



TRICARE
MANAGEMENT
ACTIVITY

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DEC 08 2003

The Honorable Duncan Hunter
Chairman, Committee on Armed Services
U. S. House of Representatives
Washington, DC 20515-6035

Dear Mr. Chairman:

I am pleased to forward this report as required by Section 753 of National Defense Authorization Act for Fiscal Year 2001. This report includes discussions on the activities of the Medical Informatics Advisory Committee and on the coordination of development, deployment, progress, and maintenance of health care informatics systems within the Federal Government and between the Federal Government and the private sector.

Since the area of Medical Informatics includes Federal Health Information Exchange (formerly the Government Computer-based Patient Record), the Computer-based Patient Record report required by the House Armed Service Committee Report 106-616 is incorporated into the Medical Informatics Report.

The Department of Defense recognizes the importance of these medical informatics initiatives in improving information sharing between the Military Health System and our federal and private sector partners.

Thank you for your continued support of the Military Health System.

Sincerely,

William Winkenwerder, Jr., MD

cc:
Representative Ike Skelton

Report to Congress



Report on Medical Informatics

Required by:

Section 753, National Defense Authorization Act for Fiscal Year 2001

and

House Armed Services Committee Report 106-616

REPORT ON MEDICAL INFORMATICS

Background

This report is required by Section 753 of the National Defense Authorization Act for fiscal year 2001. The report includes a discussion of the following: (a) The activities of the Committee; (b) The coordination of the development, deployment, and maintenance of health care informatics systems within the Federal Government, and between the Federal Government and the private sector; (c) The progress or growth occurring in medical informatics; and (d) How the TRICARE program and the Department of Veterans Affairs health care system can use the advancement of knowledge in medical informatics to raise the standards of health care and treatment and the expectations for improving health care and treatment.

The committee also directed the Secretary of Defense to provide an annual report beginning March 1, 2001, to the Senate Committee on Armed Services and House Committee on Armed Services 106-616 on the progress to date and the remaining timelines and tasks associated with integrating Department of Defense (DoD), the Department of Veterans Affairs (VA), and the Indian Health Service medical information systems.

Medical Informatics Advisory Committee

DoD requested that the Quality Interagency Coordination (QuIC) Task Force, a federal interagency activity with similar and complementary responsibilities and membership, accept the role of the Medical Informatics Advisory Committee. This role was approved by the QuIC membership. A June 2003 letter from Dr. Carolyn Clancy, Director, Agency for Healthcare Research and Quality, reiterated the continuance of the QuIC serving in the dual capacity as the Medical Informatics Committee.

The QuIC was established by Presidential Directive in 1998 to “Ensure that all federal agencies involved in purchasing, providing, studying or regulating health care services are working in a coordinated manner toward the common goal of improving quality” and was chaired by the Secretary of Health and Human Services (HHS) and co-chaired by the Secretary of Labor. The committee is currently chaired by the Secretary of Health and Human Services with the Director of the Agency for Healthcare Research and Quality serving as the chairperson for day-to-day operations. Current membership includes the Departments of Defense, Veterans Affairs, Labor, Commerce, and HHS, United States Coast Guard, Federal Bureau of Prisons, Office of Management and Budget, Office of Personnel Management, National Highway Transportation and Safety Administration, and the Federal Trade Commission,

In addition to actively participating in QuIC meetings, workgroups, and other activities, DoD subject-matter experts have briefed the QuIC on the Composite Health Care System II (CHCS II) (the military electronic medical record), the Theater Medical Information Program, and the Defense Medical Logistics Supply Support (DMLSS) program. Most recently, DoD and VA jointly briefed on the VA/DoD Joint Electronic Health Records Interoperability Plan and DoD/VA Health Information Standards Activities.

Additional Interagency Oversight

DoD/VA Health Executive Council and DoD/VA Joint Executive Council: The Chief Information Officers (CIOs) of the Military Health System and the Veterans Health Administration (VHA) meet on a continuing basis to explore, assess, develop, and monitor joint medical informatics initiatives. Both CIOs are members of and report bi-monthly to the DoD/VA Health Executive Council which is co-chaired by the Assistant Secretary of Defense (Health Affairs) and the VA Undersecretary for Health. Periodically, information management and technology issues also are briefed to the

DoD/VA Joint Executive Council which is co-chaired by the Under Secretary of Defense (Personnel and Readiness) and the Deputy Secretary for Veterans Affairs.

The VA/DoD Joint Strategic Plan: The VA/DoD Joint Strategic Plan, approved at the April 2003 Joint Executive Council meeting, includes an integrated information sharing goal with several actionable objectives for health information sharing. These include enhancing the Federal Health Information Exchange capabilities, demonstrating new technical capabilities to exchange appropriate health data between DoD and VA while maintaining appropriate security, and adopting common health data standards.

The President's Task Force to Improve Health Care Delivery For Our Nation's Veterans (PTF): The President's Task Force to Improve Health Care Delivery For Our Nation's Veterans (PTF) was created by Executive Order 13214, signed in May 2001. The President's charge to the PTF was to identify ways to improve health care delivery to VA and DoD beneficiaries through better coordination and improved business practices. The final report from the PTF, including a series of 23 specific recommendations for action, was published in May 2003. These recommendations focus on providing clearer leadership, creating a seamless transition, removing barriers to collaboration, and addressing the mismatch between VA demand and resources. Among these is a recommendation that "VA and DoD should develop and deploy by fiscal year 2005 electronic medical records that are interoperable, bi-directional, and standards-based." Many of the DoD/VA activities discussed in this report support increasing the Quality of Medical Care through Medical Informatics.

DoD/VA Interagency Health Informatics Initiatives

The VHA and the MHS are involved in numerous multi-agency medical informatics activities. Examples of specific DoD/VA joint efforts are as follows:

Federal Health Information Exchange: The Federal Health Information Exchange (FHIE), formerly known as the Government Computer-based Patient Record (GCPR), is an exemplary model of collaboration between the Departments. FHIE enables the electronic transfer of appropriate protected electronic health information, in keeping with applicable privacy laws and regulations, from DoD to VA at the time of a service member's separation. DoD has transmitted over 47 million messages on 1.56 million unique patients containing information on laboratory results (clinical chemistry, blood bank information, microbiology, surgical pathology, and cytology), radiology results, outpatient pharmacy data from military treatment facilities, allergy information, discharge summaries (inpatient history, diagnosis, and procedures), admission, disposition, and transfer information (admission and discharge dates), and patient demographic information (name, social security number, date of birth, sex, race, religion, patient category, marital status, primary language, and address). This information is available in the FHIE data repository for access by VA providers nation wide at over 200 facilities.

DoD will transfer additional protected health information on individual service members at the time of their separation from military service and on previously separated veterans as mutually agreed upon requirements are approved. All health information exchanges will be executed in a manner that is fully compliant with Health Information Portability and Accountability Act (HIPAA) regulations. A separation listing provided monthly by the Defense Manpower Data Center (DMDC) is used to continue to gather and transfer this information on newly separated service members.

The data elements added in fiscal year 2003 were discharge summaries, allergy information, more robust admission, disposition, transfer information, and laboratory cytology results. Future planned product improvements will enable FHIE to include consult reports (referring physician and physical findings), additional pharmacy information (DoD's Mail Order Pharmacy and retail pharmacy profile), and selected data

from the Standard Ambulatory Data Record (diagnosis codes, primary care manager, treatment provider, clinical service, and appointment date/time). The MHS and VHA CIOs meet with the FHIE program management staff on a monthly basis to provide the necessary guidance to keep this exemplary program functioning smoothly.

DoD/VA Electronic Health Records Interoperability Initiative: DoD strongly supports the need for appropriate sharing of electronic health information between DoD and VA. In addition to the efforts on FHIE, to further strengthen DoD/VA electronic medical information exchange while leveraging Departmental systems investments, DoD and VA are working to ensure the interoperability of the Department's electronic medical records systems by the end of fiscal year 2005.

As previously reported, at the September 2002 DoD/VA Joint Executive Council meeting, the Under Secretary of Defense (Personnel and Readiness) and the Deputy Secretary for Veterans Affairs signed the Executive Decision Memorandum defining the goals of the DoD/VA Electronic Health Records Interoperability Initiative. To facilitate the development of functional capabilities and requirements and ensure interoperability between the DoD Clinical Data Repository (CDR) and the VA Health Data Repository (HDR), the Departments formed the Clinical/Health Data Repository (CHDR) Working Integrated Product Team (WIPT) led by senior managers in both Departments. An official Charter laying out the following goals was developed and signed by both the DoD and VA:

- Health care providers shall have integrated access to health data from an individual's DoD and VA records by October 2005.
- The CHDR WIPT will recommend an architecture that will enable an integrated view of health data.
- Clinical decision support for an individual will seamlessly use data from both agencies.

The CHDR WIPT is co-chaired by the DoD Chief Medical Information officer and the VA Enterprise Systems Manager, Health Data Systems. The CHDR WIPT is continuing their efforts to develop interoperability between the DoD Clinical Data Repository (CDR) and the VA Health Data Repository (HDR) to meet the goal of October 2005. The CHDR WIPT started meeting monthly in June 2002 and currently has sub-groups/areas of concentration in the following areas: architecture, information management/data quality/standards, functional, program management, imaging, and information assurance/privacy. To date, the CHDR WIPT has developed high-level functional requirements, a draft architecture diagram, and a preliminary project timeline. The CHDR WIPT continues to work towards the development of a prototype for a bi-directional data flow between DoD and VHA and the development of a CDR-HDR interface. A proof of concept demonstration is planned for single clinical domain area (Pharmacy) by October 2004. The exchange of health information exchanges will be in full compliance with HIPAA regulations.

The CHDR WIPT is additionally working towards a draft data movement and replication design, a draft “treatment” policy white paper on information assurance/privacy, and a draft system view architecture. The overall CHDR project timeline preliminarily incorporates the subgroup timelines and milestones. Assumptions, dependencies, overlaps, and inconsistencies have been identified. Domains or specific areas of information for the CDR and HDR are being compared and mapped to ensure compatibility.

Laboratory Data Interoperability: Both DoD and VA use electronic order entry systems to order laboratory tests and receive results. Historically, these systems have not been able to exchange data. This initiative facilitates the electronic transfer/sharing of laboratory order entry and results retrieval between DoD, VA, and commercial reference laboratories. Encrypted communications are now being exchanged between the Spark M.

Matsunaga VA Medical Center and Regional Office (Honolulu) and Tripler Army Medical Center. Plans for further implementation are underway.

Credentialing Test: A pilot project is underway to evaluate the merits of electronically sharing credentialing information between DoD's Centralized Credentials Quality Assurance System and Veterans Administration Professional Review Program (CCQAS/VetPro), the HHS developed system used by VA. Agreement has been reached on common credentialing data elements to be exchanged between the two systems to improve the process of initially credentialing a provider that has been previously credentialed in the other Department. The DoD and VA's software developers have jointly and successfully begun building the necessary interfaces to support this initiative. Pilot testing will take place at Naval Hospital Great Leaks/North Chicago Veterans Health Care System/Hines VA Hospital, Ireland Army Community Hospital/Louisville, VA; and Mike O'Callaghan Federal Hospital in Las Vegas, NV and should be complete by the second quarter of FY 2004.

Consolidated Mail Outpatient Pharmacy Pilot: The Consolidated Mail Outpatient Pharmacy (CMOP) pilot project was initiated to evaluate the cost effectiveness, processes, and beneficiary use of a CMOP operated by VA to refill prescriptions from the DoD direct care system. The two Departments have collaborated to develop an automated interface between the Leavenworth, KS, CMOP and three MTFs, one from each of the services. The specific sites are: Kirtland Air Force Base, NM; Naval Medical Center, San Diego, CA; and Darnall Army Community Hospital, Fort Hood, TX. The Departments have reviewed analysis of the joint DoD/VA CMOP Pilot prepared by Center for Naval Analysis (CNA) and have found the program to be feasible, with high participation by DoD beneficiaries, and high satisfaction among users of the program. The DoD continues to be interested in exploring this joint activity with the VA.

E-portal Systems: DoD and VA continue to collaborate on the development and enhancement of their e-portal systems: TRICARE Online and MyHealthVet. In 2003, VA procured their health and wellness content from Healthgate Data Corporation, providing MyHealthVet access to the same 18 million pages of content used by DoD's TRICARE Online. Within the VA, the planned national release date for MyHealthVet is April 15, 2004. MyHealthVet will support a unified portal entry system into VA services by veterans. Within DoD, TRICARE Online is now deployed at 117 sites and has more than 62,000 registered users.

Other Multi-Agency Health Informatics Initiatives

Standards Development: DoD continues to play a key role as a lead partner in the Consolidated Health Informatics (CHI) initiative. The goal of the CHI initiative is to establish Federal health information interoperability standards as the basis for electronic health data transfer in all activities and projects among all agencies and departments. The new standards will help improve the quality of care by ensuring federal entities use common standards that will make it easier to exchange needed information. Currently, federal entities use systems based on different standards that make it difficult to share information. Standards for data exchange between DoD and VA will be current Government, DoD, and VA standards. Standards developed and reviewed by the CHI interagency working group will be used to the greatest extent possible. HHS serves as managing partner for this initiative and other partners include the VA, Centers for Medicare & Medicaid Services, National Institutes of Health, Centers for Disease Control, Indian Health Service, Social Security Administration, General Services Administration, Administration for Children & Families, Food & Drug Administration, U.S. Agency for International Development, Department of Justice, and Department of State.

In March 2003, HHS announced the first set of standards to be adopted. These are:

- Health Level Seven (HL7) messaging standards
- National Council on Prescription Drug Programs (NCDPC) standards
- Institute of Electrical and Electronics Engineers 1073 (IEEE 1073) series of standards for connectivity of medical devices to computers
- Digital Imaging Communications in Medicine (DICOM) standards for digital imaging
- Laboratory Logical Observation Identifier Name Codes (LOINC) to standardize the electronic exchange of clinical laboratory results
- X12 transaction set, as required by HIPAA regulations

At a briefing before the National Committee on Vital and Health Statistics in May 2003, CHI's initial considerations on the second set of terminology recommendations were well received. Final recommendations are expected in late fiscal year 2003 or early fiscal year 2004.

The members of the CHI are also participating in a number of projects -- individually and as part of the Consolidated Health Informatics group -- looking to establish widespread use of electronic health data systems and programs including electronic health records. Among these are "two new steps in building a national electronic health care system that will allow patients and their doctors to access their complete medical records anytime and anywhere they are needed, leading to reduced medical errors, improved patient care, and reduced health care costs," as HHS Secretary Tommy G. Thompson announced 1 July, 2003, at the National Health Information Infrastructure Conference in Washington, DC.

- First, the Secretary announced that the Department has signed an agreement with the College of American Pathologists (CAP) to license the College's standardized medical vocabulary system and make it available without charge throughout the U.S. This action opens the door to establishing a common medical language as a key element in building a unified electronic medical records system in the U.S. The CAP agreement announced 1 July 2003, will be administered

through the National Library of Medicine (NLM), a component of HHS' National Institutes of Health (NIH). The terms of the contract include a one-time payment-shared by the Department of Defense, the Department of Veterans Affairs, and many HHS agencies-with annual update fees to be borne by the NLM.

- Second, the Secretary announced that HHS has commissioned the Institute of Medicine to design a standardized model of an electronic health record. The health care standards development organization known as HL7 has been asked to evaluate the model. Once it has been designed in HL7, HHS will share the standardized model record at no cost with all components of the U.S. health care system. The Department expects to have a model record ready in 2004. DoD, among other federal agencies, is actively participating as an organizational member of HL7 in the development of the functional model design and evaluation.

To date, DoD and VA have agreed to adopt joint health care information technology standards, where applicable, and joint workgroups have developed clinical vocabulary and laboratory standards recommendations that are under review by the full committee.

Federal Health Architecture: The Federal Health Architecture initiative is being led by the Department of Health and Human Services. DoD is one of the lead agencies participating in this new initiative. The first vertical line of business proposed to be addressed is public health surveillance. This effort will serve as a proof-of-concept for continuing to develop additional lines of business building to a full Federal Health Architecture.

Connecting for Health: DoD remains an enthusiastic supporter of Connecting for Health . . . *A Public-Private Collaboration* in 2003 through participation as a member of the Steering Group. This collaborative was convened by the Markle Foundation to answer calls by the Institute of Medicine, the President's Information Technology Advisory Committee, and the National Committee on Vital Health Statistics to provide clinicians, consumers, and those responsible for population health with ready access to timely, reliable, and secure information via an electronic health information infrastructure. Specifically, its primary objectives are to accelerate the rate of adoption of

national clinical data standards and identify practical strategies and solutions for developing an interconnected electronic infrastructure. The collaborative is comprised of stakeholders from federal and state organizations, health care information technology organizations, national standards groups, manufacturers, academic and research institutions, consumers, and private clinicians and hospitals.

This effort includes a Data Standards Working Group that was formed to establish a consensus on a core set of data and communication standards, specifications and related components that meet the overlapping needs of patients, providers, and public health agencies; define barriers to widespread adoption; and identify and implement strategies to accelerate adoption of standards. DoD, along with other federal agencies, was an active participant in this work group. The Data Standards Working Group report and recommendations were published June 5, 2003. DoD will be a participant in the September 2003 Steering Group meeting to help determine options for the next phase of work for this initiative.

Continuity of Care Record: DoD participated in the first of a series of consensus-building meetings offered on the Continuity of Care Record (CCR) Project sponsored by the Massachusetts Medical Society, Healthcare Information and Management Systems Society (HIMSS), and ASTM International. The CCR is a standard specification being developed to foster and improve continuity of patient care when a patient is referred, transferred, or otherwise goes to another provider setting. Demographic information, allergies, a medication list, and summary of care provided, plus a short care plan with recommendations for the next step in patient care, are included in the CCR. The consensus-building meetings are being held in order to involve government agencies, medical societies, other professional societies, state departments of public health, and others who may be interested in contributing to its development and adoption.

Military Health System (MHS) Medical Informatics Decision Making Tools

DoD is working to optimize the organization and use of the digital information that will be available as a result of innovations in medical informatics. This process involves not only creating the hardware and software specific to these needs, but also developing the approach to collecting, integrating, analyzing, and presenting the information to monitor, guide, and eventually elevate the performance of the health care system through improved use of information.

In addition to the interagency efforts outlined above, DoD positioned itself to support several new medical informatics initiatives. Significant progress has been made internally in developing and testing three major informatics initiatives: the MHS Data Repository (MDR), the MHS Management Analysis and Reporting Tool (M2 – formerly known as the All Region Server Bridge), and the Population Health Operational Tracking and Optimization (PHOTO) tool. Examples of the kinds of improvements made in 2003 are those to M2. These include technical improvements, security improvements, the addition of pharmacy data from the Pharmacy Data Transaction Service (PDTS), and improvement in data quality. Further, DoD began planning and organizing activities to support the successful implementation of the new TRICARE Encounter Data format to be used by Managed Care Support Contractors (MCSCs).

MHS Data Repository (MDR): The MDR is an exceptionally robust clinical and business data warehouse supporting executive information and decision support for the MHS. To facilitate providing complete, accurate information upon which to make decisions, the MDR manages the receipt, processing, and storage of tremendous volumes of data. Data in the repository reflect health plan utilization by all MHS beneficiaries around the globe over the past seven years. The MDR is populated with clinical encounter and cost data from the MTFs as well as “purchased care” data from contracted MHS network providers. More than 260 systems around the globe provide clinical, cost,

eligibility, and purchased care data as well as multiple reference files. This enables crosscutting analysis among financial, clinical, enrollment and eligibility, and purchased care databases.

Robust demographic data is fed into the data warehouse from the Defense Manpower Data Center elucidating not only the geographic locations of eligible beneficiaries, but also their history of health plan enrollment. Finally, a nearly continuous stream of laboratory, radiology, and pharmacy data populates the warehouse with remarkably detailed outcomes data that make the MDR one of the most clinically rich data repositories in the world.

The data, which include beneficiary, provider, financial, and healthcare use information, are processed in the MDR to improve data quality, integrated, and then made available to MHS decision makers. Multiple executive information and decision support tools have been developed to utilize the MDR. These systems allow MHS executives and analysts to perform an exceptionally wide range of analytical and managerial functions. From simple web-based reports, managers can assess the current status of health plan performance. Clinical researchers and analysts also can study everything from a horizontal view of a single patient's care to the effects of legislated changes in health plan policies on financial planning. Emphasis in 2003 has been on increasing the data feeds and improving data quality.

MHS Management Analysis and Reporting Tool (M2): This extremely powerful analytic tool supports healthcare analysts and decision makers to manage and oversee MHS operations. It is an automated information system designed to deliver decision support and executive information capabilities in a secure environment to executives at all five operational levels within the enterprise. M2 combines a powerful commercial ad hoc query tool with MHS data covering the clinical, financial, and beneficiary demographic domains with MTF, purchased care, pharmacy, and enrollment/eligibility

data. In M2, the frequency of some of the data feeds has been increased from monthly to weekly to provide better, more timely data. During 2003, the volume of data going into M2 has increased to include pharmacy data from the Pharmacy Data Transaction Service (PDTS), data from the Customer Satisfaction Surveys, and population projection data from the Managed Care Forecasting and Analysis System (MCFAS). Security of the data has also been upgraded.

Population Health Operational Tracking and Optimization (PHOTO): The PHOTO system is a data mart that provides easy access to standardized MHS performance metrics, which include data from direct care facilities and the MCSCs. It provides a concise set of health plan performance measures in a single, user-friendly, web-based application to inform TRICARE program managers of the effectiveness and efficiency of their program execution. The PHOTO metrics offer visibility into beneficiary health care patterns and provide important information for evaluating the implementation of TRICARE and the MHS Optimization Plan in the areas of Customer Responsiveness, Best Clinical Practices, Best Business Practices, and Population Health Management. Multiple levels of aggregation allow managers at corporate, regional, and local levels to determine their contribution to total plan performance and for the retrieval of appropriately detailed information for effecting change at all levels of the enterprise. During 2003, PHOTO added eight new metrics. These are clinical measures based on the Health Plan Employer Data and Information Set (HEDIS) methodology. Also added was data from the TRICARE Mail Order Pharmacy program tracked in PDTS. The final significant change was the migration of the processing environment to an improved architecture platform, which cut update times by more than 50 percent.

The Pre- and Post-Deployment Instruments - Review and Recommendations: The pre- and post-deployment health assessment instruments are used to determine and document the health status of deploying and redeploying service members. The post-deployment health assessment tool was recently enhanced and expanded from two to four

pages, in response to national interest in the health of deployed personnel as well as the timing and scope of current deployments. These health assessment instruments are important components of DoD's overall force health protection and surveillance programs, helping to identify and address the deployment-related health needs to active and reserve military members and veterans. Efforts to further enhance these medical informatics tools are ongoing, including their use in the metrics-based quality assurance initiatives.

Increasing the Quality of Medical Care through Medical Informatics Research

To facilitate the evolution of Healthcare Quality Measures and Outcomes, TRICARE Management Activity has established a research partner, the Center for Outcomes Research at Yale University School of Medicine. In fiscal year 2000, this center investigated healthcare and management data currently available within the MHS and information systems used to store, retrieve, and share this information. Building upon a foundation of applied scientific methodology and rigor, they analyzed MHS healthcare and management data and delivered the following reports assessing medical informatics initiatives:

Healthcare Quality and Outcomes Research Plan for the Military Health System: This proposes a plan for production of real-time information useful in improving the health of and the provision of healthcare for MHS beneficiaries. This five-year plan calls for using both existing data systems and emerging systems in the development of a platform for gathering and employing real-time data useful for improving the quality of care and outcomes. It identifies opportunities for demonstrating how advancements in medical informatics, combined with a quality and outcomes research capability can transform data into information that can be used to enhance all phases of the healthcare delivery system. The information, in turn, can provide insight and timely support for decision making by clinicians, administrators, policymakers, and the command structure on the quality of

care; variations and patterns of care and outcomes; the effectiveness of clinical and population health strategies, and the efficiency of current approaches.

Evaluation of Clinical Couplers in the Military Health System: This evaluation provides a review of clinical coupler tools. It is currently being reviewed to maximize the use of clinical coupler tools. Clinical couplers are protocols providing an expert advice decision tree linking patient responses to set questions to the identification of preventative and screening measures for specific diseases based on patient risk profiles. The Diabetes Clinical Coupler is currently being integrated into CHCS II.

Summary

During fiscal year 2003, DoD has been actively using advancements in medical informatics to transform the gathering and use of information in order to better understand and measure the delivery and quality of health care provided throughout the MHS. These advancements include increased capacity for integration of databases and systems and improved access to key information collected in the on-going operations of the health care system across multiple and remote sites of care. This includes the greater collection and use of metrics. The Institute of Medicine has cited improved information and use of information as essential tools for raising standards of care.

Advancements in medical informatics have the potential to greatly enhance the information that is readily available to all users. Through the increased access to relevant information, using tools such as clinical couplers, MHS beneficiaries who should receive preventive interventions will be identified and documented. Increase access to information will help to facilitate and evaluate care, identify opportunities for improvement, and highlight examples of clinical and business best practices. Advancements in information will improve health care quality by measuring performance in real-time, providing an overview of the most current outcomes and increasing

accountability. The timely provision of critical information about the care and patient's outcomes to health care providers will provide the knowledge where it is needed most. It will also enhance the quality of health care delivered by the MHS.

DoD will continue its efforts to remain an integral part of interagency activities that capitalize on the use of medical informatics through joint participation with informatics-focused organizations. Senior DoD and VA leaders are committed to joint initiatives, such as participation in the Medical Informatics Advisory Committee, the Joint DoD/VA Clinical Health Data Repository Working Integrated Product Team (CHDR WIPT), the Federal Health Information Exchange (FHIE), and the Consolidated Healthcare Initiative (CHI), which will ensure that the developing capabilities of medical informatics will be implemented in a timely and cost effective manner which supports the quality and availability of the quality medical care to all beneficiaries.