May 18, 2006

Information Technology Management

Acquisition of the Armed Forces Health Longitudinal Technology Application
(D-2006-089)

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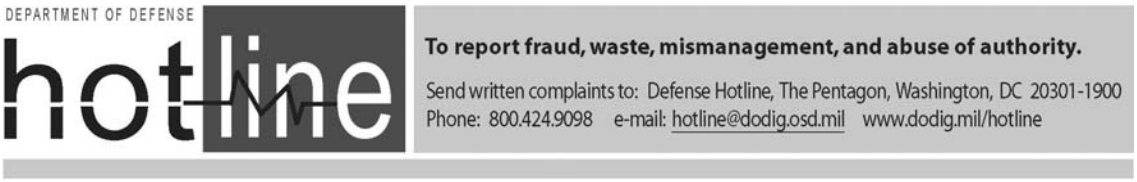

Acronyms

AHLTA	Armed Forces Health Longitudinal Technology Application
CHCS II	Composite Health Care System II
CITPO	Clinical Information Technology Program Office
COTS	Commercial Off-The-Shelf
GAO	Government Accountability Office
IG	Inspector General

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

May 18, 2006

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE
(HEALTH AFFAIRS)

SUBJECT: Report on the Acquisition of the Armed Forces Health Longitudinal Technology Application (Report No. D-2006-089)

We are providing this report for review and comment. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The Assistant Secretary of Defense (Health Affairs) comments were partially responsive in that they did not provide a date for completion of planned actions. Therefore, we request additional comments on all recommendations to include an estimated date of completion by June 15, 2006.

If possible, please send management comments in electronic format (Adobe Acrobat file only) to AudATM@dodig.mil. Copies of the management comments must contain the actual signature of the authorizing official. We cannot accept the / Signed / symbol in place of the actual signature. If you arrange to send classified comments electronically, they must be sent over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Questions should be directed to Ms. Jacqueline L. Wicecarver at (703) 604-9077 (DSN 664-9077) or Mr. Sean A. Davis at (703) 604-9049 (DSN 664-9049). The team members are listed inside the back cover. See Appendix E for the report distribution.

By direction of the Deputy Inspector General for Auditing:

Richard B. Jolliffe
Assistant Inspector General
Acquisition and Contract Management

Department of Defense Office of Inspector General

Report No. D-2006-089 **May 18, 2006**
(Project No. D2005-D000AS-0117.000)

Acquisition of the Armed Forces Health Longitudinal Technology Application

Executive Summary

Who Should Read This Report and Why? Healthcare providers; warfighters; Armed Forces Health Longitudinal Technology Application program officials; and individuals involved in the requirements development, testing, and oversight of the Armed Forces Health Longitudinal Technology Application should read this report. This report discusses the proper identification of the risks associated with the integration of commercial off-the-shelf software, as well as the program manager's emphasis on the use of risk management, lessons learned, and performance monitoring programs for the Armed Forces Health Longitudinal Technology Application program.

Background. On November 21, 2005, the Assistant Secretary of Defense (Health Affairs) changed the name of the Composite Health Care System II to the Armed Forces Health Longitudinal Technology Application. The Armed Forces Health Longitudinal Technology Application is a medical and dental clinical information system that will generate and maintain a comprehensive, lifelong, computer-based patient record for every soldier, sailor, airman, and marine; their family members; and others entitled to DoD military health care. The Armed Forces Health Longitudinal Technology Application program is expected to support 9.2 million beneficiaries. As of September 30, 2005, there were 7.01 million patients with records on-line at 51 Medical Treatment Facilities. The initial program provides support capabilities in the outpatient arena. Currently, the Armed Forces Health Longitudinal Technology Application program management office is planning for the development of capabilities for inpatient care. The estimated cost of the entire program is just over $5 billion.

Results. Although the Armed Forces Health Longitudinal Technology Application program management office is using risk mitigation techniques such as risk management, lessons learned, and performance monitoring, the program remains at high risk because of the complexities of integrating commercial off-the-shelf software into the existing Armed Forces Health Longitudinal Technology Application program. At the time of our initial review in September 2005, the program management office had not identified any mitigation strategies to reduce and control risk. Additionally, current strategies are not sufficient to mitigate the commercial off-the-shelf risk. As a result, the Armed Forces Health Longitudinal Technology Application program is vulnerable to continued increases in cost, extended schedules for implementation, and unrealized goals in performance from underestimating the difficulties of integrating commercial off-the-shelf products. See the Finding section of the report for detailed recommendations. The management controls that we reviewed were effective in that we did not identify any material management control weakness.

Management Comments and Audit Response. The Assistant Secretary of Defense (Health Affairs) concurred with the draft recommendations to provide documentation to support assigned risks, provide justification and an implementation plan for the high risk assigned to Block III, and to develop additional and more robust mitigation strategies associated with commercial off-the-shelf products. Although partially responsive, the comments did not provide estimated completion dates for the planned actions.

We request that the Assistant Secretary of Defense (Health Affairs) provide comments on the final report by June 15, 2006. A discussion of the management comments is in the Audit Results section of the report, and the complete text is in the Management Comments section.

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Background

On November 21, 2005, the Assistant Secretary of Defense (Health Affairs) changed the name of the Composite Health Care System II (CHCS II) to the Armed Forces Health Longitudinal Technology Application (AHLTA). AHLTA is a medical and dental clinical information system. The system will generate and maintain a comprehensive, lifelong, computer-based patient record for every soldier, sailor, airman, and marine; their family members; and others entitled to DoD military health care. The computer-based patient record will provide real-time access to individual and population health care information for health care providers to make informed, definitive decisions on the health care of members of the Armed Forces assigned worldwide, as well as those members deployed as part of contingency operations at home and abroad. The system will provide the capability to document patient medical care and exposure to different environmental or occupational hazards, and to retrieve lifelong medical records, dental care, and immunization status. These electronic records will allow for patient illness trend surveillance, which will help detect and prevent illness.

System Description. AHLTA is expected to support 9.2 million beneficiaries with more than 132,500 military and civilian medical personnel providing medical treatment at 70 inpatient facilities and 828 medical and dental clinics. As of September 30, 2005, there were 7.01 million patients with records on-line at 51 Medical Treatment Facilities. Currently, the AHLTA Program Management Office is planning for the development of capabilities for inpatient care. In the future, the system will interface with the Department of Veterans Affairs' HealtheVet-VistA medical system.

Acquisition Strategy. The April 2005 Acquisition Strategy stated that AHLTA is an Acquisition Category IAM,[1] automated information system. The system builds on capabilities of existing systems, phasing in their functions over time, while adding new capabilities to meet mission requirements. AHLTA initially provides support capabilities in the outpatient arena, while the mature system will extend those capabilities into the inpatient arena. The ultimate goal is to integrate all legacy CHCS clinical functions, as well as the functions of other clinical applications, into AHLTA. In order to conform to the principles of evolutionary acquisition, the system is designed to accommodate changes and facilitate the integration of future systems and technology, including the integration of commercial off-the-shelf (COTS) products.

Current Block Functions. AHLTA will gather, store, and transmit computerized information about a patient's lifetime health status and health care. This application enables the rapid access and transfer of relevant patient information for regional and remote treatment of injuries and illnesses. AHLTA will also support patient referrals to, and consultations with, specialists within a regional

[1]An Acquisition Category IAM is a major automated information system that is estimated to require program costs in any single year in excess of $32 million (FY 2000 constant dollars), total program costs in excess of $126 million (FY 2000 constant dollars), or total life-cycle costs in excess of $378 million (FY 2000 constant dollars), for which the Milestone Decision Authority is the Assistant Secretary Defense (Networks and Information Integration/DoD Chief Information Officer).

area or at distant locations. When fully operational, the computer-based patient record will provide a paperless, filmless health care record that will be a confidential and comprehensive record of care for the full continuum of theater and peacetime care. The computer-based patient record will also provide links to external knowledge sources, interconnect network providers, and will provide clinical decision support and rationale for care rendered. For the first time, the computer-based patient record will give health care providers instant access to a continuous and coherent chronology of the health care history of each of their patients.

Schedule Delay. The AHLTA Full Operational Capability Decision has been delayed by 4 years because of Block 1 performance issues and the Block 2 Dental Application having to be redesigned. In April 2004, Block 1 was not meeting the 6-second system performance requirement for patient data retrieval and response to user input that are included in the October 2002 operational requirement document. The performance problems led to the Navy and the Air Force stopping deployment of AHLTA at their facilities until these performance issues were resolved. Based on an analysis prepared by the Clinical Information Technology Program Office (CITPO),[2] the extreme performance degradation during this time was associated with database Input/Output issues that were eventually corrected with upgrades to the software and hardware. In addition to the performance issues causing schedule delays to the Full Operational Capability, issues with the Dental Application led to schedule delays in fielding Block 2. The performance problems in Block 1 also caused a delay in the acquisition of the COTS products needed for Block 3 capability. Appendix C shows a comparison of the three AHLTA Acquisition Program baselines.

Life-Cycle Cost Increase. The estimated program cost for AHLTA has increased by approximately $1 billion (from $4.023 billion to $5.019 billion) due to the original life cycle being extended by 3 years, from FY 2018 to FY 2021. The extension of 3 years being added to the life cycle was caused by the system performance issues during Block 1, which led to a delay in Block 2 Operational Test and Evaluation and delayed the Block 2 Milestone C decision. Additionally, a new Milestone B date was required for Block 3 because of the delay in acquiring the commercial products needed for the Block 3 capabilities.

[2] The Clinical Information Technology Program Office, an office within the Office of the Assistant Secretary of Defense (Health Affairs), manages AHLTA.

Objectives

The audit was announced on January 25, 2005, with the objective to review AHLTA budgeting, accounting, performance, and user satisfaction. In April 2005, the audit was re-scoped to review AHLTA program requirements, Clinger-Cohen compliance, and management controls. The re-scoped audit objective was to evaluate program requirements, the related acquisition strategy, and system testing to determine whether the system was being implemented to meet cost, schedule, and performance requirements. We also evaluated management controls as they relate to AHLTA. See Appendix A for a discussion of the scope and methodology and for information on prior audit coverage related to the objectives.

Managers' Internal Control Program

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control (MC) Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of the Review of the Management Control Program. We reviewed Management Control Program documentation as it related to AHLTA to accomplish our objectives. The objective of our audit was focused on system requirements, Clinger-Cohen compliance, and the Management Control Program for AHLTA.

Adequacy of Management Controls. We found no weaknesses in the Management Control Program for the documents we reviewed.

Adequacy of Management's Self-Evaluation. We did not discuss the adequacy of management's self-evaluation because we did not find any management control weaknesses for program requirements and Clinger-Cohen compliance, which covered the objectives of our re-scoped audit. The AHLTA management controls were included in DoD Inspector General (IG) Report No. D2006-003, "Security Controls Over Selected Military Health System Corporate Databases," October 7, 2005. That report stated, ". . . TMA [TRICARE Management Activity] uses a standard vulnerability assessment form to evaluate all assessable units in the program offices. That assessment form is used to evaluate a range of assessable units . . . [but] does not provide detailed questions for each assessable unit and is not tailored to individual subject areas . . .." The report also stated,

> Expansion of the MCP [Management Control Program] self-assessment at the Navy, Air Force, Army, and TRICARE Management Activity by incorporating specific electronic, physical, and personnel controls would assist activities in complying with DoD guidance. In addition, a comprehensive

> self assessment would provide additional assurance that the programs are operating as intended.

The report recommended that the Assistant Secretary of Defense (Health Affairs) . . . include tests for electronic, physical, and personnel controls in its Management Control Plans to ensure compliance with DoD Regulation 5200.2-R, "Personnel Security Program," January 1987, and DoD Instruction 8500.2, "Information Assurance Implementation," February 6, 2003. TRICARE Management Activity concurred with the recommendation.

Classification of Commercial Off-The-Shelf Risk

Although the AHLTA Program Management Office used risk mitigation techniques such as risk management, lessons learned, and performance monitoring, the program remains at high risk because of the complexities of integrating COTS software into the existing AHLTA program. Additionally, at the time of our initial review in September 2005, the program management office had not identified any mitigation strategies to reduce and control program risk. Current mitigation strategies are inadequate. As a result, the AHLTA program is vulnerable to continued increases in cost, extended schedules for implementation, and unrealized goals in performance from underestimating the difficulties of integrating COTS products.

Mitigation Techniques

The AHLTA Program Manager uses risk management, lessons learned, and performance monitoring programs to mitigate cost, schedule, and performance risks. A risk management program is used to identify, analyze, mitigate, and control risks before they become problems. Additionally, the program management office uses lessons learned to identify best practices or positive experiences from resolving past problems. Finally, the program management office uses benchmark testing and end-to-end performance measurement to monitor systems performance.

Risk Management. The AHLTA Program Manager uses a risk management program in order to mitigate performance issues and user dissatisfaction, and focuses on managing risks throughout the software acquisition life cycle. The AHLTA risk management process is defined in the "CITPO Risk Management Plan," September 20, 2004, which provides guidance on identifying, analyzing, mitigating, and controlling risks before they become problems. The CITPO Risk Management Database documents CITPO program risks.

Lessons Learned. The AHLTA Program Manager uses lessons learned to mitigate performance issues and user dissatisfaction. The CITPO identifies lessons learned as resolved problems, best practices, or positive experiences. The CITPO lessons learned database is the central knowledge repository for CITPO lessons learned. Lessons are captured on standardized forms and submitted by subject matter experts. In addition, Lessons Learned Facilitators and Directors identify best practices and industry standards on a regular basis.

Performance Monitoring. The AHLTA Program Manager uses a performance monitoring program in order to mitigate performance issues and user dissatisfaction. The AHLTA Program Management Office uses benchmark testing to establish key lessons learned, tools, and processes from the initial test cycle that can be applied to future testing. It also uses end-to-end performance

measurement to detect performance threshold violations, to analyze and view historical trends, and to isolate and remediate performance problems.

Commercial Off-The-Shelf Integration

The AHLTA program remains at high risk because of its reliance on COTS to fully satisfy the requirements of the program. To accomplish the requirements for Block 1 of the AHLTA system, the AHLTA Program Management Office selected and procured COTS products. These products formed the core of the systems functions that will be used in all blocks. The AHLTA Program Management Office did not acquire any additional COTS products to fulfill the requirements of Block 2. However, the majority of AHLTA functions resides in Block 3, which involves the integration of COTS products. Specifically, the Block 3 Draft Capability Development Document requires that "the system shall provide an order entry, results documentation, and results retrieval capability for pharmacy, laboratory, and radiology." These capabilities will replace the legacy system capabilities through the integration of COTS products. Additionally, the April 2005 Block 3 Acquisition Strategy states that COTS products will be acquired and integrated into AHLTA to fulfill the majority of the critical requirements capabilities. Therefore, the operational effectiveness of Block 3, and thus the system as a whole, relies on the successful integration of COTS products.

Risk Management

The AHLTA risk management process is a six-phase process in which risks are identified, analyzed, planned, tracked, controlled, and documented and communicated. Management action is determined based on the priority value of the risk. Risks are prioritized based on the probability the risk will occur and the impact the risk will have on program cost, schedule, and performance if the risk does occur. The AHLTA Program Management Office reassesses risk priority levels when significant changes to a risk occurs. Risk management officials within the program office review open risks to assess changing conditions and identify significant changes in status. Program officials are provided with routine risk status reports during project and team meetings. The risk management officials use the risk status reports to decide whether the risk mitigation plan needs to be modified, the risk should be closed, a contingency plan should be invoked, or tracking should continue.

The table shows the CITPO Risk Evaluation Matrix, which is used to assign a risk's priority value. The values 1 through 5 identify the level of risk and thus, the amount of management action required to mitigate the risk.

- Priority Value 1 risks require immediate management action and mitigation action within 3 months.

- Priority Value 2 risks do not require immediate action and are tracked[3] by management.
- Priority Value 3 risks are watched[4] by management.
- Priority Value 4 risks require monitoring but problems are not anticipated.
- Priority Value 5 risks do not require action beyond normal management attention.

CITPO Risk Evaluation Matrix				
Probability				
Impact		HIGH Occurrence Is Assured	MEDIUM Occurrence Is Possible	LOW Occurrence Is Unlikely
	HIGH Significant Impact	HIGH 1	HIGH 2	MEDIUM 3
	MEDIUM Moderate Impact	HIGH 2	MEDIUM 3	LOW 4
	LOW Little or No Impact	MEDIUM 3	LOW 4	LOW 5

COTS Integration Risks. The AHLTA Program Management Office considers the integration of COTS products to be a medium risk. The program office

[3] The "CITPO Risk Management Plan," September 20, 2004, defines "tracked" as the fourth phase of the CITPO Risk Management Process. During this phase, risk data is collected and compiled so that it can be analyzed for trends.

[4] The "CITPO Risk Management Plan," September 20, 2004, defines "watched" as "a mitigation approach where management monitors a risk and its attributes for significant change."

identified a risk[5] associated with COTS integration. The risk states that there is a "potential concern that the complexity of the COTS integration may result in [program] costs being understated." The program office assigned this risk at Value 3, which indicates the risk has one of the following: an unlikely probability of occurring and a significant impact to cost, a possibility of occurring and a moderate impact to cost, or an assured probability of occurring and little or no impact to cost. The AHLTA April 2005 Acquisition Strategy states COTS products will fulfill the majority of the critical requirements capabilities. Therefore, we consider this risk to be improperly prioritized because AHLTA success and full deployment relies heavily on the successful integration of COTS.

Reprioritize COTS Integration Risk. The AHLTA Program Management Office should increase the priority value of the COTS integration risk from Priority Value 3 to Priority Value 2. Prior DoD IG audit reports as well as DoD and industry lessons learned on the use and integration of COTS indicate that when the integration of COTS is more complex than planned, the impact to cost, schedule, and performance is significant.

Prior DoD IG Audit Reports. DoD IG Report No. D-2002-124, "Allegations to the Defense Hotline on the Management of the Defense Travel System," July 1, 2002, states that the Defense Travel System Project Management Office underestimated the complexity of integrating COTS products. The Defense Travel System Project Management Office was required to do extensive developmental work. As a result, the system was not deployed on schedule and approximately $7.5 million was spent unnecessarily in order to accommodate the schedule delay. Another example of the complexity of integrating COTS products and the effect on cost is cited in DoD IG Report No. D-2002-123, "Acquisition and Clinger-Cohen Act Certification of the Defense Integrated Military Human Resources System," June 28, 2002. The Defense Integrated Military Human Resources System Program Manager expected the COTS software would require 10 to 20 percent modification. The report states that prior DoD experience with COTS products indicated that it may be unreasonable to expect to meet 80 to 90 percent of the required functionality with an "off-the-shelf" application. As a result, the Air Force and Navy were required to perform extensive modifications to achieve the required functionality.

DoD and Industry Lessons Learned. According to the Software Engineering Institute's study entitled "Commercial Item Acquisition: Considerations and Lessons Learned," June 26, 2000, the integration of COTS is more challenging than developing a custom capability. Therefore, increased management oversight is fundamental to guarantee the success of the integration. According to the lessons learned guidance, integrating COTS requires extensive expertise. A program management office must not assume the commercial product will be integrated into the system with minimal effort. The assumption could result in user dissatisfaction and schedule and cost overruns. The guidance

[5] The risk associated with COTS integration is identified in Risk Management Report 2005-020, October 3, 2005. The audit team focused on Risk Management Report 2005-020 because we considered the other risk management reports to be properly prioritized. A Risk Management Report is a printout from the CITPO Risk Management Database that identifies the risk, the impact of the risk, priority level of the risk, general comments, responsible personnel, and risk mitigation summaries. See Appendix D for Risk Management Report 2005-020.

also states that an incomplete evaluation of commercial items can affect program planning in unexpected ways. Specifically, vendor deficiencies or new versions of the product can delay the schedule and increase program costs.

The AHLTA Program Management Office must also be aware of the affect on cost if the commercial products become obsolete or require new versions or upgrades.

Mitigation Strategies. According to Risk Management Report ID 2005-020, "COTS Integration," October 3, 2005, the Program Management Office did not have a mitigation strategy associated with the identified COTS integration risk. The CITPO Risk Management Plan states risk information should be translated into decisions and both present and future mitigation actions. The CITPO Risk Management Plan states these actions should then be implemented. Mitigation strategies are used to reduce risk by either reducing the impact or the probability, or both, of the risk. The program management office stated that it was evaluating mitigation strategies. The lack of a mitigation strategy could potentially increase program life-cycle costs, schedule, and performance.

AHLTA Program Management Office Response to Discussion Draft

In response to a discussion draft of this report, the AHLTA Program Management Office staff commented that we were incorrect in stating that they had not developed any mitigation strategies associated with COTS integration. Specifically, they responded, "CITPO has identified COTS integration as a medium level program risk and developed corresponding mitigation strategies." Additionally, they suggested that our recommendation could be changed to, "Develop additional, more robust mitigation strategies to further reduce and control this risk." In response to our request for additional information to support their statement, the program office staff provided an updated copy of their COTS Integration Risk Management Report, March 2, 2006, which showed that on September 28, 2005, the project officer approved opening two mitigation strategies identified by the CHCS II Project Team. Appendix D contains the October 3, 2005, and March 2, 2006, Risk Management Reports.

Supporting Documentation for Mitigation Strategies. The Risk Management Report is the only documentation provided by AHLTA to support its position that it had developed two mitigation strategies to address the COTS integration risk. The stated mitigation strategies, below, are not sufficient to mitigate the COTS integration risk:

- Mitigation Strategy No. 2005-020-1: Coordinate across Information Management and Information Technology teams during the FY 2008 Program Objectives Memorandum development cycle; and

- Mitigation Strategy No. 2005-020-2: Address the risk in the Program Objectives Memorandum submissions.

Specifically, the mitigation strategy documents provided did not include what actions must be taken, the level of effort and materials required, the estimated cost to implement the plan, a proposed schedule showing the proposed start date, the time phasing of significant risk reduction activities, the completion date, and relationships to significant activities and milestones as recommended by the "DoD Risk Management Guide for DoD Acquisition," Fifth Edition, version 2.0, June 2003.

Conflicting Priority Values of the Risk. The October 3, 2005, Risk Management Report identifies COTS integration as Priority Value 3, which, according to the CITPO Risk Evaluation Matrix discussed on page 7 of this report, is a medium risk. The program management office comments to the discussion draft report, February 23, 2006, also identified COTS integration as a medium risk. However, according to the March 2, 2006, Risk Management Report, the program management office had raised the risk level of COTS integration from Priority Value 3 to Priority Value 2 during a November 1, 2005, in-process review based on the complexity of integrating COTS products in Block 3. Subsequently, on January 17, 2006, the program management office raised the COTS integration risk from Priority Value 2 to Priority Value 1 based on the advice of the CHCS II Project Officer and the CHCS II Engineering Team regarding cost and complexity concerns with the COTS integration.

According to the CITPO Risk Management Plan, Priority Value 1 risks indicate the probability of occurrence is assured and the impact to cost, schedule, or performance is severe. Risks designated as Priority Value 1 require an immediate change in current project activities in order to reduce or eliminate the risk. Management action is required within 3 months to begin implementing mitigations. If the COTS integration risk was increased from Priority Value 2 to Priority Value 1 on January 17, 2006, as stated in the March 2, 2006, Risk Management Plan, the AHLTA Program Management Office had until April 17, 2006, to begin implementing mitigations. The Program Management Office did not provide project activities to reduce or eliminate the COTS integration risk in its April 7, 2006, response to the draft report.

The program management office's rationale for increasing the risk to this level is uncertain. The CITPO definition of a Priority Value 1 is that the risk must be assured to occur and be of significant impact. However, the program management office did not provide documentation that supported the occurrence of this risk is assured. Block 3 of the program had not yet received a Milestone B decision to enter System Development and Demonstration, the acquisition phase in which integration risk is reduced. Additionally, during the Systems Integration portion of the System Development and Demonstration phase, subsystems are integrated, design details are completed, and system-level risk is reduced. Finally, we believe that the mitigation strategies identified in the March 3, 2006, Risk Management Report will not satisfactorily mitigate this risk in the allotted time frame because Program Objectives Memorandum submissions will not be delivered to the Comptroller until August 2006, which is past the April 17, 2006, implementation deadline.

Conclusion

Integration of Block 3 COTS software remains a significant risk for the successful completion of AHLTA. Two prior audit reports on other systems have shown that the impact to cost is substantial if COTS products require extensive unplanned developmental work. Additionally, DoD and industry lessons learned state that the impact to DoD systems cost, schedule, and performance is significant if the integration of COTS products is more complex than planned. The program management office response to the discussion draft report stated that COTS integration was a medium risk; however, documentation used to support that statement identified that the risk was a Priority Value 1 (high). Additionally, the provided information did not support that elevation. Without a mitigation strategy that includes such information as the required actions needed to mitigate the risk, the level of effort and materials required, the estimated cost, and the proposed implementation schedule, the risk of increased program costs as a result of the unsuccessful COTS integration is increased as the impact and probability of the risk is not reduced.

Management Comments on the Finding and Audit Response

Management Comments on the Identification of Mitigation Strategies. The Assistant Secretary of Defense (Health Affairs) disagreed with the statement that the program management office had not identified any mitigation strategies to reduce and control risk. According to the Assistant Secretary, the program management office did identify several mitigation strategies and recommended that the additional COTS-related Risk Management Reports be included in Appendix D of our final report. The complete text of the Assistant Secretary is in the Management Comments section of this report.

Audit Response. The audit team focused specifically on Risk Management Report ID 2005-020, "COTS Integration," October 3, 2005, because we considered the other risk management reports related to integration of COTS products to be properly prioritized. Although the CITPO Program Management Office was evaluating mitigation strategies for this risk at the time of our initial review in September 2005, they had not developed any.

In response to the Discussion Draft Report, CITPO provided the audit team with an updated Risk Management Report ID 2005-020, March 2, 2006, as well as three additional COTS-related risk reports referred to by the Assistant Secretary of Defense (Health Affairs). The two mitigation strategies provided in the updated Risk Management Report ID 2005-020 were not sufficient to mitigate the risk. Specifically, the mitigation strategies did not include what actions must be taken, the level of effort and materials required, the estimated cost to implement the plan, a proposed schedule showing the proposed start date, the time phasing of significant risk reduction activities, the completion date, and relationships to significant activities and milestones as recommended by the "DoD Risk Management Guide for DoD Acquisition," Fifth Edition, version 2.0, June 2003. Therefore, we recommended that the CITPO Program Management Office

develop more robust mitigation strategies for COTS integration risk, Risk ID 2002-020.

The additional risk management reports included in the CITPO response to the Discussion Draft Report were not included in the Draft Report because they did not relate to our review of Risk Management Report ID 2005-020. We updated the report to clarify the COTS integration risk of our review was Risk Management Report ID 2005-020. However, at the request of the program management office, we included the following Risk Management Reports in Appendix D: CHCS II, "Block III-Lab AP/COTS Interoperability," Risk ID 2004-080, January 1, 2005; CHCS II, "COTS Integration/Convergence," Risk ID 2004-085, January 1, 2005; and CHCS II, "COTS Integration," Risk ID 2004-086, June 10, 2004.

Management Comments on Contradiction of Risk Management Reports. The Assistant Secretary of Defense (Health Affairs) disagreed with our analysis of the October 3, 2005, and March 2, 2006, Risk Management Reports, stating that he did not see a contradiction in these reports. According to the Assistant Secretary, the October 3, 2005, Risk Management Report shows the continuing evaluation of the mitigations strategies which were initiated on September 28, 2005. The current Risk Management Report, March 2, 2006, provides a traceable timeline of the changes to the Risk Management Report from when the risk was established.

Audit Response. We accept the explanation the AHLTA Program Management Office provided. Therefore, we have removed the statement that the March 2, 2006, Risk Management Report contradicts the one provided to the audit team on October 3, 2005. However, at the time of our initial review in September 2005, there were no mitigation strategies developed for the risk of the integration of COTS. Also, the mitigation strategies in the March 2, 2006, Risk Management Report were inadequate in that they did not contain the recommendations of the DoD Risk Management Guide for DoD Acquisition. In addition, the program management office did not provide the significant activities and milestones recommended by the DoD Risk Management Guide. Recommendation 3 requested that the program office develop more robust mitigation strategies in accordance with the CITPO Risk Management Plan.

Management Comments on Conflicting Priority Values of the Risk. The Assistant Secretary of Defense (Health Affairs) stated that "Conflicting Priority Values of the Risk" is a misleading statement and suggested changing the word conflicting to adjusting. In addition, he stated that the audit team had apparently misinterpreted and taken out of context the statement that CITPO had identified COTS integration as a medium risk and developed corresponding mitigation strategies. The Assistant Secretary stated the statement was intended to refute the information contained in the draft report that "the program office had not identified any mitigation strategies." Also, he stated that CITPO provided four COTS risk management reports with risk priorities ranging from medium to high risk in response to the discussion draft.

Audit Response. We agree that the risk level for Risk Management Report ID 2005-020, "COTS Integration," October 3, 2005, has been adjusted. However,

the AHLTA Program Management Office's written response did not correlate with the actual risk report provided. The CITPO response to the discussion draft specifically states that COTS integration is a medium-level program risk. Therefore, we request the Program Manager, Armed Forces Health Longitudinal Technology Application provide documentation that supports the movement of COTS integration to higher risk levels as stated in Recommendation 1 of the draft report. In addition, we acknowledge that CITPO provided four COTS Risk Management Reports with risk priorities ranging from medium to high. However, our identification of conflicting risk levels was focused on Risk Management Report ID 2005-020, "COTS Integration," October 3, 2005.

Recommendations

We recommend that the Program Manager, Armed Forces Health Longitudinal Technology Application:

1. Provide documentation that supports the program management office decisions on November 1, 2005, and January 17, 2006, that increased the risk priority value for commercial off-the-shelf product integration into the Armed Forces Health Longitudinal Technology Application from Priority Value 3 (medium) to Priority Value 2 (high), and from Priority Value 2 (high) to Priority Value 1 (high).

2. Provide justification and an implementation plan for the Priority Value 1 (high) risk assigned to Block 3.

3. Develop additional or more robust mitigation strategies that address the commercial off-the-shelf product integration Priority Value 1 (high) risk in accordance with the CITPO Risk Management Plan. These mitigation strategies should, at a minimum, contain the recommendations included in the "DoD Risk Management Guide for DoD Acquisition, Fifth Edition, version 2.0, June 2003.

Management Comments. The Assistant Secretary of Defense (Health Affairs) concurred stating that the AHLTA Program Manager will provide appropriate documentation to support the assignment of risk priorities associated with commercial off-the-shelf product integration, provide justification and an implementation plan for the Priority Value 1 (high) risk assigned to the AHLTA Block 3, and continue to develop additional and more robust mitigation strategies that address the commercial off-the-shelf product integration Priority Value 1 (high) risk.

Audit Response. Although the Assistant Secretary of Defense (Health Affairs) concurred with the recommendations, the comments are partially responsive in that a completion date for the planned actions was not provided. Additionally, the date for implementation of mitigations for COTS integration has passed. The AHLTA Program Management Office did not provide project activities to reduce or eliminate the COTS integration risk in its April 7, 2006, response to the draft report. Therefore, we request that the Assistant Secretary of Defense (Health Affairs) provide the completion date for the planned actions to the final report by June 15, 2006.

Appendix A. Scope and Methodology

We reviewed laws, policies, guidance, and documentation dated from January 24, 1997 through March 2, 2006, related to the system requirements of AHLTA. To accomplish our specific objective, we met with officials from the AHLTA Program Management Office, the Clinical Information Technology Program Office, the Joint Medical Information System Program Executive Office, and officials from the Offices of the Assistant Secretary of Defense (Health Affairs), the Assistant Secretary of Defense (Networks and Information Integrations/DoD Chief Information Officer), the Joint Chiefs of Staff, the Joint Interoperability Test Command, the Army Test and Evaluation Command, and the Director of Operational Test and Evaluation.

We began the audit with an overall objective to review budgeting, accounting, performance, and user satisfaction of the AHLTA to determine whether the system was being implemented to meet cost, schedule, and performance requirements. However, during the audit the objective was re-scoped to only review system requirements, Clinger-Cohen compliance, and management controls. Specifically, we reviewed operational requirements, acquisition strategy, and operational and developmental testing. The re-scoping of the audit resulted from a meeting held on April 10, 2005, between management from the Department of Defense Office of Inspector General and officials from the Office of the Assistant Secretary of Defense (Networks and Information Integration/DoD Chief Information Officer).

We performed this audit from January 2005 through March 2006 in accordance with generally accepted government auditing standards. We collected the information for the audit through meetings, e-mails, and briefings with the personnel stated above. We reviewed laws, policies, guidance, and documentation for each area we reviewed during the audit. Specifically we reviewed:

- Public Law 108-287, "Department of Defense Appropriations Act for Fiscal Year 2005," August 5, 2004; Public Law 104-106, "National Defense Authorization Act for Fiscal Year 1996," February 10, 1996; Office of Management and Budget Circular A-11, "Preparation and Submission of Budget Estimates," July 12, 1999; Chairman of the Joint Chiefs of Staff Instruction 3170.D, "Joint Capabilities Integration and Development System," March 12, 2004; Federal Acquisition Regulation Part 39, "Acquisition of Information Technology," March 2005; DoD Instruction 5000.2, "Operation of the Defense Acquisition System," May 12, 2003; Defense Acquisition Guidebook, April 27, 2005; and the Acquisition Community Connection Web site for compliance with the Clinger-Cohen requirements.

- Chairman of the Joint Chiefs of Staff Instruction 3170.01B, "Requirements Generation System," April 15, 2001; Chairman of the Joint Chiefs of Staff Instruction 3170.01C, "Joint Capabilities Integration and Development System," June 24, 2003; CHCS II Mission Needs Statement, January 28, 1997; Analysis of Alternatives,

April 28, 1998; Operational Requirement Documents, January 24, 1997; September 18, 2000; October 30, 2002; and May 4, 2004; Draft Capability Development Document for Block 3, January 2005; and Director, Operational Test and Evaluation Memorandum for Block 2, February 24, 2005, to determine the validity of the AHLTA requirements.

- DoD Directive 8320.2, "Data Sharing in a Net-Centric Department of Defense," December 2, 2004; CHCS II Test and Evaluation Master Plan for Block 2, September 16, 2004; CHCS II System Evaluation Reports for Block 1 and Block 2, September 26, 2002, and February 18, 2005; and Joint Interoperability Test Certifications for Block 1 and Block 2, October 10, 2003, and March 28, 2005, for potential testing issues or problems.

- The CHCS II Acquisition Strategies for Block 2 and Block 3, September 16, 2003, and April 12, 2005; Acquisition Program Baselines, January 27, 2003; November 17, 2003; and May 27, 2005; Acquisition Decision Memorandums for Block 1 and Block 2, January 28, 1997; February 20, 1998; December 23, 1998; January 28, 2003; June 13, 2003; November 17, 2003; and May 27, 2005; and CHCS II Defense Acquisition Executive Summary Reports, Third Quarter FY 2004 through First Quarter FY 2006 for potential schedule, performance, and cost issues.

- The CITPO Risk Management Plan, September 20, 2004; the CHCS II Risk Management Plan, September 29, 2003; the CHCS II Risk Management Database, October 6, 2005; the CITPO Lessons Learned Database and Reports, September 23, 2005; the CHCS II Performance Monitoring Program, September 27, 2005; the AHLTA Active Risk Management Report, October 3, 2005; and the AHLTA Risk Management Report, March 2, 2006, for an understanding of the mitigation techniques being emphasized by the AHLTA Program Manager to gain greater control over potential schedule delays and increases in program costs.

Use of Computer-Processed Data. We did not use computer-processed data to perform this audit.

Use of Technical Assistance. Two computer engineers from the Software Engineering Branch, Technical Assessment Division, for Investigative Policy and Oversight, DoD Office of Inspector General, assisted in the audit. The computer engineers assisted the audit team by determining that software and hardware problems encountered by AHLTA during the full deployment of Block 1 functionalities were not COTS-related.

Government Accountability Office High-Risk Area. The Government Accountability Office (GAO) has identified several high-risk areas in DoD. This report provides coverage of the DoD approach to the business transformation high-risk area.

Prior Coverage

During the last 7 years, GAO and the DoD IG have issued four reports discussing the Composite Health Care System II.

GAO

GAO Report No. GAO-04-691R, "Post-Hearing Questions on VA/DoD Health Data Exchange," May 14, 2004

GAO Report No. GAO-02-345, "Greater Use of Best Practices Can Reduce Risks in Acquiring Defense Health Care System," September 2002

DoD IG

DoD IG Report No. D-2001-038, "Allegations Relating to the Procurement of a Report Module for the Composite Health Care System II," January 29, 2001

DoD IG Report No. D-1999-068, "Acquisition Management of the Composite Health Care System II Automated Information System," January 21, 1999

Appendix B. Armed Forces Health Longitudinal Technology Application Acquisition Strategy

The table below represents the AHLTA acquisition strategy. The AHLTA system's acquisition is divided into three blocks, which are divided into multiple releases.

Current AHLTA Functional Block Strategy		
Block 1	**Block 2**	**Block 3**
Encounter Documentation	**Release 1**	**Release 1**
Order Entry and Results Retrieval	Spectacle Request Transmission System II	Pharmacy
Encounter Coding Support	**Release 2**	**Release 2**
Consult Tracking	Dental Charting and Documentation[2]	Laboratory
Alerts and Reminders		Anatomic Pathology
Automated Clinical Practice Guidelines[1]		**Release 3**
Role-Based Security		Radiology
Health Data Security		**Release 4**[3]
Health Data Dictionary		Inpatient Charting and Documentation
Master Patient Index		Occupational Health Surveillance
Ad Hoc Query Ability		

[1]Moved from Block 2, Release 2.

[2]Moved from Block 2, Release 1.

[3]Result of Block 4 being merged into Block 3.

Appendix C. Armed Forces Health Longitudinal Technology Application Acquisition Program Baselines

The chart below shows the AHLTA Acquisition Program Baseline transition. The May 27, 2005, approved Acquisition Program Baseline is a result of a breach in the AHLTA program's schedule. The breach in the schedule was a direct result of performance problems during the full deployment of Block 1.

AHLTA-Approved Acquisition Program Baselines								
	Acquisition Program Baseline			Acquisition Program Baseline Change 1			Baselined Acquisition Program Baseline	
	January 27, 2003			November 17, 2003			May 27, 2005	
	Objective	Threshold		Objective	Threshold		Objective	Threshold
				No Changes Unless Specified			No Changes Unless Specified	
Milestone (MS) 0	JAN 1997	APR 1997						
MS 1	MAY 1998	AUG 1998						
Block 1 Developmental Test and Evaluation	JUN 2000	SEP 2000						
Block 1 Operational Test and Evaluation	APR 2002	JUL 2002						
Block 1 MS C Limited Deployment	NOV 2002	MAY 2003						
Block 1 Full Rate Production Decision	JUL 2003	JAN 2004						
Block 2 System Requirements Review	NOV 2000	FEB 2001						
Block 2 MS B	NOV 2002	MAY 2003						
Block 2 Operational Test Readiness Review 3	APR 2003	OCT 2003		NOV 2003	MAY 2004		DELETED	
Block 2 Release 1 Deployment Decision Review (DDR)							MAR 2005	SEP 2005
Block 2 MS C	JUL 2003	JAN 2004		MAR 2004	SEP 2004		DELETED	
Block 2 Full DDR							JUN 2006	DEC 2006
Block 3 MS A	NOV 2002	MAY 2003						
Block 3 MS B	JAN 2004	JUL 2004					MAR 2006	SEP 2006
Block 3 MS C	JAN 2004	JUL 2004					SEP 2007	MAR 2008
Block 3 Release 1 DDR							MAR 2008	SEP 2008
Block 3 Release 2 DDR							MAR 2008	SEP 2008
Block 3 Release 3 DDR							DEC 2008	JUN 2009
Block 3 Full DDR							SEP 2009	MAR 2010
Initial Operating Capability	MAR 2004	SEP 2004						
Full Operating Capability	SEP 2007	SEP 2008					SEP 2011	SEP 2012
Block 4 MS A	JUL 2003	JAN 2004					DELETED	
Block 4 MS B	SEP 2004	MAR 2005					DELETED	
Block 4 MS C	SEP 2004	MAR 2005					DELETED	

Appendix D. Armed Forces Health Longitudinal Technology Application Risk Management Reports

Active Risk Management Report

As of Monday, October 03, 2005 4:35:32 PM

Risk-Id: 2005-020 **Risk Level:** Project **Key Group:** Integration **Transfer Office:**

Office Of Primary Responsibility	Start Date	Close Date	Project Name	Priority	Risk Source	Impact Area	Gov't POC/Project Officer
CHCS II Project Office	8/1/2005		CHCS II	3	Funding	Cost	CAPT Heidi Moos

Risk Champ: Tracey Brown **Add'l Project(s) Affected by Risk:**

Risk Statement: There is a potential concern that the complexity of the COTS integration may result in costs being understated.

Impact: This could cause program lifecycle costs to be understated.

Mitigation Summary:	Strategy #	Description	Start Date	Closed Date	MitSME / Alt Mit_SME
	2005-020-1	PO is currently evaluating mitigation strategies.	9/28/2005		Col Tom Beach/ Tracey Brown

Mitigation Summary:	Strategy #	Description	Start Date	Closed Date	MitSME / Alt Mit_SME
	2005-020-2	PO is currently evaluating mitigation strategies.	9/28/2005		Col Tom Beach/ Tracey Brown

Appendix D. Armed Forces Health Longitudinal Technology Application Risk Management Reports (cont'd)

Risk Management Report

As of *Thursday,March 02, 2006 11:02:36 AM*

Risk-Id: 2005-020 **P** **Risk Level:** Project **Key Group:** Integration **Transfer Office:**

Office Of Primary Responsibility	Start Date	Close Date	Project Name	Priority	Risk Source	Impact Area	Gov't POC/Project Officer
CHCS II Project Office	8/1/2005		CHCS II	1	Funding	Cost	CAPT Heidi Moos

Risk Champ: Tracey Brown **Add'l Project(s) Affected by Risk:**

Risk Statement: There is the potential that current cost assumptions may not have accounted for recently acknowledged / discovered complexities of COTS integration resulting in understated cost estimates in the POM years

Impact: This could cause schedule delays, cost overruns, and performance impacts.

General Comments:

1/17/2006	The CHCS II Project Officer and the CHCS II Engineering Team advised the PM of cost and complexity concerns with the COTs Integration, and based on their discussion this risk has been elevated by the CITPO PM from P2 to P1.
11/1/2005	During November's CHCS II IPR, the CHCS II Project Officer elevated this risk from a priority 3 to a priority 2 based on the complexity of integrating the COTs Products in Block 3.
9/28/2005	Received approval from PO to open two mitigation strategies identified by CHCS II Project Team.
8/5/2005	PO approved risk as Priority 3. Mit's are being coordinated by PO and Project team.
8/1/2005	This potential risk was identified. Awaiting Project Officer approval.

Mitigation Summary:

Strategy #	Description	Start Date	Closed Date	MitSME / Alt Mit_SME
2005-020-1	Coordinate across IM/IT teams during FY08 POM development cycle.	9/28/2005		Beach Tom Col/Brown Tracey

Mitigation Summary:

Strategy #	Description	Start Date	Closed Date	MitSME / Alt Mit_SME
2005-020-2	Address in POM submissions	9/28/2005		Beach Tom Col/Brown Tracey

Appendix D. Armed Forces Health Longitudinal Technology Application Risk Management Reports (cont'd)

Risk Management Report

As of *Friday,February 24, 2006 1:31:46 PM*

Risk-Id: 2004-080 P **Risk Level:** Project **Key Group:** Interoperability **Transfer Office:**

Office Of Primary Responsibility	Start Date	Close Date	Project Name	Priority	Risk Source	Impact Area	Gov't POC/Project Officer
CHCS II Project Office	1/1/2005		CHCS II Block 3	2	Supportability	Performance	LCDR Joseph Granado

Risk Champ: Tracey Brown **Add'l Project(s) Affected by Risk:**

Risk Statement: Legacy CHCS is in the process of deploying full lab interoperability. Thus allowing data sharing among DoD labs at a regional level and with commercial reference labs, once LAB/AP COTS is deployed thus the legacy interoperability will be lost as legacy CHCS lab modules are turned off.

Impact: This may cause significant impact inside laboratory, and could cause moderate impact at the commander level.

General Comments: 1/14/2005 The original start date 6/8/2004. Based upon the changes in Block 3/4, date moved out to be reassessed by CITPO PO whether or not this risk should continue to be tracked. [DC]

Mitigation Summary:	Strategy #	Description	Start Date	Closed Date	MitSME / Alt Mit_SME
	2004-080-1 P	Design a method to deploy Lab/AP COTs by region. (Most of the interoperability happens at the regional level. Replacing legacy by region will greatly reduce the disruption to legacy interoperability.)	1/1/2005		Granado Joseph LCDR/

Appendix D. Armed Forces Health Longitudinal Technology Application Risk Management Reports (cont'd)

Risk Management Report

As of *Friday,February 24, 2006 1:32:51 PM*

Risk-Id: 2004-085 **Risk Level:** Project **Key Group:** Convergence **Transfer Office:**

Office Of Primary Responsibility	Start Date	Close Date	Project Name	Priority	Risk Source	Impact Area	Gov't POC/Project Officer
CHCS II Project Office	1/1/2005		CHCS II	2	Supportability	Performance	LCDR Joseph Granado

Risk Champ: Tracey Brown **Add'l Project(s) Affected by Risk:**

Risk Statement: Undefined internal interfaces could cause some integration impacts between CHCS II and the COTs product.

Impact: Once the new COTs product is in place there may be integrtion impacts to CHCS II.

General Comments: 1/14/2005 The original start date 6/8/2004. Based upon the changes in Block 3/4, date moved out to be reassessed by CITPO PO whether or not this risk should continue to be tracked. [DC]

Mitigation Summary:	Strategy #	Description	Start Date	Closed Date	MitSME / Alt Mit_SME
	2004-085-1	Continue to interface developed conflicts with the new production CHCS II.	1/1/2005		Granado Joseph LCDR/

Appendix D. Armed Forces Health Longitudinal Technology Application Risk Management Reports (cont'd)

Risk Management Report

As of *Friday,February 24, 2006 1:33:35 PM*

Risk-Id: 2004-086 **Risk Level:** Project **Key Group:** Integration **Transfer Office:**

Office Of Primary Responsibility	Start Date	Close Date	Project Name	Priority	Risk Source	Impact Area	Gov't POC/Project Officer
CHCS II Project Office	6/10/2004		CHCS II	2	Technical	Performance	CAPT Heidi Moos

Risk Champ: Tracey Brown **Add'l Project(s) Affected by Risk:**

Risk Statement: There is a possibility that COTS version upgrades may not be included in the CHCS II baseline when available, causing unknown technical performance issues.

Impact: If COTS product upgrades are not added to the CHCS II baseline in a timely manner, product supportability and functionality, as well as security vulnerability fixes, would be degraded and not maintained. Interoperability with other COTS products would also be impacted.

General Comments:

9/3/2004 This risk was downgraded and approved to a priority 2 in the IPR held 24 August 2004. (RM 9/3/04)

6/29/2004 Risk Background:
There are a number of Commercial Off-the Shelf (COTS) products that comprise the CHCS II system, including Oracle db, Tuxedo, 3M, and the hardware operating system. As the COTS vendors upgrade product versions and/or produce software patches to fix bugs or security vulnerabilities, these upgraded versions must be added to the CHCS II system in a manner that does not degrade current functionality. Planning for the interoperability & regression testing, as well as subsequent release of the COTS product upgrades, remains a challenge both in terms of cost and schedule. [CAPT Moos, TB, AK, 6/29/04]

6/10/2004 New proposed risk added per the CHCS II PM-Level Monthly IPR. [CAPT Moos, TB, AK, 6/10/04]

Mitigation Summary:

Strategy #	Description	Start Date	Closed Date	MitSME / Alt Mit_SME
2004-086-1	**Identify conflicts in software COTS upgrades and convergence/operational issues early in the planning and development cycle.**	6/29/2004		Moos Heidi CAPT/Brown Tracey

Appendix D. Armed Forces Health Longitudinal Technology Application Risk Management Reports (cont'd)

8/12/2005	No change in status - Recommended contract language being finalized.[Col Beach, TB, DC, 8/12/05]
7/14/2005	Recommended contract language being finalized.[Col Beach, TB, DC, 7/14/05]
6/10/2005	Recommendations for managing COTS upgrades were briefed to CITPO PM in April 05 in preparation for the IIPT and OIPT briefings. Activity continues. [Col Beach, TB, DC, 6/10/05]
5/4/2005	Recommendations for managing COTS upgrades were briefed to CITPO PM in April 05 in preparation for the IIPT and OIPT briefings. Activity continues. [T. Brown, DCC 4 May 05]
4/14/2005	No Update.
3/14/2005	No Update.
2/15/2005	No Update.
1/14/2005	CITPO IA provided updated process for updating system hardware and data base with security patches as they are identified. Draft process was provided to Integic, DISA, CHCS II teams, CITPO CM, Release Management and TIMPO for review and comment. Comments due back 1/20/05. A follow-on meeting will be held to finalize the process.This captures one aspect of COTS upgrades. CITPO SE developing options for consideration for managing COTS upgrades. [T. Brown, 13 Jan 05]
12/2/2004	CITPO Information Assurance, DISA, Integic (software integrator). Project Team and CITPO CM continuing to work to to refine and communicate the process for updating system hardware and data base with updated security patches. New Systems Engineering contract with Integic for 2005 contains a task that requires Integic to register the CHCS II system components on the VMS to enable them to receive the latest security notifications. [T. Brown, 2 Dec 04]
11/16/200	CITPO Information Assurance, DISA, Integic (software integrator). Project Team and CITPO CM working together to refine and communicate the process for updating system hardware and data base with updated security patches. Basic Process: software security packages provided to CITPO CM by DISA, passed to Integic for testing and integration/updating of documentation, passed to DTE (via CITPO CM) for independent tesitng and released via standard CHCS II release management procedures.

Appendix D. Armed Forces Health Longitudinal Technology Application Risk Management Reports (cont'd)

10/15/200	CITPO SE finalizing white paper identifying options for addressing this issue. Integic contracts being evaluated to determine what tasks are covered by current contracting vehicles. (T. Brown 10/15/04)
9/16/2004	CITPO SE is drafting white paper identifying options for addressing this issue. Draft paper due September 04. (T. Brown 9/15/04)
6/29/2004	The CHCS II developer (Integic) is establishing an internal risk management team to include PGUI, CHCS II-T, and CHCS II software developers. [CAPT Moos, TB, AK, 6/29/04]

Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
Under Secretary of Defense (Comptroller)/Chief Financial Officer
    Deputy Chief Financial Officer
    Deputy Comptroller (Program/Budget)
Under Secretary of Defense for Personnel and Readiness
    Assistant Secretary of Defense (Health Affairs)
        Joint Medical Information System Program Executive Office
            Program Manager, Clinical Information Technology Program Office
            Program Manager, Armed Forces Health Longitudinal Technology Application
Assistant Secretary of Defense (Networks and Information Integration/DoD Chief
    Information Officer)
Director, Program Analysis and Evaluation

Department of the Army

Surgeon General of the Army
Auditor General, Department of the Army

Department of the Navy

Surgeon General of the Navy
Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Surgeon General of the Air Force
Auditor General, Department of the Air Force

Combatant Command

Inspector General, U.S. Joint Forces Command

Non-Defense Federal Organizations and Individuals

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Homeland Security and Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform
House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform
House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

Office of the Assistant Secretary of Defense (Health Affairs) Comments

THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

APR 7 2006

Mr. Richard Jolliffe
Office of the Inspector General
Department of Defense
400 Army Navy Drive, Room 300
Arlington, VA 22202-4704

Dear Mr. Jolliffe:

This is the Office of the Assistant Secretary of Defense (Health Affairs) /TRICARE Management Activity (TMA) response to the recommendations in the Department of Defense (DoD) Inspector General (IG) draft audit report, "Audit of the Acquisition of the Armed Forces Health Longitudinal Technology Application," January 25, 2005 (Project No. D2005-D00AS-0117.0000).

The TMA acknowledges receipt of the proposed draft audit report and concurs with the overall recommendations. Specifically, TMA will develop additional, more robust mitigation strategies associated with Commercial Off-The-Shelf integration risk. However, TMA takes exception to several inaccurate statements, to include "the program office has not identified any mitigation strategies." TMA provided corrections to these statements in the March 3 Feedback to the Discussion Draft Report, to include four Armed Forces Health Longitudinal Technology Application risk management reports with corresponding mitigation strategies. Only one of these was utilized in the report and included in Appendix D. The omission of these key documents misrepresents the proactive risk management efforts taken within the program office.

Enclosed are specific TMA responses to the DoD IG's draft audit report. Please feel free to direct questions on this matter to my project officer, Ms. Pamela Schmidt, at (703) 681-8830, or Mr. Gunther Zimmerman (General Accounting Office IG Liaison), at (703) 681-3492.

Sincerely,

William Winkenwerder, Jr., MD

Enclosures:
As stated

Inspector General (IG) Report-Dated March 24, 2006

Inspector General (IG) Draft Audit Report
"Acquisition of the Armed Forces Health Longitudinal Technology Application"
Project No. D2005-D000AS-0117.000
Office of the Secretary of Defense (Health Affairs) Response

RECOMMENDATION 1: We recommend that the Program Manager, Armed Forces Health Longitudinal Technology Application, provide documentation that supports the program management office decisions on November 1, 2005, and January 17, 2006, that increased the risk priority value for commercial off-the-shelf product integration into the Armed Forces Health Longitudinal Technology Application from Priority Value 3 (medium) to Priority Value 2 (high), and from Priority Value 2 (high) to Priority Value 1 (high).

OASD (HA) RESPONSE: Concur. The Program Manager will provide the appropriate documentation to support the assignment of risk priorities associated with commercial off-the-shelf product integration.

RECOMMENDATION 2: We recommend that the Program Manager, Armed Forces Health Longitudinal Technology Application, provide justification and an implementation plan for the Priority Value 1 (high) risk assigned to Block 3.

OASD (HA) RESPONSE: Concur. The Program Manager will provide justification and an implementation plan for the Priority Value 1 (high) risk assigned to AHLTA Block 3.

RECOMMENDATION 3: We recommend that the Program Manager, Armed Forces Health Longitudinal Technology Application, develop additional or more robust mitigation strategies that address the commercial off-the-shelf product integration Priority Value 1 (high) risk in accordance with the CITPO Risk Management Plan. These mitigation strategies should, at a minimum, contain the recommendations included in the Risk Management Guide for DoD Acquisition, Fifth Edition, version 2.0, June 2003 [to] develop additional, more robust mitigation strategies to further reduce and control this risk.

OASD (HA) RESPONSE: Concur. The Program Manager will continue to develop additional and more robust mitigation strategies that address the commercial off-the-shelf product integration Priority Value 1 (high) risk in accordance with the CITPO Risk Management Plan. Corresponding mitigation strategies will adhere to the recommendations included in the Risk Management Guide for DoD Acquisition, Fifth Edition, version 2.0, June 2003.

Inspector General (IG) Report-Dated March 24, 2006

Inspector General (IG) Draft Audit Report
"Acquisition of the Armed Forces Health Longitudinal Technology Application"
Project No. D2005-D000AS-0117.000
Office of the Secretary of Defense (Health Affairs) Response

TMA TECHNICAL COMMENTS:

Executive Summary

Current: (Paragraph 3)

"Additionally, the program management office has not identified any mitigation strategies to reduce and control risk".

TMA Response:

The program management office did identify several mitigation strategies. This issue was identified in the TMA's 3 Mar 2006 feedback to the Discussion Draft of a Proposed Report, which included the following Risk Management reports. Additionally, only one of these reports, 2005-020, is listed in Appendix D. Recommend all four reports be included.

2005-020, CHCSII COTS Integration, 1 Aug 2005
2004-080, CHCSII, Block III -Lab AP/COTS Interoperability, 1 Jan 2005
2004-085, CHCSII, COTS Integration/Convergence, 1 Jan 2005
2004-086, CHCSII, COTS Integration, 10 Jun 2004

Classification of Commercial Off-the-Shelf Risk

Current: (Page 5, paragraph 1)

"Additionally, the program management office has not identified any mitigation strategies to reduce and control program risk."

TMA Response:

The program management office did identify mitigation strategies. This issue was identified in the TMA's 3 Mar 2006 feedback to the Discussion Draft of a Proposed Report, which included the following Risk Management reports. Additionally, only one of these reports, 2005-020, is listed in Appendix D. Recommend all four reports be included.

2005-020, CHCSII COTS Integration, 1 Aug 2005
2004-080, CHCSII, Block III -Lab AP/COTS Interoperability, 1 Jan 2005
2004-085, CHCSII, COTS Integration/Convergence, 1 Jan 2005
2004-086, CHCSII, COTS Integration, 10 Jun 2004

Final Report Reference

Page 9, paragraph 3

Mitigation Strategies

Current: (Page 8, paragraph 6)

"At the time of our review, the Program Management Office did not have a mitigation strategy associated with the identified COTS".

TMA Response:

The program management office did identify mitigation strategies. This issue was identified in the TMA's 3 Mar 2006 feedback to the Discussion Draft of a Proposed Report, which included the following Risk Management reports. Additionally, only one of these reports, 2005-020, is listed in Appendix D. Recommend all four reports be included.

2005-020, CHCSII COTS Integration, 1 Aug 2005
2004-080, CHCSII, Block III -Lab AP/COTS Interoperability, 1 Jan 2005
2004-085, CHCSII, COTS Integration/Convergence, 1 Jan 2005
2004-086, CHCSII, COTS Integration, 10 Jun 2004

AHLTA Program Management Office Response to Discussion Draft

Page 9, paragraph 4

Current: (Page 9, Paragraph 2)

"In response to our request for additional information to support their statement, the program office staff provided an updated copy of their COTS Integration Risk Management Report, March 2, 2006, which showed that on September 28, 2005, the project officer approved opening two mitigation strategies identified by the CHCS II Project Team. However, this current report contradicts the risk report provided to the audit team on October 3, 2005, because, according to the risk report at that time, the program office was still evaluating mitigation strategies. Appendix D contains the October 3, 2005, and March 2, 2006, Risk Management Reports."

TMA Response: TMA does not see a contradiction in these reports-perhaps some explanation is needed. The Risk Management report (2005-020) documents the status of the COTS integration risk at that time. As of 3 Oct 2005, mitigation strategies 2005-20-1 and 2005-20-2 indicate the Program Office was evaluating mitigation strategies, which were initiated 28 Sep 2005. The 2 Mar 06 risk management report 2005-20 provides traceability of updates to this risk management report, reflected in the General Comments section:

1 Aug 2005: Potential risk identified, awaiting approval
5 Aug 2005: Priority level 3 risk assigned
28 Sep 2005: Approval to develop 2 mitigations strategies
1 Nov 2005: Approval to elevate risk from level 3 to level 2
17 Jan 2006: PM is advised of cost and complexity of COTS integration; risk elevated to level 1

Final Report Reference

In addition to Risk Management Report 2005-020, the program office provided the following risk management reports 3 Mar 2006, which were not included in Appendix D:

2004-080, CHCSII, Block III -Lab AP/COTS Interoperability, 1 Jan 2005
2004-085, CHCSII, COTS Integration/Convergence, 1 Jan 2005
2004-086, CHCSII, COTS Integration, 10 Jun 2004

Conflicting Priority Values of the Risk (Page 10, Paragraph 1)

Page 10, paragraph 2

TMA Response:

The statement, "**Conflicting Priority Values of the Risk**" is misleading and misrepresents the CITPO Risk Management Program. These changes reflect proactive adjustments made to the AHLTA COTS integration risk 2005-020 priorities over time, from 5 Aug 2005 (Level 3), 1 Nov 2005 (Level 2), and 17 Jan 2006 (Level 1) Suggest "Conflicting" be changed to "Adjusting ".

Current: (Page 10, Paragraph 1)

Page 10, paragraph 2

"The program management office comments to the discussion draft report also identified COTS integration as a medium risk."

TMA Response:

This sentence has apparently been misinterpreted and taken out of context. In the 3 Mar 2006 comments to the discussion draft report, TMA provided the following statement, "CITPO has identified COTS integration as a medium level program risk and developed corresponding mitigation strategies." The statement was intended to refute the following, "the program office has not identified any mitigation strategies".

This inaccurate statement is repeated in the Executive Summary and on pages 5 and 8, even though TMA provided corrections 3 Mar 2006. CITPO provided four COTS risk management reports dating back to 10 Jun 2004, with risk priority assignments that range from 1 to 3. These risk priorities have been adjusted over time to help manage AHLTA's COTS integration risk.

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