

DEFENSE HEALTH SERVICES SYSTEMS 2009 ANNUAL REPORT

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#### MISSION

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DHSS provides and sustains clinical support, medical logistics, and resource management information technology capabilities that support the delivery of world-class healthcare to our service members and their families in peace and war.

#### VISION

DHSS will be the premier organization which sets the standard for delivering clinical support, medical logistics, and resource management information technology products that are:

- Supportive of operational needs
- Cost effective across the life cycle
- Reliable, robust, timely and secure

## Year One in a Successful Merger



Dear Colleagues,

In June 2008, three program offices—DMLSS, EIDS, and RITPO—came together to form the Defense Health Services Systems. This merger allowed us to incorporate best practices from these successful organizations to deliver health IT systems, to capitalize on our economies of scale, and to improve our product quality. We are proud that as a team we continued high quality service to our customers while navigating the turbulence of a reorganization.

Today we – DHSS - are building or maintaining more than 28 automated information systems used throughout the Military Health System in three major areas: clinical support, medical logistics, and resources. DHSS products help detect and contain the spread of disease across the world, manage the delivery of drugs and medical supplies around the world, and track billions of dollars annually in healthcare services to nearly 9.4 million beneficiaries.

Our number one job is to ensure we satisfy our stakeholders, which includes delivering new capabilities that delight our customers and reliably and safely operate the systems already in-place. There is no doubt we have the skills to achieve this mission. We have a dedicated, well-educated and knowledgeable team. We offer solid products and services to our customers and we are increasing our commitment to keep our customers involved at every step.

We are blessed to have noble work to perform – developing and operating IT systems supporting the delivery of care to the personnel who defend our country. We are further blessed there is plenty of this work to be done, and finally that it is interesting and challenging work. Let's build on the foundation of successes from this past year and make DHSS the best IT organization in the Department of Defense.

Best Wishes,

George (Dan) Magee, PhD

Dan Magea

Program Manager

**Defense Health Services Systems** 

#### DHSS AT A GLANCE

#### **DHSS TODAY**

- · Nation's largest Department of Defense health IT acquisition program in number of users/products deployed
- \$250 million dollar annual budget
- Over nine million eligible product users; one million actual users
- · Develop or maintain 28 products
- Manage 300+ terabyte global data warehouse
- Maintain operations with over 1,000 interfaces worldwide
- · Process TRICARE claims for nearly \$20 billion dollars in purchased care
- Deliver near real-time global medical surveillance
- Provide the AHLTA reporting tool (CDM)
- Operate enterprise Blades Center
- Develop enterprise messaging service (iXP)
- Furnish enterprise Common Access Card authentication system (iAS)
- Maintain over 500 servers in four secure locations
- Send daily data feeds to the Veterans Health Administration and Centers for Disease Control & Prevention
- Sustain global one-million-transaction-a-day financial claims system
- Winner
  - » 2009 Government Computer News Agency IT Award (PMITS)
  - » 2009 Computerworld Honors Program Laureate Award (CDM)
  - » 2009 Computerworld Honors Program Laureate Award (DoD/VHA Data Synchronization)
  - » 2009 Computerworld Honors Program 21st Century Achievement Award Finalist (CDM)
  - » 2009 Paul F. Truran, Jr., Medical Materiel and Logistics Management Award (Col Troy Molnar, DHSS)

#### **DHSS THE YEAR AHEAD**

- Release new dimensional data model for CDM
- Offer CDM access to non-AHLTA users
- Deploy Business ObjectsXIr3 to M2 users worldwide
- Implement iAS DHSS-wide
- Move development/test servers onto more agile and robust environment
- Implement Radio Frequency Identification
- Release Patient Safety Reporting enterprise-wide
- Develop world-class Data Operations Center

## DHSS Leadership

Dr. Magee has more than 30 years of experience in Supply Chain Management, Healthcare Management, Acquisition Management and Information Systems Development. Prior to his position leading DHSS, Dr. Magee served as the Acting Program Manager for the Defense Medical Logistics Standard Support program. DMLSS is the DoD system for managing all aspects of medical logistics for DoD hospitals. Prior to rejoining federal service Dr. Magee spent two and a half years with SAIC managing their support to the DoD TRICARE Online initiatives. Before joining SAIC, Dr. Magee served for 28 years in the U.S. Army and retired as a Colonel in the Medical Service Corps. In his final assignment, he served as the Program Manager for the DMLSS program.



Dr. George (Dan) Magee Program Manager

Mr. Veasey is a retired Army Colonel whose 30 years of distinguished military service featured a variety of assignments. Prior to his retirement, Mr. Veasey served as the Operations Officer to the Army Inspector General; Chief, Army Promotions Branch; and G-1, lst Armored Division with which he served during Operation Desert Storm. After retiring, Mr. Veasey served as a DoD contractor and helped establish the Office of the Special Assistant for Gulf War Illnesses (the predecessor of the Office of Force Health Protection and Readiness). He then worked for the Department of Agriculture before coming to the MHS in 2000. Mr. Veasey first worked as Deputy Program Manager for Operations, Resources Information Technology Program Office. Mr. Veasey assumed the duties of Deputy Program Manager, for the Executive Information Decision Support program office in March 2006, and was promoted to Acting Program Manager of EIDS in January 2008.



Mr. Michael J. Veasey Principal Deputy Program Manager

### **DHSS Leadership**



Ms. Jenna L. Noble Deputy Program Manager Clinical Support Division

Ms. Noble has 29 years in leadership, including seven in the DoD and 22 years in the U.S. Army before retiring as a Lieutenant Colonel. Her leadership skills include program management, policy planning and development, acquisition, information systems, administrative functions, and process improvement. Upon retirement, Ms. Noble was a Process Engineer, Test Manager, and Technical Advisor and then began her civil service career as a Computer Systems Analyst for the Program Executive Office, Enterprise Information Systems, U.S. Army. She next assumed the role of Deputy/ Acting Joint Program Manager of the Defense Integrated Military Human Resources System, a Web-based human resources information system projected to be used throughout the Services. Before joining DHSS, Ms. Noble was Program Control Officer/ Acquisition Lead of the PEO for Satellite Communications, Teleports, and Services at the Defense Information Systems Agency.



COL Christopher J. Harrington Deputy Program Manager Medical Logistics Division

Colonel Harrington was commissioned into the Army in 1982. His assignments have included JTF-A Honduras; U.S. Army Medical Materiel Center, Europe, Heidelberg, Germany; Southwest Asia; Camp Carroll, Korea and Fort Sam Houston, where he commanded the 147th Medical Logistics Battalion. He served as a Division Chief in the office of the Chairman, Joint Chiefs of Staff, J4. At Fort Detrick, he was the Director - Joint Medical Logistics Functional **Development Center managing** development and sustainment of the medical logistics family of systems. He currently serves as the Deputy Program Manager, Defense Health Services Systems - Medical Logistics.



Mr. Michael L. Smith
Deputy Program Manager
Resources Division

Mr. Smith is a retired Lieutenant Colonel from the U.S. Army Medical Service Corps with a concentration in field medical administration, nursing, finance, and health administration. Mr. Smith is a former Chief, TRICARE Policy, Office of the Surgeon General, U.S. Army, where he developed the Army Medical Department policy for managed care worldwide. He also served as the principal liaison for Health Affairs, Service Surgeons General, in implementing operational aspects of the TRICARE program and performance management initiatives for the enterprise. Mr. Smith received the Order of Military Merit, Legion of Merit, Silver Star, and Bronze Star during his military service.

## **Clinical Support Division**

DHSS Clinical Support provides IT solutions to help optimize clinical processes throughout the MHS. Its suite includes clinical data analysis, medical scheduling and appointing, provider privileging and credentialing, patient safety, nutrition management and special needs management.

#### **DEVELOPMENT OF THE CLINICAL DATA MART CONTINUES TO FLOURISH**

Development continues to flourish on CDM, the clinical reporting tool for the military's electronic health record AHLTA. Since its worldwide deployment in February 2008, CDM has grown to over 400 users who generated close to 60,000 data queries last year. Interest continues to peak for CDM reporting with nearly 40,000 queries generated in just the first four months of 2009.

This year, the first set of provider-centric reports was delivered to diabetes providers throughout the MHS. These 12 new reports allow providers to look at their entire panel of diabetic patients using an "at-a-glance" dashboard of trends including blood pressure, hemoglobin A1C levels and body mass index.



Future initiatives include access to CDM outside of AHLTA, new data elements, a new data model to enhance and improve reporting, and new public reports for providers and specialty care givers.

CDM allows Military Health System analysts and clinicians to measure, analyze and manage performance of patient care. CDM provides secure access to clinical patient data from AHLTA's Clinical Data Repository, the global storehouse of direct care health records.

#### **IMPROVEMENTS CONTINUE TO TRICARE ONLINE**

Improvements continue to TOL, the MHS online portal for healthcare services, benefits, and health information. With TOL, users can schedule appointments, order prescription refills and view their personal health records.

This year, TOL account registrations increased by 16 percent and the TOL pharmacy refill module was activated by 111 military treatment facilities, giving beneficiaries the ability to refill and check their medication status online.



## **Clinical Support Division**



#### PATIENT SAFETY REPORTING MOVES CLOSER TO DEPLOYMENT

PSR is scheduled to be deployed early 2010. The PSR team has worked successfully with the Services and the DoD Patient Safety Program Office to develop common workflow processes in the PSR commercial-off-the-shelf (COTS) product being configured for the MHS. Once deployed, PSR will deliver standardized patient safety event reporting for the MHS's direct care facilities and help reduce the frequency and severity of medical safety events. PSR will also allow the MHS to track and trend medical adverse events and pinpoint problem areas for correction and prevention.



### ENTERPRISE WIDE SCHEDULING AND REGISTRATION DELIVERING NEW INTERFACE

Once fully deployed, EWS-R will provide a graphical user interface for the Composite Healthcare System Patient Administration and Patient Appointing and Scheduling modules. EWS-R will reduce duplicate and misidentified medical records by attaching an Electronic Data Interchange Person Number to each patient record. Finally, EWS-R will provide a dental scheduling capability intergrated with AHLTA, the military's electronic health record.

The EWS-R team recently completed systems qualification testing and will now begin operational testing. Transition planning of the EWS-R Project transfer from DHSS to Defense Health Information Management Systems (DHIMS) is underway and set to be complete in FY10.

EWS-R conducted extensive limited user testing at 10 MTFs of which eight elected to retain the application for MTF usage following the testing period. As a result of the LUT, completion of formal developer integration testing and systems integration testing, the project team implemented over 50 enhancements to EWS-R, increasing the application's reliability, response times, and workflow.

## **Clinical Support Division**

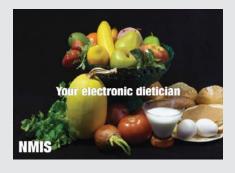
### CENTRALIZED CREDENTIALS QUALITY ASSURANCE SYSTEM DELIVERS IMPROVED SYSTEM RELIABILITY AND PERFORMANCE

The CCQAS team successfully implemented six major maintenance builds, with a total of 295 user change requests, and successfully upgraded the database to Oracle 10g to increase system reliability and performance. CCQAS continues to be responsive to its users by offering additional document storage space for the Services in their continuing move toward a paperless environment. CCQAS delivers a Web-based, worldwide credentials, privilege management, risk management and adverse actions system for the MHS.



### NUTRITION MANAGEMENT INFORMATION SYSTEM REPLACING LEGACY SOFTWARE

The state-of-the-art NMIS COTS product is replacing the legacy NMIS government off-the-shelf system at 48 MTFs worldwide. NMIS is being replaced at 24 Army, 14 Air Force, and 10 Navy sites. In addition, DHSS delivered 90 NMIS tablet computers to the MHS. These tablets give MTFs the ability to work wirelessly at patients' bedsides to increase patient safety and satisfaction. NMIS is a fully integrated nutrition management system supporting military readiness and the war fighter worldwide. NMIS allows MHS dietetics personnel to provide preventive and therapeutic medical nutrition and food management to service members and their beneficiaries.



### SPECIAL NEEDS PROGRAM MANAGEMENT INFORMATION SYSTEM IMPROVES SYSTEM RELIABILITY AND PERFORMANCE

To help guarantee privacy and protection for users and beneficiaries, SNPMIS has encrypted communication and implemented Common Access Card authentication. The SNPMIS team also initiated a server reorganization effort to increase system reliability and performance. SNPMIS provides access to a comprehensive program of therapy, medical support and social services for young MHS beneficiaries with special needs.



DHSS Medical Logistics delivers the DMLSS automated IT system, a Tri-Service suite of modules standardizing medical logistics across the MHS. DMLSS improves the effectiveness and efficiency of MHS healthcare delivery by reducing the time providers and professionals spend on logistics.



### DEFENSE MEDICAL LOGISTICS STANDARD SUPPORT BEGINS DMLSS 3.10 DEPLOYMENT

DMLSS was successfully converted from a HP Informix/UNIX platform, to a Windows/Oracle platform. This Oracle Technical Refresh for DMLSS Release 3.10 has been deployed. DMLSS 3.10 uses an active directory/collaborative forest concept for remote access provided by the U.S. Army Medical Information Technology Center. It also increases the speed of DMLSS and provides the facility management module with Drawbase 6.4. DMLSS 3.10 is expected to be deployed to more than 200 sites within the MHS by the end of 2009.

DMLSS is the DoD standard medical logistics system and helps providers deliver cost-effective, state-of-the-art healthcare to patients worldwide. DMLSS delivers automation support of reengineered medical logistics business practices through a comprehensive range of materiel, equipment, and facilities management information systems.

#### DHSS LAUNCHES RADIO FREQUENCY IDENTIFICATION PILOT IN NATIONAL CAPITAL AREA

As a part of the DMLSS 3.10 technical refresh, RFID was built into DMLSS and is being tested in the National Capital Area as a pilot for the MHS. RFID provides electronic tracking of materials at the pallet level reducing receipt processing and staff time. The pilot launched at Fort Belvoir's Dewitt Army Community Hospital is evaluating the impact of RFID on receipt processing times, time spent on data entry, inventory discrepancy resolutions, sorting goods and verifying quantities. Preliminary results show time savings in receipt processing, staff satisfaction, and ease of discrepancy resolutions. DHSS plans to extend the pilot to the National Naval Medical Center in Bethesda, MD and Malcolm Grow Medical Center at Andrews Air Force Base.

#### **DMLSS CUSTOMER ASSISTANCE MODULE DELIVERS NEW RELEASE**

DCAM Version 1.2.40 was delivered to Defense Health Information Management Systems in November 2008. This next generation of DCAM offers a streamlined user interface. Users can easily sort through on-screen data and quickly make orders, verify receipts, or resolve issues. DCAM's embedded database was also migrated to Microsoft SQL Server Compact Editions, offering faster performance and greater security, while maintaining the lightweight footprint that allows DCAM to be installed on almost any computer. The DCAM medical logistics ordering tool

allows users to view a supplier's catalog and generate electronic orders. DCAM automates the Class VIII supply process at the lower levels of care, and allows non-logisticians to electronically exchange catalog, order, and status information with their supply activity.

#### **DMLSS MIGRATION PLAN RELEASED**

In his April 2009 presentation at the Health Information and Management Systems Society conference, COL Chris Harrington announced DHSS's plan to migrate the DMLSS family of systems to an enterprise-wide logistics architecture by 2012. This approach involves migrating stovepiped DMLSS legacy systems to integrated and interoperable best of breed capabilities. This "net centric" approach will enable DMLSS applications to:

- · Facilitate data and capability sharing in a secure manner
- Standardize security by avoiding point-to-point connectivity
- Improve reuse of service-based system customizations
- Reduce total costs of ownership by maximizing reuse
- Avoid single points of failure prevalent with centralized systems
- Offer a cost effective transition to industry best practices without interruptions in service

#### JOINT MEDICAL ASSET REPOSITORY DATA WAREHOUSE DEPLOYED

JMAR's medical logistics data warehouse has been successfully deployed, allowing JMAR to collect historical data across multiple medical logistics functional areas. Historical data will now be used to predict future asset requirements for trend analysis of purchasing patterns. JMAR's user interface was re-designed and migrated to Business Objects to provide users greater flexibility in data reporting.

The JMAR team successfully deployed the Joint Medical Logistics Readiness Tool, allowing users for the first time to "see" medical logistics asset visibility via a geospatial information system interface.



JMAR is a Web-based application providing access to medical asset information for any user, any time, on any machine. Its Item Receipts Dashboard allows medical logisticians to conduct trend analysis of purchasing patterns at various levels. Its Chemical Biological Radiological and Nuclear dashboard allows DoD to track and analyze CBRN assets across the enterprise. JMAR is the single, integrated and authoritative source for joint Department of Defense Asset Visibility.



### PATIENT MOVEMENT ITEMS TRACKING SYSTEM BEGINS MAJOR UPGRADES

Development has begun for a major upgrade to PMITS that will include an option for data exchange through network connectivity, a new user interface allowing input of criteria for key summary reports, a user-defined summary page displaying key information, an expanded database and data exchange protocol for minimum/maximum item quantity monitoring by location, and expanded search capabilities.

PMITS has been deployed to Kandahar, Afghanistan in support of our troops. Currently, PMITS is in more than 100 sites worldwide, including 61 peacetime, 18 theater, nine training, and 16 rapid deployment sites. PMITS provides an automated system to track and manage the MHS's movement of medical equipment used on patients during aeromedical evacuations. PMITS supports a timely recycling of patient movement items by accurately tracking assets worldwide. PMITS combines basic inventory tracking with the power of "just-in-time" logistics and can operate in a variety of environments, including those without consistent Internet connectivity.



## ESSENCE MEDICAL SURVEILLANCE IMPLEMENTS AUTOMATED REPORTING TOOLS

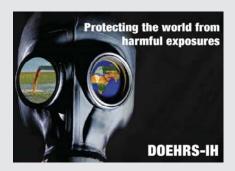
Several automated tools were implemented in ESSENCE to help improve users' productivity, including scripts to monitor and electronically notify users about outages, downtimes, and password reminders. ESSENCE is a Web-based medical surveillance tool that automatically screens the entire Military Health System worldwide for rapid or unusual increases in the occurrence of certain medical syndromes. In October 2008, the ESSENCE server environment was moved to a new secure location resulting in significantly improved performance. Before the move, ESSENCE averaged

two to four ingest cycles every 24 hours. Now, ESSENCE updates its database eight to 10 times every 24 hours, a data timeliness increase of between 150 to 300 percent.

Epidemiologists and public health experts are using ESSENCE to report an increased number of red and yellow alerts for symptoms potentially related to the H1N1 outbreak such as any respiratory, influenza-like illness, fever, and gastrointestinal distress. Requests for ESSENCE accounts continue to significantly increase as awareness of this potential public health emergency continues to rise. ESSENCE looks for and reports unusual trends by types of illnesses over time and by patient or treatment location. ESSENCE receives and analyzes data on approximately 90,000 daily outpatient, pharmacy and emergency department visits in DoD healthcare facilities worldwide.

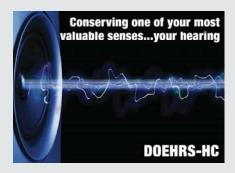
### DEPLOYMENT CONTINUES FOR DEFENSE OCCUPATIONAL AND ENVIRONMENTAL HEALTH READINESS SYSTEM – INDUSTRIAL HYGIENE

DOEHRS-IH has completed deployment to 65 Navy sites and 125 Air Force sites. DOEHRS-IH reports occupational and environmental health readiness and actively tracks air, water, soil, and environmental hazards for the DoD Military Health System. DOEHRS-IH captures and maintains comprehensive, exposure-based surveillance information, enhances personnel readiness and ensures compliance with occupational health and safety federal laws and directives.



### UPGRADES DEPLOYED WORLDWIDE FOR DEFENSE OCCUPATIONAL AND ENVIRONMENTAL HEALTH READINESS SYSTEM - HEARING CONSERVATION

DOEHRS-HC deployed upgrades worldwide to audio booths at 372 Army sites, 206 Air Force sites, 202 Navy sites and 194 Army National Guard sites. DOEHRS-HC also underwent a major audiometer and bio-acoustic simulator hardware refresh. DOEHRS-HC reports noise exposure surveillance and performs hearing diagnostic evaluation and management for the DoD. DOEHRS-HC provides early detection, monitors hearing progress along standard clinical pathways, and documents hearing loss and injury referrals.



DHSS Resources provides world-class enterprise IT systems supporting the business of military medicine. These products support critical business processes such as personnel readiness, manpower and personnel management, learning management, medical coding and collections, as well as solutions that determine the total cost of providing healthcare to the MHS's nearly 9.4 million beneficiaries.

#### DHSS RESOURCES LAUNCHES MILESTONE ACHIEVEMENTS FOR THE MHS

DHSS Resources launched several milestone achievements for the MHS this year. MHS Learn, in partnership with the VHA, launched a free civilian provider online training portal to give physicians worldwide critically needed training on post-traumatic stress disorder and traumatic brain injury. The MHS Data Repository team delivered seamless transference of data products from its repository of more than 100 terabytes of MHS data in days or even minutes to military data analysts worldwide. Such efforts previously required weeks or months for data collection, analysis and reporting. Based on ingest and throughput of source data, MDR processing increased 2,000 percent to more than 46 billion records for FY09. The computing power of the MHS Management Analysis & Reporting Tool doubled. M2, the MHS's most widely used analytical tool, now allows data queries of its 2.5 terabyte database in seconds instead of hours.

The purchased care team launched a secure Web version of TRICARE's Duplicate Claims System that annually identifies \$7 to \$12 million in duplicate claims for recovery by the MHS. The team also reported processing over 184 million TRICARE Encounter Records representing almost \$20 billion in healthcare claims for TRICARE, up five percent over last year.



## DHSS PRODUCTS USED TO IDENTIFY LARGEST FRAUD SETTLEMENT IN TRICARE HISTORY

TRICARE's Program Integrity Office and its subcontractor, Wisconsin Physician Services were unanimously selected for the 2008 Investigation of the Year Award from the National Healthcare Anti-Fraud Association for successfully uncovering more than \$100 million dollars in overseas fraud, the largest in TRICARE history. Using DHSS's Purchased Care Data Warehouse and the Purchased Care Detailed Information System, the Program Integrity Office and WPS identified false claims from the Republic of the Philippines through

Health Visions Corporation. The five-year investigation resulted in a 75-count indictment, guilty pleas, and the recovery of more than \$100 million dollars for TRICARE. PCDW is a single repository of more than 10 years worth of data and is used by the Program Integrity Office as the cornerstone of TRICARE's investigative efforts worldwide. The office uses PCDIS to review detailed claim-related data by provider and beneficiary.

#### THE IMPACT OF PURCHASED CARE FOR THE MHS

DHSS has processed over 184 million Tricare Encounter Data healthcare related records, representing almost \$20 billion dollars in healthcare, up 5% from 2008. The purchased care team also reduced TED's daily cycle time - processing on average 700,000 records - from five to three hours – a 40 percent improvement. Auditing of the TED cycles was also reduced from days to hours and the team applied system automation to simplify data transfer between TED to the MDR. TED records, collects, verifies, and tracks billions of dollars annually in purchased care claims and encounter data for the MHS. TED is the global MHS industry leader in purchased care claims



data records processing. Most TED records validate claim payments within 24 hours of submission, resulting in shorter billing cycles and reimbursements paid within 30 days, one of the fastest claims processing cycles in the healthcare industry.

The purchased care team began redesigning the production architecture for DHSS's Patient Encounter Processing and Reporting. The team also designed a new data management and transfer capability for PEPR that has improved accuracy and automated delivery of reference data to all purchased care systems. PEPR is a Web-based suite of applications used to analyze purchased care claims data generated by managed care support contractors worldwide. Its applications include PCDIS and the Purchased Care Utilization Reporting and Evaluation System.

#### **EXPENSE ASSIGNMENT SYSTEM SUCCESSFULLY CONVERTED**

The EAS repository was successfully converted from an aging Informix database to a modern and sustainable Oracle 10g database. EAS was also upgraded to Business Objects Xi and Solaris 10. The application was installed onto new hardware, resulting in significant improvement in system performance and user access. EAS is a cost allocation tool providing standardized reporting of workload, expense and manpower data. EAS enhances healthcare resource management and supports decision making at all levels of the MHS.





### MHS DATA REPOSITORY TEAM CONTINUES DATA QUALITY IMPROVEMENTS

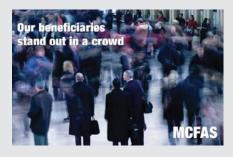
MDR's Data Processing Operations team successfully developed user documentation and guidelines to create a problem-free migration to a new, more powerful platform at a DISA computing facility. Over 100 users of this sophisticated analysis tool and centralized data repository were transitioned to the new environment with minimal interruption.

The team continued development and improvement of data quality assurance tools in regard to the receipt of MDR source data. This continuous

quality improvement program serves to monitor data input, alerts analysts to suspect problems, and assists in the investigation of data timeliness and completeness issues using sophisticated statistical control processes and algorithms developed from observation of data submission trends. Users benefit from better, timelier data as a result of MDR's data quality assurance efforts.

The MDR processing team completed full implementation of automated processes to populate a metadata database of all MDR data products. The metadata allows users to quickly research the composition of each data product available in the repository for use in analysis.

MDR has introduced three new data sets into its processing activities. They are the Comprehensive Ambulatory Provider Encounter Record, TRICARE Retired Dental Program, and Referral Records (in support of Ill, Injured and Wounded Warrior monitoring). DHSS is on track to complete 759 processing cycles that will add over 16.7 billion records to the MDR, an increase of almost 12% over its FY08 production workload. MDR captures and validates from more than 460 DoD health data network systems worldwide, and is the MHS's single point for data integration, data quality edits, online and near-line data storage, feed of extractions to down-stream user interfaced systems, and DoD healthcare data transfers.

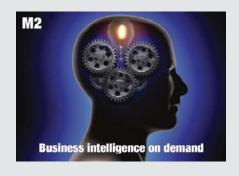


#### **NEW VERSION OF MCFAS RELEASED**

A new version of the Managed Care Forecasting and Analysis System was released featuring several enhancements to the forecasting tool. The enhancements include historic population data from FY1995-2007 and forecasts from FY2008-2015 in the MCFAS Beneficiary Population Forecasting Model, and adds the ability to build custom reports in the MCFAS Custom Market Area Tool. MCFAS is the officially sanctioned source of population forecasts for MHS planning and budgeting, and is used by several federal organizations for planning and budgeting.

### MHS MANAGEMENT ANALYSIS AND REPORTING (M2) BUSINESS OBJECTS XI UPGRADES CONTINUE

The M2 upgrade to Business Objects XI R3 continues to move forward with completion of design review meetings for database and BO universe changes. A BOXIr3 Limited User Validation environment began a six-month trial in June. An elite cadre of M2 users has been granted access to the LUV to explore and test capabilities and enhanced functionality available in BOXIr3. Once the M2 proponents are satisfied objectives of the LUV have been met, migration of M2 to BOXIr3 will begin. M2's AIX operating system and DB2 database are being upgraded as part of M2's Authority to Operate



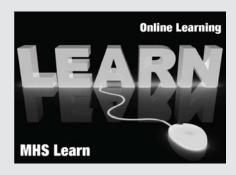
review at a secure DISA computing facility. M2 is a powerful ad hoc query tool used for summary and detailed views of population, clinical, and financial data from all MHS regions. With M2, analysts can perform trend analysis, conduct patient and provider profiling studies, and identify opportunities for transferring healthcare from the private sector to MTFs.

#### **CODING AND COMPLIANCE EDITOR MIGRATES TO NEW SERVERS**

The team successfully migrated CCE from Dell servers to Blades at 39 MTFs. This migration is producing increased processing power and memory allocation and allows central management of CCE including patch updates, application updates and data backup by Blades Operation Center. The team successfully deployed CCE's inpatient module at Offutt, Holloman, Whiteman and its outpatient module at Davis Monthan, Malmstrom, Barksdale, Ellsworth, Peterson, Holloman, Grand Forks, Whiteman, FE Warren, Patrick, and Los Angeles.



The team also successfully installed the latest version of CCE at 52 MTFs providing users the ability to capture the "Present on Admission" indicator for inpatient encounters and improved functionality to schedule worklists and reports.



### MHS LEARN CIVILIAN PROVIDER PORTAL REACHING PHYSICIANS WORLDWIDE

In 2008, Congress directed Department of Defense and Veterans Affairs leaders to identify new ways to reach civilian providers who deliver therapeutic and diagnostic care to active duty Service members and Veterans suffering from post-traumatic stress disorder and/or traumatic brain injury. DoD/VA leveraged DHSS's MHS Learning Management System (MHS Learn) the DoD's enterprise e-learning training portal, to begin offering a six-month Web-based training solution pilot on PTSB/TBI to civilian mental health providers worldwide. Using MHS Learn's existing technologies, the

DoD/VA team delivered the Civilian Provider Portal, from concept to implementation, in less than 90 days. The concept of operations projected 200 mental health providers would access training during the six-month pilot. Since the Portal went "live" more than 1,400 civilian providers have taken the training and nearly 300 providers are signing up each month to be trained on how to recognize PTSD/TBI in their patients who are either active duty military or veterans. The training link is at www.health.mil/civilianprovidereducation, and participants earn continuing medical education credits for successfully completing the courses.

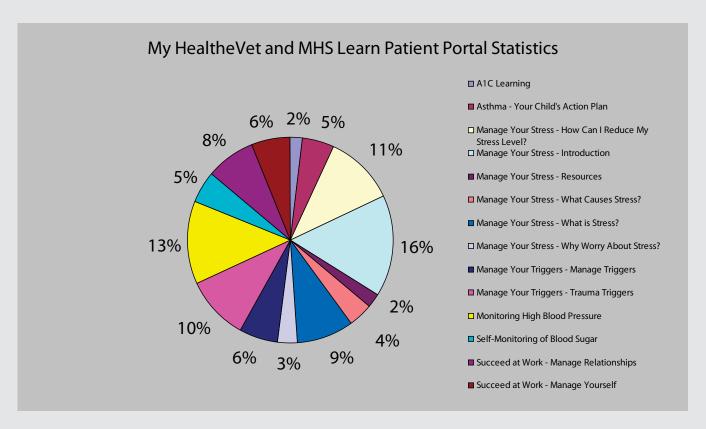
#### MHS LEARN REDESIGNS WEB SITE, UPDATES BROWSER, ENHANCES DOD/VA SHARING OPPORTUNITIES

MHS Learn, the enterprise learning portal, redesigned its Web site, updated it browser system checker and continues to achieve enhanced learning opportunities shared by DoD/VA.

The Browser System Checker now identifies all system components needed to work properly in MHS Learn before a learner logs into the system and encounters any training difficulties. The Browser System Checker was updated with the latest JAVA Console and Windows Media Player Plug.

The team is also working to build a combined training site with the DoD/VA as a potential training portal for their eBenefits and MyHealtheVet portals. Users, from both portals, will have 24/7 access to a multitude of training courses. The training portal is projected to go "live" by the end of 2009. MHS Learn is also working with the Healthcare Executive Council to evaluate adding two VA-developed courses on moderate sedation and PTSD for primary care clinicians.

MHS Learn is a Web-based enterprise training delivery and management system with an expanding library of more than 1,800 medically related courses. MHS Learn actively partners with the DoD/VA and the Uniformed Services University of Health Sciences to provide quality training and continuing education courses and credit to staff and beneficiaries.



My HealtheVet and the MHS Learn Patient Portal have a combined total of 5,053 learners who have accessed these portals. This chart shows courses on both portals along with their associated percentages.

#### PROTECTED HEALTH INFORMATION MANAGEMENT TOOL

PHIMT was migrated to a more secure location and onto a more robust server architecture to allow for the system's future growth. The PHIMT team built a non-sensitive mirror image of PHIMT as a training environment for new users.

The system was upgraded to allow demographic data from MDR to be integrated into PHIMT. This upgrade allows users to look up a patient and allows some of their personal data to be autofilled instead of manually typed into PHIMT. This upgrade reduces the risk of errors in the system while



alleviating work required by PHIMT users to enter Disclosures, Disclosure Accountings, Disclosure Restrictions, Authorizations, Notice of Privacy Practices, Alternative Communications, Complaints, PHI Access, and PHI Amendments.



#### **MHS INSIGHT**

MHS Insight became the Navy's tool of choice for measuring performance management metrics and is becoming the tool of choice for the U.S. Army. The user base increased over 33 percent from FY08 up to 525 users and is continuing to increase significantly.

Live demonstrations of MHS Insight were presented to staff in the Office of Chief IM/IT, the Navy, and the Office of the Chief Medical Officer. All praised the tool as intuitive and beneficial for reporting performance metrics for the MHS. MHS Insight reports real-time, actionable data to help direct

management's efforts, and monitors key data to increase performance accountability by helping leadership identify trends for appropriate action.



#### **PROSPECTIVE PAYMENT SYSTEM**

The latest version of PPS was released in November 2008, and featured the long-awaited PPS reconciliation tool. For the first time, users can query Healthcare Effectiveness Data and Information Set measures. It also allows users to rapidly create advanced and complex queries and access new reporting tables and fields. PPS directs a performance-based budgeting system for the MHS providing incentives and financial rewards for efficient management.



## DEFENSE MEDICAL HUMAN RESOURCES SYSTEM-INTERNET CLOSE TO FULL DEPLOYMENT

2009 is proving to be a successful year for DMHRSi with full deployment expected by the end of FY09. DMHRSi was fully deployed with the Navy by the end of 2008. DMHRSi has been deployed to 98 percent of Army sites and 65 percent of Air Force sites.

In November 2008, users began entering their own e-mail addresses into DMHRSi in preparation for gaining the ability to reset their own passwords in December 2008. In February 2009, DMHRSi was Public Key Enforced.

Ongoing improvements were made to DMHRSi's ad-hoc reporting tool Discoverer. The monthly training schedule for Discoverer is listed on Defense Connect Online and can be viewed at https://connect.dco.dod.mil/plususers. In June 2009, DMHRSi received its Interim Authorization to Operate.

## Awards and Signficant Achievements

# TWO MILITARY HEALTH SYSTEM IT INITIATIVES LAUDED BY COMPUTERWORLD HONORS PROGRAM; AHLTA CLINICAL REPORTING TOOL NAMED 21ST CENTURY ACHIEVEMENT FINALIST

Computerworld Honors Program presented Laureate Awards to two Military Health System information technology initiatives: the Department of Defense and Veterans Health Affairs Data Synchronization and the Clinical Data Mart. Computerworld also named CDM, the clinical reporting tool for the military's electronic health record, AHLTA, a 21st Century Achievement Award finalist in healthcare during its awards ceremony June 1, 2009 in Washington, D.C. This distinguished honor identifies AHLTA's clinical reporting tool as the very best among its peers.



CDM won its Laureate and 21st Century Achievement Award Finalist designation for its use in AHLTA clinical reporting. Using CDM's near real-time AHLTA data, clinicians can quickly identify patients at risk and track chronic diseases such as asthma and diabetes. Most importantly, CDM can uncover clinical blind spots that, if left unchecked, could result in unintentional harm to patients. CDM identified more than 44,000 patients worldwide potentially at risk of undiagnosed chronic kidney disease.

Laureate winner DoD/VHA Data Synchronization was lauded for its standard-setting global model to link, standardize and synchronize medical supply chain product data between healthcare facilities and suppliers. Medical supplies—a \$200 billion dollar industry—account for 40 percent or more of a hospital's operating costs. Since its launch in 2003, DoD/VHA Data Synchronization has saved the federal government more than \$30 million dollars in product price reductions.

This partnership created a global Product Data Bank that has spread to 30 healthcare industry partners as a test pilot for the entire industry. The program is a model of healthcare IT synchronization and strives to move the nation's medical supply industry towards adopting a single-set of standards to reduce medical supply costs and improve patient safety.

CDM and DoD/VHA Data Synchronization are now part of Computerworld's Global Archives. Their case studies will be shared with researchers, students, and scholars through www.cwhonors.org, and through digital records housed in national archives in over 100 universities, museums, and research institutions throughout the world.

#### **DHSS RECOGNIZED BY GOVERNMENT COMPUTER NEWS**

In October 2008, DHSS received an "Honorable Mention" Award from GCN for Outstanding Information Technology Achievement in Government. DHSS was lauded for its work in developing CDM and was cited for improving "the quality, safety and efficiency of healthcare for 9.3 million Military Health System beneficiaries by building CDM, which dramatically improved data query and processing times."

## Awards and Significant Achievements



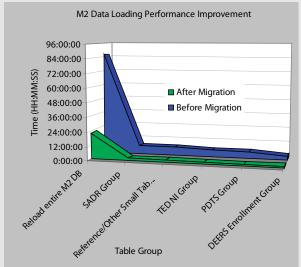
#### DHSS DELIVERS TRAILBOSS MIGRATION ON TIME AND ON BUDGET

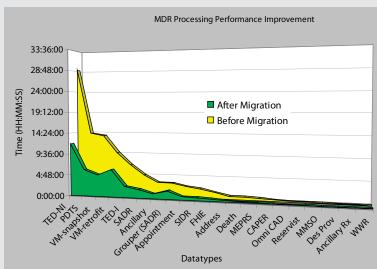
A key achievement for DHSS was the physical migration of its largest technical infrastructure from one secure location to a new secure location on-time and on-budget. This move entitled "Trailboss" relocated 10 DHSS applications and 300 terabytes of data onto 22 new servers in less than nine months. Typically, a migration of this size requires up to 24 months to complete. Key successes included doubling the relative performance computing power onto a smaller physical and energy consumption footprint without interruption of service to thousands of DHSS users worldwide.

With Trailboss, DHSS moved a global automated medical surveillance system, a global business intelligence and analysis network used to manage TRICARE's \$39 billion dollar global healthcare system, and a global one-million-transaction-per-day financial claims processing system.

#### **USERS REACTIONS TO TRAILBOSS MIGRATION**

Results of the migration show significant improvements in data loading and processing times, particularly for MDR and M2. Users report "stunningly faster" processing times as shown in these graphs.





## Awards and Signficant Achievements

#### **DHSS PRODUCTS TRACKING H1N1 PANDEMIC OUTBREAK WORLDWIDE**

Three DHSS products are globally tracking and reporting the H1N1 outbreak worldwide. These applications include the Joint Medical Asset Repository Pandemic dashboard, ESSENCE medical surveillance, and the MHS Data Repository. JMAR's Web-based pandemic dashboard helps quickly locate medical supplies in a crisis through total visibility of DoD-wide medical asset data. Epidemiologists and public health experts are using ESSENCE to report any increases in red and yellow alerts for several medical syndromes, including any respiratory, influenza-like illness, fever and gastrointestinal distress. MDR is feeding raw anonymized Standard Ambulatory Data Records to the Centers for Disease Control & Prevention every four hours, every day of the week. CDC uses this SADR data feed for its BioSense/National Pandemic and Influenza Response Program and for reporting in its weekly publication of the Morbidity and Mortality Weekly Report available at www.cdc.gov/mmwr/about.html.

#### **DHSS PRODUCTS FEATURED IN SEVERAL PUBLICATIONS**

Several DHSS products have been featured in publications throughout the past year.

The Director of the Medical Operations Directorate, Defense Supply Center Philadelphia, COL Marsha Langlois was a featured contributor in the May 2009 issue of Military Medical/CBRN Technology Medical Magazine. COL Langlois describes the operations of the DoD Executive Agent for Medical Material, the DLA Medical Directorate that provides \$4.2 billion dollars worth of medical material and services annually.

MDR data was used in the March 2009 issue of an American Heart Association journal study on the use of Tamiflu to help protect patients with cardiovascular disease who are diagnosed with influenza.

MHS Learn's Civilian Provider Portal was featured in the March 2009 issue of US Medicine.

MHS Insight, the MHS Values Dashboard, was featured in a November 2008 issue of Government Health IT News.



DMLSS was featured in a September 2008 article published by the U.S. Marine Corps Forces Europe about the Marine Corps Prepositioning Program Norway's implementation of DMLSS in Trondheim, Norway.

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