JOINT REPORT TO CONGRESS

ELECTRONIC MEDICAL RECORD INTEROPERABILITY

Requested by:

Conference Report 110-434, accompanying H.R. 3332,

Making Appropriations for the Department of Defense for the

Fiscal Year Ending September 30, 2008, and for other Purposes

And

Conference Report 110-424, accompanying H.R. 3043

Making Appropriations for the Departments of Labor, Health and

Human Services, and Education, and Related Agencies for the

Fiscal Year Ending September 30, 2008, and for other Purposes

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Executive Summary

This report responds to the request in Conference Report 110-434 of H.R. 3332, Conference Reports 110-423 and 110-424. This consolidated report highlights the actions being taken by the Department of Defense (DoD) and the Department of Veterans Affairs (VA) to meet the requirement for an interoperable Electronic Health Record (EHR) by September 30, 2009.

DoD and VA are committed to achieving interoperable electronic health records (EHR) to support health care and benefits delivery and management for our nation's Service members and Veterans. Our goal is to ensure appropriate beneficiary and medical information is visible, accessible, and understandable through secure and interoperable information management systems—making the necessary information available to those who need it, when they need it, and in a form that is suited to meet stakeholders' needs.

The agencies have established a joint governance and oversight structure to determine data sharing priorities, address policy issues, guide execution, and oversee progress. Through the VA/DoD Joint Executive Council (JEC), Health Executive Council (HEC) and Benefits Executive Council (BEC), senior leadership of both Departments have oversight on joint initiatives. In May 2007, the Wounded, Ill and Injured Senior Oversight Committee (SOC) was established to directly engage the senior military and civilian officials to ensure that the recommendations of the Independent Review Group, the President's Commission on Care for Returning Wounded Warriors, the Interagency Global War on Terror Heroes Report, and other commissions and studies were promptly and properly integrated and implemented, coordinated, and resourced. On April 17, 2008, the Departments established the DoD/VA Interagency Program Office (IPO) to provide direct operational oversight and management of EHR interoperability initiatives. Additionally, the DoD/VA Joint Clinical Integration Board (JCIB) was established to ensure clinicians have a direct voice in the prioritization of recommendations for electronic health data sharing.

The Departments recognize that information does not always need to be computable to be of value; information in a text or scanned format and viewable by users may be the most cost effective way to meet the need. The Departments adopted the Center for Information Technology Leadership's (CITL) Standardization Levels as an analytical framework for defining interoperability.

Across the nation, data standards are neither completely defined nor implemented. The government has acknowledged a role in influencing industry to adopt data standards and develop products based on these standards. Both Departments are national leaders in these data standardization efforts, participate in Standards Development Organizations deliberations, have agreed to an initial set of standards through the e-government initiative, Consolidated Health Informatics, and are active in the Healthcare Information Technology Standards Panel (HITSP). The Departments are committed to implementing agreed upon national standards, however, occasionally must execute data sharing projects in anticipation of nationally recognized standards.

Today, DoD and VA are leading the nation in exchanging information among separately developed systems to provide timely administration of veterans' benefits and continuity of care for our Wounded Warriors. DoD and VA continue to collaborate in numerous interagency data sharing activities and are delivering information technology (IT) solutions that significantly improve the secure sharing of appropriate electronic health information. The Departments are leveraging existing bidirectional exchange initiatives to expand the types of data shared and are on target to ensure that essential health data elements, as defined by the JCIB, will be viewable between the departments by October 2008. The Departments continue to plan and collaborate regarding electronic medical record interoperability.

Under the leadership of the JEC and HEC, the Departments are marching forward to implement enhancements to existing data exchanges while identifying attainable opportunities to support our most seriously ill and injured Service members and Veterans.

The Departments' EHR Interoperability goal is to achieve a single logical (not necessarily physical) electronic health record view across the full Service member and Veteran life-cycle.

Information technology can not by itself solve various quality, coordination, and efficiency problems. Underlying organizational processes must be improved first, or information technology merely perpetuates the old processes. Understanding the organizational needs, standard, defined processes which the organization utilizes, and simplifying those processes is the first priority. Subsequently, information technology serves as an enabler and supports the organization's improved business processes. DoD and VA are committed to continue to evolve and expand the appropriate sharing of health information to enhance care delivery and continuity of care for shared patients to meet the requirement for interoperable electronic health records systems or capabilities by September 30, 2009. The agencies recognize that there is a compelling need to promote the sharing of health information, not just with other federal agencies, but also with private sector health care entities to provide for the continuity and quality care to all Wounded Warriors.

Background

This report is submitted pursuant to Conference Reports 110-423 and 110-424. The report includes a discussion of the following: details of actions being taken by Department of Defense (DoD) and Department of Veterans Affairs (VA) to achieve interoperable electronic health record systems or capabilities; detailed spending plan for the use of funding provided in the Joint Incentive Fund (JIF) for the Inpatient EHR Assessment; the identification of on-going and planned projects and programs; and, a discussion of the Departments' goals for interoperability and how these projects and programs will address those goals.

Overview and Vision

DoD and VA are committed to achieving an interoperable EHR to support healthcare and benefits delivery and management for our nation's Service members and Veterans. It is our goal to make the necessary information available to those who need it, when they need it and in a form that is suited to meet stakeholders' needs. To realize the shared vision of information interoperability, the two Departments will leverage current, robust information sharing programs and infrastructure and expand upon existing initiatives and incrementally implement greater capabilities as determined by the health, benefits, and personnel communities and as technology advances. Actions and involvement by leadership, management, and the workforce are required to fully achieve the shared vision of information interoperability.

Governance and Oversight

Joint Executive Council/Health Executive Council/Benefits Executive Council

The two Departments have a formal governance council structure to oversee development of policy and support to DoD/VA joint initiatives and resource sharing, including information sharing. The Joint Executive Council (JEC) is co-chaired by the Deputy, Secretary of VA, and the DoD Under Secretary for Personnel and Readiness. The JEC is the overarching council, and links the two supporting councils: the Health Executive Council (HEC) co-chaired by the VA's Under Secretary for Health and the Assistant

Secretary of Defense for Health Affairs, and the Benefits Executive Council (BEC) co-chaired by the VA's Under Secretary for Benefits and DoD's Principal Deputy Under Secretary for Personnel and Readiness. The councils use the VA/DoD Joint Strategic Plan (JSP) as their guide for the implementation of the goals and objectives related to sharing and improving care and benefits administration to beneficiaries. The DoD/VA JSP is used to advance performance goals, and is annually reviewed, updated, and improved.

Senior Oversight Committee

A Wounded, Ill, and Injured Senior Oversight Committee (SOC) was formed as an ad hoc task force to specifically address the recommendations by the Government Accountability Office, the Veterans Disability Benefits Commission, the Independent Review Group's Report, the DoD Task Force on Mental Health, the President's Commission on Care for America's Returning Wounded Warriors, the Global War on Terror Heroes Report, and the National Defense Authorization Act (NDAA) of 2008. The SOC, which is co-chaired by Deputy Secretary of Defense and Deputy Secretary of VA compliments the goals of the councils.

DoD/VA Interagency Program Office

Section 1635 of the NDAA for FY08, directed the agencies to establish the Interagency Program Office (IPO). The IPO was stood up in April 2008 and reports to the JEC co-chairs. The IPO's immediate focus will be on EHR and other health care data sharing between DoD and VA, however, the scope of the IPO is anticipated to expand in mid-Fiscal Year (FY) 2009 to include personnel and benefits electronic data sharing.

DoD/VA Joint Clinical Information Board (JCIB)

The JCIB is a DoD/VA clinician led group co-chaired by the Deputy Assistant Secretary of Defense for Clinical and Program Policy and the Chief Patient Care Services Officer, Veterans Health Administration. The JCIB guides the clinical priorities for what electronic health information we should share next. The JCIB will prioritize additional sharing information to achieve interoperable EHR systems and capabilities by September

2009. They will continue to prioritize additional data sharing for future development as well.

Interoperability Maturation

DoD and VA have agreed to use the following definition, which focuses on the desired outcome of information interoperability, that is, a mutual understanding of shared information.

> *"The ability of users to equally interpret (understand) unstructured or structured information which is shared (exchanged) between them in electronic form."*

The Interoperability Continuum

The two Departments are guided by the Center for Information Technology Leadership's (CITL) Standardization Levels as an analytical framework for defining interoperability. CITL defines four levels of Healthcare Information Exchange and Interoperability which reflect the amount of human involvement required, the sophistication of information technology (IT), and the level of standardization. Table 1 below characterizes the four levels:

Table 1

Level	Description	Example
1	Non-electronic data exchange	No use of IT (Mail, telephone)
2	Machine-transportable data	Transmission of non-standardized data via basic IT (fax, e-mailed pictures, portable document format files)
3	Machine-organizable data	Transmission of structured messages containing non-standardized data; requires interfaces that can translate incoming data from the sending organization's vocabulary to the receiving organization's vocabulary; usually results in imperfect translations because of vocabularies' incompatible levels of detail (e-mail of free text, PC-based exchange of files in incompatible or proprietary file formats, HL-7 messages)
4	Machine-interpretable data	Transmission of structured messages containing standardized and coded data; Interoperable

		data exchange with standardized message formats and content (automated exchange of coded results from an external lab into a provider's Electronic Medical Record, automated exchange of a patient's problem list)

Level 1, the lowest level is defined as non-electronic data exchange or no use of IT to share data. Level 4, the highest level, is defined as machine-interpretable data or the transmission of structured messages containing standardized and coded data. Level 4 is viewed as an idealized state with all systems using standardized formats and vocabularies. The CITL framework does not imply that all information is needed at level 4, nor is level 4 achievable in all circumstances. Today much of the information being shared between the DoD and VA is at level 3 with some data (outpatient pharmacy and allergy data) being shared at level 4 for more than 18,100 patients receiving care from both DoD and VA. Clinicians on the JCIB apply the CITL definitions to determine what information needs to be viewable versus computable. As an example, most clinical notes can be transmitted at level 3 with no loss of clinical utility and, therefore, expanding resources to achieve a higher level may not be cost effective.

Interoperability Drivers and Constraints

A major driver for information interoperability is to ensure that the information on wounded warriors is available for the purposes of timely benefits administration and continuity of care whether in DoD, VA, or the private sector. After a review of recent Commission and Presidential Task Force reports, key clinical issues facing veterans from recent conflicts have been identified as: burns, traumatic brain injury, vision and hearing loss, multi-amputation, and post-traumatic stress disorder. Healthcare providers identified information gaps by comparing the electronically available information against the information needed to treat the common problems presented by returning wounded warriors. It is critical that information sharing be driven by the needs of the clinical and business users of the information systems with the most urgent needs given highest priority when technically feasible.

As DoD and VA modernize their information systems, it is important that DoD and VA consider DoD/VA information exchange requirements. However, it is not reasonable to delay DoD and VA information sharing initiatives in anticipation of any such enhancements. Near term success will be measured in increments rather than in one major implementation of tools and capabilities. DoD and VA will likely continue to experience a range of information interoperability issues, some intrinsic to the current way of doing business, others arising as a result of technology, and yet others from a workforce not yet fully trained regarding the value of information and its management. Examples of constraints to achieving information interoperability include: undefined standards and maturing standards that are not implemented; incompatible legacy computing and communications infrastructure; architectural issues; and, existing data in unstructured formats which is difficult to discover and access. The DoD/VA Information Interoperability Plan addresses many of these issues.

Information technology can not by itself solve various quality, coordination, and efficiency problems. Underlying organizational processes must be improved first, or information technology merely perpetuates the old processes. Understanding the organizational needs, standard, defined processes which the organization utilizes, and simplifying those processes are the first priority. Subsequently information technology serves as an enabler and supports the organization's improved, business processes.

Although not perceived as a constraint, reaching consensus on information requirements is a complex undertaking requiring a structured approach and support from subject matter experts. Information analysis requires close cooperation between domain experts and information technologists. Often, the information requirements may appear rather unclear and complex which makes clarifying and structuring an intensive and time-consuming effort. Restraint is needed to preclude leaping to a technical solution without an adequate requirements definition.

Adoption of Shared Standards

DoD and VA are leading the nation on sharing data. Across the nation, data standards are neither completely defined nor implemented. The government has acknowledged a role in influencing industry to adopt data standards and develop products based on these standards. Both Departments are national leaders in these data standardization efforts, participate in Standards Development Organizations deliberations, have agreed to an initial set of standards through the e-government initiative, Consolidated Health Informatics (CHI), and are active in the Healthcare Information Standards Technology Panel (HITSP). Today, the data standardization efforts reside under the umbrella of the American Health Information Community which recently approved an initial set of technical standards. Implementation of standards will facilitate information sharing between the two Departments and private sector healthcare delivery systems. Table 2 below shows the dimensions of the evolution of information sharing between the Departments.

Table 2

Beginning	Today
Viewable text	Viewable text, images (limited) and computable data
Historical data with monthly updates	Current information, realtime
Local Site-by-Site sharing	Enterprise-wide availability of data
Separated veterans' data	Active duty, veterans', and shared beneficiaries data
One-Way Exchange	Two-Way Exchange

The Current Environment

Increasingly, administrative and healthcare documents are available electronically, although some are still only available in paper form. As more information is captured electronically, there are greater opportunities to share the information electronically thus improving the rapid sharing of data and continuity of care.

On-going DoD/VA Interagency Initiatives

DoD and VA continue to spearhead numerous interagency data sharing activities and are delivering information technology solutions that significantly improve the secure sharing of appropriate electronic health information. These initiatives enhance healthcare delivery to beneficiaries and improve the continuity of care for those who have served our country. This section describes these initiatives. Section 6.2 provides a summary of information sharing statistics.

When a Service member separates from active duty, DoD supports the monthly transfer of electronic health information to a secure jointly developed repository known as the Federal Health Information Exchange (FHIE). VA providers and benefits specialists access the data in this joint repository daily for use in the delivery of healthcare and claims adjudication. VA clinicians using VistA/Computerized Patient Record System access this data while treating veterans. VA benefit specialists access data through the Compensation and Pension Record Interchange system, which supports the adjudication of compensation and pension benefit claims. It also facilitates determination of entitlement to vocational counseling, planning, and training as well as insurance and waiver of premiums for veterans with a 100 percent Service connected disability rating. The data transferred includes: inpatient and outpatient laboratory and radiology results; outpatient pharmacy data from MTFs, retail network pharmacies, and DoD mail-order pharmacy; allergy information; discharge summaries; admission, disposition, and transfer information; consultation reports; standard ambulatory data record information such as diagnostic codes, primary care physician, treating physician; patient demographic information; Pre-and Post-Deployment Health Assessments (PPDHA) and Post-Deployment Health Reassessments (PDHRA).

DoD sends electronic PPDHA and PDHRA information to the VA monthly for separated Service members and National Guard and Reserve members who have been deployed and are now demobilized. In addition, DoD sends PDHRAs to VA weekly for individuals referred to the VA for care or evaluation. PDHRAs are used to monitor the overall health

condition of troops post deployment with, specific emphasis on mental health concerns that have emerged over time since deployment; inform them of potential health risks; as well as maintain and improve the health of Service members and veterans.

For patients being treated by both DoD and VA, the Departments developed the Bidirectional Health Information Exchange (BHIE) which enables the bidirectional, real-time sharing of allergy information; outpatient pharmacy data; demographic data; inpatient and outpatient laboratory and radiology results; ambulatory encounters/clinical notes; procedures; patient problem lists; encounter notes; vital signs; and Theater clinical data. Theater data includes inpatient notes, outpatient encounters, and ancillary clinical data, such as pharmacy data, allergies, laboratory results, and radiology reports. Access to BHIE data is available through AHLTA and VistA for patients treated by both departments.

To increase the availability of clinical information on a shared patient population, VA and DoD have collaborated to further leverage the BHIE functionality to allow bidirectional access to inpatient documentation from DoD's Essentris System. Twenty of DoD's largest inpatient facilities use Essentris to document inpatient care. The Departments currently share discharge summaries, operative notes, inpatient consultations, and inpatient history and physical data and are in the process of implementing the ability to share additional inpatient documentation, such as summary notes, initial evaluation notes, procedure notes, evaluation and management notes, pre-operative evaluation notes, and post-operative evaluation and management notes. Several sites have implemented this capability and implementation will continue at additional sites in the coming year.

In September 2006, the Departments established interoperability between the Clinical Data Repository (CDR) of AHLTA and VA's Health Data Repository (HDR). The DoD/VA Clinical Data Repository/Health Data Repository (CHDR) interface supported the first exchange of interoperable and computable outpatient pharmacy and medication

allergy data between the Departments in a live patient care environment. The exchange of computable outpatient pharmacy and medication allergy data enables drug-drug interaction checking and drug-allergy checking using data from both departments. This enhances patient safety and quality of care. CHDR allows for the exchange of computable pharmacy and medication allergy data on patients who receive care from both healthcare systems. DoD's outpatient pharmacy data exchange includes information from MTF pharmacies, retail pharmacies, and mail order pharmacies. Clinicians at several sites are actively using CHDR and continue to exchange pharmacy and medication allergy data on more than 18,100 patients who receive healthcare from both systems (active dual consumers). This functionality is now available for use in all DoD facilities. More than ninety-five DoD sites have patients who are flagged as active dual consumers.

For our most seriously wounded, ill, and injured Service members, DoD and VA also coordinated on additional sharing initiatives such as medical records scanning. In addition to making documentation from Essentris available to VA, the Departments are scanning paper medical record items from three major DoD trauma centers (Walter Reed Army Medical Center (WRAMC), National Naval Medical Center (NNMC) Bethesda, and Brooke Army Medical Center (BAMC)) to be sent to the four VA Polytrauma Centers (in Tampa, Richmond, Palo Alto, and Minneapolis) when patients are transferred as inpatients. The goal is to make those records available to VA in a digital format. One of the key considerations in technical solutions was to index the digitized record in a manner that can be efficiently identified and viewed by providers.

To support the most severely wounded and injured Service members, DoD and VA have also begun medical image sharing initiatives. DoD electronically transfers radiology images from these same three major DoD trauma centers to the four VA Polytrauma Centers when patients are transferred as inpatients. This is a manually intensive process for both DoD and VA and is not scalable to broader imaging sharing between the Departments.

As part of a demonstration project, William Beaumont Army Medical Center (WBAMC) and El Paso VA Health Care System (HCS) implemented a solution based on BHIE to exchange digital radiology messages. The primary focus is for sharing radiology images between DoD and VA facilities in a specified geographic region. The capability was successfully demonstrated and is operational in El Paso. It is currently being implemented in Evans Army Community Hospital and Naval Health Clinic Great Lakes. This image sharing solution is planned to expand to Landstuhl Regional Medical Center, the National Naval Medical Center, Walter Reed Army Medical Center, and Keesler Air Force Base. The project team is working with each of the military services and the leadership at each site to finalize implementation dates. The target is to have all sites implemented by end of calendar year 2008. Expansion to these sites will involve a broader test of the functionality, provide the Departments more data on clinical demand and need for digital images, and provide key data on infrastructure needs and limitations. These lessons learned will be used to inform broader DoD/VA image sharing efforts.

The Laboratory Data Sharing Interoperability Initiative (LDSI) facilitates the electronic sharing of laboratory order entry and results retrieval between DoD, VA, and commercial reference laboratories. LDSI for laboratory chemistry tests is available for use throughout DoD, and is actively being used daily between DoD and VA at several sites where one Department uses the other as a reference laboratory. DoD and VA also have the capability for laboratory anatomic pathology (AP) and microbiology orders and results retrieval using Logical Observation Identifiers Names and Codes (LOINC) and Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) data standards. The LDSI AP/microbiology functionality became operational at Brooke Army Medical Center and VA South Texas Health Care System in May 2007.

Either Department may function as the reference laboratory for the other. The decision to offer referral testing and to use LDSI to allow electronic orders and results retrieval is based on the results of the local business case analysis. For example, a small medical

facility, such as an outpatient clinic, may have a laboratory, but the number and types of available tests performed in-house are scaled to match the scope of services offered by the clinic. The small lab would not be able to offer the full range of laboratory tests that a laboratory that supported a medical center could perform. When a provider orders a test on a patient that is not able to be performed in-house, laboratory personnel must make arrangements to send that patient's specimen to an outside laboratory for testing. The specimen is often sent to a commercial reference laboratory. However, in locations where DoD and VA facilities are in close proximity to each other, it may be more cost effective and/or efficient to send the specimen from the smaller VA lab to the larger DoD lab, or vice versa, instead of using a commercial testing facility. For example, in El Paso, Texas, WBAMC and the VA El Paso Health Care System Clinic are co-located. The VA Clinic has a laboratory that completes some laboratory tests internally, but it relies on WBAMC to perform other tests.

From a Laboratory Director's perspective, LDSI streamlines workflow and facilitates laboratory business processes for both the submitting and testing facilities. The ability to electronically place and transmit orders to the reference lab coupled with the ability to electronically enter and transmit results back to the submitting facility, reduces the administrative manpower burden and improves the security of patient information. Also, use of LDSI enhances patient safety by eliminating potential clerical errors resulting from manual transcription of results from paper reports into the lab computer system.

DoD and VA will continue to evolve and expand the appropriate sharing of health information to enhance care delivery and continuity of care for shared patients.

The inpatient EHR assessment project is a joint activity by the DoD and VA to define and develop an inpatient EHR solution that will ensure high quality clinical care for the Service member across the continuum of care from the point of injury in Theater to DoD MTFs in Garrison to VA medical centers. Instead of addressing the sharing of clinical

data between DoD and VA as an add on to a project, the solution will build, from the ground up, allowing for DoD and VA clinicians to have access to the clinical information on a patient regardless of where the care is rendered.

The project is comprised of two six month phases. The first phase, completed in January 2008, documented and assessed DoD and VA inpatient clinical processes, workflows, and requirements. It identified areas of commonality and the areas of uniqueness between the departments. Additionally, it determined the benefits and the impacts on each department's timelines and costs for deploying a common inpatient EHR solution.

In the follow-on phase, specific actions are being developed that are based on the information developed during the initial phase. The outcome of the second phase, was completed in August 2008, and included a set of prioritized recommendations for potential technical solutions. Those recommendations were derived through a cost analysis, schedule and benefits for VA and DoD using analytic modeling based on recognized industry best practices. The output from phase II will be used as an input into the subsequent decision by DoD/VA executive leadership on the approach for a Joint Inpatient EHR.

Since the 1st Quarter, FY 2007, DoD and VA have spent a total of 4.43 million dollars for Booz Allen and Hamliton's support of this project.

Currently Shared Information

The table below summarizes some of the increases in electronic health data sharing over the last year.

Table 3

DoD/VA Sharing Initiatives FY 2007 to FY 2008 Statistical Comparison		
Project:	**April 2007**	**April 2008**
Federal Health Information Exchange (FHIE):	• 3.8 million unique patients • 2.2 million correlated patients • 54.6 million laboratory results • 9.0 million radiology reports • 55.2 million pharmacy records • 57.0 million standard ambulatory data records • 1.7 million consultation reports *Cumulative Total: Over 187 million HL7, PDTS, and SADR messages*	• 4.3 million unique patients • 3.0 million correlated patients • 63.1 million laboratory results • 10.4 million radiology reports • 64.6 million pharmacy records • 68.1 million standard ambulatory records • 2.5 million consultation reports *Cumulative Total: Over 220 million HL7, PDTS, and SADR messages*
Deployment Health Assessments:	Over **1.7M** Pre– and Post–Deployment Health Assessments (PPDHA) and Post–Deployment Health Reassessments (PDHRA) forms on over **690,000** separated Service members and demobilized Reserve and National Guard members	Over **2.2M** Pre– and Post–Deployment Health Assessments (PPDHA) and Post–Deployment Health Reassessments (PDHRA) forms on over **906,000** separated Service members and demobilized Reserve and National Guard members
Bidirectional Health Information Exchange (BHIE) statistics for shared patients:	• 26 DoD host sites which include 15 medical centers, 19 hospitals, and more than 190 outlying clinics • Over 2.2 million correlated patients • Over 919,000 unique new patients (not in FHIE data repository) • Over 891,000 cumulative DoD/VA FHIE/BHIE queries • Over 63,000 combined DoD/VA FHIE/BHIE monthly queries	• All DoD/VA sites • Over 3.0 million correlated patients - Includes over 78,000 Theater patients • Over 1.5 million unique new patients (not in FHIE data repository) - Includes over 22,000 Theater patients • Over 2.3 million cumulative DoD/VA FHIE/BHIE queries • Over 274,000 combined DoD/VA FHIE/BHIE monthly queries

DoD/VA Sharing Initiatives FY 2007 to FY 2008 Statistical Comparison		
Project:	**April 2007**	**April 2008**
BHIE-DoD Essentris Interface:	• 7 DoD Sites • Inpatient Discharge Summaries	• 16 DoD sites (accounts for over 40% of all DoD Inpatient beds) • Inpatient Discharge Summaries, Inpatient consultations, operative reports, and history and physical reports • Transfer Summary notes, Initial Evaluation notes, Procedure notes, Evaluation and Management notes, Pre-operative Evaluation notes, and Post-operative Evaluation and Management notes roll out (at 4 of 16 facilities)
Clinical Data Repository/Health Data Repository (CHDR) Sites:	• 7 DoD/VA Sites • Number of Active Dual Consumer (ADC) patients - 4,984	• Available to all DoD sites • 7Active DoD/VA Sites • Number of Active Dual Consumer (ADC) patients – 18,160

Going Forward

The Departments continue to pursue information management and technology initiatives to improve the secure sharing of appropriate health information. These initiatives enhance healthcare delivery to beneficiaries and improve the continuity of care for those who have served our country. They make up the pathway to increased information interoperability and their alignment to the Departments' goals.

Planned Initiatives

Recognizing that many of the inpatient clinical care processes in the DoD and VA hospitals and medical facilities are similar, the two Departments have committed to identifying opportunities for sharing of health care data and information systems in order to provide more cost effective and efficient support for our nation's Service members and Veterans. DoD's AHLTA is in use worldwide with an inpatient capability planned for future enhancements. As part of the MHS EHR strategic plan, in the third quarter of FY

2008 DoD is to receive the results of an assessment of the options for implementing an enterprise wide inpatient capability. The timeline for implementing that capability is dependant on the analysis of the assessment. VA's VistA/CPRS is in use across the VHA and is fully integrated across inpatient and ambulatory care settings, and is undergoing a modernization effort to support the use of current technology and information tools. Therefore, the timing was appropriate to investigate opportunities for a joint approach for the inpatient EHR system.

The types of data that will be shared through BHIE will be expanded by the end of FY 2008 to include, family history, social history, images, questionnaires and other documents.

To increase the availability of clinical information on a shared patient population, VA and DoD have collaborated to further leverage the BHIE functionality to allow bidirectional access to inpatient documentation from DoD's Essentris System. This capability is now operational at 20 of DoD's largest inpatient facilities. The Departments are currently in the process of implementing the ability to share additional inpatient documentation, such as pre-operative and post-operative evaluation and management notes. DoD will also expand Essentris to 14 additional sites in FY 2009.

To increase the availability of computable clinical information, VA and DoD are collaborating to further leverage the CHDR to support the DoD/VA exchange of computable laboratory data exchange capability, by the end of FY 2009. In addition the departments will implement the automated activation of active dual consumer patient capability to support the current DoD/VA exchange of computable pharmacy and allergy data. This will begin by the end of FY 2008 and is anticipated to be completed by 3rd quarter FY 2009.

DoD/VA will implement the image sharing capability using BHIE that was successfully demonstrated at additional sites in FY 2008 and FY 2009. This initiative will facilitate real-time awareness of and access to radiological images at the point of care.

DoD and VA want to provide healthcare providers with awareness of the availability of both DoD and VA medical images, and provide efficient interagency access to those images. Shared images will be temporarily stored, but will not transfer from one agency to the other, facilitating real-time awareness of and access to images at the point of care with minimal negative impact on agency networks or storage capabilities. As DoD continues to work toward image-enabling AHLTA, DoD is working with VA to learn from their experiences.

DoD and VA currently use a Virtual Private Network (VPN) between their networks to insure secure data transfer. DoD and VA have been working closely to foster the development and implementation of a trusted network security and communications infrastructure partnership in support of electronic health information sharing. Implementation of an improved secure DoD/VA gateway to support health data exchange and provide redundancy is anticipated in late 4th Quarter FY 2008. The gateways will support current and planned health data sharing, including image sharing.

The Departments will continue to participate in the DoD/VA Health Architecture Interagency Group (HAIG). The HAIG participates in and contributes to standards related organizations such as Healthcare Information Technology Standards Panel (HITSP) and Health Level 7(HL7) in order to improve the availability of shared health information in support of consumer-driven health care and interoperable health information for DoD/VA beneficiaries.

VA and DoD will continue to exhibit leadership in the national and Government-wide health information technology standards harmonization and implementation arena by participating in the development of health standards, and when mature and available,

jointly utilizing health information technology systems and products that meet recognized interoperability standards.

VA and DoD will continue to work through the JCIB to ensure clinicians lead the information technology community in prioritizing electronic health data sharing needs.

Summary

With the joint leadership of both Departments, DoD and VA continue to develop and implement numerous interoperability initiatives. Today they are delivering information technology solutions that significantly improve the secure sharing of appropriate electronic health information for our shared beneficiaries and the seamless transition for Service members to Veteran status. The current level of sharing has built a strong foundation for information interoperability needed to achieve our shared vision. Step-by-step, the two Departments have broadened the scope of the information being shared supporting enhanced continuity of care and will proceed to achieve interoperability of our EHR systems and capabilities by September 2009.