



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

DEC 29 2010

The Honorable Carl Levin
Chairman, Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

We are pleased to provide Congress with the enclosed report on Health Quality Information and Technology Enhancement. Section 723 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2000, as amended by Section 742 of the NDAA for FY 2006, requests an annual report on the quality of health care furnished under the health care programs of the Department of Defense (DoD). The report contains FY 2009 data and updated information on the quality of health care provided by DoD, and is an avenue for communication with Congress on the status of quality care within the Military Health System (MHS) as recommended by the Healthcare Quality Initiatives Review Panel.

Thank you for your interest in MHS and its beneficiaries. We at TRICARE are proud to serve our nation's military heroes and their families and are committed to providing them the best possible health care.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Peach Taylor, Jr.", written over a horizontal line.

George Peach Taylor, Jr., M.D.
Deputy Assistant Secretary of Defense
(Force Health Protection and Readiness)
Performing the Duties of the
Assistant Secretary of Defense
(Health Affairs)

Enclosure:
As stated

cc:
The Honorable John McCain
Ranking Member



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

DEC 29 2010

The Honorable Jim Webb
Chairman, Subcommittee on Personnel
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

We are pleased to provide Congress with the enclosed report on Health Quality Information and Technology Enhancement. Section 723 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2000, as amended by Section 742 of the NDAA for FY 2006, requests an annual report on the quality of health care furnished under the health care programs of the Department of Defense (DoD). The report contains FY 2009 data and updated information on the quality of health care provided by DoD, and is an avenue for communication with Congress on the status of quality care within the Military Health System (MHS) as recommended by the Healthcare Quality Initiatives Review Panel.

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(Health Affairs)

Enclosure:

As stated

cc:

The Honorable Lindsey Graham
Ranking Member



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

DEC 29 2010

The Honorable Ike Skelton
Chairman, Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

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Performing the Duties of the
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(Health Affairs)

Enclosure:
As stated

cc:
The Honorable Howard P. "Buck" McKeon
Ranking Member



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

DEC 29 2010

HEALTH AFFAIRS

The Honorable Susan A. Davis
Chairwoman, Subcommittee on Military Personnel
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Madam Chairwoman:

We are pleased to provide Congress with the enclosed report on Health Quality Information and Technology Enhancement. Section 723 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2000, as amended by Section 742 of the NDAA for FY 2006, requests an annual report on the quality of health care furnished under the health care programs of the Department of Defense (DoD). The report contains FY 2009 data and updated information on the quality of health care provided by DoD, and is an avenue for communication with Congress on the status of quality care within the Military Health System (MHS) as recommended by the Healthcare Quality Initiatives Review Panel.

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Deputy Assistant Secretary of Defense
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Performing the Duties of the
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(Health Affairs)

Enclosure:
As stated

cc:
The Honorable Joe Wilson
Ranking Member



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

DEC 20 2010

The Honorable Daniel K. Inouye
Chairman, Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

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Deputy Assistant Secretary of Defense
(Force Health Protection and Readiness)
Performing the Duties of the
Assistant Secretary of Defense
(Health Affairs)

Enclosure:
As stated

cc:
The Honorable Thad Cochran
Vice Chairman



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

DEC 29 2010

HEALTH AFFAIRS

The Honorable Norm Dicks
Chairman, Subcommittee on Defense
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

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Deputy Assistant Secretary of Defense
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Assistant Secretary of Defense
(Health Affairs)

Enclosure:
As stated

cc:
The Honorable C. W. Bill Young
Ranking Member



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

DEC 20 2010

HEALTH AFFAIRS

The Honorable Joseph R. Biden, Jr.
President of the Senate
United States Senate
Washington, DC 20510

Dear Mr. President:

We are pleased to provide Congress with the enclosed report on Health Quality Information and Technology Enhancement. Section 723 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2000, as amended by Section 742 of the NDAA for FY 2006, requests an annual report on the quality of health care furnished under the health care programs of the Department of Defense (DoD). The report contains FY 2009 data and updated information on the quality of health care provided by DoD, and is an avenue for communication with Congress on the status of quality care within the Military Health System (MHS) as recommended by the Healthcare Quality Initiatives Review Panel.

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OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

DEC 20 2010

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
Washington, DC 20515

Dear Madam Speaker:

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OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

DEC 29 2010

HEALTH AFFAIRS

The Honorable David R. Obey
Chairman, Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

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Performing the Duties of the
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(Health Affairs)

Enclosure:
As stated

cc:
The Honorable Jerry Lewis
Ranking Member

DEPARTMENT OF DEFENSE HEALTH CARE QUALITY REPORT TO CONGRESS

2010

ANYTIME, ANYWHERE...



The Fiscal Year (FY) 2010, covering FY 2009, Department of Defense Health Care Report to Congress is provided by the TRICARE Management Activity, Office of the Chief Medical Officer (OCMO), Clinical Quality Division, in the Office of the Assistant Secretary of Defense (Health Affairs) (OASD/HA).

PHOTOS:

defenseimagery.mil, istock.com, gettyone.com

TRICARE AT A GLANCE: FACTS AND FIGURES PROJECTED FOR FY 2010¹

Total Beneficiaries	9.5 million ²
Military Facilities – Direct Care System	
Total ³ U.S.	
Inpatient Hospitals and Medical Centers	59 (44 in U.S.)
Ambulatory Medical Clinics	364 (290 in U.S.)
Military Health System Personnel	
	135,437
Military	84,085
Officers	31,224
Enlisted	52,352
Civilian	51,352
Civilian Resources – Purchased Care System	
Network Individual Providers (primary care, behavioral health, and specialty care providers)	363,198
TRICARE-authorized Acute Care Hospitals	3,151
TRICARE Network Acute Care Hospitals	2,656
Total Unified Medical Program (UMP)	\$48.5 billion ⁴
(Includes estimated FY 2010 receipts for Accrual Fund)	\$10.8 billion ⁵

Figure 0-1: ¹Note: Unless specific otherwise, this report presents budgetary, utilization and cost data for the Defense Health Program (DHP) Unified Medical Program (UMP) only, including those related to deployment. ²Department of Defense (DoD) health care beneficiary population projected for the end of FY 2010 is 9,489,313, rounded to 9.5 million, based on the Managed Care Forecasting and Analysis System (MCFAS), as of OASD(HA) Acting CFO Memo September 21, 2009. ³MTF data from real property reports, Office of the Chief Financial Officer, December 15, 2009. ⁴Includes direct and private sector care funding, military personnel, military construction, and the Medicare-Eligible Retiree Health Care Fund (MERHCF) (“accrual fund”) DoD Normal Cost Contribution paid by the U.S. Treasury. ⁵The DoD (MERHCF), implemented in FY 2003, is an accrual fund that pays for health care provided in DoD/Coast Guard facilities to DoD retired, dependent of retired, and survivors who are Medicare-eligible beneficiaries. The fund also supports purchased care payments through the TFL benefit implemented in FY 2002. There are three forms of contribution to Defense health care: (1) The accrual fund (\$10.8B, normal cost contribution) discussed above is paid by the Military Services for future health care liability accrued since October 1, 2002, for Active Duty, Guard, and Reserve beneficiaries and their family members when they become retired and Medicare-eligible; and (3) \$9.1B to pay for health care benefits provided today to current Medicare-eligible retirees, family members, and survivors (i.e., actual projected outlays from the trust fund care — \$7.5B for purchased care, \$1.6B for direct (MTF) care, both Operations and Maintenance (O&M), as well as Military Personnel costs).



INTRODUCTION

- p. II** | Table of Contents
- p. IV** | Requirements for Report
- p. V** | Message from Charles L. Rice, MD, Performing the Duties of the Assistant Secretary of Defense for Health Affairs



EXECUTIVE SUMMARY

- p. VI** | Clinical Quality Management
- p. VII** | Evidence-based Practice & Clinical Quality Measurement
- p. VIII** | MHS Population Health & Medical Management
- p. IX** | Patient Safety
- p. X** | Access to Care & Patient Satisfaction
- p. XI** | Innovations & Policy Initiatives to Enhance Clinical Quality
- p. XI** | Healthcare Innovations Programs & Awards
- p. XII** | Biosurveillance



II



III



IV



V

p. 1 | CLINICAL QUALITY MANAGEMENT

- p. 2** | MHS Overview
- p. 3** | Commitment to Quality
- p. 4** | Clinical Quality Architecture
- p. 7** | Systems & Processes Supporting Quality Outcomes
- p. 9** | Accreditation & Certifications
- p. 9** | Medical Management Education & Training
- p. 10** | Review of DoD Medical Quality Improvement Program

p. 11 | EVIDENCE-BASED PRACTICE AND CLINICAL QUALITY MEASUREMENT

- p. 12** | Clinical Practice Guidelines
- p. 13** | Quality Measures
- p. 20** | MHS Special Studies & Quality Improvement Initiatives
- p. 24** | Purchased Care 2009 Quality Improvement Activities

p. 25 | POPULATION HEALTH & MHS MEDICAL MANAGEMENT

- p. 26** | Health Programs Overview
- p. 26** | Tobacco Cessation Marketing & Education
- p. 27** | Weight Management Demonstration
- p. 28** | Alcohol Education
- p. 29** | More Promotion/Education
- p. 30** | Medical Management
- p. 31** | Utilization Management
- p. 32** | Case Management
- p. 32** | Disease Management

p. 33 | PATIENT SAFETY PROGRAM

- p. 34** | A Culture of Patient Safety
- p. 34** | Culture Assessment & Feedback
- p. 34** | Leadership Engagement & Development
- p. 35** | Culture Assessment & Feedback
- p. 36** | Training Coaching & Skill Building For Team-Based Care
- p. 39** | Risk Identification & Mitigation
- p. 42** | Awareness Promotion
- p. 43** | Purchased Care Focus



VI



VII



VIII



IX

p. 45 | ACCESS TO CARE & PATIENT SATISFACTION

- p. 46** | TRICARE Health Care Survey of DoD Beneficiaries
- p. 47** | TRICARE Outpatient Satisfaction Survey (TROSS)
- p. 48** | TRICARE Inpatient Satisfaction Survey

p. 51 | POLICY INITIATIVES

- p. 52** | Patient-Centered Medical Home
- p. 52** | MHS Transparency
- p. 53** | Pay-for-Performance
- p. 54** | Behavioral Medicine Sustained Initiatives & Innovations

p. 57 | SUCCESS STORIES & INNOVATIONS

- p. 58** | Access & Convenience
- p. 59** | Activated Patients
- p. 59** | Readiness & Cost
- p. 60** | Healthy Lifestyles
- p. 60** | Quality
- p. 61** | Other Success Stories & Innovations

p. 63 | BIOSURVEILLANCE

- p. 64** | Epidemiologic Analysis
- p. 64** | Emerging Infectious Disease Surveillance
- p. 65** | Capacity Building Initiatives & Outbreak Response Efforts
- p. 66** | Electronic Surveillance Initiatives
- p. 68** | Summary

p. 69 | APPENDICES

- p. 70** | Acronyms
- p. 75** | Certifications & Accreditations

**REQUIREMENTS
FOR THE
REPORT**

The requirement for the Department of Defense (DoD) Report to Congress on health care quality is outlined in Public Law and Congressional direction. The following references depict the guidelines utilized to develop the report.

National Defense Authorization Act Requirement

Section 723(e) of the National Defense Authorization Act for Fiscal Year 2000, Public Law 106-65, mandated an annual report on the quality of health care furnished under the health care program and included the measures to be reported upon. These measures were modified by Section 742 of the National Defense Authorization Act for Fiscal Year 2006, Public Law 109-163.

The Assistant Secretary of Defense for Health Affairs (HA) shall submit to Congress on an annual basis a report on the quality of health care furnished under the health care programs of the Department of Defense (DoD). The report shall cover the most recent fiscal year ending before the date the report is submitted and shall contain a discussion of the quality of the health care measured on the basis of each statistical and customer satisfaction factor that the Assistant Secretary determines appropriate, including, at a minimum, a discussion of the following:

- Measures of the quality of health care furnished, including timeliness and accessibility of care;
- Population health;
- Patient safety;
- Patient satisfaction;
- The extent of use of evidence-based health care practices; and
- The effectiveness of Biosurveillance in detecting an emerging epidemic.

The Healthcare Quality Initiative Review Panel Recommendation

The Healthcare Quality Initiative Review Panel report from July 2001 provided recommendations considered essential to ensure continued improvement in the DoD health system. The recommendations included the reestablishment of the Quality Management Report as a comprehensive information product for communicating with and educating leadership within Congress, the Office of the Assistant Secretary of Defense for Health Affairs, TRICARE Management Activity (TMA), the Services, and the military treatment facilities (MTFs) on the status of quality in the Military Health System (MHS).

• • •

**A MESSAGE FROM
CHARLES L. RICE, MD.,
PERFORMING
THE DUTIES OF
THE ASSISTANT
SECRETARY OF
DEFENSE FOR
HEALTH AFFAIRS**

It is with great pride that I submit to Congress the 2010 Department of Defense Report on Health Care Quality.

The Military Health System (MHS) is prepared to respond anytime, anywhere with a comprehensive medical capability to support military operations, natural disasters and humanitarian crises around the globe. In parallel, the MHS is committed to delivering world-class health care to all Department of Defense (DoD) service members, retirees, and their families, while also providing world-class medical education, training, and research.

The MHS's nearly 9.6 million beneficiaries deserve health services that are convenient and tailored to meet their individual health and medical needs. By focusing on providing evidence-based care in an integrated and seamless way across our health care system, we strive to meet our goal of eliminating disease and achieving optimal health.

The Department of Defense Report to Congress on Health Care Quality highlights quality initiatives, demonstrating our commitment to continuously assess and improve the care provided to our beneficiaries. This report focuses on MHS activity, performance, and achievements occurring between 1 October 2008 and 30 September 2009. As required by law, the report covers six areas: measures of health care quality, population health, patient safety, patient satisfaction, use of evidence-based health care practice, and effectiveness of biosurveillance for emerging epidemics.

It is an incredible honor and privilege to serve with the world's finest team of men and women who are dedicated to caring for the Nation's fighting forces and their families. Further, we appreciate the support Congress has provided to help us provide the very best health care, in particular for the wounded, ill and injured. While there is always much more that must be done, I believe we continue to make progress toward our goals, and I would like to tell you where we are, what we have accomplished and what we plan to do in the future.

— **Charles L. Rice, MD.**



CLINICAL QUALITY MANAGEMENT

The Military Health System (MHS) is a global health care network within the Department of Defense (DoD), providing cutting-edge health care to all U.S. military personnel worldwide. The MHS has 59 inpatient hospitals and medical centers, 364 health clinics and nearly a \$50 billion budget, delivering high quality health care to a beneficiary population that nears 9.6 million service members, veterans, and family members through the TRICARE network. The system consists of: the Office of the Assistant Secretary of Defense for Health Affairs; the medical departments of the Army, Navy, and Air Force; the Joint Chiefs of Staff and Combatant Command surgeons; and TRICARE Management Activity (TMA). The MHS has two complementary arms: the direct care (DC) system provides services to patients in military treatment facilities (MTFs), and the purchased care (PC) system provides care to military beneficiaries through civilian providers in private offices or non-military facilities. The PC Managed Care Support Contractors (MCSCs) provide care in three geographic regions: the North, administered by Health Net Federal Services; the South, administered by Humana Military Healthcare Services; and the West, administered by TriWest Healthcare Alliance. Each contractor administers the TRICARE benefit to an estimated 2.4 million beneficiaries. There are also six Designated Provider (DP) programs that offer a TRICARE Prime benefit to non-Active Duty beneficiaries who choose to enroll. Together, they currently serve over 100,000 beneficiaries. This program is unique in offering its Prime benefit to eligible beneficiaries who are aged 65 years and older. DP programs are available at Pacific Medical US Family Health Plan (USFHP) in Seattle; CHRISTUS Health in Texas; Brighton Marine in Boston; Martin's Point in Portland, Maine; Johns Hopkins USFHP in Maryland; and St. Vincent's USFHP in New York.

The MHS commitment to provide high-quality health care and to improve performance is guided by:

- **Guiding Principles:** The MHS adheres to principles for quality adopted from the Institute of Medicine (IOM); these include safety, effectiveness, timeliness, patient centered, efficient, and equitable. These principles are essential to accomplishing the mission and achieving our vision.
- **Quadruple Aim:** The MHS modeled the Quadruple Aim after the Institute for Healthcare Improvement's (IHI) Triple Aim, which encompasses Population Health, Experience of Care, and Responsibly Managing Total Health Care Costs, with the addition of one other key element — readiness, which reflects one of the core tenets of the MHS' mission. This model centers on creating value by focusing on quality, eliminating waste and reducing inconsistencies in the provision of care, and considers the total cost of care over time, not just the cost of individual health care episodes.
- **Quality Architecture:** Management of quality in the MHS requires continuous, multidirectional communication across various components and specialties within the system. Structures and processes have been implemented to support clinical quality management and facilitate communication to enhance the care provided throughout the system. Communication to support quality management in the MHS is accomplished through the inclusion of quality management in key leadership committees and the development of a select number of quality-focused committees. These committees successfully connect information flow from policy development through implementation. The lead committees include the Senior Military Medicine Advisory Council (SMMAC), the Clinical Proponency Steering Committee (CPSC), and the MHS Clinical Quality Forum (CQF).
- **Systems and Processes Supporting Quality Outcomes:** Systems and processes supporting quality outcomes include the MHS Population Health Portal (MHSPHP), AHLTA (the military's electronic health record), ESSENTRIS™ (the MHS interim inpatient solution), quality assurance, certifications and accreditations, medical management education and training, and the external review of DoD's Medical Quality Improvement Program.

EVIDENCE-BASED PRACTICE & CLINICAL QUALITY MEASUREMENT

DoD is committed to using evidence-based medicine (EBM) to ensure DoD beneficiaries receive the best possible care. Strategies identified to accomplish this mission include the development and communication of evidence-based clinical practice guidelines (CPGs), followed by ongoing measurement. Through a collaborative relationship, DoD and VA continues to work together to develop and maintain CPGs. Twenty-three CPGs served as the underpinning for interagency condition management initiatives in 2009.

Measurement is essential for evaluating and comparing the quality of care provided in medical facilities, and is used for improving the quality of care delivered in the MHS. MHS participates in the development, review, and endorsement of quality measures established by the National Quality Forum (NQF) and the Agency for Healthcare Research and Quality (AHRQ). DoD utilizes these nationally-recognized measures, as well as accreditation by external agencies with industry-wide accepted standards, to assess the care provided in the MHS. In addition, the MHS supports special studies that are focused on finding opportunities for improving the quality of health care across the MHS.

Among the metrics used by DoD are process-of-care measures that are included on the Hospital Compare web site. Hospital Compare was created by the Centers for Medicare & Medicaid Services (CMS) and the Hospital Quality Alliance (HQA). In 2009, Hospital Compare measures collected by the MHS included Acute Myocardial Infarction, Heart Failure, Pneumonia, Surgical Care Improvement Project, Children's Asthma Care, and Pregnancy. Performance for these measures, in both the DC and PC networks, were either comparable or slightly higher than the national rates in 2009. In 2009, when the MHS PC and DC were compared to the National Hospital Compare rates over time, all the measures were trending upward, demonstrating improvement in meeting or exceeding national standards. Also in 2009, the MHS began placing the Hospital Compare data submitted to CMS for civilian facilities on its own Web site. This MHS site now contains data on DC MTFs as well as PC facilities, both network and non-network, enabling beneficiaries

to compare the quality of care provided for these services at all facilities in their local area.

DoD also evaluates performance on the Joint Commission's pregnancy-related measures to capture MHS's largest service line. Pregnancy core measures for DC MTFs were found to be close to or slightly above the expected risk-predicted rate. In addition, DC MTFs continued their partnership with the National Perinatal Information Center (NPIC). In seven of the eight NPIC measures, the MTFs had significantly better rates for this data. In one measure the rate was within a percentage point of the standard.

DoD also evaluates how well it is doing for outpatient and preventive care and uses the National Committee on Quality Assurance's (NCQA) methodology for the collection of Healthcare Effectiveness Data and Information Set (HEDIS®). Data available for DC facilities performance ranged between the 50th and 90th percentiles, except for appropriate use of asthma medications, in which DC exceeded the 90th percentile. All of the PC Managed Care Support Contractors (MCSCs) and Designated Providers (DPs) have quality improvement initiatives underway to improve compliance with these measures as well. To improve performance on these measures, new contracts will be awarded in 2010 to MCSCs that include incentives for improvement on select HEDIS® measures. To insure accuracy of the HEDIS® data in the MHSPHP, the requirement for a certified HEDIS® vendor has been included in the new TRICARE quality monitoring contract (TQMC) which is the external civilian quality review contract.

The AHRQ Patient Safety Indicators (PSIs) metrics provide information on potential in-hospital complications and adverse events following surgeries, procedures, and childbirth. The MHS, like many health system leaders in the private sector, uses the PSIs as a tool to help identify potential adverse events occurring during hospitalization. Performance on PSIs is tracked and discussed in the MHS.

Clinical Measures Steering Panel (CMSP) and in the MHS Clinical Quality Forum (CQF)
Under the guidance of the DC Scientific

Advisory Panel (SAP), the MHS Clinical Quality Management (CQM) conducted four studies in 2009 with a quality focus. These studies were: Emergency Department Utilization in the MHS; Multidrug-Resistant Organism Control in MTFs; Low Back Pain Evaluation and Treatment in the MHS; and Clinical Outcomes of a Step Therapy Program for Proton Pump Inhibitors. These studies evaluated specific issues across the DC and included private sector comparable data, when available. The aim of these studies was to provide DoD leadership and health care providers with independent, impartial analyses of DC clinical data so that they may evaluate policy and clinical practice in the MHS. The MHS CQM education program translates these research findings and recommendations into solutions that may be applied to clinical practices.

The PC MCSCs and DPs also conducted a variety of quality improvement initiatives, projects and studies in 2009. In some cases, the studies were conducted over multiple years and measured the effectiveness of interventions. Some of these studies were initially indicated through review of regional or contractor performance on TJC ORYX® core measure sets or their HEDIS® compliance. Examples of some of these activities include: Appropriate Use of Antibiotics for Community Acquired Pneumonia in Accordance with the Pneumonia Core Measure Set; Identification of Barriers to Compliance With Cancer Screenings Through Health Net Case Management and Disease Management Queries; and Smoking Cessation for Active Disease Management Participants Quality Improvement Program (QIP).

MHS POPULATION HEALTH & MEDICAL MANAGEMENT

Population Health (PH) steps beyond the individual-level focus of medicine by addressing a broad range of factors that affect health at the population level to improve the health of specific populations. This model connects medical interventions to individuals, MTFs, worksites and community-based wellness. This model also connects prevention activities focused on improving overall health and reducing morbidity and premature mortality in the MHS population.

In 2009, the MHS Population Health Healthy Choices for Life initiatives continued to address tobacco cessation, obesity and alcohol abuse prevention. The 2009 John Warner National Defense Authorization Act (NDAA) directed the implementation of a smoking cessation program under TRICARE, available to all non-Medicare eligible beneficiaries, that would include access to a toll-free 24/7 quit line, no-cost pharmaceuticals via the mail order pharmacy (including nicotine replacement products), cessation counseling, printed and web-based cessation materials, and an annual report to Congress on the details of the benefit. Implementation of the program was begun and the first report to Congress was submitted.

The HEALTH weight-management demonstration project for addressing obesity was launched in July 2006 and concluded in September 2008. The weight management

demonstration showed that weight loss could be facilitated through Web-based support. As a result, TMA is developing a Web site modeled on the evidence-based Veteran's Administration MOVE! program, and will be made available to all MHS beneficiaries. The program will be tailored to meet the individual needs of each beneficiary by providing guidance on nutrition and physical activity and allowing the beneficiary to set the pace through goal setting and a step-by-step approach.

The TMA Alcohol Counter-Marketing & Education campaign launched "THAT GUY" in December 2006, targeting military enlisted personnel between the ages of 18 to 24. The campaign is now deployed at 228 military installations and units in 42 states, and 11 countries. There has been a steady increase in campaign awareness within the target audience according to the annual Status of Forces surveys. Findings also show a statistically significant, lower incidence of binge drinking at installations where the THAT GUY campaign has been implemented.

The goal of Medical Management (MM) is to augment the coordination of patient care and create an efficient and effective quality health care system. The MM guide provides how-to guidance establishing MM programs, which includes information on outcomes management and resources that can be customized at the

local level. MM provides a managed-care model, linking Utilization Management (UM), Case Management (CM), and Disease Management (DM) into an integrated patient care management model.

The function of Utilization Management within each MTF is to identify, monitor, evaluate, and resolve issues that may result in inefficient delivery of care, or that may have an impact on resources and services. At the military treatment facility level, UM is accomplished through proactive, ongoing data analysis, utilization, case, and referral management.

Case Management is a vital clinical process that supports the MHS's ability to provide continuity of care through the seamless coordination of services to meet beneficiaries' health care needs. The Office of the Chief Medical Officer (OCMO), developed interim policy for the implementation of clinical CM in the MHS. CM web-based and virtual instructor-led training via the MHS Learn platform are being implemented. TMA continues working toward acquisition of an

enterprise-wide automated CM tool to assist with documentation and tracking of a patient's individualized care plan.

The goals of Disease Management are to improve health status (clinical outcomes), increase patient and provider satisfaction, and ensure the appropriate utilization of resources. The MHS DM program addresses asthma, chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and diabetes. Further expansion of the DM program is targeted to include depression and anxiety disorders, along with cancer screening. The DoD is pursuing necessary regulatory changes to implement DM as a full benefit, in accordance with the John Warner National Defense Authorization Act; Section 734: Disease and Chronic Care Management.

The MHS continues to focus energies on identifying the best overall DM processes and practices. To accomplish this, the MHS has extended its DM demonstration project and continues to evaluate the outcomes of DM programs implemented in previous years.

PATIENT SAFETY

The DoD Patient Safety Program (PSP) is a comprehensive DoD program with the mission of establishing a culture of patient safety targeting health care leadership, healthcare professionals, beneficiaries and patients, system-wide. This is accomplished through the PSP's infrastructure of three core components: the DoD Patient Safety Center, the Center for Education and Research in Patient Safety, and the Healthcare Team Coordination Program. These core components support the many patient safety activities and initiatives as highlighted below.

In collaboration with the Agency for Healthcare Research and Quality (AHRQ), DoD PSP launched TeamSTEPPS® in 2007 to build an infrastructure for integration and sustainment of team-based care throughout the MHS to transform the culture into one for which patient safety is a cornerstone. TeamSTEPPS is a team training, implementation, coaching, and sustainment program designed to improve

communication and other teamwork skills among healthcare providers. Since launching TeamSTEPPS, the DoD PSP has developed communication, teamwork and skill building tools, such as toolkits which offer just-in-time training, action steps, and resource guides for specific patient safety strategies, and tools that which are presented within the TeamSTEPPS curriculum. In 2009, two new toolkits were created and disseminated, providing resources to implement the SBAR (a strategy for communicating a patient's status— Situation, Background, Assessment, and Recommendation) and Briefs and Huddles (team events allowing for information exchange within health care teams). TeamSTEPPS has received widespread recognition from TJC, the NQF, IHI, CMS, and the National Patient Safety Foundation (NPSF).

The DoD PSP also provides support to five Centers of Excellence Team Resource Centers (TRCs) across the country for the development, validation, proliferation, and

sustainment of team-driven care throughout the MHS. In addition to conducting Tri-service simulation-based training that incorporates TeamSTEPPS principles and tools, TRCs also conduct fundamental research and special projects on teamwork and patient safety, translating research findings and theory into practice, resulting in safer team processes and patient outcomes.

The DoD Patient Safety Center (PSC) serves as the repository for all DoD patient safety data and manages the Patient Safety Registry. DoD patient safety reports, submitted by MTFs to PSC, increased substantially (12%) in FY 2009. More importantly, four of the five data points between FY 2005 – 2009 reveal consistent increased-reporting of events. Through more thorough and consolidated event reporting, identification of actual causes can be made and opportunities seized for improvement. The correlation between an increase in patient safety reporting and a decrease in harm events

is substantial and compelling – organizations that report events are safer systems. In 2009, a total of 127,569 medical events were reported. The DoD PSP awareness promotion initiative offers virtual collaboration tools and other informational resources that foster collaboration and awareness on how to improve patient safety. The Patient Safety Learning Center (PSLC) promotes communication and increases awareness across the patient safety community. This member-based community Wiki (or Web portal) enables community members to access and contribute lessons learned, best practices, tools and resources, news articles, community events, and much more. The interactive monthly Learning Action Network (LAN) Webinars focus on specific patient safety topics.

Moving forward into FY 2010, DoD plans to continue to emphasize the impact of team-driven care on reducing the risk of error and improving patient care and quality.

**ACCESS TO
CARE & PATIENT
SATISFACTION**

The MHS routinely collects, analyzes, and synthesizes information to measure beneficiary satisfaction, quality of care, and access to health services. As a means of accomplishing this objective, the MHS consistently uses proven survey instruments and methods to obtain information about its beneficiaries.

The Health Care Survey of DoD Beneficiaries (HCSDB) is a population-based survey that is conducted quarterly. The HCSDB provides information on access to health services as well as satisfaction with care that is provided. The HCSDB allows for comparison with the U.S. population covered by commercial health plans. In FY 2009 beneficiary satisfaction with the TRICARE plan showed continued improvement. Satisfaction with personal or specialty physicians also demonstrated improvement in FY 2009.

The TRICARE Outpatient Satisfaction Survey (TROSS) collects information on the experience of care received in ambulatory settings. The survey is conducted monthly by

mail and phone and includes both the direct care (DC) system and the purchased care (PC) networks. Beneficiary ratings of the overall health care experience with outpatient services increased from FY 2007 to FY 2009. In addition, TRICARE Prime enrollee ratings of the health plan improved for all MHS enrollees, from 66% in FY 2007 to 70% in FY 2009.

The TRICARE Inpatient Satisfaction Survey (TRISS) focuses on inpatient experiences of adults who receive medical, surgical, and obstetrical services at DC and PC hospitals. Like the HCSDB and the TROSS, the TRISS questions were designed to allow for comparison with civilian hospitals across the nation. Although FY 2009 results were unavailable at the time of this report, overall inpatient satisfaction has shown steady improvement in both the DC and PC systems since FY 2006. In addition, overall MHS “willingness to recommend” ratings increased over the period FY 2006 through FY 2008.

INNOVATIONS & POLICY INITIATIVES TO ENHANCE CLINICAL QUALITY

The MHS has several key policy initiatives designed to enhance and improve the delivery of care in DoD. The focus of these efforts includes, but is not limited to, further developing the DoD's Patient-Centered Medical Home (PCMH), providing financial incentives to the Services based on their MTF's performance, increasing transparency across the MHS, and expanding behavioral medicine programs that provide access to care to those who need it.

In 2009, substantial progress was made toward the MHS-wide adoption of the PCMH. In September, the MHS held the Inaugural Tri-Service Medical Home Summit that included leadership from Health Affairs, TMA, the Services, and leading civilian associations involved in the PCMH concept such as the National Committee for Quality Assurance (NCQA). Also in 2009, the ASD(HA) issued a policy memorandum directing the implementation of the PCMH as a comprehensive and coordinated primary care model to improve patient satisfaction and outcomes. With this mandate, MTFs were encouraged to utilize innovative approaches that are patient-centered and access-focused.

Efforts to increase the level of transparency continued in FY 2009. In the area of clinical quality, the MHS's performance on process-of-care measures was added to the MHS Clinical Quality Management Web site,

www.mhs-cqm.info, for both DC and PC, as well as non-network facilities. This will help enable beneficiaries to better make informed choices and decisions about where they receive inpatient care.

The MHS's Pay-For-Performance program is a policy initiative designed to enhance the quality of care provided at MTFs. This initiative provides financial rewards to Services based on their MTF's performance in the areas of quality, satisfaction, and access to care. Incentives are determined by performance on a range of attributes and metrics, which include comparisons to DoD and civilian averages. Payments for quality of clinical care are based on performance on HEDIS® and ORYX® measures.

The DoD/HA Behavioral Medicine Division (BMD) showed continued program growth since its inception in 2006. BMD provides leadership on beneficiary behavioral health issues affecting the DC and PC components of TRICARE. In FY 2009, BMD sustained initiatives and innovations in the areas of medical readiness and experience of care which have resulted in enhanced TRICARE programs and benefit options. Examples of key BMD initiatives include: RESPECT-Mil II, Primary Care Behavioral Health Integration, TRICARE Partial Hospitalization Program and updates to the DoD Enhanced Access to Autism Services Demonstration.

HEALTHCARE INNOVATIONS PROGRAMS & AWARDS

To meet the MHS's mission, health and medical professionals often develop innovative solutions that ultimately improve access, cost and quality of health care while ensuring the medical readiness of our Armed Forces. Often, however, dissemination of these positive ideas and practices is limited.

The Health Care Innovations Program (HIP) serves as a forum for leaders and practitioners in the MHS to celebrate and share innovative programs and ideas for potential system-wide solutions. HIP awards are organized into the following five categories:

- **Access and Convenience:** Developing a methodology that matches the right patient

to the right provider, at the right place and at the right time.

- **Activated Patients:** Promoting an active voice from the patient's perspective in hospital/clinic policies and philosophy of care.
- **Healthy Lifestyles:** Promoting healthy lifestyles through wellness activities and programs.
- **Readiness and Cost:** Focusing on accomplishing the mission in a cost-effective manner that is visible and fully accountable.
- **Quality:** Ensuring that benchmark standards for health and health care are met, while obtaining maximum effectiveness from the resources provided and/or available.

The winners of each category for FY 2009 were invited to present their innovations and participate in a panel discussion at the 2010

MHS Conference, “Sharing Knowledge: Achieving Breakthrough Performance.”

BIOSURVEILLANCE

The Armed Forces Health Surveillance Center (AFHSC) provides DoD with a unique, centralized epidemiologic capability to promote, maintain and enhance the health of military and military-associated populations by providing relevant, timely, actionable, and comprehensive health surveillance information. Integral to the AFHSC’s role is the ongoing monitoring of the prevalence, incidence and trends of infectious diseases in person, place and time. This constant monitoring allows estimates of operational impact and disease burden to be determined, and enables recommendations to be provided to key decision makers within DoD for implementation of control measures in support of Force Health Protection.

During FY 2009, the AFHSC Global Emerging Infections Surveillance System’s

(GEIS) influenza and respiratory disease surveillance network played an integral role in the early detection of, and response to, the novel influenza A/H1N1 pandemic. The AFHSC-GEIS partner network detected and reported to the CDC the very first four cases of the novel influenza A in the world—an untypable strain not previously recognized. The AFHSC-GEIS network also supported the first laboratory-confirmed cases in over a dozen other countries. In addition to its role in emerging infectious diseases surveillance, the network assisted with providing a rapid global response to the 2009 influenza pandemic through training and capacity-building efforts with partner nations, development of new surveillance and diagnostic platforms, and timely reporting of surveillance results and disease trends to public health authorities.

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CLINICAL QUALITY
MANAGEMENT

The Military Health System (MHS) is a global health care network within the Department of Defense that provides health care to all U.S. military personnel worldwide. Equipped with nearly 60 hospitals, over 360 health clinics and nearly a \$50 billion budget, the MHS delivers high quality health care to a beneficiary population that nears 9.6 million service members, veterans and family members. The MHS is more than an expansive network of health care providers; it is also a synergy of Army, Navy, Air Force and purchased care capabilities that serve, protect and treat all entitled beneficiaries. On and off the battlefield, in times of peace and war, the MHS's goal is to ensure that the highest standard of care is delivered.



CLINICAL QUALITY MANAGEMENT

IN THE MILITARY HEALTH SYSTEM



MHS OVERVIEW

The Military Health System (MHS) consists of the following: Office of the Assistant Secretary of Defense for Health Affairs; medical departments of the Army, Navy, and Air Force; Joint Chiefs of Staff; Combatant Command surgeons; and TRICARE Management Activity (TMA).

As an integrated health care delivery network under the authority of the Assistant Secretary of Defense (Health Affairs) and operated by DoD, TRICARE is the health care provider of the MHS. TRICARE provides a full spectrum of health care services to nearly 9.6 million eligible

beneficiaries worldwide. TRICARE is composed of two complementary care delivery structures: the direct care (DC) system provides services to patients in Military Treatment Facilities (MTFs) while the purchased care (PC) system provides care to military beneficiaries through commercial providers in civilian health care facilities.

The DC system is the collection of health care resources and capabilities from the Army, Navy and Air Force. The DC system serves beneficiaries throughout the United States and overseas, including those serving in deployed and operational settings. The Surgeon General for each of the three Armed Services assumes the leadership responsibilities for managing and overseeing the delivery of health care provided by his or her Service. TMA works very closely with the Services in providing support and guidance.

The PC system includes three large managed care support contractors (MCSCs) and designated providers (DP). Like the DC system, TMA also provides oversight for quality of care and fosters improved integration with the PC community. The DPs and MCSCs are committed to quality and to the tenets of the Quadruple Aim as well as achieving improved population health, superior member experiences, responsibly managed cost, and the support of medical readiness for active duty.

The MCSCs provide care in three geographic regions: the North, administered by Health Net Federal Services; the South, administered by Humana Military Healthcare Services; and the West, administered by TriWest Healthcare Alliance. The MCSCs provide care for active duty service members (ADSMs), active duty (AD) family members, retirees and retirees' family members younger than age 65. These programs administer the TRICARE benefit for an estimated 2.4 million beneficiaries per region.

The DPs provide care to 110,000 beneficiaries in six primary locations: Pac Med US Family Health Plan (USFHP) in Seattle; CHRISTUS Health in Texas; Brighton Marine in Boston; Martin's Point in Portland, Maine; Johns Hopkins USFHP in Maryland; and St. Vincent's USFHP in New York. The DPs serve the Medicare-eligible population as well as provide care to AD family members, retirees, and retirees' family members. (Figure 2-1)

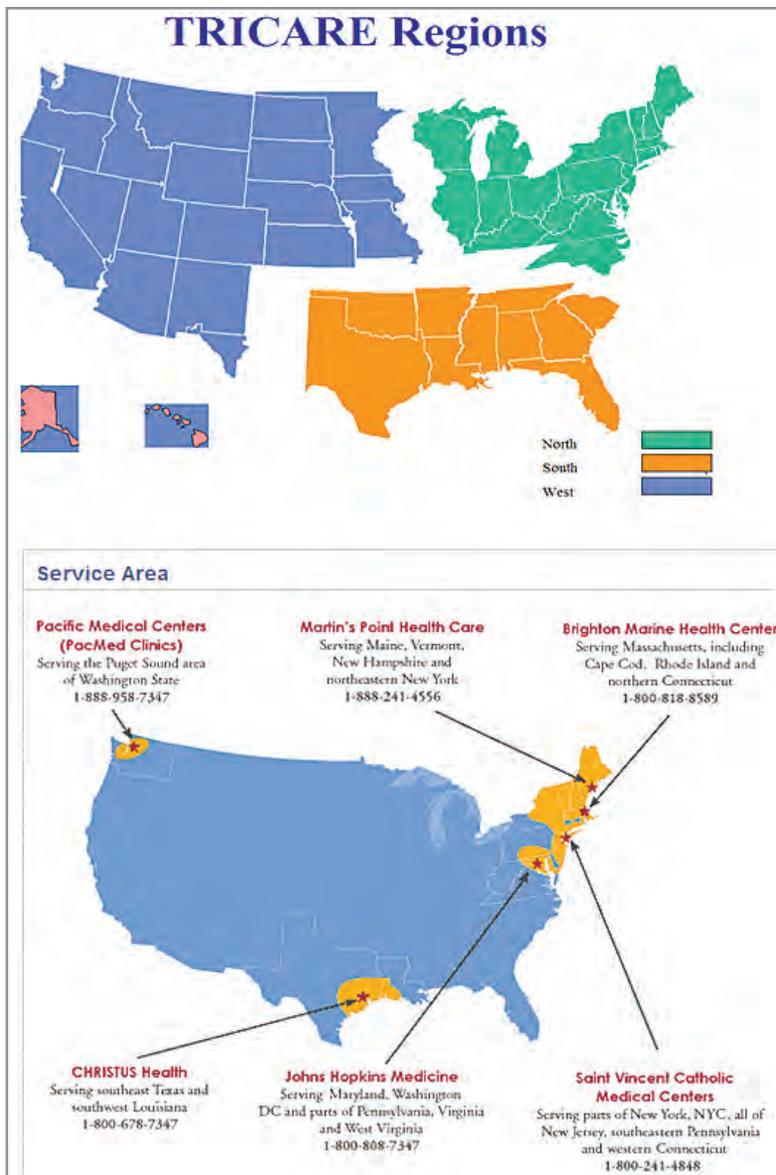


Figure 2-1: TRICARE Regions Covered by MCSCs and DPs

**COMMITMENT TO
QUALITY**

Quality Patient Care

The MHS is committed to the health and well-being of service members, retirees and their families. Disease prevention and evidence-based treatment are the keys to improving beneficiaries' quality of life, which helps them achieve optimal health and physical fitness while becoming an even more effective military force.

The stated mission of the MHS is to accomplish the following:

- Casualty care and humanitarian assistance;
- Fit, healthy and protected force;
- Healthy and resilient individuals, families and communities; and
- Education, research and performance improvement.

These goals are not mutually exclusive. Commanders and service members partner with the MHS to achieve individual medical readiness and enhanced performance. They expect and deserve responsive, capable, coordinated medical services anywhere, anytime. No other health system in the world can provide what the MHS must provide in a rapidly changing national security environment. The MHS focuses on developing and deploying innovative products and services that meet mission requirements.

MHS beneficiaries desire health services that are convenient and tailored to their individual health and medical needs. Providing high quality, evidence-based care to beneficiaries seamlessly across the health system encourages our beneficiaries to team up with their providers on their course of treatment, resulting in behavior that promotes health and conserves resources.

The quality of health care provided by DoD is measured in a variety of ways, using civilian benchmarks whenever possible. Sources to be evaluated include information obtained from electronic administrative and clinical data, abstraction of medical records and, perhaps most importantly, surveys of DoD beneficiaries.

Quality Assurance

The MHS maintains active and effective organizational structures, management emphasis, and program activities to assure Quality in Health Care (QHC). QHC is the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

In accordance with the authority in DODI 6025.13, DoD implements policy, assigns responsibilities and provides procedures for managing the DoD Medical Quality Assurance and Clinical Quality Management (CQM) in the MHS.

CQM activities include the following elements:

- Clinical performance measurement and improvement;
- Credentials and clinical privileges;
- Risk management (RM);
- Adverse actions; and
- Patient safety.

The MHS employs strategies to continuously study and improve the processes and outcomes in the provision of health care services. Supporting MHS QHC, these services address the elements already defined in the medical literature as important for quality care. The six dimensions of quality found in medical literature that correspond with the goals of the MHS are that care must be safe, effective, patient-centered, timely, efficient and equitable, and are defined as:

Safe — Avoiding injuries to patients from the care that is intended to help them;

Effective — Providing services, based on scientific knowledge, to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively);

Patient-centered — Providing care that is respectful of and responsive to individual patient preferences, needs and values and ensuring that patient values guide all clinical decisions;



Figure 2-2: Quadruple Aim

Timely — Reducing waits and sometimes harmful delays for both those who receive and those who give services;

Efficient — Avoiding waste, including waste of equipment, supplies, ideas, and energy; and

Equitable — Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location or socioeconomic status.

The MHS is committed to being patient-centered and providing quality health care. Providing Quality Assurance (QA) data creates opportunities to save lives and improve the services provided to all beneficiaries. The MHS provides readily available, relevant QA aggregate statistical data to its beneficiaries, enrollees and providers in an easy-to-understand format, in collaboration with similar initiatives in the private sector and non-federal public sector.

Guiding Principles

Through Clinical Quality Management, TRICARE focuses on the Institute of Medicine’s (IOM) six aims for quality—safe, effective, timely, patient-centered, efficient, and equitable quality of care:

- Promoting clinical quality across the MHS in alignment with the strategic plan;
- Preventing possible causes of medical error through the use of measurement;
- Utilizing a variety of clinical quality measures to continually assess the care provided across the system and at each level of the organization;
- Aligning with the national agenda to develop health care quality consensus measures and comparisons; and
- Ensuring that the MHS remains in the forefront of health care quality measurement by seeking current information on clinical

measures that are used to improve clinical quality.

Quadruple Aim

In the fall of 2009, MHS leaders recognized that MHS’s plan is consistent with the concept of the Triple Aim proposed by the Institute for Healthcare Improvement (IHI). The Triple Aim was intended to describe the kind of results that could be achieved when all of the elements of a comprehensive health care system worked together to serve the needs of a population. The MHS adopted the Triple Aim and added readiness, a fourth key element. Readiness reflects our core mission and our reason for existing; it is first among our aims. (Figure 2-2)

The four tenets of the Quadruple Aim are:

- **Readiness** — Ensuring that the total military force is medically ready to deploy and deliver health care anytime, anywhere in support of the full range of military operations, including humanitarian missions.
- **Population Health** — Improving the health of a population by encouraging healthy behaviors and reducing the likelihood of illness by focusing on prevention and the development of increased resilience.
- **Experience of Care** — Providing a care experience that is patient- and family-centered, compassionate, convenient, equitable, safe, and always of the highest quality.
- **Responsibly Managing Total Health Care Costs** — Creating value by focusing on quality, eliminating waste and reducing inconsistencies in the provision of care; and considering the total cost of care over time, not just the cost of individual health care episodes.

Beyond FY 2009, indicators and metrics will allow MHS to measure how well it is performing and to identify areas that need improvement.

CLINICAL QUALITY ARCHITECTURE

Clinical Quality Management is reliant upon continuous, multidirectional communication across the many components, agencies and disciplines within the MHS. Formal structures and processes have been designed to support

clinical quality management in the MHS. The MHS has a number of formal committees that strive to maintain communication and disseminate information in support of broad quality management. These committees

successfully connect information flow from policy development and implementation through the evaluation process. (Figure 2-3)

Senior Military Medical Advisory Council

The strategic direction of Clinical Quality Management in the MHS is established by the Senior Military Medicine Advisory Council (SMMAC) which is responsible for decision making and periodic monitoring of key strategic and operation milestones. The membership of SMMAC includes the Assistant Secretary of Defense (Health Affairs), the Service Surgeons General, Joint Staff Surgeon, Principle Deputy Assistant Secretary of Defense (Health Affairs), the Deputy Assistant Secretary of Defense (Clinical & Program Policy), Deputy Assistant

Secretary of Defense (Force Health Protection & Readiness), Deputy Assistant Secretary of Defense (Health Budget & Financial Policy), Deputy Assistant Secretary of Defense (Health Plan Administration), and the MHS Chief Information Officer.

Clinical Proponency Steering Committee

Oversight of the development and implementation of clinical policies, practices and systems to support implementation of the strategic goals of the MHS is the responsibility of the Clinical Proponency Steering Committee (CPSC). The CPSC serves as the Quality Council for the MHS. The membership of CPSC includes Deputy Assistant Secretary of Defense (Clinical & Program Policy), Service Deputy Surgeons

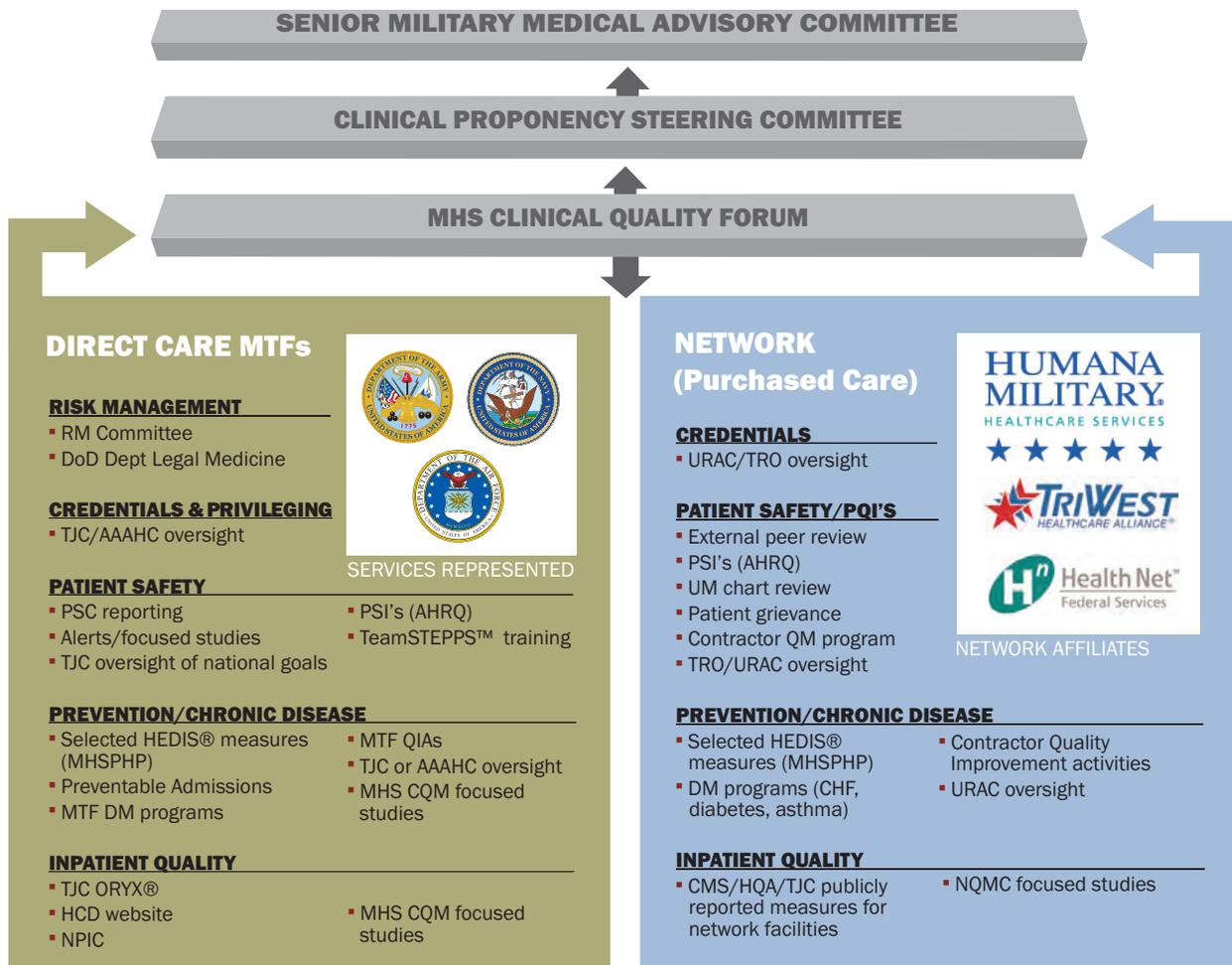


Figure 2-3: Clinical Quality Architecture for Direct and Purchased Care

General, Deputy Surgeon General United States Public Health Service, Deputy Assistant Secretary of Defense (Force Health Protection & Readiness), Deputy Assistant Secretary of Defense (Health Budgets and Financial Policy) and Deputy Assistant Secretary of Defense (Health Plan Administration), and Chief Information Officer TRICARE Management Activity.

The MHS Clinical Quality Forum

The Clinical Quality Forum (CQF), a collaborative committee sponsored by the Office of the Assistant Secretary of Defense (OASD) HA/TMA, has oversight responsibility for clinical quality assessment across the DC and PC of the MHS. CQF's primary responsibilities are to continually monitor key performance indicators and to evaluate the quality of health care provided to DoD beneficiaries. CQF provides ongoing updates and recommendations to senior leadership through regular reporting to the CPSC.

A number of working groups and panels, aligned under the MHS CQF, focus on specific quality initiatives and programs. This Forum facilitates collaborative work through initiating and implementing clinical quality-related activities. For example, the Scientific Advisory Panel (SAP) identifies potential performance improvement opportunities for study and analysis, while the Clinical Measures Steering Panel (CMSP) focuses on MHS performance in clinical quality measures.

In FY2009, several functional work groups were implemented to focus on improving quality within specialized medical disciplines. Among the panels that were established were the following: the Anesthesia Reporting and Monitoring Panel (ARM-P); the Infection Prevention and Control Panel (IPCP); and the Prenatal Advisory Panel (PAP). These working groups are comprised of medical subject matter experts from the three Services and report up through the CQF.

Contracts Supporting Clinical Quality Management in the MHS

Direct Care System: The MHS Clinical Quality Management Support Contract (MHS CQM SC) is part of an overall TMA strategy

to become a provider of world-class health care. Currently, this contract is administered by Lockheed Martin Health Solutions. The MHS CQM SC collects, manages and reports DoD's performance measures and accreditation requirements including TJC's ORYX® measures, the CMS National Hospital Measures, health plan quality measures, and the Agency for Healthcare Research and Quality (AHRQ) measures. These data focus mainly on the DC facilities and are analyzed to identify areas of excellence and opportunities for improvement. The MHS CQM SC also conducts clinical studies evaluating specific processes and outcomes of care and utilizing private sector-comparable data when available. DoD leadership and health care providers use these independent, impartial analyses of MHS clinical data to evaluate policy and practices in the MHS with a focus on improving performance.

The MHS CQM SC develops education programs from the studies to translate findings and recommendations into solutions that can be applied to clinical practices. Online continuing medical education (CME) and continuing nursing education credits (CNE) are given to participants through a partnership with the Uniformed Services University of the Health Sciences (USUHS). The online educational activities are available to policymakers and health care professionals at every level of the MHS. In addition, the MHS CQM SC provides for consultative site visits to military inpatient and ambulatory facilities to help organizations use their external data (e.g., TJC ORYX® and the Special Studies) for performance improvement initiatives.

Quality Oversight in Army, Navy and Air Force Direct Care System

The Office of the Surgeon General for each of the Services is responsible for and provides oversight of the quality of care and services provided to enrolled beneficiaries within each Service's health care facilities. This oversight is accomplished with the aid of subject matter experts on health care quality at the regional and/or facility level. The Surgeon General for each Service develops a strategic plan for their Service that is aligned with the strategic direction of the MHS. Quality plans are developed at the facility level to guide and direct

the organization's quality-related functions and initiatives.

Quality Oversight in Purchased Care System

All contractors in the PC system are required to have quality-management processes and infrastructures that meet TRICARE requirements and national standards. The TRICARE Operations Manual was revised during FY 2009 to better describe quality monitoring and review processes, including delineation of the content of the annual quality management plans and the reports required from each of the contractors. The improvements in specifications for these deliverables will greatly enhance comparability across programs and the ability to provide a thorough overview of the quality management activities across all entities. This manual change was incorporated in the MCSC and DP contracts through contract modifications accomplished throughout 2009.

Quality oversight for the MCSCs is provided through the TRICARE regional offices (TRO). Quality monitoring of the DPs is provided through the Designated Providers Program

Office (DPPO) and Healthcare Operations staff who conduct annual site visits to each of the primary locations.

The external peer review processes for the purchased care network are conducted by the National Quality Monitoring Contractor, currently MAXIMUS. This contract provides support for the TMA Appeals and Hearings, and Reconsiderations. The contract also provides for a random retrospective review of care delivered to beneficiaries, health-care technology assessments and focused studies, and standard-of-care reviews for care provided in MTFs for which malpractice compensation has been awarded. The MTF standard-of-care reviews, which are conducted by specialty matched, board-certified physicians or other appropriately matched providers, reflect the standard of care at the time the services were delivered. In 2009, the contract was expanded to allow review of selected active-duty standard-of-care case determinations.

A new TRICARE Quality Monitoring Contract will be awarded in FY 2010.

SYSTEMS & PROCESSES SUPPORTING QUALITY OUTCOMES

Information technology is a valuable tool in the delivery of quality health care because it facilitates the sharing of medical information among providers and with beneficiaries, increases patients' access to care, and contains medical and administrative costs. The MHS continues to implement technology to further its mission to create a world-class health care system.

The MHS Population Health Portal

The MHS Population Health Portal (MHSPHP) is a Tri-Service, Web-based tool that generates



detailed action and prevalence lists for providers of clinical preventive services and disease and condition management for enrolled TRICARE beneficiaries. The MHSPHP also allows both MTFs and headquarters staff to track aggregate information and compare MTF data with the National Committee on Quality Assurance's (NCQA) Healthcare Effectiveness Data and

Information Set (HEDIS®) benchmarks and guidelines for numerous measures.

The portal is easy to access and is intended to actively assist clinic managers, health care integrators, clinical epidemiologists, and other clinic personnel in managing the delivery of quality health care.

The portal provides access to data that helps in numerous areas:

- Assessing population health demographics;
- Demand forecasting for health preventive services and disease management of enrolled populations;
- Collecting patient-specific information by health care providers;
- Analyzing high utilization rates of primary care for prospective case management patients;
- Allocating resources where they are most needed; and
- Identifying opportunities for improvement.

The MHS Electronic Health Record



DoD continues to expand and improve its worldwide electronic health record (EHR) system, which has AHLTA at its core. The

DoD EHR supports MHS professionals who are responsible for health care delivery, clinical analysis, medical surveillance, development of evidence-based clinical practice guidelines, and outcomes research. A key enabler of military medical readiness, the DoD EHR captures and stores structured data in its Clinical Data Repository (CDR), giving health care providers secure 24/7 access to the medical records of DoD's highly mobile beneficiaries in the DC system. Data extracted from the EHR enable MHS professionals to access executive-level reports on common diagnoses and procedures to identify trends or concerns. The EHR system also incorporates Computer-based Provider Order Entry (CPOE) capabilities with a user-friendly interface. In addition, the EHR standardized documentation improves coding practices. Records in the AHLTA CDR are retrievable at points of care worldwide, including nearly 900 medical and dental treatment facilities—fixed and deployed. AHLTA has been in use worldwide since December 2006. Data from AHLTA is shared with the Department of Veterans Affairs (VA) to provide health care data to clinicians and benefits claims specialists.

AHLTA incorporates evolving clinical requirements and technological advances to achieve increased or improved functionality. AHLTA continues to improve the clinical encounter documentation process and to provide user requested functional capabilities based on lessons learned from AHLTA's Block 1 deployment. Several enhancements are intended to improve healthcare provider workflow processes and minimize the time required to document clinical encounters. New software capabilities include support for automated clinical practice guidelines, electronic patient signatures, and health history modules that allow patients to self-report information.

The reach of MHS Theater systems extends to deployed treatment settings in Iraq, Kuwait,

and Afghanistan, where AHLTA-Theater (AHLTA-T) is used to capture outpatient encounter records and transfer them to the AHLTA CDR. The Theater Medical Information Program-Joint (TMIP-J) is an integrated suite of software solutions that support military readiness and health care in Theater. TMIP-J offers a modular, scalable version of AHLTA built to operate in low to no communications environments. Its systems capture and manage electronic health information in support of DoD EHR; support the delivery of advanced health care in the most challenging conditions, including Theater and shipboard; facilitate medical supply and equipment tracking, patient movement visibility and health surveillance in Theater; support Service members' continuum of care from Theater to the home front; and enable DoD to share pertinent clinical Theater data with the VA.

Since worldwide implementation in 2006, AHLTA use continues to grow at a significant pace. As of September 30, 2009, AHLTA has processed and stored records of more than 122 million outpatient encounters. On average, AHLTA processes more than 152,000 encounters each workday. As of September 30, 2009, more than 2.5 million outpatient clinical encounters had been documented in AHLTA-T and transferred to the AHLTA CDR.

Essentris™ is the interim inpatient documentation system for MHS that improves productivity by eliminating the majority of paper-based inpatient documentation. At the core of Essentris™ is automated clinical documentation which frees users to attend to direct patient care. Clinicians use Essentris™ to document critical care, acute care, labor and maternal childcare, psychiatric care, pediatrics, and operative care.

As of September 30, 2009, Essentris was operational at 27 of 59 DoD inpatient sites. Additionally, DoD has implemented the Bidirectional Health Information Exchange (BHIE) inpatient documentation sharing capability at 24 of those 27 sites, covering 59% of DoD's total inpatient beds. MHS plans additional deployments, to increase coverage to

more than 90% of DoD's total inpatient beds by September 2011.

Use of Essentris™ at Landstuhl Regional Medical Center plays a critical role in ensuring

continuity of care, supporting the capture and transfer of inpatient records of care for Wounded Warriors. These records are now accessible stateside to DoD and VA providers caring for injured Service members or Veterans.

ACCREDITATION & CERTIFICATIONS

Hospitals and freestanding clinics across the MHS are required to obtain accreditation from external accreditation agencies. All MTFs maintain appropriate nationally recognized certification — for ancillary services such as blood banking, radiology and laboratory services — based on federal regulations and the respective armed services policies. The MCSCs, DPs and overseas health care contractors ensure quality of care and services for TRICARE beneficiaries by adhering to their contract requirements, which comply with the TRICARE Operations, Policy and Reimbursement manuals.

Accreditation guidance and standards that may be applicable in either the DC or the PC system are identified in the accreditation standards published by The Joint Commission (TJC), the Commission on Accreditation of Rehabilitation Facilities (CARF), the Accreditation Association for Ambulatory Health Care (AAAHC) and the American Osteopathic Association (AOA) as well as other accrediting bodies approved by the ASD(HA). In addition, the contracted providers have achieved accreditation through nationally recognized accrediting organizations, including URAC (formerly Utilization Review Accreditation Commission—the acronym is now the name of the organization) and the National Committee for Quality Assurance (NCQA), and are compliant with the ISO 9001:2000 requirements.

The requirements of the ISO 9001:2000 are

generic and are intended to be applicable to all organizations, regardless of type, size and product provided. ISO 9001:2000 specifies requirements for a quality management system, where:

- The organization needs to demonstrate its ability to consistently provide a product that meets customer requirements and applicable statutory and regulatory requirements; and
- The organization aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

The contractors have also achieved accreditation for a number of their programs, including network management, case management, utilization management, HIPAA, and disease management. Annually, each contractor provides a quality management plan and an annual report that depicts the types of quality oversight, quality improvement initiatives, the projects and studies that have taken place during the year. The mandate for external accreditation reflects DoD's commitment to ensuring that the structures and processes for delivering care are of the highest quality possible. As a result of the accreditation process, performance improvement strategies have been developed that assist direct care as well as purchased care providers in continuously improving the safety and quality of health care.

MEDICAL MANAGEMENT EDUCATION & TRAINING

TMA continues to meet the challenge of providing MHS personnel with the knowledge and training necessary to meet the requirements of DoD policy. TMA supports training via classroom instruction that can be accessed online at www.neweditions.net/phmmd/index.asp. This site provides information about

registering for the onsite and online web-based courses offered by TMA. The onsite classroom instruction is an expert-led, interactive, four-day, Medical Management Course based on the principles and business planning tools outlined in the TRICARE Medical Management Guide. Six Medical Management Courses are offered

throughout the three TRICARE regions annually, providing Continuing Medical Education (CME) and Continuing Nursing Education (CNE) units. Also available from the Military Health System Clinical Quality Management (MHS CQM) Web site are online educational activities based on evidence-

based research studies that offer free CME and CNE units. These activities are available at www.mhs-cqm.info. Medical management education is also included in presentations at national meetings (e.g., National TRICARE Conferences) and through written publications.

REVIEW OF DOD MEDICAL QUALITY IMPROVEMENT PROGRAM

The FY 2007 National Defense Authorization Act (Public Law 109-364) required the Secretary of Defense to contract with a qualified independent academic medical organization for the purpose of conducting a review of the DoD medical quality improvement program.

In FY 2008, a nonprofit research and analysis organization (Lumetra) completed an extensive review of quality and patient safety regulations and directives, previous reports on quality and patient safety, published literature, and information available on the Internet about MHS medical quality and patient safety. Interviews and a survey completed by clinical and quality leaders from TMA, the three

branches of Service, and the Managed Care Support Contractors were conducted to obtain a comprehensive understanding of the structures, systems, and processes of the quality and safety programs.

In FY 2009, Lumetra released the final report, which included a broad set of recommendations that were written for a wide-ranging audience and across numerous subject-matter domains with many falling within the purview of the DoD and Services. The MHS CQM is providing oversight and guidance for review and implementation of recommendations. Progress on issues from the external review is expected to continue in FY 2010.

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EVIDENCE-BASED
PRACTICE AND
CLINICAL QUALITY
MEASUREMENT

The Institute of Medicine’s (IOM) Roundtable on Evidence-Based Medicine defines evidence-based medicine (EBM) to mean that to the greatest extent possible, the decisions that shape the health and health care of Americans—by patients, providers, payers, and policymakers alike—will be grounded on a reliable evidence base, will account appropriately for individual variation in patient needs, and will support the generation of new insights on clinical effectiveness. EBM seeks to clarify aspects of medical practice that are in principle subject to scientific methods and to apply these methods to ensure the best prediction of outcomes in medical treatment.



EVIDENCE-BASED PRACTICE
AND CLINICAL QUALITY MEASUREMENT



DoD is committed to EBM and has incorporated evidence-based clinical practices into the Military Health System (MHS) to ensure DoD beneficiaries receive the best possible care based on the most current scientific evidence available. Strategies identified to accomplish this mission include the development and communication of evidence-based clinical practice guidelines followed by ongoing measurement.

Throughout the United States, health care leaders in the private and public sectors alike recognize the need to measure the quality of care delivered by health care organizations. Measurement is essential for evaluating and comparing the quality of care provided in medical facilities, and for improving the quality of care delivered in the MHS. Like its civilian counterparts, the MHS is concerned about the quality and cost of health care. Fortunately, the highest quality care grounded in scientific evidence is often the most effective care.

MHS staff participate in the development, review and acceptance of quality measures established by the National Quality Forum (NQF) and the Agency for Healthcare Research and Quality (AHRQ). DoD utilizes these nationally recognized clinical quality measures as well as accreditation by external agencies with industry-wide accepted standards to assess the care provided in the MHS. Specifically, the CQF and the MHS Clinical Measures Steering Panel are central to this effort to promote clinical quality across the MHS in alignment with the MHS strategic plan. The CQF provides ongoing updates and recommendations to senior leadership and disseminates quality information across the MHS to advocate adoption of best practices. The Clinical Measures Steering Panel provides guidance and overall direction for MHS clinical quality measures initiatives.

**CLINICAL
PRACTICE
GUIDELINES**

DoD is committed to evidence-based standardization of care to achieve more consistency, improve quality of care and cost-effectiveness in the delivery of health care for their beneficiaries. Through a collaborative relationship, DoD and the VA continue to work together to develop and maintain clinical practice guidelines (CPGs). Continued collaboration will result in improvements in care quality and cost-effectiveness across the MHS. Currently, 23 CPGs serve as the foundation for interagency condition management initiatives. Guidelines available for use throughout the MHS and VA include:

1. Amputation Rehabilitation
2. Asthma
3. Chemical, Biological, Radiological and/or Blast Injury*
4. Chronic Heart Failure (CHF)
5. Chronic Kidney Disease
6. Chronic Obstructive Pulmonary Disease (COPD)
7. Diabetes
8. Dyslipidemia
9. Hypertension
10. Ischemic Heart Disease

11. Low Back Pain
 12. Major Depressive Disorder
 13. Medically Unexplained Symptoms
 14. Mild Traumatic Brain Injury
 15. Obesity
 16. Opioid Therapy for Chronic Pain
 17. Post-Deployment Health
 18. Post-Operative Pain
 19. Post-Traumatic Stress Disorder
 20. Pregnancy, Uncomplicated
 21. Stroke Rehabilitation
 22. Substance Use Disorder
 23. Tobacco Use Cessation
- *CHPPM Pocket Card: Nuclear Biological Chemical Illness

Many primary care providers in the purchased care (PC) network have small panels of TRICARE beneficiaries and participate with numerous major medical plans in the PC system. The expectations of all plans is that the providers practice evidence-based medicine and adhere to selected guidelines in the care of all of their patients, regardless of the payer. Examples of how the DPs are using evidenced-based clinical practice guidelines include the following:

- During 2009, Johns Hopkins' U.S. Family Health Plan (USFHP) evaluated compliance with four clinical practice guidelines: two medical and two behavioral health guidelines. For diabetes, the American Diabetes Association guideline was adopted. Two HEDIS measures — annual HbA1c panels and annual retinal eye examinations — were chosen to assess guideline adherence. USFHP implemented a revamped diabetes disease management program in 2009, one of the goals of which was to increase compliance rates with the clinical practice guidelines. Similarly, Johns Hopkins' USFHP has adopted the National Heart, Lung, and Blood Institute's guidelines on treatment of asthma and has made revisions to the asthma disease management program that will increase compliance with these guidelines.
- Pacific Medical Centers uses evidence-based guidelines to assure adherence to care standards that provide patients with the best outcomes. These include evidence-based standards for diabetes, coronary artery disease and several preventive screening procedures. Each primary care doctor receives population-based outcomes measures and actionable information on his/her practice that are based on these guidelines. Specialty measures are also based on evidence, such as measurement of liver function tests in patients on methotrexate.

QUALITY MEASURES

Quality measures help MHS beneficiaries compare the quality of care provided in medical facilities and assist them in making informed decisions about the quality of health services available to them and their families. The standardized and consensus-based metrics are also essential for leaders and stakeholders who are focused on evaluating and improving the quality of health care delivered in the direct care (DC) and purchased care (PC) Network of the MHS.

The MHS uses national consensus measures for evaluating the quality of care provided in the DC and PC systems. Many of these measures have been formally endorsed by the National Quality Forum (NQF), a multi-stakeholder organization that is comprised of more than 350 organizations representing consumers, purchasers, health care professionals, providers, health systems, insurers, state governments, and federal agencies. Metrics endorsed by NQF include but are not limited to many of The Joint Commission's ORYX® quality measures and the National Committee for Quality Assurance's (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS®), a tool used by more than 90% of America's health plans to measure performance on important dimensions of care and service.

Hospital Quality Measures

DoD analyzes a range of hospital quality data to assess its clinical performance against established national average benchmarks. Among the metrics used by DoD are the Process of Care

measures included on the Hospital Compare Web site.

Hospital Compare is a web-based quality tool provided by the Center for Medicare and Medicaid Services (CMS) that includes hospital process of care measures that show how well hospitals provide care that is recommended for patients being treated for a heart attack, heart failure, pneumonia, asthma (children only), or for patients having surgery. Measures included in the Hospital Compare Web site are consensus-based and endorsed by the NQF.

During 2009, the MHS CQM started using the Hospital Compare data submitted to CMS as a way for beneficiaries to compare health care plans provided in their area. The MHS CQM Web site contains not only DC MTFs but also PC network and non-network facilities.

In FY 2009, it also became possible for TRICARE regional offices and MCSCs to receive action lists from the portal, identifying patients who were not compliant with recommended screenings and focusing their efforts on this population to improve compliance.

In addition to metrics found on Hospital Compare, DoD also evaluates performance on pregnancy-related measures to reflect the substantial pregnancy-related patient volume in the MHS. Metrics include The Joint Commission's Pregnancy measures and the National Perinatal Information Center's (NPIC) Comparative Data.

Acute Myocardial Infarction (AMI)

An acute myocardial infarction (heart attack) happens when the arteries leading to the heart become blocked and the blood supply is slowed or stopped.



When the heart muscle can't obtain the oxygen and nutrients it needs, the part of the heart tissue that is affected may die. This scenario results in hospitalization and/or death of the patient, depending on the extent of heart damage.

The MHS collected data on seven processes of care measures for the AMI population. Figure

3-1 shows MHS overall performance rates as compared with the national rates. Performance was either slightly higher or comparable for six of the seven measures. One measure (AMI-7) had insufficient data for DC hospitals due to low population. AMI-8 lags behind the national average in direct care hospitals. This metric continues to be a challenge for the DC because the procedure is used minimally, resulting in a low volume of patients that meet the definition for this metric.

Acute Myocardial Infarction Core Measures

- AMI – 1 Aspirin on Arrival
- AMI – 2 Aspirin Prescribed at Discharge
- AMI – 3 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blockers (ARB) for Left Ventricular Systolic Dysfunction (LVSD)
- AMI – 4 Adult Smoking Cessation Advice/Counseling
- AMI – 5 Beta-Blocker at Discharge
- AMI – 7A Fibrinolytic Medication within 30 minutes of Arrival
- AMI – 8 Percutaneous Coronary Intervention (PCI) within 90 Minutes of Arrival

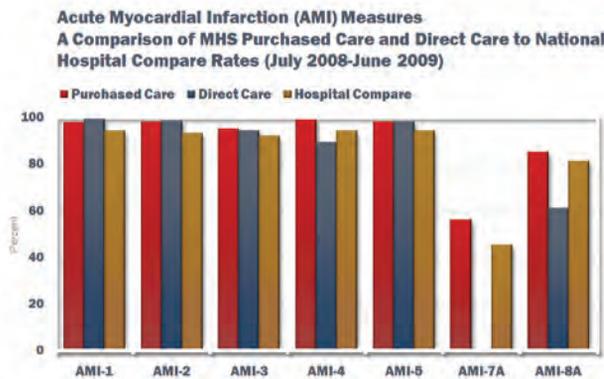


Figure 3-1: Acute Myocardial Infarction Measures

Heart Failure (HF)

With heart failure, the body doesn't get enough oxygen and nutrients to meet its needs. As the heart tries to pump more blood, the muscle walls become weaker over time. This scenario often results in hospitalization and sometimes death.



MHS collected data on four Heart Failure process measures illustrated in Figure 3-2 shows MHS's performance rates were either comparable or higher than the national rates for three of the four measures. Performance in the DC system was below the national rates for HF-4, but has shown improvement since FY2008.

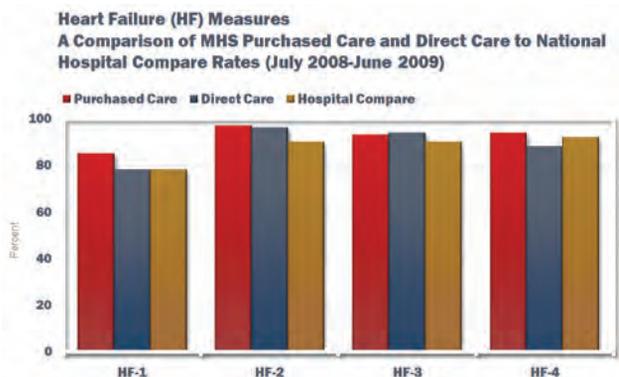


Figure 3-2: Heart Failure Measures

Heart Failure Core Measures

- HF – 1 Discharge Instructions
- HF – 2 Evaluation of Left Ventricular Systolic Assessment
- HF – 3 Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blockers (ARB) for Left Ventricular Systolic Dysfunction (LVSD)
- HF – 4 Adult Smoking Cessation Advice/Counseling

Pneumonia (PN)

Pneumonia is caused by a viral or bacterial infection that fills the patient’s lungs with mucus, thus lowering the oxygen level in the blood.



Figure 3-3 shows MHS’s performance rates exceeded or were similar to national rates in five of seven metrics. The PC network hospitals

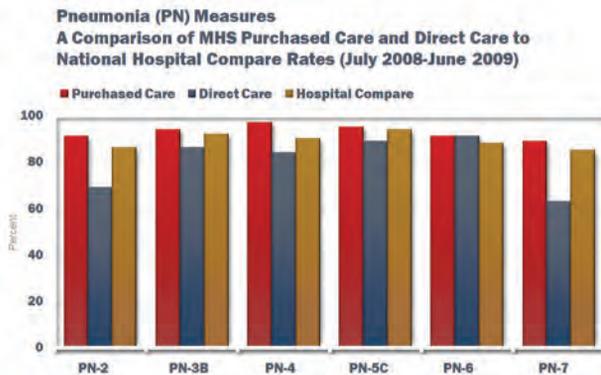


Figure 3-3: Pneumonia Core Measures

exceeded national rates for all measures. Performance was lower than the national average in the DC system for PN-2, PN-3B, PN-4, PN-5C and PN-7, highlighting areas that need continued improvement. As shown in Figure 3-6, performance has improved over a four year period.

Pneumonia Core Measures

- PN – 1 Pneumonia Patients Who Had an Arterial Oxygen Assessment Within 24 Hours of Hospital Arrival
- PN – 2 Pneumococcal Vaccination
- PN – 3B Blood Cultures in Emergency Department Prior to Antibiotic
- PN – 4 Adult Smoking Cessation Advice/ Counseling
- PN – 5C Initial Antibiotic Received within 6 Hours of Hospital Arrival
- PN – 6 Most Appropriate Initial Antibiotic(s)
- PN – 7 Influenza Vaccination

Surgical Care Improvement Project (SCIP)

One way hospitals improve surgical care and reduce the risk of wound infection after surgery is by providing the right medicines at the right time on the day of surgery.



Figure 3-4 presents five SCIP measures that the MHS collected in FY 2009. Of these, both the DC system and PC network were within

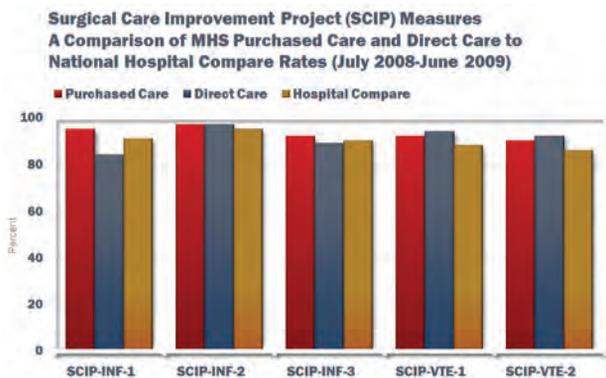


Figure 3-4: Surgical Care Improvement Project Measures

one percentage point of meeting or exceeding the National Hospital Compare rates for four of the five measures. Direct care MTFs lag behind the national rate for SCIP-INF-1 and SCIP-INF-3. The cause of this lag may in part be explained by a change in documentation practices and may not be a reflection of the actual care provided. (Figure 3-4)

Surgical Care Improvement Project Core Measures

- SCIP – 1 Prophylactic Antibiotic Received Within One Hour of Incision
- SCIP – 2 Appropriate Prophylactic Antibiotic Selection
- SCIP – 3 Prophylactic Antibiotics Discontinued within 24 Hours After Surgery
- SCIP – Recommended Venous
- VTE-1 Thromboembolism (VTE) Prophylaxis Ordered
- SCIP – Recommended Venous
- VTE-2 Thromboembolism (VTE) Prophylaxis Received

Children's Asthma Care (CAC)

Asthma is a chronic lung condition that causes problems getting air in and out of the lungs. It is the most common chronic disease in children and a major cause of morbidity and health care costs nationally. Asthma is also one of the most frequent reasons for a child's admission to a hospital.



The MHS collected data on three metrics that examine the quality of asthma care for children. National guidelines for treating children with asthma in the hospital recommend using a reliever medication and a systemic corticosteroid medication in the severe phase and gradually cutting down the dosage of medications to provide control of the asthma symptoms. As shown in Figure 3-5, MHS compliance is near 100% for CAC-1 and CAC-2 measures. CAC-3 in the DC is substantially lower than the PC and Hospital Compare rates. The low rate of this measure is being evaluated as to cause and it may be more an issue of documentation than not providing the home management plan required. (Figure 3-5). As shown in Figure 3-6, performance on CAC-3 has improved since 2008.

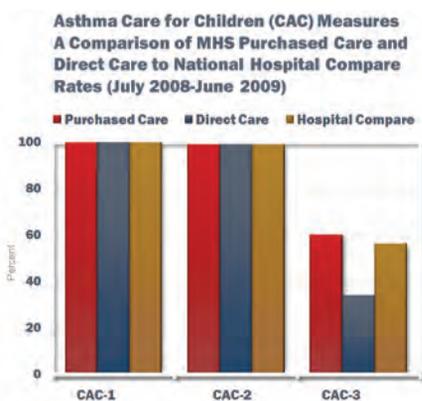


Figure 3-5: Asthma Care for Children (CAC) Measures

Children's Asthma Care (CAC) Core Measures

- CAC – 1 Reliever Medication Prescribed for Inpatient Asthma
- CAC – 2 Systemic Corticosteroid Medication Prescribed for Inpatient Asthma
- CAC – 3 Home Management Plan

A focused analysis of measures identified for improvement (Figure 3-6) shows that when the MHS PC and DC rates are compared to the National Hospital Compare Rates over

time, all the measures are now in an upward trend, demonstrating improvement in meeting the national standards.

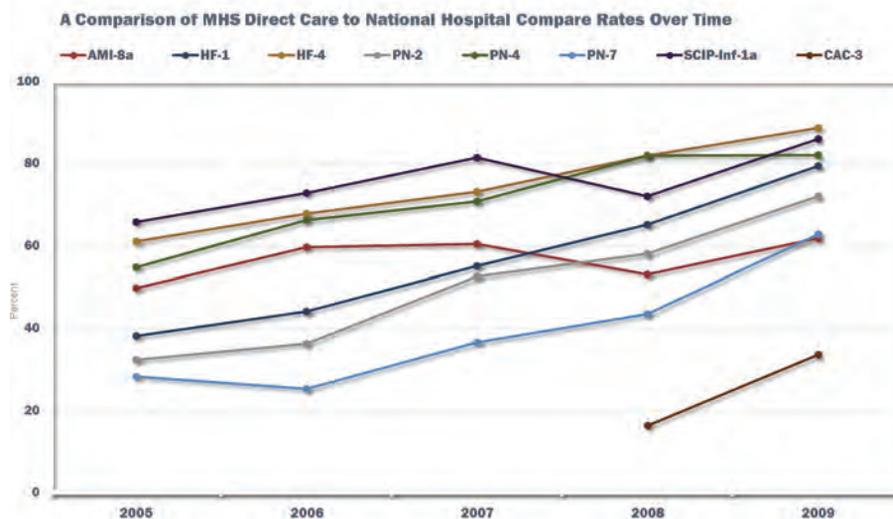


Figure 3-6: National Hospital Quality Measure Comparison (July 2005-June 2009)

ORYX Pregnancy Core Measure Sets 2009

Measure Number	Measure Name	Numerator	Denominator	Observed Rate	Predicted Rate
14547	Pregnancy VBAC*	892	6558	13.6% (.136)	11.7%
14548	Neonatal Mortality**	130	50363	0.3% (.0026)	0.3%
14555	3 rd and 4 th -Degree Lacerations***	1070	37606	2.9% (.0285)	3.0%

Figure 3-7: ORYX Pregnancy Core Measure Sets 2009, Definitions of Predicted Rate Core Measures; * Vaginal birth after caesarean section (VBAC): Used to assess prenatal patient evaluation, management, and treatment selection concerning vaginal deliveries in patients who have a history of previous caesarean section. **Neonatal mortality: Reports how often infants died after 28 days of birth. Neonatal (0 to less than 28 days of age) mortality continues to account for the largest proportion of infant (0 through 11 months of age) deaths. This measure is adjusted to reflect the fact that some babies are sicker than others at or shortly after birth. ***Third- and Fourth-degree lacerations: Reports how often patients have significant tears between the vagina and anus while having a baby.

Pregnancy

Young families represent a significant portion of the MHS beneficiary population. Childbirth remains the leading reason for hospitalization in the MHS with more than 50,000 births in military hospitals each year.



The ORYX® Pregnancy Core Measure Set of metrics is unique in that they include outcomes for both mothers and neonates. These measures are risk adjusted using a statistical process to identify and adjust for variation in patient outcomes that stem from differences in patient characteristics (or risk factors) across health care organizations. Depending on the presence of risk factors at the time of health care encounters, patients may experience different outcomes regardless of the quality of care provided by the health care organization. By adjusting for risks associated with outcomes that are beyond the control of the health care organization, risk adjustment allows fair and accurate inter-organizational comparisons.

All three pregnancy outcome measures are risk-adjusted. For each metric, two values are reported: The “actual rate” for the measure for the time period being reported, and the “expected risk-predicted rate” for the measure

for the time period being reported. Reporting both rates provides a basis for evaluating hospital performance for risk-adjusted measures. The expected risk-predicted rate can be compared to the actual rate; if the expected rate is higher than the actual rate, the hospital has performed better than anticipated based on the illness of the patients being treated. MTF pregnancy core measures (Figure 3-7) were close to or slightly above the expected risk-predicted rate based on the illness of the patients being treated.

The MHS also participates in the National Perinatal Information Center, thereby providing a means to closely compare childbirth data from across the Nation in a national perinatal center database (PCD), with data from 50 MTFs that deliver infants. Validated, risk-adjusted perinatal information from multiple women and infants’ hospitals is analyzed to provide benchmarks for infant and maternal outcomes, patient safety, utilization of services, costs, and staffing data.

Data from participating MTFs across the three Services were used in the analysis of perinatal processes and outcomes. Key findings are summarized in Figure 3-8. In seven of the eight measures, the MTFs have significantly better rates for this data (note: the lower the rate, the more favorable). In the one measure that is higher, the rate is a little over one percent.

The MHS continues to exceed the national norms established through the Perinatal Information Center benchmark database, attesting to the high quality of care provided to mothers and newborns delivered in MTFs.

National Perinatal Information Center Comparative Data*

Outcome Measure	MTFs	PCD
Caesarean Birth Rates	26.0%	34.0%
Major Complication Rates	4.6%	7.2%
Extreme Complication Rates	0.1%	0.3%
Operative Delivery Rate*	9.4%	7.8%
Induction Rate	18.1%	18.7%
Major Complications for the Neonates (Inboms)	3.4%	5.8%
Extreme Complications for the Neonates (Inboms)	0.2%	1.4%
Mortality Rate for Special Care Neonates	0.4%	2.5%

Figure 3-8: National Hospital Quality Measure Comparison (July 2005-June 2009) *Includes non-breech vaginal instrument delivery cases such as forceps or vacuum extraction deliveries.

**Outpatient and Preventive Care Measures
HEDIS®**

The National Committee for Quality Assurance (NCQA) developed HEDIS® to provide reliable, comparative health plan data about clinical quality. The MHS Population Health Portal (MHSPHP) uses methodologies comparable to HEDIS® to capture the performance of the system’s preventive care and disease management programs (Figure 3-9). The data for these clinical performance metrics were gathered from an MHS electronic central database that includes inpatient, outpatient and pharmacy information. Reports on the clinical performance measures are provided to MHS leadership to assess the performance of health care delivered across the system. Actionable information permits providers to deliver timely, evidence-based medical services.

These outpatient process-of-care measures are also collected for beneficiaries enrolled to purchased care network providers. The MHSPHP uses a historical data file that documents beneficiary status, including which female beneficiaries have had a past hysterectomy or mastectomy procedure and should not be counted in the denominator. One limitation of the data file is that, in situations where the beneficiary was not enrolled in

TRICARE Prime or was not using TRICARE as their primary insurance at the time of the procedure, there would be no way for the MHSPHP to identify this important clinical information. Consequently, the denominator for some PC metrics could be inflated, which would make the rates appear lower. In the near future, new contracts will be

awarded to MCSCs that include incentives for improvement on clinical measures. A National Committee for Quality Assurance (NCQA) certified HEDIS® auditor will conduct baseline and ongoing audits to provide assurance that the numbers reported are accurate. For these reasons, PC metrics are not currently included in this report.

The following clinical performance data and analysis demonstrate DoD’s commitment to utilizing nationally recognized clinical performance measures. One should also note, the values associated with HEDIS® compliance between the 10th and 90th percentiles may fall within a narrow range. For example, a rate of 70% of eligible patients screened for breast cancer (ages 42-69) falls at the 50th percentile, but 78.7% screened is at the 90th percentile for HEDIS® compliance. In this illustration, the compliance level moves significantly from 50% to 90%, with a difference of only 8.7% in screening.

As shown in Figure 3-10, the 2009 Cervical Cancer Screening in the DC system is 83.2%, an increase from 2008, and within a percentage point of moving into the 75th percentile.

In Figure 3-11, the DC Breast Cancer Screening rate is now above the HEDIS® 75th percentile at 76.2 % , which is an incremental improvement from 2008.

As shown in Figure 3-12, the Colorectal Cancer Screening rate in the DC is 67.5 %, an improvement from 2008. It falls now between the 75th and 90th percentiles.

In Figure 3-13, Use of Asthma Medications in the DC is 96.6% and exceeds the HEDIS® 90th percentile. This measure continues to show improvement from 2008.

Figure 3-14 shows the 2009 Annual Diabetes HbA1c screening for the DC was 86.8%, falling below the 50th percentile. The percentile improved from 2008 but continues to be an area to focus on for improvement.

Outpatient & Preventive Care Measures Based on HEDIS® Methodology

- Cervical cancer screening rates (Pap tests);
- Breast cancer screening rates (mammography);
- Colorectal cancer screening;
- Use of appropriate medications for people with asthma; and
- Diabetes care (HbA1c testing and control, retinal exams, low-density lipoprotein screening and control).

Figure 3-9: Outpatient and Preventive Care Measures Based on HEDIS® Methodology

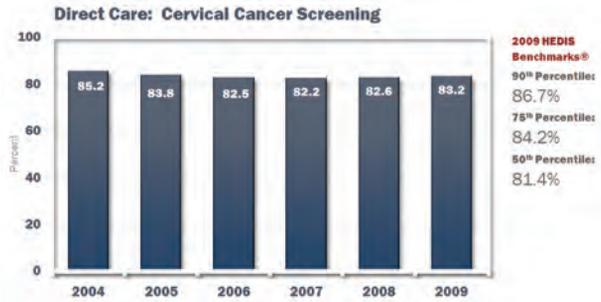


Figure 3-10: Direct Care Cervical Cancer Screening (FY 2005-2009) from HEDIS® 50th-75th-90th Percentiles: National Committee for Quality Assurance (NCQA), State of Health Care Quality, 2009

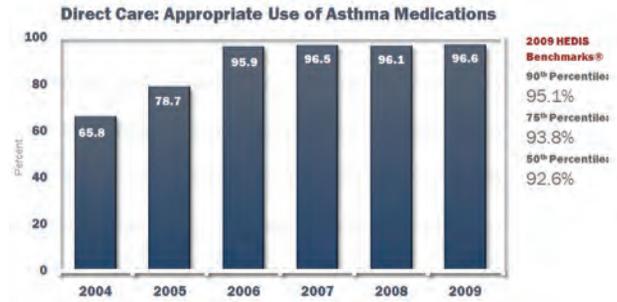


Figure 3-13: Direct Care Appropriate Use of Asthma Medications (FY 2005-2009) from HEDIS® 50th-75th-90th Percentiles: National Committee for Quality Assurance (NCQA), State of Health Care Quality, 2009

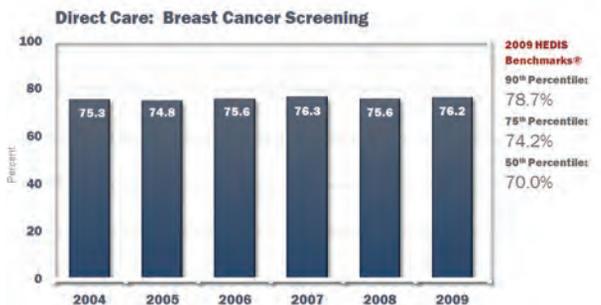


Figure 3-11: Direct Care Breast Cancer Screening (FY 2004-2009) from HEDIS® 50th-75th-90th Percentiles: National Committee for Quality Assurance (NCQA), State of Health Care Quality, 2009 *Beginning in 2009, HEDIS® now reports a single rate for women 42-69 years of age for breast cancer screening.

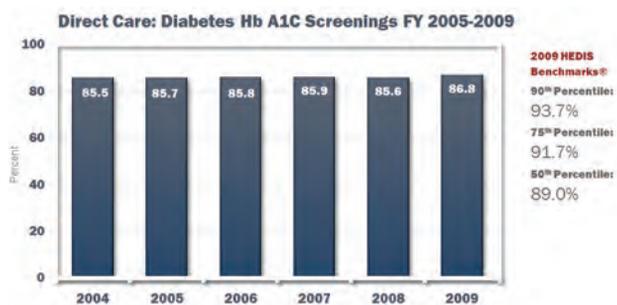


Figure 3-14: Direct Care Diabetes Hb A1C Screenings (FY 2005-2009) from HEDIS® 50th-75th-90th Percentiles: National Committee for Quality Assurance (NCQA), State of Health Care Quality, 2009

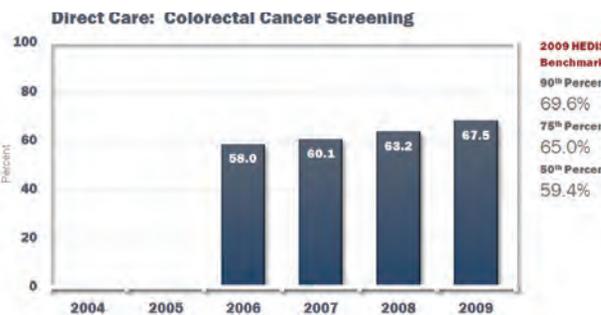


Figure 3-12: Direct Care Colorectal Cancer Screening (FY 2005-2009) from HEDIS® 50th-75th-90th Percentiles: National Committee for Quality Assurance (NCQA), State of Health Care Quality, 2009

The Agency for Healthcare Research and Quality (AHRQ) Quality Indicators (QI)

The Agency for Healthcare Research and Quality (AHRQ) Quality Indicators (QI) measure health care quality by using readily available hospital inpatient administrative data. The Patient Safety Indicators (PSIs) are a set of QI metrics that provide information on potential in-hospital complications and adverse events following surgeries, procedures and childbirth. The PSIs were developed after a comprehensive literature review, analysis of ICD-9-CM codes, review by a clinician panel, implementation of risk adjustment, and empirical analyses.

MHS SPECIAL STUDIES & QUALITY IMPROVEMENT INITIATIVES

The Military Health System Clinical Quality Management (MHS CQM) is part of an overall TMA strategy to become a provider of world-class health care. MHS CQM collects, manages, and reports DoD's performance measures and accreditation requirements, including Joint Commission ORYX® and the MHS Balanced Scorecard data. MHS CQM and the MCSC also conduct clinical studies that evaluate specific outcomes across the MHS and utilize private sector comparable data when available. DoD leadership and health care providers use these independent, impartial analyses of the MHS clinical data to evaluate policy and practice in the MHS.

The MHS CQM education program translates these research findings and recommendations into solutions that may be applied to clinical practices. Online free continuing medical education (CME) and continuing nursing education credits (CNE) are given to participants through a partnership with the Uniformed Services University of the Health Sciences (USUHS). These online educational activities are available to policymakers and health care professionals at every level of the MHS. In addition, MHS CQM provides consultative site visits to military in-patient and ambulatory facilities to help organizations use their external data, (i.e., Joint Commission ORYX® and the Special Studies) for performance improvement initiatives.

Background: Emergency Departments (EDs) provide a range of health care services, from the care of critically-ill patients to primary health care and, increasingly, non-urgent patient care and services. In the United States EDs have more than 100 million visits annually with children and adults older than 65 years of age having the highest rates of ED visits. Focusing on data from 47 military treatment facilities (MTF) throughout FY 2007, this study examined ED utilization, identified the most common chief complaints, and described patterns of follow-up care after an ED visit.

Findings: During FY 2007, there were 1,242,190 visits (see Figure 3-15 for demographic description of FY 2007 visits) by 789,030 MHS beneficiaries to the 47 MTF EDs. The majority of beneficiaries (67.7%) had only one ED visit. Overall, 20.6 % (n = 253,113) of the ED visits were followed by an MTF outpatient visit within seven days, for the same diagnostic category and 5.3 percent (n = 65,221) of ED visits were followed by an MTF inpatient hospitalization within seven days for the same diagnostic category. The major diagnostic category with the greatest proportion of outpatient follow-up visits within seven days was mental disorders (53.5%); patients with diseases of the circulatory system had the highest proportion of follow-up hospitalizations (34.3%) within seven days.

Conclusions: The results of this study indicated that, overall, ED utilization by MHS beneficiaries was comparable to the ED utilization of civilian-based hospitals. In addition, primary diagnoses among the FY 2007 ED visits were diagnoses expected to be seen in the primary health care setting.

Recommendations: TRICARE Management Activity should consider the following suggestions on the basis of these study results:

- Medical management of high utilizers, which would positively impact the quality of care delivered in the ED system and also reduce the incidence of adverse risks.
- Institute the global use of electronic records with proven performance in the ED environment to ensure accurate and complete

Emergency Department Visits

Duty Status/Characteristic	DoD (n%)	Army (n%)	Navy (n%)	Air Force (n%)
Total ER Visits	1,242,190	701,890	363,457	176,843
Active Duty & National Guard	347,207 (30.1%)	223,184 (31.8%)	105,506 (29.0%)	45,517 (25.7%)
Dependent: Active Duty, & National Guard Reserve	524,091 (2.2%)	302,926 (43.2%)	160,884 (44.3%)	60,281 (34.1%)
Retired	123,069 (9.9%)	62,492 (8.9%)	34,710 (9.6%)	25,867 (14.6%)
Dependent: Retired Survivor, Other, Unknown	220,823 (17.8%)	113,288 (16.1%)	62,357 (17.2%)	45,178 (25.6%)
Gender				
Female	630,107 (50.9%)	353,696 (50.4%)	185,918 (51.2%)	90,493 (51.2%)
Male	612,080 (49.1%)	348,191 (49.6%)	177,539 (48.9%)	86,350 (48.8%)
Unknown	3 (0.0%)	3 (0.0%)	0 (0.0%)	0 (0.0%)
Age				
	M = 28.2 SD = 20.4	M = 27.5 SD = 19.8	M = 27.3 SD = 20.0	M = 32.8 SD = 22.6
<18 Years	337,544 (27.2%)	193,848 (27.5%)	102,586 (28.2%)	42,110 (23.8%)
18 - 64 Years	821,873 (66.2%)	467,637 (66.6%)	239,704 (66.0%)	114,532 (64.8%)
65+ Years	82,141 (6.7%)	41,400 (5.9%)	21,167 (5.8%)	20,714 (11.4%)
Missing Data	32 (0.0%)	5 (0.0%)	0 (0.0%)	27 (0.0%)

MHS CQM 2009 Special Studies

The following FY 2009 studies were conducted as part of the overall initiative of MHS CQM External Review of Care Scientific Advisory Panel (SAP).

Study Title: Emergency Department Utilization in the Military Health System

Figure 3-15: AD Demographic Description of FY 2007 DoD Emergency Department Visits

information regarding all aspects of the ED encounter are documented.

- Develop a scorecard or metric with policies/guidelines for how quickly MHS beneficiaries treated within MTF EDs should be seen, treated and released.

Study Title: Multidrug-Resistant Organism Control in Military Treatment Facilities

Background: Increasing prevalence of multidrug-resistant organisms (MDROs) in U.S. hospitals and medical centers has implications for patient safety. An estimated two million hospitalized patients suffer health-care-associated infections (HAIs) annually that lead to nearly 100,000 deaths. The treatment of HAIs has become more complex because organisms may change and adapt to antimicrobial drugs. MDROs of concern among military healthcare facilities include methicillin-resistant staphylococcus aureus (MRSA), vancomycin-resistant enterococcus (VRE), and acinetobacter. The National Healthcare Safety Network (NHSN) is an initiative sponsored by the Centers for Disease Control and Prevention (CDC) that seeks valid estimates of the magnitude of adverse events and adherence to HAI prevention practices. This study provides baseline data to describe practices (based on recommendations by the CDC, the Institute for Healthcare Improvement, the Society for Healthcare Epidemiology of America, and the Infectious Diseases Society of America Standards and

Practice Guidelines Committee) currently used to control MDROs in military hospitals. Infection-control personnel from 58 military treatment facilities (MTFs) with inpatient beds were invited to complete surveys regarding the frequency with which facilities use general and intensified strategies to control MDROs.

Findings: A total of 47 completed

surveys were received from the 58 MTFs for an overall response rate of 81%. Forty-five of the 47 facilities (about 96%) had a plan for monitoring MDRO activity. In terms of general strategies for controlling MDROs, the participating MTFs reported nearly always educating and training healthcare personnel and usually following infection-control precautions, environmental measures, administrative measures and surveillance strategies (see Figure 3-16). With regard to intensified strategies, facilities nearly always follow enhanced infection-control precautions and feedback strategies (see Figure 3-17). When MRSA (the most monitored MDRO) persists, despite general strategies, nearly half of the facilities (42%) implement an active surveillance-testing program.

Conclusions: MTFs tend to follow recommended strategies for managing MDROs, including ongoing infection-control precautions such as hand washing, and cleaning and disinfecting surfaces and equipment in and around patients. This was supported by findings that senior leaders demonstrate involvement with patient safety initiatives, staff/personnel are regarded as valued team members and routine briefings are conducted to promote staff awareness.

Recommendations: The MHS should continue with system-wide enrollment and participation in the NHSN to ensure standardized, comprehensive data collection and monitoring. In addition, the MHS Infection Prevention and Control Panel (IPCP) should perform ongoing oversight and coordination and provide future direction for this program. The IPCP should also review the data from this study, DoD and Service policies, and national best practices to identify additional opportunities for improvement. Finally, the MHS should adopt or develop standard guidelines for the judicious use of antimicrobial agents.

Study Title: A Study of Low Back Pain in the Military Health System

Background: Low back pain (LBP) in the United States is the fifth most common reason for patient visits to physicians and a leading cause of job-related disability. According to the Department of the Army (2003), LBP affects an estimated 150,000 ADSMs annually and is the second most common reason for health care visits. For Army

Mean Scores for General Strategies

Note: 1 = Never; 2 = Seldom; 3 = Sometimes; 4 = Usually; 5 = Always

General Intervention Strategies for Management/Control of MDROs	Army n=17	Navy n=14	Air Force n=15	MHS n=47
Education and Training Personnel	4.8	4.9	4.8	4.8
Infection Control Precautions	4.5	4.5	4.5	4.5
Environmental Measures	4.4	4.5	4.6	4.5
Administrative Measures	4.3	4.2	4.6	4.4
Surveillance	4.1	3.8	4.1	4.0
Judicious Use of Antimicrobials	3.3	2.7	3.0	3.0

Figure 3-16: Mean Scores for General Strategies

Mean Scores for Intensified Strategies

1 = Never 2 = Seldom 3 = Sometimes 4 = Usually 5 = Always

Intensified Strategies for Management/Control of MDROs	Army n=17	Navy n=14	Air Force n=15	MHS n=47
Enhanced Infection-Control Precautions	4.6	4.7	4.8	4.7
Enhanced Feedback	4.6	4.5	4.5	4.6
Enhanced Administrative Measures	4.4	4.2	4.6	4.4
Enhanced Environmental Measures	4.2	4.3	4.2	4.3
Enhanced Education and Training of Personnel	4.2	4.5	4.0	4.2
Policies for Patient Admission and Placement	4.3	4.4	4.2	4.2
Enhanced Judicious Use of Antimicrobial Agents	4.3	3.9	3.5	3.9
Enhanced Surveillance	3.6	3.4	3.9	3.7
Decolonization	3.5	3.5	3.5	3.5

Figure 3-17: Mean Scores for Intensified Strategies

Low Back Pain Study Patients (n=12,691)

Red-Flag Screen Results	Received Imaging Study		Did Not Receive Imaging Study		Totals	
	n	%	n	%	n	%
Positive	797	38.6%	1,269	61.4%	2,066	16.3%
Negative	2,949	27.8%	7,676	72.2%	10,625	83.7%
Totals	3,746	29.5%	8,945	70.5%	12,691	100.0%

Figure 3-18: Lower Back Pain Imaging Study

Active Duty Service Members (ADSMs), LBP is also associated with the highest risk for disability five years after an injury and is the most frequent precursor to a medical evaluation board (MEB) review.

This study used administrative data and medical records information from FY 2008 to examine and describe the delivery of recommended health care services in the Direct Care System (DCS). Data collection focused primarily on the first outpatient visit in a new episode of care for LBP (referred to as the “index” visit).

Findings: Among the 12,691 patients in the primary care study sample, 3,110 (25%) were seen at Army MTFs, 2,688 (21%) were seen at Navy MTFs, and 6,893 (54%) were seen at Air Force MTFs. Just over one-half of all the records featured explicit documentation suggesting that patients were examined for the following red-flag conditions: vertebral compression fracture (54%), progressive neurologic deficits (54%) and herniated disc (53%). The use of imaging studies (plain X-rays, CT scans or MRIs) was examined among patients who screened positive for any red-flag conditions and who screened negative for all red flag conditions. Of the screen-negative patients, 27.8% (2,949/10,625) received an imaging study as compared with 38.6% (797/2066) of screen-positive patients. The majority of screen-positive patients (1,269/2,066 = 61.4%) did not receive an imaging study (see Figure 3-18). Almost one-fourth (3,112/12,691 = 24.5%) of LBP patients either had a follow-up visit in a physical therapy clinic, a manipulation procedure, or both. Medications most frequently prescribed on the day of the index visit were non-steroidal anti-inflammatory (NSAIDs) (58%), centrally-acting skeletal muscle relaxants (45%) and opiate agonists (19%).

Conclusions: The use of imaging studies for the 28% of study patients who screened negative for red-flag conditions has cost and quality-of-care

implications. Imaging studies are not associated with better outcomes in patients with nonspecific LBP and may expose patients to radiation unnecessarily. Conversely, not performing imaging studies on 61% of patients who screened positive for red-flag conditions runs counter to evidence-based recommendations for prompt work-up for LBP patients suspected of having a serious underlying condition.

Recommendations: The MHS should implement LBP monitoring metrics and quality indicators with ongoing evaluation and monitoring at the local level of each MTF. Maximize communication of the low back pain clinical practice guideline and tool kit to include LBP educational programs.

Study Title: Clinical Outcomes of a Step Therapy Program for Proton Pump Inhibitors

Background: Step therapy is a medication “cost management strategy” that uses the safest and most cost-effective medications first (usually referred to as “preferred medications”) and, if clinically necessary, progresses to more costly, or less clinically desirable, non-preferred medications. When the DoD Pharmacy and Therapeutics (P&T) Committee reviewed this drug class in May 2007, PPIs were found to be the single most costly drug class, representing more than \$485 million in MHS expenditures from April 2006 through March 2007. A step therapy program was implemented for TRICARE beneficiaries in 2007 to promote the use of the most cost-effective PPIs. Under the program, PPIs in tier 1 or 2 of the DoD uniform formulary were designated as preferred agents, and PPIs in tier 3 were designated as non-preferred. For new PPI users, the initial prescription for a non-preferred PPI would be rejected at the pharmacy, requiring patients to contact their providers to either obtain a prescription for a preferred PPI or for the provider to verify that the non-preferred PPI was clinically necessary.

This study was prompted by a program analysis performed for the DoD Pharmacy and Therapeutics Committee which indicated a substantial percent of new PPI users who present a prescription for a non-preferred PPI at the retail and mail order points of service and receive a step therapy rejection, do not subsequently fill a PPI prescription under the TRICARE pharmacy

benefit. While these patients may be opting to purchase an over-the-counter PPI product or using private health insurance, the concern is the process may result in patients not receiving necessary care, potentially resulting in increases in serious gastrointestinal (GI) events. The study examined the impact of the step therapy program on TRICARE for Life (TFL) patients; this patient population was specifically targeted on the assumption that older beneficiaries are more likely to be receiving PPIs for the treatment of serious medical conditions, are more vulnerable to GI adverse events, and may have more difficulties negotiating the step therapy process, compared to younger individuals. PPIs are used for a wide range of medical conditions, including dyspepsia (heart burn) and acid reflux as well as prevention and treatment of GI ulcers.

The 59,679 individuals in the study population were classified into one of four groups: (1) Patients who began therapy with the preferred PPI and therefore did not trigger the step therapy intervention; (2) step therapy with subsequent change to a preferred PPI; (3) step therapy and clinical justification for a non-preferred PPI; and (4) step therapy with no documented PPI in the next 9 months. Key analyses focused on inpatient admissions and outpatient visits relating to GI disease, death and the characteristics of patients with no documented PPI prescription on record.

Findings: The preferred PPI group contained 53.4% (n = 31,851) of the study population and functioned as a reference group (patients who did not encounter the step therapy intervention) The remaining 46.6% of TFL beneficiaries were further divided into three groups: step therapy with subsequent preferred PPI (n = 18,985; 31.8%), step therapy with subsequent non-preferred PPI (n = 2,855; 4.8%), and step therapy with no subsequent documented PPI (n = 5,988; 10.0%). If only patients who encountered a step therapy rejection are considered, the percent of patients who do not have a record of subsequently receiving a PPI prescription is about 22%, roughly 1 in 5.

Differences in health outcomes among the four groups were noted. Individuals in the

Likelihood of Having a GI Hospitalization

GI = Gastrointestinal; PPI = Proton Pump Inhibitor; REF = Reference Group; OR=Odds Ratio

Likelihood of Having any GI Disease-Related Hospitalization	Preferred PPI	Step Therapy & Preferred PPI OR (95% CI)	Step Therapy & Non-Preferred PPI OR (95% CI)	Step Therapy & No Documented PPI OR (95% CI)
Quintile 1 (least likely)	REF	REF	REF	REF
Quintile 2	REF	0.96 (0.91-1.02)	0.89 (0.79-1.00)	1.09 (1.00-1.20)
Quintile 3	REF	1.00 (0.94-1.05)	0.92 (0.82-1.04)	1.26 (1.15-1.38)
Quintile 4	REF	1.05 (0.99-1.11)	0.86 (0.76-0.97)	1.40 (1.28-1.54)
Quintile 5 (most likely)	REF	1.20 (1.13-1.27)	0.93 (0.82-1.04)	1.78 (1.63-1.94)

Figure 3-19: Likelihood of Having a GI Hospitalization Sorted by Research Group With the Propensity Score Analysis Adjusted Using Multinomial Regression: Gastrointestinal (GI), Proton Pump Inhibitor (PPI), Reference Group (REF), Odds Ratio (OR), Note: Quintiles of likelihood were constructed on the basis of age, gender, service, the Charlson Comorbidity Index, the Chronic Disease Score (Mod C), and the use of medications before PPI therapy initiation.

step therapy with preferred PPI group were more likely to have a hospitalization for GI disease compared to the reference group, who likewise received a preferred PPI but did not encounter the step therapy rejection. In order to take into account differences among patients in terms of their risk for serious GI events, patients were divided into quintiles (Figure 3-19) representing the likelihood of having any GI-related hospitalization (1: least likely; 5: most likely). TFL beneficiaries in the step therapy with subsequent preferred PPI group at highest risk for a GI event (quintile 5), as well as those in the step therapy with no subsequent documented PPI group and in quintiles 3, 4 and 5, were significantly more likely to have a GI hospitalization compared to the reference group.

Conclusions: Limitations of this study included incomplete primary diagnosis data, no visibility of PPI use if purchased over the counter or with other health insurance, and lack of reliable death data. It is also important to remember that the study was performed in an older beneficiary population and results may not extrapolate to a younger age group. In summary, the data did seem to show that patients at higher GI risk who received step therapy and did not subsequently receive a documented PPI were more likely to have a GI-related event compared to those who were initially prescribed a preferred PPI and never encountered the step therapy rejection. Another possible interpretation of this data is that patients



who opt not to follow up after a step therapy rejection tend to be those at higher GI risk, who are most likely to have a GI hospitalization. In other words, patients who opt not to follow-up after a step therapy rejection may not just be patients with relatively minor symptoms who can be adequately treated with lifestyle changes or an over-the-counter PPI.

Recommendations: The MHS should:

- Consider a targeted intervention program to follow up with beneficiaries who encounter a

step therapy rejection but then do not obtain a prescription fill.

- Communicate with providers and beneficiaries to encourage that patients start on preferred agents whenever possible, and efficiently negotiate the waiver process when a non-preferred agent is clinically necessary.
- Continue to analyze the impact of step therapy programs on both cost and patient outcomes to determine its appropriate place in managing the DoD pharmacy benefit.

**PURCHASED
CARE 2009
QUALITY
IMPROVEMENT
ACTIVITIES**

The PC MCSC conducted a variety of quality improvement initiatives, projects and studies in 2009. In some cases, the studies were conducted over multiple years and measured the effectiveness of interventions. Some of these studies were initially indicated through review of regional or contractor performance on TJC ORYX® core measure sets or their HEDIS® compliance. The following is a representative list of some of these activities:

- Appropriate Use of Antibiotics In Accordance with the Surgical Care Improvement Project Core Measure Set
- Appropriate Use of Antibiotics for Community Acquired Pneumonia in Accordance with the Pneumonia Core Measure Set
- Improvement in the Rate of Administration of Human Papilloma Virus (HPV) Vaccination
- Appropriate Authorization of Spinal MRI Based on InterQual® Criteria
- Identifying and Improving the Rate of Beneficiary Consent to Case Management
- Management of Attention Deficit Hyperactivity Disorder in Children by Primary Care Managers
- The Prescribing and Management of Psychotropic Drugs by Non-Mental- Health Providers
- Use of Appropriate Medications for People with Asthma Monitoring
- Appropriate Testing for Children With Pharyngitis
- Identification of Barriers to Compliance With Cancer Screenings Through Health Net Case Management and Disease

Management Queries

- Oxycontin Use in Opiate-Naïve Patients as Evidenced by a Pharmacy Data Transaction System (PDTS) Algorithm
- Assessment of the Effectiveness of Medication Reconciliation Processes at Transition from Hospital to Home
- Incidence of Measles Diagnoses in the TRICARE North Beneficiary Population
- Approved Authorizations and Referrals For Which No Services Are Rendered
- Improving Self-Management of Oral Anticoagulant Therapy for Case-Managed Beneficiaries
- Cervical Cancer Screening QIP
- Diabetic Nephropathy QIP
- Flu Shot Initiative QIP
- HbA1c Testing QIP
- Follow-Up After Hospitalization for Mental Illness QIP
- Antidepressant Medication Management QIP
- Improving Mental Health Assessment Post-ICU QIP
- Safety Education for Families of Autistic Children QIP
- Case Management Flu Shot QIP
- Increased Case Management for Beneficiaries With Complex Needs QIP
- Smoking Cessation for Active Disease Management Participants QIP
- Disease Management Flu Shot QIP
- Colorectal Cancer Clinical Study
- TPR Use of Mental Health Services – Clinical Study
- Breast Cancer Prevention

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MHS
POPULATION
HEALTH

Population Health (PH) is devoted to the maintenance and enhancement of the health of the Military Health System (MHS) population, using available resources in the most efficient and effective way possible. Population Health Improvement (PHI) provides a balance of activities promoting awareness, education, prevention and intervention, all designed to improve the health of a specified population. This model connects medical interventions to individual military treatment facilities (MTFs), worksites and community-based wellness and prevention activities to improve overall health and reduce morbidity and premature mortality in the MHS population.

IV



POPULATION HEALTH
& MHS MEDICAL MANAGEMENT



The MHS PH initiatives focus on reducing the risk of disease and injury on the personal level by specifically encouraging healthy behaviors and enhancing physical fitness. While health care providers continue to render necessary care, the range of treatment options can be standardized and measurable improvements can be achieved in performance and health status. These initiatives include demonstration projects on “Healthy Choices for Life,” which in 2009 continued to address the issues of tobacco use, alcohol abuse and obesity.

HEALTH PROGRAMS OVERVIEW

DoD developed and implemented a series of demonstration and pilot projects to address key health behaviors that were identified in the *2005 Survey of Health-Related Behaviors*, and are associated with increased morbidity and preventable death.

evidence-based projects that address the increase in tobacco use, obesity and alcohol misuse and abuse among TRICARE beneficiaries. These projects focused primarily on activities promoting healthy behaviors and disease prevention as well as field testing the effectiveness of comprehensive benefits not currently covered by TRICARE.

“Healthy Choices for Life” initiatives are

TOBACCO CESSATION MARKETING & EDUCATION CAMPAIGN

Responding to increased tobacco use among junior AD military personnel, DoD implemented an education campaign aimed at helping AD military personnel quit tobacco and lead healthier lives.

“Quit Tobacco—Make Everyone Proud” in January 2007. The goals of the campaign are to increase awareness of the negative social and physical effects of tobacco and decrease its use and acceptance in the military work environment. The campaign is aimed at E1–E4 personnel who are 18 to 24 years old, who have the highest rates of tobacco usage in the military. The campaign is designed to motivate tobacco users who want to quit to actually formulate and implement a quit plan. This plan is based on the social marketing model of Prochaska and DiClemente’s Transtheoretical Health Behavior Stages of Change. The campaign theme, materials and approach are based on formative research with the target audience, which found:

- Adverse performance effects of tobacco are not appreciated or understood;
- Tobacco use is perceived as normal and is supported by military culture; and
- Top-down health and readiness messages did not resonate as much as service members’ pride in their uniforms, recognition of their status as role models, and the emphasis on quitting tobacco for a loved one.

Despite decades of effort to reduce tobacco use in military populations, tobacco use remains firmly entrenched in a significant segment of the military population, with new smokers and tobacco chewers starting daily. As measured by the 2008 DoD Survey of Health-Related Behaviors, the prevalence of smoking among 18 to 25 year-olds on AD was 38%, as compared to 30.5% for members of the armed services overall. Also of concern is the fact that many personnel initiate tobacco use after entering the armed services.

Background: The TRICARE Management Activity (TMA) launched

Resources and Outreach: This campaign is funded by Defense Health Plan POM FY10–FY15 but is dependent on local program managers to get their message to the target audience. The campaign’s award-winning Web site, www.ucanquit2.org, has 285,000 visitors per year (70% unique, and a 23% increase in



The Defense Manpower Data Center (DMDC)
 The DMDC conducts annual surveys, both Web-based and pencil-and-paper, to support the personnel information needs of the Under Secretary of Defense for Personnel and Readiness. These surveys assess the attitudes and opinions of the entire DoD community on a wide range of issues.

Figure 4-1: Duties of the DMDC



Figure 4-2: Downloadable interactive tools and print materials on www.ucanquit2.org

unique visits compared to 2008). It provides interactive information, games and videos, a message board for peer-to-peer support, and a savings calculator as well as access to real-time live-chat help with a trained tobacco cessation coach 18 hours per day. Personalized tools include a calendar, customizable quit plan, the ability to create a blog under the My

Quit Space section, and a subscription to text message support. Over 400,000 centrally funded campaign promotional items have been distributed to 400 installation points of contact. The campaign also provides print ads/drop-in articles, service-specific posters, postcards, fact sheets, radio and video public service announcements (PSAs), and DVDs for use in tobacco cessation classes and for distribution to local media. Sixty-five percent of installation newspapers (with a combined circulation of 550,000) regularly use campaign materials, and 80% of targeted radio stations report using the audio PSAs.

Awards: During 2009, this campaign received the Horizon Interactive Award (Gold Level), the Interactive Media Outstanding Achievement Award, the Web Marketing Association's Outstanding Web Award, the W3 Award (Silver Level), the Web Health Award (Silver Level), and the Health Improvement Institute's Aesculapius Award of Excellence.

IMPACT: This campaign continues to struggle to pierce the consciousness of the target audience as measured by campaign brand awareness in the annual Status of Forces surveys performed by the DMDC. However, results of the recently released 2008 DoD Health-Related Behaviors (HRB) Survey of Active Duty Forces found that 26% of respondents on installations with high campaign visibility reported seriously thinking of quitting smoking in the next 30 days compared to six percent from other installations.

Marketing and outreach strategies included leadership briefings, collateral materials distribution, and Web and electronic marketing. The campaign encouraged its audience to visit www.ucanquit2.org, a Web-based cessation support and education tool.

The key elements of the tobacco cessation project, "Tobacco Free Me," which ran from May 2006 to September 2008, established the framework for the TRICARE Smoking Cessation Program. The 2009 John Warner National Defense Authorization Act (NDAA), further directed the main components of the program to include availability to all beneficiaries under the TRICARE program (non-Medicare eligible) no-cost, smoking cessation pharmaceuticals (including nicotine replacement products), behavioral counseling, access to a toll-free 24/7 quit line, printed and Web-based cessation materials, and refunds of co-payments, as well as an annual report to Congress on the details of the benefit.

WEIGHT MANAGEMENT DEMONSTRATION

Obesity is one of the leading causes of preventable death in the United States. According to the Health Care Survey of DoD Beneficiaries conducted in January 2005, nearly two-thirds of all MHS beneficiaries were overweight (41%) or obese (22%) as measured by their body mass index (BMI). For the AD population, nearly two-thirds were classed as overweight or obese, however, only 12% of AD personnel were obese. Obesity was much higher among retirees under age 65 (33%).

To combat this epidemic, TRICARE launched the HEALTH program in July 2006, which concluded in September 2008. HEALTH was designed to help non-AD participants reach their desired weight and teach them how to live a healthier lifestyle. Program participants learned about healthy meal planning, created personalized exercise programs, and worked with a phone counselor and primary care manager to determine weight loss goals and receive instructions on how to maintain a healthy weight.

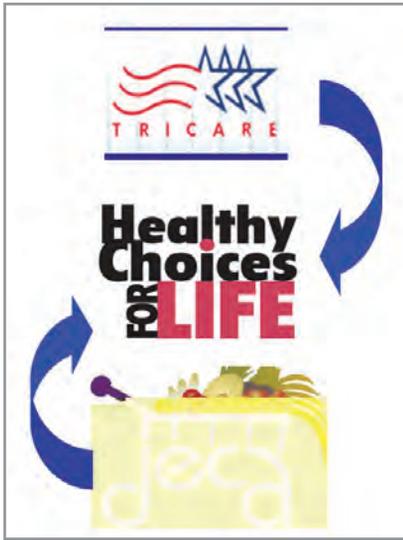


Figure 4-3: Healthy Choices for Life Campaign



Figure 4-4: Healthy Choices for Life Website

The key elements of the HEALTH demonstration project included the following:

- It targeted services to overweight and obese, non-AD TRICARE Prime beneficiaries 18 to 64 years of age (and not eligible for Medicare) residing in Indiana, Illinois, Ohio and Michigan.
- Design elements included access to behavioral modification tools, educational support, and pharmacotherapy to aid in weight loss efforts.
- The study design followed the National Heart, Lung, and Blood Institute’s recommendations, which include consideration of pharmacotherapy for patients with a BMI greater than 27 with risk factors, or a BMI of 30 without risk factors.

The program’s Web site provided access to various tools, including a calorie calculator, BMI calculator, a calories burned calculator and physical activity logs. Participants also had access to eHealth and teleHealth capabilities, which included weight loss counseling.

TRICARE designed the study to collect data on the feasibility, usefulness and cost-effectiveness of program components designed to be part of a weight management benefit for

all TRICARE beneficiaries.

Evaluation Outcomes:

- Participants’ weight loss after 6 months averaged 9.6 pounds;
- The average cost per participant ranged from \$145 to \$390, depending on the level of intervention sought;
- Participants reported an improvement in their health status;
- Participants experienced improved diastolic and systolic blood pressure;
- Participants reported increased levels of physical activity;
- Participants reported decreased food intake;
- Almost 4,000 eligible beneficiaries were interested in participating; 61% completed the enrollment process;
- The mean age was 48, the mean BMI was 32; and 70% of program participants were female;
- Program retention averaged 67.4% at 6 months and 42.5% at 12 months; and
- Participants reported satisfaction with the demonstration program.

The weight management demonstration showed that weight loss could be facilitated through Web-based support. As a result, TMA is developing a Web site modeled on the evidence-based Veteran’s Administration MOVE! program, which will be available to all MHS beneficiaries. The program will be tailored to meet the individual needs of each beneficiary by providing guidance on nutrition and physical activity and allowing the beneficiary to set the pace through goal setting and a step-by-step approach.

ALCOHOL EDUCATION

Background: TMA launched “THAT GUY” in December 2006 as an integrated marketing campaign targeting military enlisted personnel of ages 18 to 24. The campaign uses a multi-media, peer-to-peer social marketing approach to raise awareness of the negative short-term social consequences of excessive drinking in this age group, thereby promoting peer disapproval of excessive drinking and leading

to reductions in binge drinking. This campaign includes an award-winning Web site, www.thatguy.com, as well as online and offline public service announcements, paid



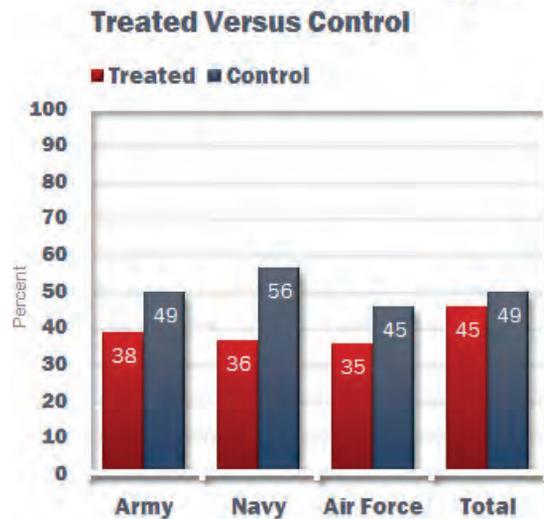


Figure 4-6: Binge drinking among treated vs. control installations by branch from 2008 Survey of Health-Related Behavior (HRB)

and pro bono billboard and print advertising, a turnkey implementation plan and schedule for installation project officers, centrally funded promotional materials, and central support of special events.



MORE HEALTH PROMOTION/ EDUCATION

The managed care support contractors (MCSCs) likewise engaged in a number of health promotion, education and wellness activities to improve population health. Examples include prevention screening reminders, vision screening, blood pressure screening, weight management, and smoking cessation. Outreach is done by a variety of

Resources and Outreach: This campaign is funded by Defense Health Plan POM FY10-15 but is dependent on commanders and local program managers to convey the message to the target audience.

The campaign is now actively deployed by 1,500 local points of contact at 228 military installations, and units in 42 states and 11 countries. Half a million promotional items have been distributed, and www.thatguy.com has been viewed by 800,000 users at a current rate of 27,000 per month.

Awards: During 2009, the THAT GUY campaign won the Bronze Anvil Award for research and evaluation, and the Web site won three different awards of excellence from the International Academy of Visual Arts for their Visual Appeal, Gaming and Animation categories.

Impact: There has been a steady increase in campaign awareness within the target audience according to the annual Status of Forces surveys performed by the DMDC, rising from “phantom awareness” of three percent in 2006 to 14% in 2007, and 30% in 2008. Furthermore, the recently released 2008 HRB survey showed a decrease in binge drinking among junior enlisted men of ages 17–20 (45% in 2005, 39% in 2008). Findings also show a statistically significantly lower incidence of binge drinking at installations implementing the THAT GUY campaign: 38% among all treated installations versus 49% at control (untreated) installations (figure 4-6). Additionally, junior enlisted personnel on installations that actively deployed the campaign were less likely (21%) than those from control installations (30%) to say their friends believe drinking to the point of losing control is acceptable.

mechanisms, including plan newsletters, Interactive Voice Response (IVR) callouts, e-mail, individual letters to beneficiaries, birthday cards outlining screening tests that a beneficiary should have in that year, and through the beneficiaries’ primary care providers, clinic nurses or qualified health coaches.

MEDICAL MANAGEMENT

The MHS has developed a Medical Management (MM) model that promotes the integration of utilization, case, and disease management as a hybrid approach to managing patient care. MM is a key process used to improve the clinical quality and business efficiency of health care services in the MHS. Further, MM includes a shift to evidence-based, outcome-oriented programs that place a greater emphasis on integrating clinical practice guidelines into the MM process,

thereby holding the system accountable for patient outcomes

The DoD Instruction (DoDI) 6025.20 “Medical Management (MM) Programs in the Direct Care System (DCS) and Remote Areas” is the policy directing MTFs to implement MM. This DoDI establishes the requirements while the companion publication, the TMA Medical Management Guide, contains implementation direction. The MM Guide

provides specific how-to guidance for MTF staff in establishing MM programs, including information on outcomes management, resources such as sample forms, Web site links, and tools that can be customized at the local level.

All of the MCSC and DPs also ensure comprehensive medical management, utilization management, case management and disease management for their TRICARE enrollees.

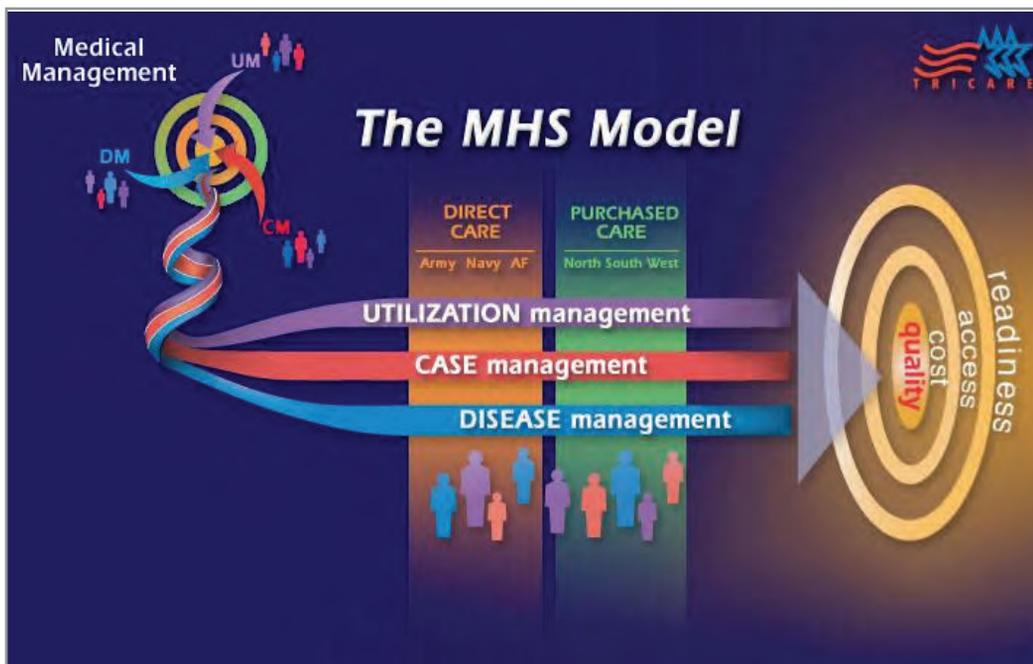


Figure 4-7: Medical Management

UTILIZATION MANAGEMENT

Utilization Management (UM) is an organization-wide, interdisciplinary approach to balancing quality, risk and cost concerns in the provision of patient care. It is the process of evaluating the medical necessity, appropriateness and efficiency of health care services. UM describes proactive procedures, discharge planning, concurrent planning, precertification, and clinical case appeals. UM also covers processes such as concurrent clinical reviews and appeals introduced by the provider, payer or patient.

The goal of UM is to maintain the quality and efficiency of health care delivery by caring

for patients at the appropriate level of care by coordinating health care benefits, ensuring the least costly but most effective treatment benefit, and the presence of medical necessity. This goal is accomplished by using nationally accepted clinical practice guidelines.

The purpose of UM within the MHS is to identify, monitor, evaluate, and resolve issues that may result in inefficient delivery of care or that may have an impact on resources, services and patient outcomes. UM in the MTFs and in purchased care is accomplished through proactive data analysis, utilization review, case management, and referral management.

**CASE
MANAGEMENT**

Case Management (CM) is defined by DoDI 6025.20 and the DoD Medical Management Guide, version 3.0 (October 2009), as “a collaborative process under the population health continuum which assesses, plans, implements, coordinates, monitors, and evaluates options and services to meet an individual’s health needs through communication and available resources to promote quality cost-effective outcomes.” In the MHS, CM is a key clinical process that supports the provision of seamless continuity of care by coordinating services to meet beneficiaries’ health care needs. Case management reduces fragmentation of care and generates a positive return-on-investment by promoting quality clinical outcomes and avoiding costs for unnecessary health care services.

In May 2007, TMA established three CM focus areas: Policy, Education and Training, and Information Management/Data Capture. These three areas continue to be the primary focus of CM efforts. TMA, Office of the Chief Medical Officer, developed interim policy for implementation of clinical CM in the MHS. In addition, TMA developed CM Web-based and virtual instructor-led training available on the MHS Learn platform. TMA continues working toward acquisition of an enterprise-wide, automated CM tool to help document and track a patient’s individualized care plan. This tool will be used to enhance the provision of CM services to beneficiaries and to support interdisciplinary health team communication across multiple care settings. Finally, TMA, in collaboration with the Joint Services CM Working Group, developed six performance measures designed to evaluate the effectiveness of CM in the MHS.

**DISEASE
MANAGEMENT**

Disease management (DM), as defined in the DoD Medical Management Guide 2009, is “An organized effort aimed at achieving desired health outcomes in populations with prevalent, often chronic diseases for which care practices may be subject to considerable variation.” The goals of DM are to improve health status (clinical outcomes), increase patient and provider satisfaction, and ensure appropriate utilization of resources. The DM focal point is on improving the quality of life for individuals by preventing or minimizing the effects of a disease, usually a chronic condition, through integrative care. The underlying premise is that when the right tools, expertise, and equipment are applied to a population, costs can be minimized in the near term, and/or resources can be provided more efficiently. DM’s focus on chronic conditions is intended to control and slow or arrest their progression rather than cure the disease. Improving the quality of life and activities for daily living are first and foremost in this approach to health care.

The MHS DM program directly supports the MHS strategic goal of Healthy and Resilient Individuals, Families, and Communities

by providing proactive, patient-centered, evidence-based care using clinical practice guidelines (CPGs) and promoting sustained partnerships with our beneficiaries. The DM program currently has two parts: A national demonstration project being conducted through the MCSCs; and individual MTF programs that often work in concert with the nationwide program, but which may go beyond or focus on other disease areas as necessitated by local population requirements. The national MCSCs-implemented DM program targets certain chronic disease patients who have high medical service utilization patterns. This program has shown a positive return on investment.

The MHS implemented a groundbreaking DM initiative in September of 2006 by taking a nationally uniform approach to DM. TRICARE’s approach to disease management is twofold: (1) keep the well healthy with a focus on healthy lifestyles, disease prevention, and health promotion and (2) maintain an active DM program for high-risk beneficiaries with specific chronic disease conditions. This revised uniform approach to DM, provides the MCSCs with risk-stratified patient lists

and formally evaluates appropriate clinical, humanistic, financial, and utilization outcomes across all three regions using national benchmarks.

Currently, the MHS DM program addresses asthma, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), and diabetes. Further expansion of outcome measures is targeted to include depression and anxiety disorders, along with cancer screening. The DoD is pursuing necessary regulatory changes to implement DM as a full benefit, in accordance with the John Warner National Defense Authorization Act (NDAA) for Fiscal Year 2007; Section 734: Disease and Chronic Care Management.

The MTFs and the TRICARE network have also developed several effective DM interventions to address the needs of their specific communities. These interventions include: publications and other resources sent to patients, group education classes, telephone care management, web-based information, and CM services as required.

The MHS continues to focus energies on identifying the best overall DM processes and practices to address the following questions:

- Who should be targeted for DM?
- What services should be provided?
- How can the MHS's approach to DM be improved?
- How do MHS DM efforts compare with other health plans?

To accomplish this end, the MHS has extended its DM demonstration project and is continuing to evaluate the outcomes attained by the DM programs implemented in 2006 and 2007.

As mentioned, the national MHS DM program, as implemented through the

MCSCs, initially targeted asthma, CHF and diabetes patients who — because of recent patterns of high medical services utilization or other reasons — may have failed to receive basic beneficial services or procedures related to their conditions. For all three diseases, evaluation has shown that most outcome measures have moved in the anticipated direction, that is, lower rates of emergency room use and inpatient care, lower medical costs, and (with a few exceptions) a greater percentage of patients receiving appropriate medications and tests. However, the effects of these interventions have been less than anticipated. Complete estimates through the end of FY 2008 show that estimated medical savings attributable to DM are \$453 per year, on average, for each asthma patient, \$371 per year for each CHF patient, and \$783 per year for each diabetes patient. The overall return on investment is \$1.26 per dollar spent on the entire program, but only the DM programs for asthma and diabetes show a net cost savings after factoring in program costs. Nevertheless, DoD currently intends to implement a full DM benefit in a similar manner to the current DM demonstration program.

Another initiative undertaken in 2009 was the selection of Martin's Point Health Care, CHRISTUS US Family Health Plan and National Naval Medical Center to participate in the Congressionally mandated, three-year Military Health Risk Management demonstration project, which will be conducted to evaluate whether monetary incentives in conjunction with wellness programs will encourage healthy behaviors among non-Medicare-eligible retired beneficiaries and their family members who are enrolled in TRICARE Prime and reside in the demonstration project service areas. Several of the USFHP programs are currently using health risk assessment tools for the benefit of their members.

• • •

PATIENT SAFETY In 2001, the Department of Defense (DoD) Patient Safety Program (PSP) was established under congressional directive to identify and report actual and potential problems in medical systems and processes and to implement effective actions to improve patient safety and health care quality throughout the Military Health System (MHS). The DoD PSP is a comprehensive program with the mission of establishing a culture of patient safety. By providing products, services and training, the DoD PSP strives to proactively ensure the safe delivery of high quality, streamlined health care and a positive patient experience to the 9.6 million TRICARE beneficiaries across the MHS. Targeting health care leadership, healthcare professionals, patients and their families, the DoD PSP engages the entire healthcare team to advance patient safety throughout the network.



PATIENT SAFETY



Patient Safety is defined as the identification and control of hazards that could lead to errors and cause patient harm. Unfortunately, in any healthcare delivery process, adverse events do occur often resulting in harmful medical errors. Many of the events are process-related and preventable. In addition to patient safety consequences, preventable errors are also very costly to the health care system. In the Institute of Medicine's (IOM) 1999 landmark report, *To Err is Human*, it was estimated that medical errors come at the cost of 98,000 preventable deaths and \$17 billion each year. This is a challenge faced by the United States health care system every day, and the MHS is not an exception.

Challenges to Safe Patient Care

- **There are up to 98,000 preventable deaths yearly (IOM, 1999)**
- **10-35% of the patients suffer from preventable adverse drug events (IOM, 1999)**
- **1.5 million harmed/year from medication errors; 7000 deaths/year (IOM, 2006)**
- **2.2-2.7 falls/1000 bed days in acute care per year; 29-48% with injury; 7.5% with serious injury (Morse, 2002)**

Figure 5-1: Challenges to Safe Patient Care

A CULTURE OF PATIENT SAFETY

Fortunately, there are evidence-based interventions that work to improve patient safety. Eliminating preventable errors and delivering safe patient care will not be achieved through a quick fix focused on individual behaviors. The key lies in addressing the underlying challenges and barriers to patient safety at local and organizational levels. The *To Err is Human* report reached the conclusion that “the majority of medical errors do not result from individual recklessness or the actions of a particular group, more commonly, errors are caused by faulty systems, processes, and conditions that lead people to make mistakes or fail to prevent them.” Along these lines, the DoD PSP encourages a non-punitive, systems approach to change practices and processes, creating a safer environment and improving the

culture of patient safety within the MHS.

The DoD PSP is helping to promote this culture by incorporating the National Quality Forum (NQF) Safe Practice as a framework within its overall strategy. NQF-endorsed Safe Practices #1-4 focus on creating a culture of patient safety and include the following: leadership structures and systems; culture measurement, feedback, and intervention; teamwork training and skill building; and identification and mitigation of risks and hazards. By addressing each of these safe practice areas through evidence-based initiatives, the DoD PSP engages leadership, providers and patients, empowering them with strategies and tools for continuous improvement in healthcare quality and safe delivery.

LEADERSHIP ENGAGEMENT & DEVELOPMENT

Leadership engagement at all levels is foundational to the culture of patient safety. MHS leaders and Commanders serve an essential role by establishing the importance of patient safety and creating a psychologically-safe environment to expedite change. Patient Safety Managers (PSMs) in Military Treatment Facilities (MTFs) are champions of patient safety, shouldering local leadership responsibility, raising patient safety issues to the forefront, sharing innovative ideas on how to address those issues with each other and MTF staff, and

implementing changes aimed to deliver results.

Based on industry evidence and solicited feedback on leadership needs, the DoD PSP has developed and deployed several tools to equip leaders to effectively promote patient safety within their organizations. DoD PSP leadership tools not only engage leaders and empower them to communicate the cause and development actions to staff, but these tools also help staff engage their leadership to communicate the importance of patient safety.



Figure 5-2: BPSM Course Photo

The DoD PSP is helping to develop leadership within patient safety through a training venue designed for new Patient Safety Managers orienting them to the position and sharing tools for success. The DoD PSP Basic Patient Safety Manager (BPSM)

5-day course provides an overview of patient safety standards and concepts such as safety culture; quality management; performance improvement; and risk identification and mitigation, in an effort to give PSMs the tools

to complete their duties successfully. A large-scale curriculum revision and course update is planned for FY 2010, including the addition of more interactive, virtual and on-demand tools to augment the didactic portion of the course.

The DoD PSP also plans to continue championing change across the MHS by engaging leadership to foster the patient safety culture. In FY 2010, the DoD PSP will launch a Commanders Forum, facilitating a unique opportunity for service leadership, primarily Military Treatment Facility (MTF) Commanders to virtually connect to share ideas, stories and best practices related to patient safety improvement initiatives in their respective areas of responsibility.

CULTURE ASSESSMENT & FEEDBACK

It is well-published by industry that organizational culture creates the environment and sets the tone for patient safety, either as a facilitator or a barrier. A culture that is not conducive to practice and process changes necessary to reduce the risk of preventable events causing harm to patients will not sustain improvements in patient safety. By

assessing culture, it is possible to identify and communicate these gaps back to leadership and staff so that targeted and effective interventions may be implemented. It is in this way that organizations may lay the foundation to establish a safe patient environment.

In FY 2008, TRICARE Management Activity sponsored the administration of the DoD Tri-Service Survey on Patient Safety Culture, an anonymous patient safety culture survey with 42 items that assessed staff attitudes and beliefs about patient safety, medical error and event reporting. An MTF's first administration of the survey provides a baseline for measuring patient

safety culture, and subsequent administrations allow facilities to track change over time. After administration of the 2008 survey, MTFs received feedback reports that included a comparison to their 2005/2006 results. The DoD PSP used the MHS-wide results to identify opportunities for improvement and to inform the development of tools and services.

Based on the 2008 Patient Safety Culture Survey results, the DoD PSP developed an Improvement Guide to help patient safety leaders in MTFs strengthen their patient safety programs and patient safety culture. The Guide includes a brief description of the DoD Tri-Service Survey on Patient Safety and overall results for the Military Health System (MHS), advice on how to use the survey results to identify opportunities for improving patient safety culture, and examples of various initiatives and tools that MHS hospitals and clinics have implemented in their efforts to improve patient safety culture, which is the foundation for safe patient care.

2008 DoD Tri-Service Survey on Patient Safety Culture

Greatest Strengths:

- 1. Teamwork within units
- 2. Supervisor/manager expectations and actions promoting patient safety
- 3. Management support for patient safety

Areas of Opportunity:

- 1. Non-punitive response to error
- 2. Staffing
- 3. Handoffs and Transitions

Figure 5-3: 2008 Tricare Survey Statistics

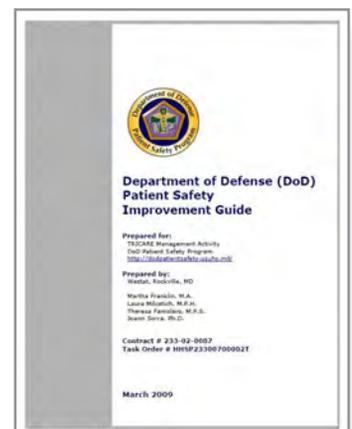


Figure 5-4: Patient Safety Improvement Guide



**TRAINING
COACHING &
SKILL BUILDING
FOR TEAM-BASED
CARE**

Based on root cause analysis (RCA) information from reported DoD adverse events, it is estimated that nearly 50% of preventable medical errors are the result of communication and teamwork breakdown within healthcare delivery teams. Thus, teamwork training and skill building is a cornerstone of the DoD PSP services. However, a successful improvement intervention is not just one training activity targeted at an individual, but it is an ongoing learning and behavior modification process that must take place within a system and an

environment that is conducive to change. Evidence in the field demonstrates that with leadership support and other organizational factors — such as culture — in alignment, improvement interventions like teamwork training and skill building to reduce the risk of medical errors are more likely to successfully transfer into practice, and the positive impact of the intervention is more likely to endure.

providers. TeamSTEPPS consists of numerous ready-to-use materials and training curricula necessary to successfully integrate teamwork principles into all areas of a healthcare system. Master Instructors work with facility champions to customize training and implementation strategies, and then provide coaching and consulting assistance as needed, to ensure success.

The DoD PSP has also developed communication, teamwork, and skill building toolkits, which offer just-in-time training, action steps, and resource guides for specific patient safety strategies and tools that are presented within the TeamSTEPPS curriculum. In 2009, two new toolkits were created and disseminated, providing patient safety champions with the resources to implement the SBAR (a strategy for communicating a patient’s status—Situation, Background, Assessment, and Recommendation) and Briefs and Huddles (team events allowing for information exchange within healthcare teams).

TeamSTEPPS has received widespread recognition from The Joint Commission, the National Quality Forum, the Institute



Figure 5-5: TeamSTEPPS Model for Patient Care

TeamSTEPPS cadre of instructors continues to grow.

More than 2,000 individuals earned a total of 13,915 continuing education units (CEUs) by participating in 115 TeamSTEPPS® sessions led by 109 instructors during FY 2009.

92% plan to apply the principles in their work environment. 87% believe the training will help improve patient safety in their work environment.

TeamSTEPPS® (Team Strategies and Tools to Enhance Performance and Patient Safety) is a team training, implementation, coaching, and sustainment initiative aimed to improve communication and other teamwork skills among healthcare

The DoD PSP empowers all healthcare workers, no matter where they are within the organization, to make a difference for their patients:

- Leadership Engagement and Development
- Culture Assessment and Feedback
- Training, Coaching, and Skill-building for Team-based Care
- Risk Identification and Mitigation

Figure 5-6: TeamSTEPPS™ Statistics

Figure 5-7: DoD PSP empowers healthcare workers



Figure 5-8: Heidi King, Acting Director, DoD Patient Safety Program, receives National Patient Safety Foundation (NPSF) Chairman's Medal from NPSF Board Chair Pamela Austin Thompson, RN, MS, FAAN (middle). Photo taken by Event Digital Photography, Inc. May, 2009

for Healthcare Improvement, the Centers for Medicare and Medicaid Services, and the National Patient Safety Foundation.

The DoD PSP has designated and provides support to five Centers of Excellence across the country to support the development, validation, proliferation, and sustainment of team-

driven care throughout the MHS. These Centers of Excellence are known as Team Resource Centers (TRCs). In addition to conducting Tri-service simulation-based training incorporating TeamSTEPPS principles and tools, TRCs also do fundamental research and special projects on teamwork and patient safety. They focus on using applied research and simulation to translate research findings and

theory into practice and provide practice opportunities for learned team behaviors and skills, resulting in safer team processes and patient outcomes.

The TRC map shows the locations of the TRCs, which serve as Tri-Service, regional Centers of Excellence for simulation-based teamwork training and skill building in the DoD. The following is a summary of some of the ongoing activities at each TRC:

- The **National Capital Area Medical Simulation Center (SimCen)** at the Uniformed Services University of Health Sciences (USUHS) focuses on group-oriented medical simulation to support learning requirements across the entire continuum of military healthcare. In addition to developing and deploying scenarios for simulation-based TeamSTEPPS training, the SimCen has developed a virtual immersive technology that creates a virtual setting in which teams may practice skills, such as an operating room that mimics the military's field deployable tent hospital. The SimCen also developed and deployed Fundamentals of Laparoscopic Skills (FLS), a skills training curriculum, which highlights patient safety issues including the potential complications of electrosurgery in the laparoscopic environment. The FLS curriculum has been validated and training equipment was placed in 13 MTFs to train residents and providers.
- The **Naval Medical Center Portsmouth (NMCP)** has also focused on developing and evaluating scenarios that incorporate modeling and simulation into TeamSTEPPS training. They have also played a role in the development and feasibility testing of an assessment technology tool called the Medical Team Performance Assessment Tool (MTPAT), which allows observers to score team performance during scenarios and assist with debriefing and performance feedback.
- The **Army Trauma Training Center (ATTC)** focuses on developing and maintaining skills in trauma care and teamwork by preparing Forward Surgical Teams (FSTs) for combat deployment through an immersive, 2-week face-to-face trauma team training course. ATTC has incorporated principles of



Figure 5-9: DoD Patient Safety Resource Centers

TeamSTEPPS so that individuals have an opportunity to learn and practice clinical and teamwork skills to ensure safe care in the combat environment.

- **David Grant Medical Center** at Travis Air Force Base has deployed TeamSTEPPS training across their facility, with new personnel receiving training during orientation. TeamSTEPPS has been integrated into simulation scenarios for multi-disciplinary unit trainings. Throughout 2009, David Grant Medical Center maintained over 86% personnel trained in TeamSTEPPS, a remarkable accomplishment.
- **The Andersen Simulation Center** at Madigan Army Medical Center has developed the Mobile Obstetrics Emergencies Simulator (MOES), a mannequin designed to validate obstetric emergency simulation curriculum with an electronic debriefing and grading tool to evaluate both technical and teamwork performance, based on TeamSTEPPS principles.

In May of 2009, in collaboration with the Department of Health and Human Services' (HHS) Agency for Healthcare Research and Quality (AHRQ), the DoD PSP brought together approximately 50 representatives from the MHS, academia, research organizations, and other Federal government agencies, as well as civilian stakeholders in patient safety to serve in a consultative role for the program. This group, called the Technical Expert Panel, represented an extensive and diverse set of

expertise including leadership and subject matter experts from all functional areas of the DoD PSP and TRCs. The meeting is held approximately every 18 months, connecting with members throughout the year.

At this meeting, the Technical Expert Panel addressed strategic questions and shared insights and perspectives from the cutting edge of the patient safety field. Topics covered during the session included spread and impact of the TeamSTEPPS initiative in the military and civilian sectors, organizational change, technology integration, simulation, and culture issues. Drawing upon these hot issues and lessons learned, DoD PSP aligns vision, mission and efforts with the true needs of the field, other national patient safety initiatives, and technology innovation to formulate a strategic plan for the direction of the program moving forward to successfully improve patient safety and quality within the MHS and beyond.

Another key strategic sharing and networking event hosted by the DoD PSP was the DoD Breakout Session, immediately following the AHRQ/DoD National Implementation of TeamSTEPPS 4th Annual Collaborative in June 2009. This session was attended by TeamSTEPPS champions from both military and civilian sectors. The DoD Breakout Session brought together over 100 collaborative DoD attendees, which provided a forum to discuss unique barriers to TeamSTEPPS implementation in the DoD. The session allowed teams implementing TeamSTEPPS on the frontline of care both in the MHS



Figure 5-10: 2009 DoD and AHRQ Technical Expert Panel

TeamSTEPPS Success Factors

- Visible Leadership Support
- Frontline Champions & Coaching
- Communications
- Integration
- Measurement
- Planning
- Training

Figure 5-11: Success Factors identified by trained sites

and in the field, an opportunity for networking and discussion on shared challenges, lessons learned, and best-practices. Attendees expressed this to be a very rare and valuable opportunity to collaborate.

Moving forward into FY 2010, the DoD plans to continue to emphasize the impact of team-driven care on reducing the risk of error and improving patient care and quality. TeamSTEPPS® training will continue as an evidence-based method for improving teamwork and coordination in health care teams,

and a strong focus will be placed on teamwork coaching and skill-building through a variety of mechanisms. The American Society for Training and Development identified that gap between training and transfer of the training to their work environment is largely due to organizational factors. Through customized coaching plans,

TeamSTEPPS Tools Distribution in 2009

- 17,486 Pocket Guides to Patient Safety
- 1,444 Multimedia Curriculum Kits
- 3,819 Guides to Action

Figure 5-12: TeamSTEPPS distribution of tools (2009)

the DoD PSP continues to emphasize the need for post-training skill-building and will provide support to facilities during the implementation and sustainment phases through coaching sessions with DoD TeamSTEPPS Master Instructors, as well as through the use of virtual learning events and on-demand tools targeting champions at the MTFs. The DoD PSP also plans to develop such learning events and tools to address some of the organizational and cultural factors that lay the groundwork for successful team-driven care including professional conduct and patient engagement.

RISK IDENTIFICATION & MITIGATION

The DoD promotes and provides systems and resources that help DoD healthcare providers decrease risk and improve care giving processes to provide higher-quality, more efficient care to patients.

The DoD PSP's Patient Safety Center (PSC), will be renamed in FY 2010 as the Patient Safety

Analysis Center (PSAC), promotes reporting of both near miss and adverse events and relies heavily on MTF healthcare workers to voluntarily identify and submit reports. DoD patient safety reports, submitted by MTFs increased substantially (12%) in FY 2009 (Figure 5-13). More importantly, 4 of the 5 data points between FY 2005 – 2009 reveal consistent increase in reporting of events.



Figure 5-13: DoD patient safety reports, submitted by MTFs to PSAC increased substantially (12%) in FY09

Special Studies Harm Stratification Data FY04-FY09

Harm Stratification	2004		2005		2006		2007		2008		2009	
	n	%	n	%	n	%	n	%	n	%	n	%
Events did not reach patient, Near Miss	53,964	59%	68,884	64%	72,810	66%	73,473	69%	75,390	66%	71,834	56%
Events reached patient, No Harm	33,401	37%	34,818	32%	33,206	30%	29,439	28%	33,841	30%	53,503	42%
Events reached patient, Harm	3,561	4%	3,875	4%	3,494	3%	3,440	3%	4,393	4%	2,232	2%
Total	90,926	100%	107,577	100%	109,510	100%	106,352	100%	113,624	100%	127,569	100%

Figure 3-17: Special Studies Data

Figure 5-14: Special Studies Data

Reporting of events provides needed insight into where processes are broken and often correlates with reduced patient harm events. This is the critical first step to mitigate risks and to understand the causes of the risks. Through more thorough and consolidated event reporting, identification of causal factors help to seize opportunities for improvement. The correlation between an increase in patient safety reporting and decrease in harm events is substantial and compelling — organizations that report events are safer systems. In 2009, 127,569 medical events were reported (see Figure 5-14).

application will offer MTFs to easily access, aggregate and trend their data. Standardizing reporting will enable the MHS to identify risks to safe care more readily and comprehensively.

To analyze risks, the DoD PSP offers **Risk Mitigation Assessment Tools** that caregivers can use to improve patient safety at their facilities. A **root cause analysis (RCA)** is conducted to identify the causal factors that underlie variation in performance, including the occurrence of a sentinel event. The Joint Commission (TJC) defines a sentinel event as “an unexpected occurrence or variation involving death or serious physical or psychological injury, or the risk thereof.” The process for conducting an RCA focuses on systems and processes, not individual performance, which promotes building a culture of safety.

In the spring of 2010, nine sites (three from each Service) will pilot test the Patient Safety Reporting System (PSR), a web-based application that will standardize reporting across the MTFs by capturing, tracking and trending near-miss and adverse events. The



Sum Leading RCA Event Types FY 98-09

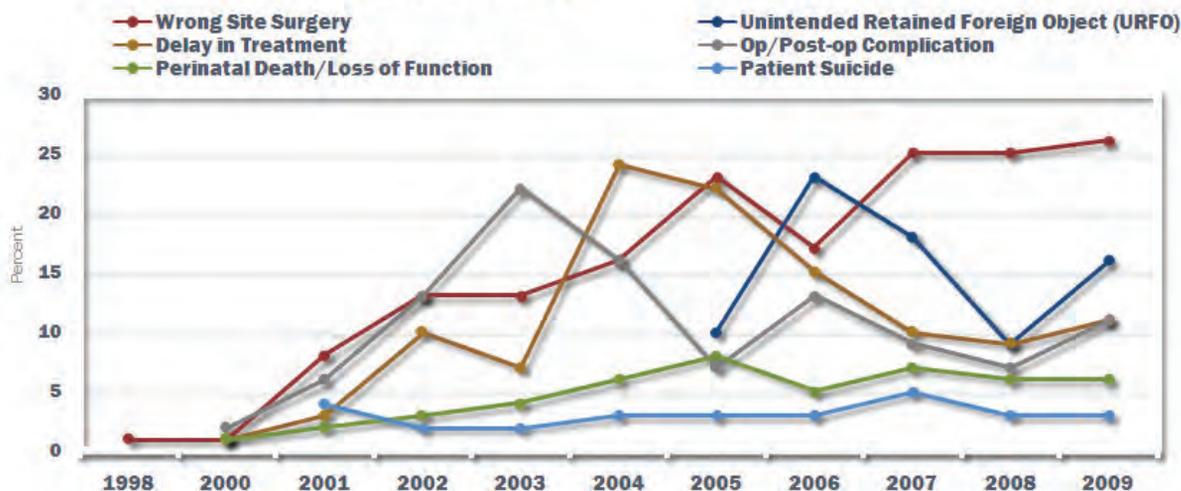


Figure 5-15: FY 09 Joint Commission Reviewable Sentinel Events

The most frequent RCA event categories (Wrong Site Surgery, Unintended Retained Foreign Object (URFO), Operation/Post-op Complication, and Delay in Treatment) for FY 2009 remained unchanged from FY 2008. Less frequent event categories that increased in FY 2009 were Perinatal-death/loss of function and Patient Suicide. Wrong Site Surgery was the leading event category with 69% occurring outside the main operating room. The majority of URFO events were retained vaginal sponges after a normal delivery. Causal factors in Delay in Treatment events were failure to diagnose, policy deficiencies (none, incomplete, ambiguous, etc.) and ineffective communication (failure to report significant findings). Pursuant to DoD policy, all MTFs are required to complete an RCA on all Sentinel Events (see Figure 5-16) as defined by and in accordance with Joint Commission standards.

The RCA courses offered by the DoD PSP provide DoD healthcare providers even more skills to function successfully in their positions. Specifically, DoD caregivers learn basic skills such as how to be team members for RCA investigations, enter events into the software and get reports. After basic training, the DoD healthcare providers can take more advanced training that provides them enhanced skills

in conducting and completing RCAs and improve upon their analysis techniques.

While RCAs are conducted retrospectively, DoD policy also requires MTFs to perform proactive risk assessments (PRAs). These assessments help MTFs anticipate potential areas of risk and develop mitigation plans prior to an event occurring. One tool the DoD uses for PRAs, is a Failure Mode and Effect Analysis (FMEA). DoD offers an FMEA course designed to train users on a proactive method to determine the root cause(s) of potential failure modes and corrective actions.

To augment its training offerings, the DoD PSP also distributes patient safety data-based publications so DoD healthcare providers can get the latest information around mitigating errors and protecting patients.

- Provided by the PSC, Alerts & Advisories provide time-sensitive information to senior leadership, providers and staff about important patient safety issues. These publications provide background, general information and recommendations for addressing the patient safety issue.
- Semi-Annual and Annual Reviews published by Patient Safety Center, provide an analysis of the reports (monthly summary reports (non-medication), adverse medication events, RCAs, FMEAs, and other reports) submitted by the Services during the respective reporting period. They identify trends, lessons learned, and other observations impacting the safety of patient care.
- Focused Reviews inform healthcare providers of trends, notable causal factors and useful lessons learned from events reported in facilities. These publications provide the latest patient safety innovations and recommended solutions from literature and MTFs.

RCAs by Category FY09

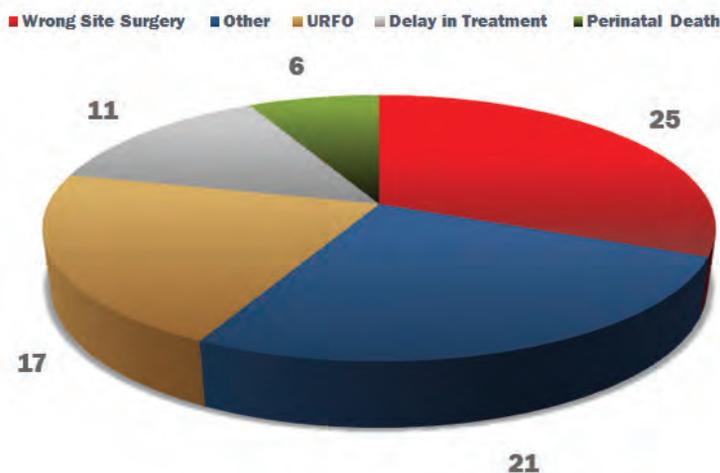


Figure 5-16: RCAs by Category FY 09

The DoD PSP will continue to systematically identify and mitigate patient safety risks and hazards with an integrated approach to drive down and prevent patient harm. Following its initial test phase, the Patient Safety Reporting System (PSR) will be implemented across the MHS direct care system. Facility staff will use



Figure 5-17: Publications Including Newsletters; Focused Reviews: Bacterial Meningitis in Children and Unintended Retention of Foreign Objects; Advisories: Endoscopes and Lovenox; and Alerts: Insulin Pens

the PSR to report both medication- and non-medication-related events with a single tool, allowing for a consolidated and streamlined event monitoring system. The PSR is an important step in advancing patient safety. By reporting events in the PSR system, everyone can help identify areas for patient safety improvement in the MHS. An anonymous, secure confidential and easy-to-use online tool, PSR will help foster conversations around safety trends and how to improve care.

When staff uses the PSR to report events, they will be able to use a new Causal and Contributing Factors list which will provide the ability to identify the circumstances or factors that influenced the occurrence or risk of a patient safety event. Identifying causal factors will help DoD healthcare providers understand how and why an event occurred to implement direct and effective corrective actions that will protect future patients. In the next year, the DoD PSP will provide guidance and communications on the importance of identifying causal factors and best practices on doing so. As the DoD PSP learned more about causal and contributing factors associated with ambulatory falls, it began compiling information on how falls can be addressed and managed. Aimed for release in FY 2010, the resulting publication, *Ambulatory Falls Reduction Toolkit*, will provide MTFs with various policies, tips and suggestions for developing an ambulatory falls program.

AWARENESS PROMOTION

Sharing important information is the key to ensuring all DoD health care providers have the same vision and goals for patient safety. While DoD caregivers may have the tools and education to create a safer patient environment, communication and collaboration help sustain these best practices. The DoD PSP offers virtual collaboration tools and other informational resources that foster collaboration and awareness around ways health care providers can improve patient safety.

portal) enables community Members to access and contribute lessons learned, best practices, tools and resources, news articles, community events, and much more.

The interactive monthly Learning Action Network (LAN) Webinars focus on a specific patient safety topic. Expert presenters share the latest evidence, best practices, lessons learned and success stories from within the DoD and civilian healthcare settings.

The DoD PSP also publishes quarterly Patient Safety Newsletters that inform the MHS community of developments, milestones and events. Dot Mil Docs, the MHS's official podcast, is another way we send our message out to the DoD community. Dot Mil Docs is a weekly audio podcast that features military medical professionals and other military health experts from across the DoD.

Through outreach events and partnerships, the DoD PSP promotes patient safety internally and externally to the DoD. Program staff participated at major conferences such as the 9th Annual International Meeting on

86% of PSLC members are located at Military Treatment Facilities.

Figure 5-18: PSLC Statistics



Figure 5-19: Webinars Hosted on Defense Connect Online

The Patient Safety Learning Center (PSLC) promotes communication and increases awareness across the patient safety community. Used by the three Services and among the numerous military treatment facilities both in the United States and overseas, this member-based community Wiki (or web



Figure 5-20: In 2009, the DoD PSP participated in 4 Dot Mil Doc sessions resulting in 6130 downloads.

Simulation in Healthcare; Industry Training Simulation and Education Conference; Institute for Healthcare Improvement; the National Patient Safety Foundation annual Conference, and the VA/DoD Falls Prevention Conference. At these conferences, staff help deliver the message of how important it is to collaborate and coordinate to improve the care to patients. By running training sessions and hosting exhibit booths, staff are able to

connect with DoD healthcare providers and raise awareness and adoption of the many tools offered by the DoD PSP.

The DoD PSP will expand and augment its use of communications and collaboration channels to promote awareness around patient safety.

The DoD PSP will continue to build awareness and sustainment of its programs to empower DoD caregivers with the tools they need to build a just culture predicated on integrity, transparency and openness – a culture of patient safety.

PURCHASED CARE FOCUS

The Designated Providers (DPs) and Managed Care Support Contractors (MCSCs) each address patient safety in a variety of ways, such as accreditation from recognized organizations (i.e., The Joint Commission), as well as individual facilities implementing initiatives that improve and facilitate safe patient care. In addition, a 2009 change to the TRICARE Operations Manual (TOM), mandated that the contractors use the Agency for Healthcare Research and Quality (AHRQ) patient safety indicators to identify potential patient safety concerns from administrative data. The early activities included identification of potential problems found through an administrative data review followed by a medical record abstraction to validate the administrative data findings. This type of activity allows the contractors to discover potential safety events rather than waiting for beneficiary complaints or grievances to trigger a review of patients' charts. Targeted studies can then be conducted to determine whether there are regional variances, and if there are treatment facilities of concern where a number of patient safety events have occurred. This information is used in the re-credentialing process, during which such incidents are tracked over time and trends are followed. If significant events are identified, network management and clinical quality representatives may visit the facility.

An example of targeted patient safety activities includes the programs at Pacific Medical Clinics in Seattle, WA, which has a very aggressive and proactive approach to pharmacy utilization. Over the past five years, an environment of drug safety has been established, increasing the number of successful quality projects. These programs were initiated to decrease morbidity and mortality due to adverse drug events. Having full access to patient pharmacy data allows this designated provider to monitor patients and employ a variety of drug safety programs, to include:

- Drugs to be Avoided in the Elderly
- Prevention of Brittle Bone (or Ice Bone) Syndrome Secondary to Long-Term Bisphosphonate Use
- Drug Level Monitoring for Patients on Lithium
- Liver Function Tests Monitoring for Patients on Disease Modifying Anti-Rheumatic Drugs (DMARD)
- Statin Interactions

CHRISTUS US Family Health Plan put in place a fall reduction education program, including education for outpatients and providers on how to prevent falls and modify their plans of care, including evaluations of home safety.

CHRISTUS US Family Health Plan has two other ongoing quality improvement initiatives to support patient safety. The Continuity of Care initiative focuses on timely and complete communication between specialists and primary care providers. The Medication

Safety focuses on educating providers and members about the list of drugs to be avoided in the elderly, and working with providers and members to evaluate care alternatives for those drugs.

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**ACCESS TO CARE
AND PATIENT
SATISFACTION**

The DoD Health Program Analysis and Evaluation Division (HPA&E), Health Care Survey Operations and Information Control, collects information to measure beneficiary and staff satisfaction, support functions such as strategic planning and marketing, improving quality of care and access, contractual performance, and respond to Military Health System (MHS) and DoD requests. This section focuses on scanning the health care environment for relevant benchmarks, applying their metrics and striving to meet or exceed those standards. The metrics presented here focus on customer satisfaction and health promotion activities through Building Health Communities. More information can be obtained at <http://www.tricare.mil/hpae/surveys/survey.cfm>.



VI

**ACCESS TO CARE &
PATIENT SATISFACTION**



**TRICARE
HEALTH CARE
SURVEY OF DOD
BENEFICIARIES**

The TRICARE Health Care Survey of DoD Beneficiaries (HCSDB) program was formally established in response to the National Defense Authorization Act Public Law, No. 102-484, § 724, 106 Stat. 2315, 2440 (1992).

Beneficiaries Experiences and Satisfaction with TRICARE

The health care consumer satisfaction surveys used by the MHS and many commercial plans ask beneficiaries to rate various aspects of their health care. MHS beneficiaries in the U.S. who have used TRICARE are compared with

the civilian benchmark with respect to ratings of (1) the health plan in general, (2) health care, (3) the personal physician, and (4) specialty care (Figure 6-1). The civilian benchmark is based on health care system performance metrics from the national Consumer Assessment of Healthcare Providers and Systems (CAHPS). Health plan ratings depend on access to care and how the plan handles various service aspects such as claims, referrals and customer complaints.

- Satisfaction with the overall TRICARE plan improved between FY 2007 and FY 2009. Satisfaction with health care remained stable during this three-year period, whereas satisfaction with one's personal or specialty physician improved.
- MHS satisfaction rates continued to lag behind civilian benchmarks, with the exception of the health plan.

Customer Reported Experience and Satisfaction with Key Aspects of TRICARE, Trends in Satisfaction Ratings of Key Health Plan Aspects for Fiscal Years 2007-09

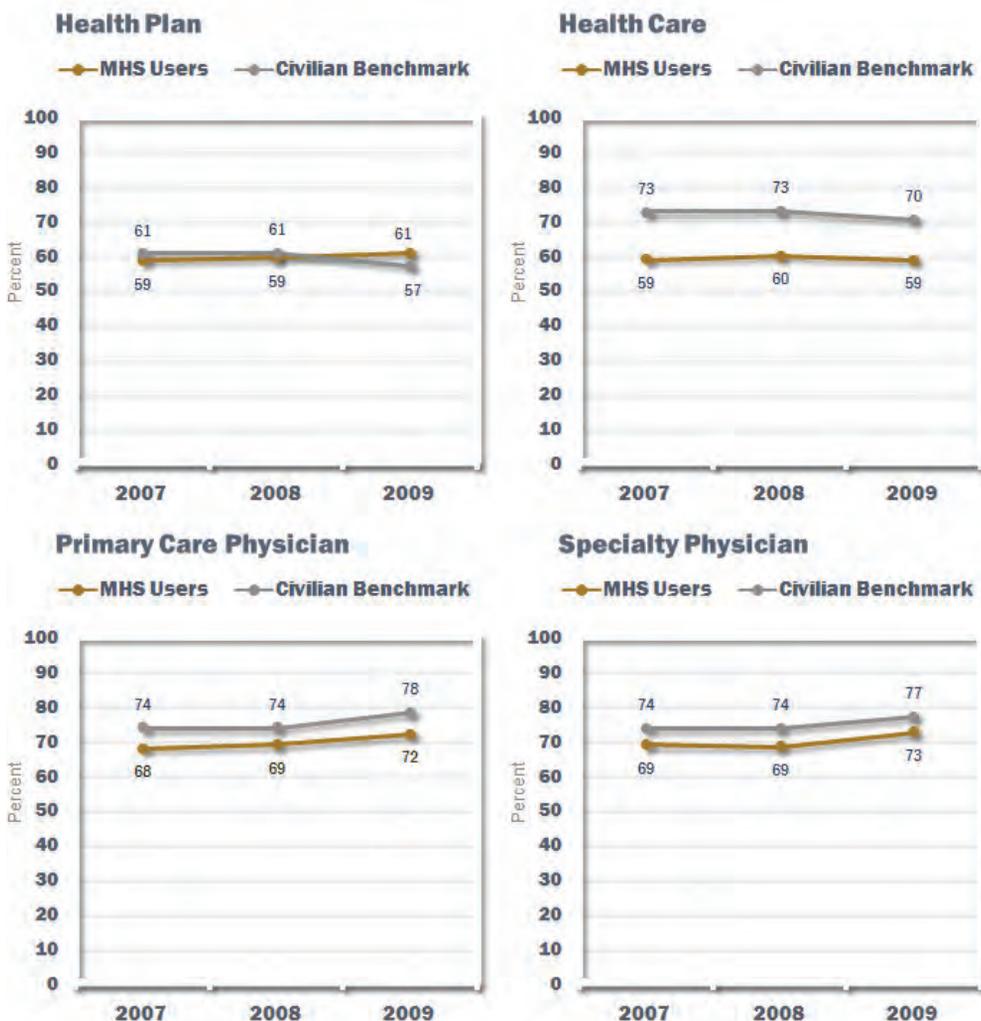


Figure 6-1. Note: DoD data were derived from the FYs 2007-2009 HCSDB, as of 12/11/2009, and adjusted for age and health status. Ratings are on a 0-10 scale, with "were satisfied" defined as a rating of 8 or better. "All MHS Users" applies to survey respondents in the 50 United States. Civilian benchmark is obtained from the National CAHPS Benchmarking Database. FY 2007 and FY 2008 results are based on questions taken from the CAHPS Version 3.0 Questionnaire and compared with the 2006 National CAHPS Benchmarking Database (NCDB), whereas FY 2009 results are based on questions from the CAHPS Version 4.0 Questionnaire and compared to the 2008 NCDB, the latest benchmark data available.

**TRICARE
OUTPATIENT
SATISFACTION
SURVEY (TROSS)**

The TRICARE Outpatient Satisfaction Survey (TROSS) reports on the experiences of outpatient beneficiaries receiving care from the Military Health System direct care military treatment facilities (MTFs) and through its civilian network of providers. The TROSS survey instrument includes MHS specific questions as well as questions from the Consumer Assessment of Healthcare Providers and Systems Clinician and Group (C&G CAHPS R) questionnaire.

The TROSS was first field tested in January 2007, succeeding the Customer Satisfaction Survey (CSS), which was used in previous evaluation reports.

The MHS is concerned about beneficiary satisfaction with telephone access to the DC system, in addition to the satisfaction metrics previously presented.

- The reported ease of making appointments by telephone increased from 66% in FY 2007 to 70% in FY 2009. (Figure 6-2) Additionally, the MHS focuses on beneficiary satisfaction

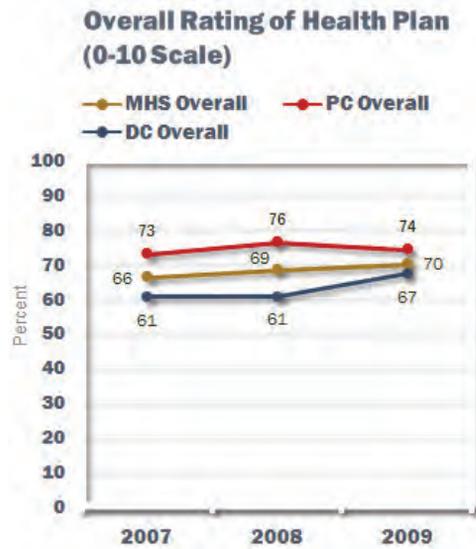


Figure 6-4: Source: OASD(HA)/TMA-HPA&E TROSS—FY 2007, 2008, and 2009 (through May 2009). Ratings are on a 10 point scale with “Satisfied” defined as a rating of 8, 9, or 10. Data are as of 1/4/2010. Note: Terms above include direct care (i.e., MTF-based care) and purchased care (i.e., care provided in the private sector, through claims-based reimbursement). “MHS” overall refers to the combination of responses from users of the direct and purchased care components.

- with the healthcare received, their overall health plan and their health care provider.
- Beneficiary ratings of the overall health care experience, after receiving outpatient health care services, increased from almost 67% in FY 2007 to more than 68% in FY 2009. The MTF-based direct care ratings increased the most, and the claims-based purchased care ratings remained the same during this period. (Figure 6-3)
- TRICARE Prime enrollee ratings of the health plan improved for all MHS enrollees, from 66% in FY 2007 to 70% in FY 2009. Although enrollees with civilian providers tended to rate their overall plan higher than enrollees with military providers, the greatest increase in plan ratings over the past three years has been by those beneficiaries enrolled at MTFs.
- The overall satisfaction rating for MHS direct care and purchased care (PC) combined has improved over the past three years. However, it has lagged behind the civilian benchmark in the rate of improvement. (Figure 6-4)

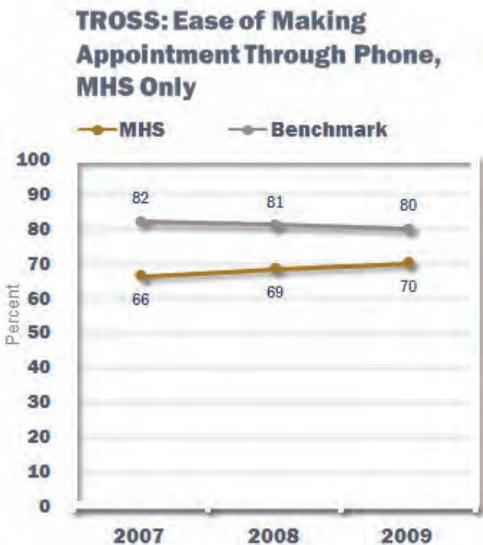


Figure 6-2: OASD(HA)/TMA-HPA&E TROSS—FY 2007, 2008, and 2009 (through May 2009). Ratings are on a 5 point scale with “Satisfied” defined as a rating of 4 or 5. Data are as of 1/4/2010.

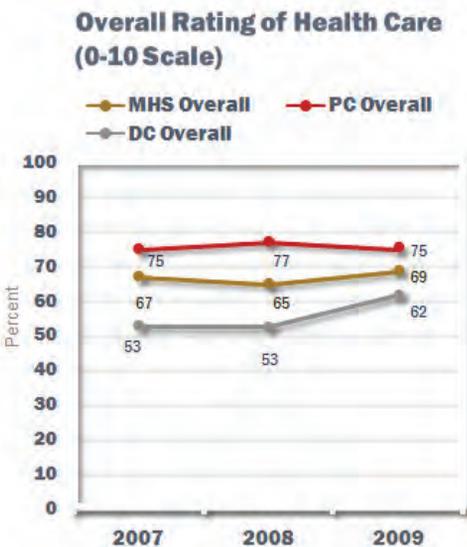


Figure 6-3. Source: OASD(HA)/TMA-HPA&E TROSS—FY 2007, 2008, and 2009 (through May 2009). Ratings are on a 10 point scale with “Satisfied” defined as a rating of 8, 9, or 10. Data are as of 1/4/2010. Note: Terms above include direct care (i.e., MTF-based care) and purchased care (i.e., care provided in the private sector, through claims-based reimbursement). “MHS” overall refers to the combination of responses from users of the direct and purchased care components.

TRICARE INPATIENT SATISFACTION SURVEY (TRISS)

The purpose of the OASD(HA)/TMA TRICARE Inpatient Satisfaction Survey (TRISS) is to monitor and report on the experiences and level of satisfaction of MHS beneficiaries who have been admitted to MTF and civilian hospitals. As with the TROSS, the TRISS is designed to compare across all Services, and across venues (i.e., DC versus PC). Separate but comparable surveys are used for inpatient surgical, medical, and obstetrical care. Similar to the TROSS and HCSDB, the TRISS is based on the AHRQ's CAHPS surveys. Specifically, the TRISS is based on the Hospital-CAHPS (HCAHPS) survey instrument, so MHS results may be compared with those of civilian hospitals reporting similar measures and trended over time. The TRISS includes 22 questions from HCAHPS, and 60 questions specific to DoD. The survey covers a number of domains, including:

- Overall satisfaction, and recommendation to others.
- Nursing care (care, respect, listening and explanations).
- Physician care (care, respect, listening and explanations).
- Communication (with nurses, doctors, and regarding medications).
- Responsiveness of staff.
- Pain control.
- Hospital environment (cleanliness and quietness).
- Post-discharge, such as written directions for post-discharge care.

Although FY 2009 results were unavailable at the time of this report, the MHS has steadily increased inpatient satisfaction within its DC and PC components over all three years, from



51% in FY 2006 to 56% in FY 2008. (Figure 6-5) Surgical PC ratings of the hospital met or exceeded the benchmark each year from FY 2006 through FY 2008. MHS beneficiaries who were discharged from either surgical or obstetrical purchased care services rated their hospital higher than beneficiaries discharged from counterpart services in DC MTFs each year.

Overall MHS “willingness to recommend” ratings increased over the period FY 2006 through FY 2008. (Figure 6-6) The DC ratings by beneficiaries using medical services increased each year from FY 2006 through FY 2008. Obstetrical and surgical services decreased from FY 2006 through FY 2007 but rebounded in FY 2008 to a level equal to or higher than those of FY 2006. The DC ratings by beneficiaries using medical and surgical services increased

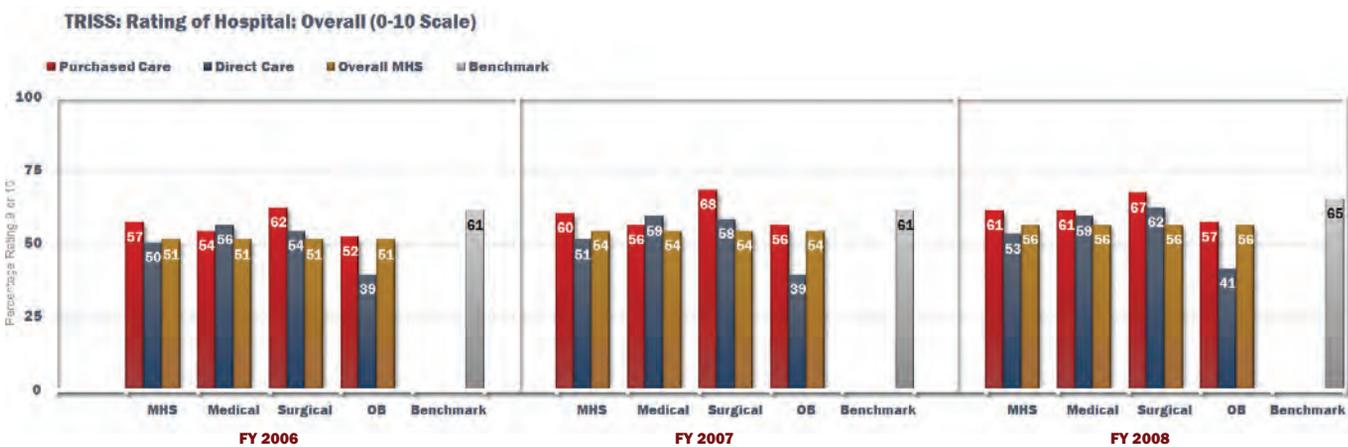


Figure 6-5: Source: TRISS rating of hospital as of 11/11/2009. Data are adjusted to account for the sampling design and non-response. Ratings are on a 0-10 point scale with “Satisfied” defined as a rating of 9 or better Note: Terms above include direct care (i.e., MTF-based care) and purchased care (i.e., care provided in the private sector, through claims-based reimbursement). “MHS” overall refers to the combination of responses from users of the direct and purchased care components.

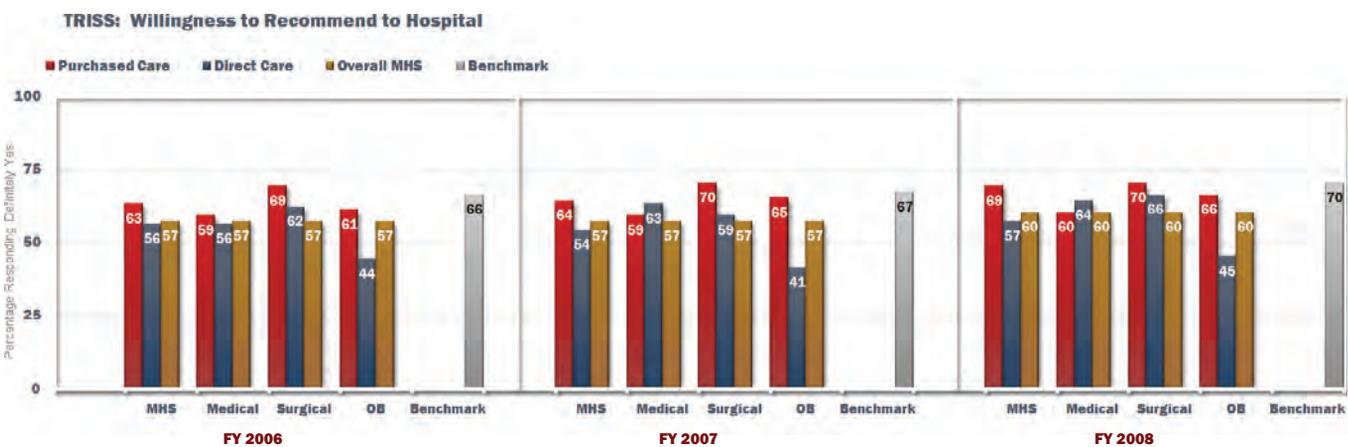


Figure 6-6: Source: TRISS as of 11/11/2009. Data are adjusted to account for the sampling design and non-response. Ratings represent responses of “Definitely Yes”. Note: Terms above include direct care (i.e., MTF-based care) and purchased care (i.e., care provided in the private sector, through claims-based reimbursement). “MHS” refers to the combination of responses from users of the direct and purchased care components.

each year from FY 2006 through FY 2008, and obstetrical services decreased from FY 2006 through FY 2007 but rebounded in FY 2008 to levels equal to or higher than those of FY

2006. Surgical PC ratings met or exceeded the civilian benchmark each year. PC ratings increased each year for all survey product lines.

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POLICY INITIATIVES
TO ENHANCE
CLINICAL QUALITY

The Department of Defense (DoD) has a range of supplemental programs and initiatives focused on enhancing the overall quality and breadth of health care provided across the enterprise. To this aim, the MHS has instituted several policy initiatives such as behavioral medicine initiatives that include RESPECT-Mil II, Primary Care Behavioral Health Integration, TRICARE Partial Hospitalization Program (PHP) and updates to the DoD Enhanced Access to Autism Services Demonstration. The Military Health System (MHS) has also established additional programs to further support specific areas of medicine, including increased transparency, implementation of the Patient-Centered Medical Home and supporting a pay-for-performance program that rewards Services based on performance on a range of criteria. Looking toward the future, DoD is committed to research and evaluation of future initiatives that will yield benefits and improvements to military medicine.



VII

POLICY INITIATIVES
TO ENHANCE CLINICAL QUALITY



PATIENT-CENTERED MEDICAL HOME

In 2008, MHS leaders began the initial planning of a renewed approach to the delivery of health care in DoD. The Patient-Centered Medical Home (PCMH) is an established model of primary care that improves continuity of care and enhances access through patient-centered care and effective patient-provider communication. The concept of the PCMH is endorsed by the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), the American College of Physicians (ACP), and the American Osteopathic Association (AOA), representing over 300,000 physicians. Effective implementation of this model has been associated with better outcomes, reduced mortality, fewer hospital admissions and reduced medical spending.

In 2009, progress was made toward the MHS-wide adoption of the PCMH. In September, the MHS held the Inaugural Tri-Service Medical Home Summit that included leadership from Health Affairs, TMA, the Services, and leading civilian associations involved in the PCMH concept such as the National Committee for Quality Assurance (NCQA). Among the goals of this initial gathering was the development of recommendations for PCMH standards and measures.

Also in 2009, the ASD(HA) issued a policy memorandum directing the implementation of the PCMH as a comprehensive and coordinated primary care model to improve patient satisfaction and outcomes. With this mandate, MTFs were encouraged to utilize innovative approaches that are patient-centered and access-focused. A cornerstone of this policy is that primary care managers (PCMs) be organized into teams to reinforce

patient-provider communication and to optimize continuity. The effectiveness of implementing this policy will be evaluated through a range of metrics that include clinical effectiveness, access to care, patient satisfaction and provider communication.

Each Service reported progress with advancing their respective PCMH efforts in 2009. Navy's pilot program at National Naval Medical Center in Bethesda has demonstrated some improvements in the areas of PCMH continuity, access to care, and patient satisfaction. Air Force expects that over ten MTFs will be engaged in their PCMH model by the end of the calendar year. Finally, Army has developed an implementation strategy for a community-based initiative designed to provide off-post primary care to active duty family members.

The PC sector was also actively engaged in the PCMH effort throughout 2009. In the TRICARE West region, TriWest initiated a survey of its subcontractors and provided primary care optimization consultations advocating PCMH principles. The South and North regions coordinated convenience care clinics focusing on optimizing access. Finally, many of the designated providers piloted PCMH initiatives, including PacMed, Johns Hopkins and Martin's Point.

Looking to the future, leadership and practitioners throughout the MHS are committed to the PCMH and progress is expected through FY 2010. Key activities will include expansion of current PCMH efforts along with the adoption of a standard set of PCMH performance measures and the creation of a mechanism to recognize Medical Homes consistent with national standards.

MHS TRANSPARENCY

Executive Order 13410: Promoting Quality and Efficient Health Care in Federal Government Administered or Sponsored Health Care Programs, issued by President Bush in August 2006, mandated that applicable health care programs measure the quality of health care services and report results to providers and beneficiaries. DoD

collaborated with the Veterans Administration (VA) and Indian Health Service (IHS) to not only improve the transparency of these results, but also to enhance transparency in the entire clinical quality of care arena.

In FY 2008, inpatient ORYX® data was added to the MHS Clinical Quality Management

Web site (www.mhs-cqm.info). During FY 2009, comparative data for DC and PC facilities and non-network facilities were added. This enabled beneficiaries to make informed choices and decisions about where they receive inpatient care.

In addition to the MHS CQM Web site, PC has also participated in a variety of

transparency initiatives which continue to increase across the network (e.g., participation by Pacific Medical Centers in the Puget Sound Health Alliance, which produces a quality report, by practice, for the community, and publication by health plans in the community of patient satisfaction information on the Internet for the community to review).

PAY-FOR-PERFORMANCE

As a result of escalating health care costs, the MHS has shifted to a value-based performance methodology to allocate funding. Under this method, the MHS developed and implemented within direct care a programming and allocation system that prospectively allocates funds in accordance with a commonly adopted value-based performance method. To date, this method has focused on outputs based on a fee-for-service basis. Currently, the MHS is piloting a method that will expand this effort to broader measures of performance. This expanded method encompasses health care benefit activities, readiness and military-unique activities. The four parts of the prospective payment system include: the value of health care, capitation, mission-essential non-benefit activities, and pay-for-quality, satisfaction and access.

Within the DC system's financial rewards for quality, satisfaction, and access to care are metrics which include comparisons to DoD and civilian averages. Specifically, payments for quality of care are based on performance of HEDIS and ORYX measures. Rewards for satisfaction are based on beneficiary

satisfaction with the health plan and level of health care provided as well as doctor's communication. Finally, payments based on access to care are determined by beneficiary responses to survey questions that ask about access to needed care and availability of appointments with a primary care manager, as well as whether appointment availability is within established standards for acute, routine, and well visits. The amount of money an MTF receives is based on the actual measure and its value, as well as the size of the patient population that is covered by the MTF, respectively.

The Managed Care Support Contractors (MCSCs) and Designated Providers (DPs) pay-for-performance initiatives vary. The following two examples illustrate how PC is employing this concept to managing the care they provide.

In 2008, Martin's Point implemented a program to reimburse network physicians for quality care through the Martin's point primary care payment model for USFHP. Martin's Point incentivizes and rewards network physicians through per member, per month (pmpm) primary care management payments, fee-for-service payments for services provided, and performance payments. For 2010, consideration will be given to Triple Aim (i.e., aligning the performance measures in the primary care payment model with Triple Aim activity).

CHRISTUS US Family Health Plan has a 5 Star Clinical Quality Program which awards the top performing providers annually in the area of Clinical and Satisfaction Quality (only) using a two-year rotation of criteria.



**BEHAVIORAL
MEDICINE
SUSTAINED
INITIATIVES &
INNOVATIONS**

The Behavioral Medicine Division (BMD) policy and innovations support the MHS Quadruple Aims of medical readiness and experience of care. The multi-focused approach to achieving mission outcomes synchronizes access to care, technology, service integration and quality in support of 9.6 million TRICARE beneficiaries.

The BMD has expanded since its inception in 2006, paralleling an increased need for behavioral medicine input into multiple DoD level activities within the Office of the Chief Medical Officer/TRICARE Management Activity (TMA). Primarily, BMD provides leadership on beneficiary behavioral health issues affecting the direct care (DC) and purchased care (PC) components of TRICARE. Additionally, BMD is the DoD lead in developing clinical guidance for collaborative care implementation within the direct care system.

The following highlighted some FY 2009 BMD sustained initiatives and innovations in medical readiness, the experience of care, and benefit options.

- **RESPECT-Mil II (R-Mil II):** BMD initiated and oversaw the assessment of the second phase of RESPECT-Mil. The R-Mil II was designed to disseminate an effective primary care depression management program to clinics across the Army with the added components of screening and clinical practice guidance for treating Post-Traumatic Stress Disorder. The assessment of the RESPECT-Mil II program is targeted for completion by March 2010.
- **Primary Care Behavioral Health Integration:** BMD led the initiative to integrate behavioral health care providers into primary care clinics at DoD medical facilities around the world. In response to the DoD Mental Health Task Force Report to Congress 2007 recommendation 5.1.2.2: “The military Services should integrate mental health professionals into primary care settings,” a TriService mental health integration working group, composed of psychology, social work, psychiatry

and family medicine representatives, was assembled. The BMD provided subject matter experts and served as lead for the working group to develop standards and tools for quality, evidence-based integration of behavioral health in primary care. An evidence review was completed, conclusions were drawn and a set of clinical, operational and administrative recommendations were developed. The recommendations will be elaborated and vetted for health affairs policy.

- **TRICARE Partial Hospitalization Program (PHP):** BMD initiated psychiatric partial hospitalization to more beneficiaries by streamlining the certification procedure. PHPs at TRICARE-authorized hospitals are now considered TRICARE-authorized providers and no longer need a separate certification. Freestanding PHPs, however, must be certified and be considered participating TRICARE providers. This initiative was the result of recommendations from the 2007 DoD Task Force on Mental Health, *An Achievable Vision*, and bridges the gap in service between traditional outpatient and inpatient care for beneficiaries.

The TRICARE PHP benefit is provided through day, evening or weekend program options. Usually, partial hospitalization is provided for a minimum of three hours a day, five days per week. The TRICARE PHP benefit also includes “intensive outpatient services” that cover less serious conditions. Prior authorization is required for all PHP admissions because there are no “emergency” admissions to PHPs.

Administrative burdens were also reduced on programs participating as TRICARE providers. This resulted in an increase from 28 to 170 PHPs available for beneficiaries. Further growth is expected as TMA educates PHPs on this benefit change.

- **Updates to the DoD Enhanced Access to Autism Services Demonstration (Demonstration):** BMD integrated the Educational Interventions for Autism Spectrum Disorders (EIA) across sites of care in Humana, HealthNet and TriWest.

“Partial hospitalization programs can be helpful for those individuals needing assistance beyond traditional outpatient therapy.”

Dr. Jack Smith, Deputy Assistant Secretary of Defense for Clinical and Program Policy

Figure 6-1: Partial hospitalization program quote from Dr. Jack Smith

Two MHS strategic mission imperatives addressing access to care and the experience of care in support of children diagnosed with Autism Spectrum Disorders (ASD), were met by the Demonstration. DoD estimates that 10,000 of the 1.2 million children of active duty service members (ADSMs) have been diagnosed with one of the ASDs. FY 2009 represented the first full year of data collection on TRICARE reimbursement for EIA to examine access to care.

To ameliorate the negative impact of autism, TRICARE introduced Applied Behavior Analysis (ABA), the only EIA

service approved by TRICARE with sufficient evidence to support effectiveness in addressing the deficiencies associated with ASD. This therapy is rendered by TRICARE-authorized providers as a Special Education benefit under the Extended Care Health Option. The Demonstration permits TRICARE reimbursement for EIA services provided by Board Certified Associate Behavior Analysts or “tutors” under the direct supervision of a TRICARE-authorized EIA provider.

Preliminary FY 2009 data analysis suggests an increase in the number of enrolled



beneficiaries, supervisors and tutors across all TRICARE regions for each quarter, as would be expected as the program matures. Contractors have been diligent in providing beneficiaries' access to the EIA Demonstration. DoD has requested a

two-year extension of the Demonstration until March 2010, which will allow time to analyze the impact of the initiative on beneficiaries. Evaluation will be ongoing until that time.

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HEALTHCARE
INNOVATIONS
PROGRAM (HIP) &
AWARDS, LINKING
PEOPLE & IDEAS

The Military Health System (MHS) has implemented many innovative programs to improve the access, cost and quality of health care while enhancing the medical readiness of our Armed Forces. Often, however, one facility does not know what another has accomplished, nor do facilities have time to do the research. The Health Care Innovations Program (HIP), as part of the Office of the Chief Medical Officer (OCMO) at TMA, serves as a forum for leaders to share innovative programs and ideas for potential system-wide solutions.



VIII

SUCCESS STORIES

& INNOVATIONS



In an effort to link people with ideas, OCMO sponsors an awards program to solicit the submission of abstracts from across the MHS. Abstracts are submitted that describe innovative programs in one of the following five award categories:

- Access and Convenience: “Developing a Methodology That Matches the Right Patient to the Right Provider at the Right Place and at the Right Time.”
- Activated Patients: “Promoting an Active Voice From the Patient’s Perspective in Hospital/Clinic Policies and Philosophy of Care.”
- Healthy Lifestyles: “Promoting Healthy Lifestyles Through Wellness Activities/Programs.”
- Readiness and Cost: “Focusing on Activities to Enhance Readiness of Military Forces and the Medical Assets That Support Them” and “Accomplishing the Mission in a Cost-Effective Manner That Is Visible and Fully Accountable.”
- Quality: “Ensuring that Benchmark Standards for Health and Health Care Are Met While Obtaining Maximum Effectiveness From the Resources Provided and/or Available.”



All submitted abstracts are reviewed by a multidisciplinary evaluation panel of TMA physicians, nurses and administrators. The winner(s) of each category are then invited to present their innovations and participate in a panel discussion during the 2010 MHS Conference, “Sharing Knowledge: Achieving Breakthrough Performance.” A synopsis of the award-winning program(s) in each of the five categories is highlighted in this section.

ACCESS & CONVENIENCE

Tripler Army Medical Center, Tele-Auscultation in Pediatric Cardiology:



Over 70,000 pediatric dependents reside in the Pacific area of responsibility (AOR), and Tripler Army Medical Center provides the pediatric subspecialty care for this population. Congenital heart disease affects approximately one percent of all live births, making abnormalities of the cardiovascular system the most common birth defect. In addition, at least 90% of all pediatric patients will have a heart murmur detected at some point in their life, most of which are innocent in nature. From this large patient population, the primary care physician must quickly and accurately determine which patients require air evacuation to Tripler Army Medical Center for further cardiac evaluation. In contrast to primary care physicians, pediatric cardiologists can accurately diagnose the innocent heart murmur by auscultation alone, thereby eliminating the need for more costly studies. Advances in electronic stethoscopy allow for the acquisition and transmission

of digital heart sounds to a computer for further evaluation and storage. This suggests the possibility of using digital heart sound recordings for telecardiology consultation, potentially eliminating the need to travel to the pediatric cardiologist.

National Naval Medical Center, Integrated Medical Home:



The Integrated Medical Home leverages personal health records (PHR) and E-Connectivity to transform care. The current U.S. health care delivery model is similar to how medicine was practiced decades ago. It is overwhelmingly dependent on patients’ initiation of care and is episodic in nature. Most, if not all, disease management, preventive care and patient education are initiated by the primary care provider. As a result, the delivery of comprehensive care is based entirely on the capabilities of an individual provider and the patient, and does not have a mechanism to ensure compliance. A patient-care team e-connectivity communication tool associated with a PHR

is an integral part of the Navy’s Patient-Centered Medical Home (PCMH) project; its goal is to empower the patient, the physician and the health-care team members to improve compliance, disease management and communication. Electronic connectivity would

improve patients’ access to their health records and status and would support the coordination of treatment of the patient-care team. Thus, the project’s success hinges on stakeholders’ adoption of technology to manage health care and improve the quality of care.

ACTIVATED PATIENTS

US Family Health Plan (USFHP) — Johns Hopkins Medicine, Promoting Activation Among USFHP Beneficiaries Enrolled in Care Management:



Providing health care services to a wide spectrum of individuals whose health status varies is increasingly complex and costly. This has led organizations to consider ways to assist individuals in taking a more active role in the management of their own health. Research indicates that an individual’s level of involvement and confidence in achieving stated health goals may have a significant impact on overall health status as well as preventing the development of health conditions. Johns Hopkins HealthCare (JHHC) Care Management department provides patient-centered interventions to improve the overall health of the population as well as the quality of health care services. To determine whether plan members’ active participation in their health plan improved their health outcomes, JHHC utilized the Patient Activation Measure (PAM) along with the Coaching for Activation resource to guide Care Management program interventions. The Nurse Case Manager then developed a Care Plan to manage each member’s health and a parallel Self-Management Plan for the

member to track their own progress. Both plans assisted members in developing the needed skills and adopting healthy behaviors to more effectively manage their health over time.

Naval Medical Center, San Diego, Promoting Activated Patients With Heart Failure:



More than five million patients and their families are affected by heart failure (HF) and more than 550,000 patients are diagnosed each year, according to the Centers for Disease Control and Prevention (CDC). Increasingly, it has been recognized that HF is a multisystem syndrome that affects the cardiovascular, humoral, neuroendocrine, renal and musculoskeletal systems. Evidence-based health care research has shown that a cardiac rehabilitation program for patients with HF improves oxygen consumption and increases exercise capacity, all resulting in reduced hospitalizations and improved quality of life. Increasing enrollment and participation in the Naval Medical Center, San Diego, cardiac rehabilitation program improved patients’ activity levels and their capacity to function well.

READINESS & COST

Naval Health Clinic, Patuxent River Use of an Electronic DD2569 to Improve Third-Party Collections:



The DD2569 Third Party Collection Program/Medical Service Account/Other Health Insurance form is required to be in each medical record of non-active duty members at the medical treatment facility (MTF) where they receive care. The DD 2569 is used to update the

members’ Composite Health Care System (CHCS) information and, more importantly, it authorizes the MTF to bill third-party insurers in accordance with 32 CFR 220. The Naval Health Clinic partnered with Wright Patterson Air Force Base to test the program for the U.S. Navy, with BUMED approval. The number of new billable accounts doubled in one fiscal year, and the potential in increased revenue should improve the amount of revenues from third-party collections as well.

VIII

HEALTHY LIFESTYLES

6th Medical Group- MacDill Air Force Base Stop Smoking: Model of an Effective Smoking Cessation Program:



In 2005, the Department of Defense conducted a survey of health-related behaviors among active duty military personnel. Results showed that from 2002 to 2005 the prevalence of smoking among active duty service members decreased slightly from 33.8% to 32.2% in 2005, and the prevalence of heavy smoking decreased from 13.1% to 11%. The study indicated that 23.3% of the Air Force population surveyed had smoked in 2005. Although this is less than

the Army (at 38.2%) and the Navy (at 32.4%), tobacco use is still costly to the Air Force. New data shows that tobacco use accounts for nearly \$90 million in lost productivity and \$25 million in increased medical costs to the Air Force annually. The Air Force is implementing various methods to address tobacco use among its population, including Health and Wellness Centers (HAWC) at every installation, tobacco cessation classes, and support services staffed by trained professionals. The MacDill HAWC has utilized all of the resources at its disposal and in the community to make favorable progress toward a smoke-free environment at MacDill Air Force Base.

QUALITY

Carl R. Darnall Army Medical Center “Go Green in HEDIS®: Alternative Energy for Primary Care”:



The staff of Carl R. Darnall Army Medical Center (CRDAMC) is constantly faced with the daunting challenge of caring for over 100,000 enrolled beneficiaries while supporting the high priority of ensuring medical readiness for soldiers. The provision of quality care for all beneficiaries is accomplished in the context of continuously rotating patients and medical staff at the home of the Army’s busiest power-projection platform and a Warrior in Transition Brigade that exceeded 1300 members in 2008. The organization is committed to addressing the entire health care continuum from primary prevention to tertiary treatment, with the goal of supporting the Primary Care Manager (PCM)-Patient team. As the Medical Command (MEDCOM) began using the nationally recognized Healthcare Effectiveness Data and Information Set (HEDIS®) metrics to identify areas for improvement, two of the three diabetes-related metrics — along with the measures for recommended breast, colorectal and cervical cancer screenings — were “red” (below the 50th percentile) on the Command Management System (CMS). In response, an interdepartmental team at Carl R. Darnall Army Medical Center, with core members from Utilization Management and Population Health, looked at existing processes

and then integrated administrative and clinical skills. They incrementally developed and implemented interventions to improve performance on the mandated HEDIS® metrics, working toward the goals of “going green” (above the 90th percentile) in all markers, providing transparency of all results to the PCM-Patient team, and conserving the resources of skilled clinicians.

Naval Medical Center, San Diego Improving Cancer Care and Survivorship:



Recognizing the need for more patient-centered care, Naval Medical Center, San Diego (NMCS), developed a Cancer Clinical Quality Team to improve coordination of care and services and to improve the quality of care for patients diagnosed with cancer. As a tertiary care center and large teaching hospital, NMCS has over 600 patients newly diagnosed with cancer every year. Given new advances in medicine and technology, the patients were offered a vast array of services and information. This can be bewildering and overwhelming to patients when they are initially diagnosed with cancer. NMCS has created a Cancer Diagnosis and Treatment pathway. Examining the care and services, the team worked to improve those “touch points” with the patients. They designed a specialized curriculum and a 90-minute multidisciplinary “Cancer 101” class, which the

Hematology/Oncology Division offers to all newly diagnosed cancer patients. The number of patient education tools were increased, are

more accessible, and have improved the quality of life and health outcomes of their patients.

OTHER SUCCESS STORIES & INNOVATIONS

U.S. Family Health Plan — Johns Hopkins Medicine

The designated providers (DPs) and managed care support contractors (MCSCs) across purchased care (PC) are also committed to recognizing and sharing innovations that result in quality health care. In addition to the HIP award given to US Family Health Plan — Johns Hopkins Medicine noted previously, the following are examples of innovated programs that are making a difference in the lives of MHS beneficiaries.

Martin's Point Health Care is one of the first 40 international organizations that was invited by the Institute for Healthcare Improvement (IHI) to be a prototyping organization for the Triple Aim initiative. Martin's Point has adopted Triple Aim as a framework for its quality plan, has set specific goals for each aim, and is working on multiple projects to make improvements toward each of the aims.

NCQA offers a suite of Physician Recognition Programs that allow Martin's Point to assess their performance against nationally recognized, evidence-based clinical standards of care. These programs provide them with public recognition for meeting or exceeding important quality-of-care measures.

Martin's Point Health Care is committed to achieving recognition in the NCQA Diabetes Recognition Program and Heart/Stroke Recognition Program for primary care providers. Currently, 100% of all eligible Martin's Point's primary care physicians have earned recognition in these programs.

Brighton Marine Health Center, in conjunction with the Tufts Health Plan, has enhanced the specialty case management program. The Tufts Health Plan has developed a predictive modeling program, called Priority

Care, that uses modeling software to identify those members most likely to have serious medical conditions and utilize significant medical resources over the coming 12 months. The USFHP has used predictive modeling to identify potential members for both disease management and enhanced specialty care management. With Priority Care and some additional enhancements to the members' identification process, managers of the plan feel confident that care management efforts are focusing on the population that generates a large proportion of the overall medical expenses and those members who have the most clinical and social needs.

Brighton Marine Health Center also implemented a Transition to Home (TTH) program in May 2007. A goal of the program is to prevent unnecessary re-hospitalizations by ensuring that members and caregivers are fully informed about the post-discharge plan of care and that a successful home care plan is implemented. Results show that the USFHP TTH population had a lower rate of "readmissions within 30 days" as well as shorter readmission "length of stay" (LOS) than the comparison population during the study period May 1, 2007 through May 31, 2008. The program evaluation was conducted using a cohort analysis, comparing readmission rates and readmission LOS between the program population and a comparison population. The cohort population consisted of USFHP members with the same primary diagnosis codes as the TTH program population. During FY 2009, Brighton Marine managed the care of 251 members in the TTH program. An additional goal is to reduce medication errors because receiving care in multiple settings often means that members obtain medications from different prescribers.

The Nurse Case Managers educate members about their medications and administer a medication management system. In FY 2009, Brighton Marine piloted a Transition Coach Program with the Caritas Home Care Agency. The program begins with the coach

visiting the member and family in the acute-care hospital setting and then conducting one or two home visits, once the member is discharged. This vehicle prevents unnecessary re-hospitalizations and reduces medication errors.

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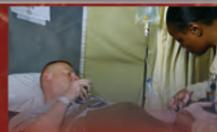


**THE ARMED
FORCES HEALTH
SURVEILLANCE
CENTER – AN
OVERVIEW**

The Armed Forces Health Surveillance Center (AFHSC) provides DoD with a unique centralized epidemiologic capability to promote, maintain and enhance the health military and military-associated populations by providing relevant, timely actionable, and comprehensive health surveillance information. Integral to the AFHSC’s role is the ongoing monitoring of the prevalence, incidence and trends of infectious diseases in time, person and place such that estimates of the operational impact and disease burden can be determined, and recommendations provided to key decision makers within DoD for implementation of control measures in support of Force Health Protection.



BIOSURVEILLANCE



EPIDEMIOLOGIC ANALYSIS



The AFHSC operates the Defense Medical Surveillance System (DMSS), an executive information system whose longitudinal database contains up-to-date and historical data on diseases and medical events (e.g., hospitalizations, ambulatory visits, reportable medical conditions, HIV tests, deployment health assessments, and immunizations), and personnel and deployment data. Using the DMSS, AFHSC conducts extensive analyses of baseline rates and trends on a wide range of medical conditions among all five Services of the Armed Forces (Army, Navy, Air Force, Marines, and Coast Guard). AFHSC is able to conduct detailed tracking of Service members' health status, prior to and after deployment, and assess vaccine safety, immunization rates, acute respiratory diseases, clinical outcomes, incidence, and prevalence of operationally-acquired infections.

AFHSC also maintains the DoD Serum Repository (DoDSR), the world's largest serum repository, with more than 50 million specimens that are linked to the relevant demographic, occupational and medical information in DMSS. When coupled, DMSS and DoDSR provide the unprecedented capability to conduct military medical surveillance, clinical care and sero-epidemiologic investigations.

In addition, the AFHSC has joined with other government agencies to enhance DoD's biosurveillance capabilities. In a collaborative effort, AFHSC, the Military

Vaccine Agency (MILVAX) and Center for Disease Control and Prevention (CDC), established The Vaccine Analysis Unit, to monitor adverse events of the pandemic (H1N1) and seasonal influenza vaccines. Outcomes of special interest being evaluated include: 1) Guillain-Barré syndrome; 2) Bell's palsy; 3) encephalomyelitis/myelitis; 4) thrombocytopenia; 5) optic neuritis; and 6) anaphylaxis. Since November 2009, potential adverse events following H1N1 vaccination have been identified from the DMSS via near-real-time surveillance. On a weekly basis, rates of outcomes for the H1N1 vaccine are compared to those for the seasonal vaccine from the previous three influenza seasons using a rapid cycle analysis. Additionally, MILVAX conducts individual case reports, medical record reviews and final verification of all cases. Supplemental cohort-based analyses are conducted to identify biologically plausible, unexpected outcomes associated with the H1N1 vaccine.

In FY 2009, AFHSC performed over 650 ad hoc requests for surveillance-related analyses for DoD stakeholders, produced over 50 recurring surveillance reports, and published online over 40 summaries of the incidence, impact, distribution, and trends of illnesses in the Medical Surveillance Monthly Report. Such analyses, and the proficiency developed in producing them, are vital to establishing expertise in short-term surveillance activities and outbreak investigations.

EMERGING INFECTIOUS DISEASE SURVEILLANCE

In 1997, in response to the 1996 Presidential Decision Directive (NSTC-7), DoD established the Global Emerging Infections Surveillance and Response System (GEIS), with the mission to monitor newly emerging and re-emerging infectious diseases (EIDs) among U.S. service members, dependents and associated host-country nationals, and strengthen military laboratory capability in order to better assess and respond to such threats. The program was expanded with FY 2006 Congressional supplementary appropriations for pandemic influenza, and in

FY 2008, GEIS became a division within the AFHSC (AFHSC-GEIS).

The AFHSC-GEIS mission is to provide an integrated global emerging infectious disease surveillance and response system that supports the Military Health System (MHS) in sustaining Force Health Protection among the U.S. military and complements EID surveillance and response efforts by other major stakeholders in the global public health community. The AFHSC-GEIS vision is to be a credible and recognized worldwide

surveillance system for emerging infections, fully integrating a global network of laboratory capabilities with a comprehensive DoD health surveillance system.

The AFHSC-GEIS supports EID surveillance by focusing on militarily-relevant infectious diseases such as influenza and other respiratory diseases, malaria, dengue and other vector-borne illnesses, acute diarrheal diseases, antimicrobial resistant pathogens, and sexually-transmitted and bacterial wound infections. Today, the AFHSC-GEIS provides direction, funding and oversight to a system consisting of a network of global partners that includes over 500 laboratory testing sites in at least 84 countries.

The AFHSC's most salient contribution in biosurveillance during FY 2009 was its support of a large and comprehensive influenza surveillance network of sites and laboratories. This network plays a major role in the U.S. Government's contributions to the global surveillance of influenza viruses and contributes to the CDC and the World Health Organization's (WHO) Global Influenza Surveillance Network in their vaccine development efforts. The three key components of the AFHSC-GEIS influenza surveillance network include: 1) the far-reaching, specialized reference overseas

laboratories located in strategic regions of Southeast Asia (two), Africa (two) and South America; 2) the unique complement of reference laboratories in the continental U.S. (four); and, 3) the comprehensive system of medical treatment facilities and medical center-based laboratories within the MHS (14), with the capacity to rapidly diagnose and detect emerging influenza (and other) respiratory pathogens.

During FY 2009, the AFHSC-GEIS influenza and respiratory disease surveillance network played an integral role in the early detection of, and response to, the novel influenza A/H1N1 pandemic. The AFHSC-GEIS partner network detected and reported to the CDC the VERY FIRST four cases of the novel influenza A in the world—an untypable strain not previously recognized. The AFHSC-GEIS network also supported the first laboratory-confirmed cases in over a dozen other countries. In addition to its role in EID surveillance, the network assisted with providing a rapid global response to the 2009 influenza pandemic through training and capacity building efforts with partner nations, development of new surveillance and diagnostic platforms, and timely reporting of surveillance results and disease trends to public health authorities.

CAPACITY BUILDING INITIATIVES & OUTBREAK RESPONSE EFFORTS

A key aspect of the AFHSC-GEIS mission is to promote and facilitate national and international preparedness for EIDs. Strengthening of U.S. military and host country disease surveillance and public health laboratory capacity represents a critical step for contributing to compliance with the WHO's International Health Regulations 2005 [IHR(2005)] detection, reporting, and response requirements. As such, in FY 2009, capacity building efforts were undertaken in a variety of formats to include enhancement of diagnostic capabilities

and expansion of surveillance for militarily-relevant infectious and tropical diseases. Capacity building initiatives were undertaken with over 80 local and regional Ministries of Health (MoH), Agriculture, Defense, and other foreign government entities and institutions worldwide, supporting at least 52 National Influenza Centers and other country-specific influenza and EID reference laboratories (44 civilian, eight military) in 46 countries worldwide.

The AFHSC-GEIS network also responded to more than 70 outbreaks in over 50 countries. The most common diseases investigated were influenza, cholera, dengue fever and hepatitis. Human disease was present in all but one of these outbreaks and specific causative



Figure 9-1: The Department of Virology in Nepal at the Walter Reed/AFRIMS Research Unit-Nepal Studying Hepatitis E Virus (HEV) Since 1987

agents were identified in over 90% of them. The affected populations ranged from just a handful (< 10) to several thousand individuals and support efforts were often on-going engagements beyond the initial investigation. The type of population supported also varied depending on the relationship and the nature of the mission of the laboratory partner.

Nearly one-half of the outbreak investigations involved AFHSC-GEIS partners supporting civilian entities through formal bilateral requests or as part of their role as a WHO regional reference laboratory; these included the U.S. Naval Medical Research Unit No. 3, the Armed Forces Research Institute of Medical Sciences (AFRIMS), and the U.S. Army Medical Research Unit-Kenya. In the majority of these instances, testing of samples from civilian populations was performed. About one-third of the partner responses involved outbreaks among U.S. troops stationed in the continental U.S. or at overseas

locations; one-quarter of the responses involved investigations in collaboration with foreign military partners and multinational forces involved in peacekeeping activities or exercises; and, one investigation involved influenza testing of U.S. expatriates through the American Embassy clinic in Jakarta, Indonesia.

Response activities included a range of efforts, from providing basic consultative services to comprehensive outbreak packages that included field support, epidemiologic consultation and laboratory diagnostic support. In over one-third of the outbreaks, personnel were provided for field support; in over one-half of these outbreaks, local health officials received epidemiologic or clinical consultative support; and laboratory, diagnostic and testing support was provided to the vast majority of the outbreak support requests.

ELECTRONIC SURVEILLANCE INITIATIVES

The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) system, an electronic disease surveillance system managed and maintained by the MHS's Defense Health Services Systems office, is used worldwide by the DoD, by the U.S. Veterans Administration health care system and by 12 of 50 states. ESSENCE continued to be improved in FY 2009. This web-based syndromic surveillance application examines DoD outpatient health care data for rapid or unusual increases in the frequency of certain syndromes. An increase in frequency may be a sign of naturally occurring communicable illness outbreaks or from the possible use of biological warfare agents. Begun in 1999 to collect health data in the Washington, DC area, ESSENCE now monitors most of the MHS, capturing data from more than 400 permanent military outpatient treatment facilities that treat active duty personnel, retirees and family members.



Local, regional and national military officials use ESSENCE to screen for possible disease outbreaks.

ESSENCE links medical data with geographic information systems, allowing DoD public health investigators to track the spread of symptoms by examining specific locations. Analysis of the data can help medical personnel move quickly, and earlier, to treat affected individuals before an illness becomes an epidemic or potentially life-threatening. In the event of a possible outbreak, DoD officials are alerted and kept informed about the results of investigations. As needed, DoD public health officials can then notify their counterparts at the Department of Homeland Security and at the CDC.

ESSENCE uses standardized disease codes from the International Classification of Diseases (ICD-9-CM) to organize patients' diagnoses into ten infectious disease syndromes in the DoD population. ESSENCE then uses sophisticated computer algorithms to calculate expected rates of these syndromes. ESSENCE provides

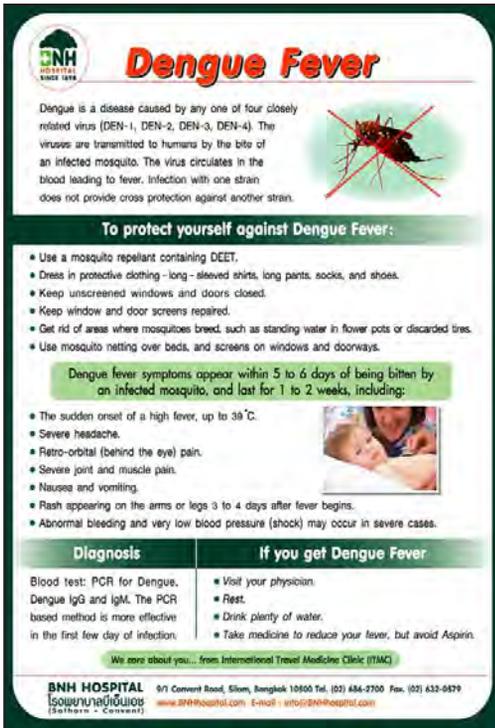


Figure 9-2: Dengue Fever Public Health Poster from the Barangay Health Center in the Philippines

the MHS with the information needed to facilitate informed decision-making and enables timely response, including the allocation of any needed medical assistance, resources and supplies to control disease outbreaks and render timely medical care to those already affected.

ESSENCE updates its database eight to ten times every 24 hours while it 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 health care facilities worldwide. The following is a selection of ESSENCE’s many activities and accomplishments achieved during FY 2009:

- ESSENCE was used to detect and track pandemic influenza A/H1N1 outbreaks.
- A new development contract was awarded for ESSENCE Block 3-5 promising several key capability improvements to the system version currently used by mid FY2011. The number of concurrent users will increase from 600 to 750. The system will add symptom-based capability to its syndrome based surveillance. New data feeds will include Disposition and Injury, Chief Complaint, HL7, and CAPER.
- The functional and technical design for ESSENCE Block 3 was established.
- The VA and DoD received support from the Joint Incentive Fund for the creation of a fully integrated joint VA/DoD

biosurveillance system. The purpose was to build upon the pre-existing ESSENCE systems to provide a more robust, comprehensive and consolidated national biosurveillance application, combining each agency’s distinct and unique patient populations.

With the ultimate goal of Force Health Protection and global public health stability, the AFHSC-GEIS and its global network of partners have continued to develop other automated electronic surveillance and early warning systems for resource limited settings. Many of these efforts have been successful in providing early detection and warning of potential disease outbreaks and of public health emergencies of international concern. Current efforts focus on harmonizing these initiatives with ESSENCE to produce a configurable product that can be used by AFHSC global partners. These initiatives include two electronic surveillance efforts developed at AFRIMS.

Optimized in FY2009, these efforts include projects with the Royal Thai Army in remote border areas of Thailand and a pilot Short Message Service-based project with the Philippine MoH in Cebu. In addition, the U.S. Naval Medical Research Center Detachment (NMRCD) in Peru supported electronic disease surveillance in Latin America. These efforts included optimization of Alerta, a public-private initiative that has revolutionized surveillance for the Peruvian military over the past seven years. This system was vital in identifying seventeen outbreaks during FY2009, including pandemic influenza, dengue, mumps, malaria, hepatitis A, and respiratory disease. In collaboration with the Johns Hopkins University’s Applied Physics Laboratory, NMRCD is developing a new electronic syndromic surveillance system using open source software that can be used in resource-limited environments. These efforts constitute important global situational awareness initiatives and serve a crucial role in medical diplomacy for support of global public health.

SUMMARY In summary, the AFHSC and its extensive network of national, international and DoD partners around the world are in a unique position to detect the emergence of new respiratory and other EID pathogens or health-related events as they arise and before they compromise mission essential functions

or result in a public health emergency of international concern. The AFHSC will continue to leverage its many assets described above to optimize force health protection and global public health. For additional information, please visit the AFHSC's Web site, at <http://www.afhsc.mil>.

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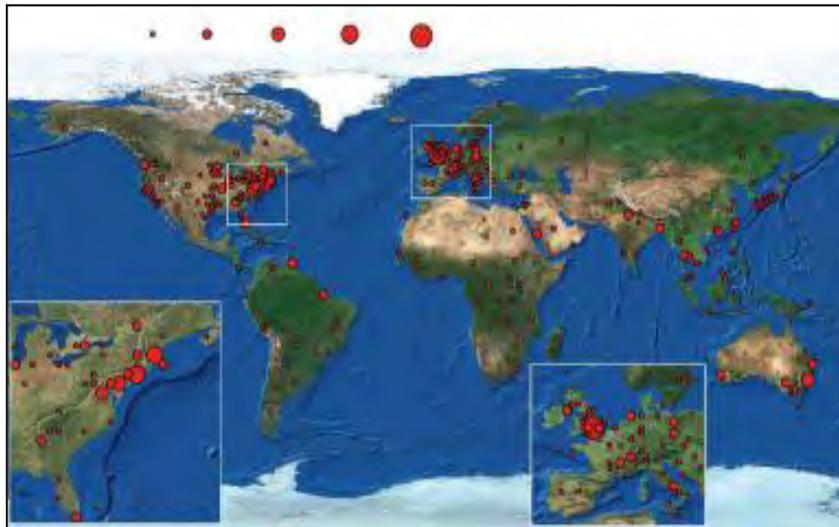


Figure 9-3: Global richness map of the geographic origins of EID events from 1940 to 2004. The map is derived for EID events caused by all pathogen types. Circles represent one degree grid cells, and the area of the circle is proportional to the number of events in the cell. Credit: Jones et. al., Nature

APPENDICES



APPENDICES



ACRONYMS

A

AAAHC	Accreditation Association of Ambulatory Health Care
AAFP	American Academy of Family Physicians
AAP	American Academy of Pediatrics
ABA	Applied Behavioral Analysis
ACC	American College of Cardiology
ACEI	Angiotensin Converting Enzyme Inhibitor
ACP	American College of Physicians
ACTD	Advanced Concept Technology Demonstration
AD	Active Duty
ADSMs	Active Duty Service Members
AF	Atrial Fibrillation
AFHSC	Armed Forces Health Surveillance Center
AFIOH	Air Force Institute for Operational Health
AFRIMS	Armed Forces Research Institute of Medical Sciences (Bangkok, Thailand)
AHA	American Heart Association
AHLTA-T	AHLTA-Theater
AHRQ	Agency for Healthcare Research and Quality
AMI	Acute Myocardial Infarction
AOA	American Osteopathic Association
AOR	Area of Responsibility
ARB	Angiotensin Receptor Blocker
ARM-P	Anesthesia Reporting and Monitoring Panel
ASC	Andersen Simulation Center
ASD(HA)	Assistant Secretary of Defense (Health Affairs)
ASD	Autism Spectrum Disorders
ATTC	Army Trauma Training Center

B

BCF	Basic Core Formulary
BHIE	Bidirectional Health Information Exchange
BMD	Behavioral Medicine Division
BMI	Body Mass Index
BSC	Balanced Score Card

C

C&G	Clinician and Group
CAC	Children's Asthma Care
CAHPS	Consumer Assessment of Health Plans Survey
CARF	Commission on Accreditation Rehabilitation Facilities
CDC	Centers for Disease Control and Prevention
CDR	Clinical Data Repository
CDW	Clinical Data Warehouse
CERPS	Center for Education and Research in Patient Safety
CHCS	Composite Health Care System
CHF	Congestive Heart Failure
CM	Case Management
CMDAMC	Carl R. Darnall Army Medical Center
CME	Continuing Medical Education
CMS	Centers for Medicare and Medicaid Services
CMS	Command Management System
CMSP	Clinical Measures Steering Panel
CNE	Continuing Nursing Education
CONUS	Continental United States
COPD	Chronic Obstructive Pulmonary Disease
CPOE	Computer-based Provider Order Entry
CPG	Clinical Practice Guideline
CPSC	Clinical Proponency Steering Committee
CQF	Clinical Quality Forum
CQM	Clinical Quality Management

CRDAMC	Carl R. Darnall Army Medical Center
CQMP	Clinical Quality Management Program
CSS	Customer Satisfaction Survey
C-STARS	Center for Sustainment of Trauma and Readiness Skills

D

DC	Direct Care
DCS	Direct Care System
DHIMS	Defense Health Information Management System
DHSS	Defense Health Services Systems
DM	Disease Management
DMAA	Disease Management Association of America
DMDC	Defense Manpower Data Center
DoD	Department of Defense
DoDI	Department of Defense Instruction
DoDSR	DoD Serum Repository
DP	Designated Provider

E

EBM	Evidence-Based Medicine
ED	Emergency Department
EHR	Electronic Health Record
EIA	Education Intervention for Autism Spectrum Disorders
EID	Emerging Infectious Diseases
ER	Emergency Room
ESSENCE	Electronic Surveillance System for the Early Notification of Community-Based Epidemics
EUCOM	European Command
EWORS	Early Warning Outbreak Recognition System
FMEA	Failure Mode and Effects Analysis

F

FLS	Fundamentals of Laparoscopic Skills
FY	Fiscal Year

G

GAO	Government Accountability Office
GEIS	Global Emerging Infections Surveillance and Response System
GERD	Gastro-Esophageal Reflux Disease
GI	Gastrointestinal
GISN	Global Influenza Surveillance Network

H

HA	Health Affairs
HAI	Healthcare-Associated Infection and Hospital-Acquired Infection
HAWC	Health and Wellness Centers
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HCD	Health Care Data, Inc.
HCSDB	Health Care Survey of DoD Beneficiaries
HCTCP	Health Care Team Coordination Program
HEDIS	Healthcare Effectiveness Data and Information Set
HF	Heart Failure
HFAP	Healthcare Facilities Accreditation Program
HHS	Department of Health and Human Services
HIP	Healthcare Innovations Program
HPV	Human Papilloma Virus
HQMC	Headquarters Marine Corps
HRB	Health-Related Behaviors

I

ICD-9-CM	International Classification of Diseases, 9th Edition, Clinical Modification
IHI	Institute for Healthcare Improvement
IHR	International Health Regulations
IITSEC	Interservice/Industry Training, Simulation and Education Conference
IOM	Institute of Medicine
IPCP	Infection Prevention and Control Panel
IVR	Interactive Voice Recognition

J

JHHC	Johns Hopkins Health Care
JHU/APL	Johns Hopkins University's Applied Physics Laboratory
JMeWS	Joint Medical Workstation
JMO-T ACTD	Joint Medical Operations-Telemedicine Advanced Concept Demonstration Program
JTF	Joint Task Force

L

LAN	Learning Action Network
Lao PDR	Lao People's Democratic Republic
LBP	Low Back Pain
LOS	Length of Stay
LVEF	Left Ventricular Ejection Fraction
LVS	Left Ventricular Systolic
LVSD	Left Ventricular Systolic Dysfunction

M

MC	Managed Care
MCSCs	Managed Care Support Contracts
MDR	Military Health System Data Repository
MDRO	Multidrug-Resistant Organism
MEDCOM	Medical Command
MHS	Military Health System
MHS CQM	Military Health System Clinical Quality Management
MHSPHP	Military Health System Population Health Portal
MILVAX	Military Vaccine Agency
MM	Medical Management
MOES	Mobile Obstetrics Emergencies Simulator
MoH	Ministries of Health
MSAT	Medical Situational Awareness in the Theater
MTF	Medical Treatment Facility
MTPAT	Medical Team Performance Assessment

N

NAD	Non-Active Duty
NAMRU-2	Naval Medical Research Unit No. 2 (Indonesia)
NAMRU-3	Naval Medical Research Unit No. 3 (Egypt)
NCAMSC	National Capital Area Medical Simulation Center
NCQA	National Committee on Quality Assurance
NDAA	National Defense Authorization Act
NF	Non-Formulary
NHRC	Naval Health Research Center
NHRCD	Naval Health Research Center Detachment
NHSN	National Healthcare Safety Network

NMCP	Naval Medical Center Portsmouth
NMCSD	Naval Medical Center, San Diego
NMRCD	Naval Medical Research Center Detachment in Peru
NNDC	National Naval Dental Center
NPIC	National Perinatal Information Center
NQF	National Quality Forum
NQMC	National Quality Monitoring Contractor
NRT	Nicotine Replacement Therapy

O

OASD	Office of the Secretary of Defense
OCMO	Office of the Chief Medical Officer
OCONUS	Outside the Contiguous United States

P

PACOM	U.S. Pacific Command
PAM	Patient Activation Measure
PAP	Prenatal Advisory Panel
PC	Purchased Care
PCI	Percutaneous Coronary Intervention
PCM	Primary Care Manager
PCMH	Patient-Centered Medical Home
PDTS	Pharmacy Data Transaction System
PH	Population Health
PHEIC	Public Health Events of International Concern
PHI	Population Health Improvement
PHMMD	Population Health and Medical Management Division
PHP	Partial Hospitalization Program

PHR	Personal Health Record
PMPM	Per Member Per Month
PN	Pneumonia
PPI	Proton Pump Inhibitor
PR	Pregnancy
PRA	Proactive Risk Assessments
PSA	Public Service Announcement
PSAC	Patient Safety Analysis Center
PSC	Patient Safety Center
PSI	Patient Safety Indicator
PSLC	Patient Safety Learning Center
PSP	Patient Safety Program
PSR	Patient Safety Reporting System

Q

QHC	Quality in Health Care
QI	Quality Indicators
QIP	Quality Improvement Plan

R

RCA	Root Cause Analysis
RM	Risk Management
RTA	Royal Thai Army

S

SADR	Standard Ambulatory Data Record
SAP	Scientific Advisory Panel
SC	Support Contract
SCIP	Surgical Care Improvement Project
SIDR	Standard Inpatient Data Record
SMMAC	Senior Military Medicine Advisory Council
SMS	Short Message Service
SRE	Serious Reportable Events

T

TATRC	Telemedicine & Advanced Technology Research Center
TBI	Traumatic Brain Injury
TeamSTEPPS®	Team Strategies and Tools to Enhance Performance and Patient Safety
TFL	TRICARE for Life
TJC	The Joint Commission
TMA	TRICARE Management Activity
TMPI-J	Theater Medical Information Program-Joint
TOM	TRICARE Operations Manual
TRC	Team Resource Centers
TRISS	TRICARE Inpatient Satisfaction Survey
TRO	TRICARE Regional Office
TROSS	TRICARE Outpatient Satisfaction Survey
TTH	Transition to Home

U

UADHP	Johns Hopkins' U.S. Family Health Plan
UBS	Thai Unit-Based Surveillance
UF	Uniform Formulary
UM	Utilization Management

URAC	Formerly Utilization Review Accreditation Commission (now acronym is the name of the organization)
URFO	Unintended Retained Foreign Object
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAMRU-K	United States Army Medical Research Unit-Kenya
USFHP	U.S. Family Health Plan
USG	U.S. Government
USUHS	Uniformed Services University of the Health Sciences

V

VA	Veterans Administration
VAU	Vaccine Analysis Unit
VBAC	Vaginal Birth After Caesarean Section

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WHO	World Health Organization
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CERTIFICATIONS & ACCREDITATIONS

The following is a sample listing of certifications and accreditations found at facilities and corporate entities within the military health system.

The Accreditation Association of Ambulatory Health Care, Inc.

The Accreditation Association of Ambulatory Health Care, Inc. (AAAHC) is a private, non-profit organization that accredits organizations in a wide variety of ambulatory health care settings. The Air Force uses AAAHC for its ambulatory clinics as a more appropriate accrediting body than TJC. The Air Force continues to maintain accreditation for its hospitals through TJC.

American Osteopathic Association (AOA)

is a member association representing more than 67,000 osteopathic physicians (DOs). The AOA serves as the primary certifying body for DOs, and is the accrediting agency for all osteopathic medical colleges and health care facilities.

Cancer Program

Our cancer program is certified by a survey every 3 years by the American College of Surgeons Commission on Cancer.

Cardiology

The Accreditation Council for Graduate Medical Education (ACGME) is responsible for the accreditation of post-MD medical training programs in cardiovascular disease within the United States. Accreditation is accomplished through a peer review process and is based on established standards and guidelines.

Clinical Investigation Department

1. Association for the Assessment and Accreditation for Laboratory Animal Care (AAALAC).
2. The U.S. Department of Health and Human Services (HHS) Office of Laboratory Animal Welfare (OLAW), which issues assurance to use laboratory animals.
3. The HHS Office of Human Research Protection, which issues federal-wide assurance to have human subjects research.

4. The Department of the Navy Human Research Protection Program, which issues DoD assurance for human subjects protection.
5. Additionally, personnel engaged in human research receive certificates of training from the Collaborative Institutional Training Initiative (CITI).

Dental

1. The Advanced Education in General Dentistry (AEGD) program is accredited by the American Dental Association's (ADA) Council on Dental Accreditation (CODA) every 7 years. The AEGD program passed its most recent accreditation in March 2006 and is due again in 2013.
2. The Oral and Maxillofacial Surgery (OMFS) and General Practice Residencies (GPR) also are accredited by CODA. Both are certificate programs. The OMFS program will have reaccreditation site visit in March 2008, and the GPR program is due in 2011. OMFS accreditation is good for 5 years and GPR for 7 years.
3. The U.S. Navy Dental Corps is designated as a recognized continuing education (CE) provider by the Continuing Education Recognition Program (CERP) conducted under auspices of the American Dental Association. The U.S. Navy Dental Corps also is designated as a nationally approved sponsor by the Academy of General Dentistry (AGD). All formal CE programs sponsored by the Navy Dental Corps are accepted by AGD for Fellowship, Mastership, and Membership Maintenance Credit. A list of CE training courses is submitted to the National Naval Dental Center (NNDC), Bethesda, biannually. NNDC submits a report to ADA and AGD, recertifying the Dental Corps as a CERP provider.

Diabetes Care

The American Diabetes Association—Certificate of Recognition is from 7 January 2006 to 7 January 2009. The association recognizes our diabetes self-management education program as meeting the national standards for diabetes self-management

education. It has specific requirements that require documents be kept on file and are subject to inspection by the American Diabetes Association.

Graduate Medical Education (ACGME)

Facilities with Graduate Education Programs are fully accredited.

Healthcare Facilities Accreditation Program

(HFAP) is authorized by the Centers for Medicare and Medicaid Services (CMS) to survey hospitals, clinical laboratories and other healthcare facilities for compliance with CMS standards.

ISO 9001:2000 specifies requirements for a quality management system where an organization

1. Needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements, and
2. Aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable regulatory requirements.

All requirements of this International Standard are generic and are intended to be applicable to all organizations, regardless of type, size and product provided.

The Joint Commission (TJC) evaluates and accredits more than 16,000 health care organizations and programs in the U.S. including MTF hospitals. The process focuses on systems critical to the safety and the quality of care, treatment, and services and comprises three major components: annual self-assessment, quarterly performance measures, and a triennial onsite survey. The annual self-assessments require organizations to determine their compliance with each of the standards.

Laboratory (which includes the Blood Bank/Blood Donor Center) is inspected and accredited by the following organizations:

1. College of American Pathologists (CAP):

Every 2 years.

2. American Association of Blood Banks (AABB): Every 2 years.
3. Food and Drug Administration (FDA): 1–2 years. All inspections are unannounced and last 2–5 days.
4. A current Clinical Laboratory Improvement Program (CLIP) certificate is maintained. The CLIP certificate is issued by a military organization, Center for Clinical Laboratory Medicine (CCLM), every 2 years and is equivalent to a civilian Clinical Laboratory Improvement Amendments (CLIA) certificate.

Mental Health/Substance Abuse Treatment Program

1. Residency Review Committee (RRC) certification for residency.
2. Accredited by the American Psychological Association (APA) as a Clinical Psychology Internship Training Site.
3. American Psychological Association for Clinical Psychology Internship: 7-year accreditation, 2007.
4. Accreditation Council for Graduate Medical Education: 5-year accreditation 2004–2009.
5. Electroconvulsive therapy (ECT) certification (individual).
6. Suboxone certification allows for dispensing of Suboxone for the treatment of opioid dependence (individual).
7. Lanterman-Petris-Short (LPS) designated facility. Allows patients to be admitted involuntarily to the facility (individual: all residents complete training).

National Committee for Quality Assurance (NCQA)

Various accreditations such as Health Plan accreditations or disease management are held by DP programs. Several programs have achieved Physician Practice connections Patients Centered Medical Home recognition.

Navy Environmental and Preventive Medicine Unit

1. Laboratory is inspected and accredited by COLA.
2. Maintains a certificate of registration

with the Centers for Disease Control and Prevention (CDC) Select Agent Program and the Animal and Plant Health Inspection Service (APHIS) Agriculture Select Agent Program to possess, use and transfer select agents and toxins.

Pharmacy

The Pharmacy Residency Program has a certificate of accreditation for the residency program in Pharmacy Practice by the American Society of Health-System Pharmacists.

Radiology

1. Radiation Therapy Division certified in radiation oncology by the American College of Radiology since 1997.
2. Mammography is accredited by the

American College of Radiology (ACR) and certified as a mammography facility by the Food and Drug Administration (FDA).

URAC, formerly known as the Utilization Review Accreditation Commission,

is a nonprofit organization promoting healthcare quality by accrediting healthcare organizations. URAC's accreditation process consists of a review of policies and procedures and an onsite visit to the applicant organization to determine that it is operating according to its stated policies. If an applicant organization passes their review, an accreditation is awarded with a valid period of two to three years after which the organization must go through the review process again to maintain its accredited status.

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