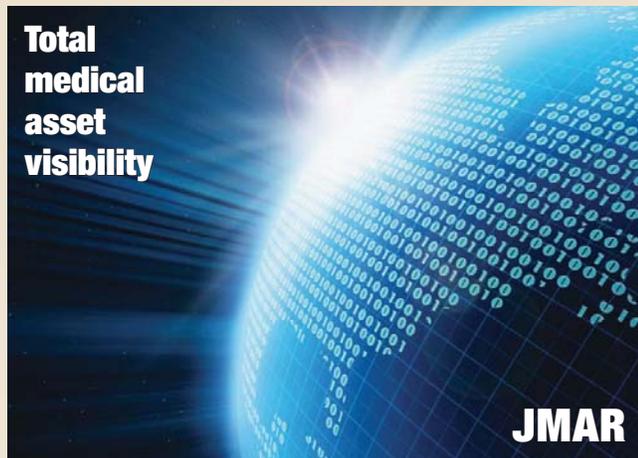


## DHSS Products

# Helping to Track H1N1 Outbreak Worldwide



*Several DHSS products are actively tracking and reporting the impact of the H1N1 influenza A outbreak worldwide.*

The Joint Chiefs of Staff reported the availability of the influenza antiviral medications Tamiflu and Relenza to the Secretary of Defense on April 27 using data from the Joint Medical Asset Repository Pandemic dashboard. DoD began tracking its available medical equipment items, antibiotics and antiviral medications in JMAR before the Department of Health & Human Services issued a nationwide public health emergency declaration on H1N1. 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 the ESSENCE medical surveillance application to report an increased number of red and yellow alerts for several medical syndromes. In particular, symptoms that potentially relate to

the H1N1 outbreak such as any respiratory, influenza-like illness; fever; and gastrointestinal distress. DHSS is also seeing a significant increase in the number of requests for ESSENCE accounts. Since the public health emergency was issued, DHSS has created more than 60 new ESSENCE accounts in just over a week. ESSENCE looks for and reports unusual trends by types of illnesses over time and by patient or treatment location. Four times a day, seven days a week, ESSENCE receives and analyzes data on approximately 90,000 daily outpatient, pharmacy and emergency department visits in DoD healthcare facilities worldwide.

The CDM team has been approached by MHS clinical leaders about creating an H1N1 query to monitor and report potential and confirmed cases of H1N1 Influenza A. CDM is the clinical reporting tool for AHLTA and receives raw data feeds from the Clinical Data Repository three times a week.

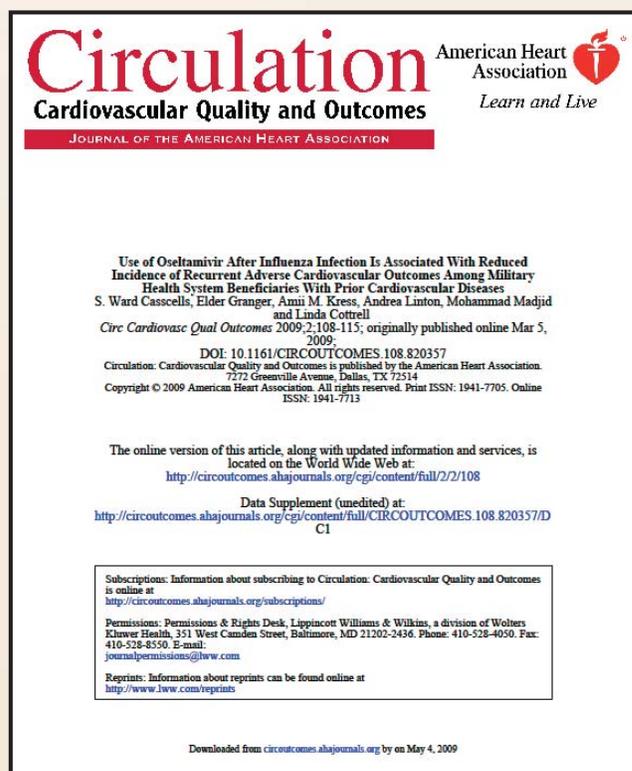
The MHS Data Repository (MDR) feeds raw anonymized Standard Ambulatory Data Records (SADR) to the Centers for Disease Control & Prevention every four hours, every day of the week. The SADR data feed is used for CDC's BioSense/ National Pandemic and Influenza Response Program and also contributes to the weekly publication of the Morbidity and Mortality Weekly Report which is available at [www.cdc.gov/mmwr/about.html](http://www.cdc.gov/mmwr/about.html).

For information on how to access DHSS products, please contact the MHS Help Desk at 1-800-600-9332 or e-mail to [eidsaccess@tma.osd.mil](mailto:eidsaccess@tma.osd.mil).

# MDR Data Used In American Heart Association Journal Study On Tamiflu to Protect Heart Disease Patients with Influenza

*Former Assistant Secretary of Defense for Health Affairs, S. Ward Casscells, M.D., and TRICARE Management Activity Deputy Director MG Elder Granger, M.D., used MDR data in their recently published study on the use of oseltamivir (Tamiflu) to help protect patients with cardiovascular disease who receive the antiviral drug within two days after being diagnosed with influenza.*

The study examined electronic healthcare service and pharmacy records for 37,482 TRICARE beneficiaries, age 18 and older, with a coded history of cardiovascular disease and a subsequent diagnosis of influenza from October 1, 2003 through September 30, 2007. The findings suggest a significant decrease in the risk of recurrent cardiovascular events in patients with a history of cardiovascular disease using the drug. The source of the study data was the MDR, an enterprise-wide data repository that captures patients' demographic and healthcare information each time a beneficiary uses their TRICARE benefit to obtain healthcare services or fill a prescription. The MDR enables the generation of a common patient profile regardless of where healthcare services are rendered, or if a military pharmacy, a commercial pharmacy, or the TRICARE Mail Order Pharmacy is used to fill prescriptions. The study was received on September 8, 2008; accepted January 13, 2009; published in *Circulation: Cardiovascular Quality Outcomes* Journal of the American Heart Association on March 5, 2009, and is available at



<http://circoutcomes.ahajournals.org>. The MDR is the centralized data repository for the MHS providing executive information and decision support for secured electronic healthcare data from the enterprise down to individual recipients of care. MDR data resides on a secure computing environment to which access is based on strict need-to-know mission essential requirements. The MDR captures and validates data from more than 260 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 and DoD healthcare data transfers.

# DHSS Receives Two 2009 Laureate Awards From Computerworld Honors Program

*Two DHSS initiatives, the DoD/VA Data Synchronization and the Clinical Data Mart (CDM), have been selected for 2009 Laureate Awards from the Computerworld Honors Program. Established in 1988, Computerworld's Honors Program recognizes and documents achievements of the men, women, organizations, and institutions around the world, whose visionary applications of information technology promote positive social, economic and educational change. Each year, the Computerworld Honors Chairmen's Committee, a group of 100 Chairmen and CEOs from leading global IT companies, submit nominations for organizations they feel demonstrate extraordinary use of information technology in 10 distinct categories.*



Informatica nominated DoD/VA Data Synchronization in the Government category and CDM in the Healthcare category by submitting case studies on each project's benefits and innovations. Both will become part of the Program's Global Archives and are available to researchers, students and scholars through [www.cwhonors.org](http://www.cwhonors.org), and through digital records housed in national archives in over 100 universities, museums and research institutions throughout the world.

The DoD/VA Data Synchronization initiative for a Medical Product Data Bank, sponsored by DHSS and executed by Defense Logistics Agency's Defense Medical Logistics Standard Support -Wholesale division at the Defense Supply Center Philadelphia has reduced unnecessary costs and improved operations in the federal healthcare supply chain. The DoD/VA is successfully synchronizing data in the materials information systems at more than 80 military and veterans' hospitals with product data from more than 20 supplier partners and two major distributors. This program, which began in 2003 to support the war in Iraq, has saved the government more than \$30 million in product price reductions through the end of 2008.

The CDM case study describes its use as AHLTA's clinical reporting tool to provide timely, automated clinical data analysis across the Military Health System. Using CDM's near real-time AHLTA data, clinicians are able to quickly identify patients at risk and track chronic diseases such as asthma and diabetes. Practice methods can be systematically reviewed using the latest clinical evidence to relate tests and treatments to patient outcomes. And, most important, clinical blind spots can be uncovered that, if left unchecked, could result in unintentional harm to patients. AHLTA's ability to provide timely, automated global clinical data analysis through CDM present boundless opportunities to not just make demonstrable differences in peoples' lives, but to actually save those lives.

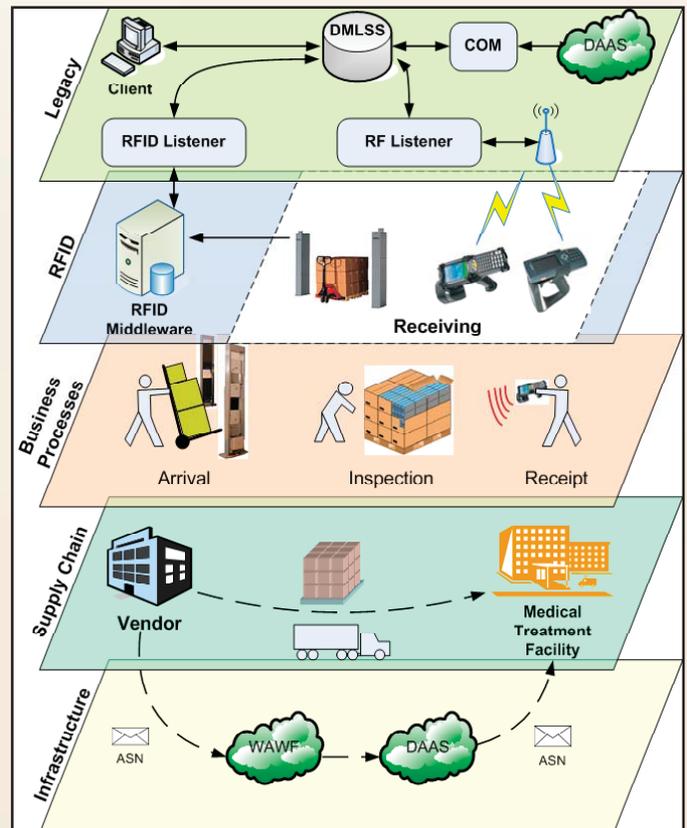
The awards ceremony will be June 1, at the Andrew W. Mellon Auditorium in Washington, DC. Both initiatives are also eligible to win additional honors. During the ceremony, *Computerworld* will announce 50 Laureate finalists for 21st Century Achievement Awards and will present 10 awards (one for each category) for recognition as the very best among their peers.

# DHSS RFID Pilot Featured in National RFID Journal Live! Conference in Orlando, Fla.

*Garry Duvall, DHSS Radio Frequency Identification Project Officer, was a speaker during the 7th Annual RFID Journal Live! Conference in Orlando, Fla., in April. Duvall described how DHSS is deploying an RFID pilot project within the National Capital Area to track medical and surgical supplies. RFID technology uses readers that beam a radio signal to gather information from either active or passive data tags. The DHSS pilot uses passive RFID tags to improve the receiving and distribution of medical supplies. Passive RFID tags, which have no battery and require an external source to provoke signal transmission, are used in enterprise supply chain management to improve the efficiency of inventory tracking and management.*

RFID can be used in numerous ways within a military hospital, Duvall said. The challenge is to find the ways that best benefit the organization. Duvall provided a comprehensive overview of how RFID is currently being used in the U.S. military, and how the U.S. Department of Defense is evaluating the possibilities of implementing RFID over the coming months and years within the MHS.

DHSS's Medical Logistics Division launched the RFID pilot at DeWitt Army Community Hospital at Fort Belvoir, Va. to track medical/surgical supplies and is extending it to National Naval Medical Center in Bethesda, Md., and Malcolm Grow Medical Center at Andrews Air Force Base. DHSS will evaluate the success of the pilot in order to recommend its deployment throughout the MHS medical supply chain. Duvall's



presentation described how DHSS is taking a phased approach to developing RFID as represented in this graph, above.

Duvall also discussed the challenges the MHS faces in deploying RFID system-wide such as potential additional costs for implementation and the lack of enterprise-wide acceptance of wireless technology. Potential benefits of RFID include reduced duplicate orders, increases shipment accuracy and faster receiving. For additional information about the conference please click onto <http://www.rfidjournalevents.com/live/>.

# DHSS Products Featured During 2009 HIMSS Conference and Exhibition

*COL Chris Harrington, DHSS Deputy Program Manager for Medical Logistics, and Lt Col Jean Meink, DHSS Director of Clinical Informatics, were featured speakers in the 2009 Health Information and Management Systems Society international conference and exhibition in Chicago, April 5-9.*

COL Harrington presented "Medical Logistics Supporting the Warfighter: Evolution to a Net-Centric Environment," on April 5 where he discussed the critical need to transform the DMLSS technical architecture from a client-server to an enterprise system so clinicians and logisticians worldwide can access DMLSS as a single-source for medical logistics information needs. Lt Col Meink and COL Kevin Abbott, M.D., presented "Clinical Data Mining Quickly Identifies Patient Risks Worldwide," on April 8. Their briefing described how the CDM mines AHLTA data to monitor patient populations, detect disease trends, and adverse medication reactions.

In addition, 10 DHSS products were exhibited at HIMSS including CDM, the Centralized Credentials Quality Assurance System, DMLSS, Patient Safety Reporting, TRICARE Online, the MHS Management Analysis & Reporting Tool, JMAR, the Patient Movement Items Tracking System, Defense Occupational and Environmental Health Readiness System-Industrial Hygiene and ESSENCE.



## Patient Movement Items Tracking System (PMITS) Deployed to Afghanistan

*PMITS, featured here in the 2009 HIMSS exhibit, has just 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 Patient Movement Items of medical equipment used on patients during an aeromedical evacuation. PMITS supports a timely recycling of PMI equipment by accurate tracking processes coupled with worldwide asset visibility. 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.



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