

The
Surgeon General's
EXCALIBUR
AWARD





EXCALIBUR AWARD

Winner

TITLE OF PROJECT: Medical Equipment Repair Parts

AWARD CATEGORY: Active Component, TO&E

ORGANIZATION: 6th Medical Logistics Management Center (MLMC)

POINT OF CONTACT: CW2 Tony L. Danko

PROJECT SUMMARY:

The 6th Medical Logistics Management Center (MLMC) Forward Team located at the United States Army Medical Materiel Center- Southwest Asia (USAMMC-SWA) provides medical maintenance management and data analysis to United States Army Central (USARCENT). From the beginning of Operation Iraqi Freedom in 2003 until March 2010, the Customer Wait Time (CWT) for medical equipment repair parts to medical maintenance activities within USARCENT was in excess of 60 days resulting in decreased operational medical equipment available to the clinician. Data collected since October 2008 showed that long delays in CWT for medical equipment repair parts caused extended downtime of critical medical equipment used for patient care on the battlefield. Medical Equipment repair parts such as Computed Tomography (CT) x-ray tubes, ventilator integrated processor control boards, and defibrillator power controllers are critical pieces of electrical and mechanical technology that are required to enable the safe and proper working condition of critical life supporting medical equipment. The USARCENT mandated medical maintenance automation system is the Standard Army Maintenance System- Enhanced (SAMS-E); a system which does not provide maintenance activities with the ability to order class VIII repair parts. Without an automated repair parts ordering method there was no centralized location for data collection and therefore no accurate demand history of the medical equipment repair parts required and utilized in theater. Additionally, there was no standard catalog. In March, as a response to this system issue, the 6th MLMC Forward Team created an interface between SAMS-E and the Theater Enterprise Wide Logistics System (TEWLS), the Class VIII Supply Management System for ordering medical materiel to include medical equipment repair parts. This interface, which is seamless and automated for the customer, now enables the proliferation of the repair parts catalog from TEWLS to SAMS-E eliminating the time consuming manual ordering process and providing maintenance activities with the ability to research and order parts for the first time during Operations Iraqi and Enduring Freedom (OIF and OEF). Data now shows that CWT for repair parts available for order within the TEWLS catalog has decreased from an average of 49 days to 18 days for a 63% improvement rate. In March 2010, the primary supplier of repair parts for USARCENT only stocked 60 repair parts due to lack of accurate demand supply data. As a result of the interface and the subsequent ability to capture demand data, the supplier now stocks 101 repair parts for a 67% improvement of available, demand supported parts. Without the ability to research required repair parts, maintenance activities had no visibility of the available cataloged parts within the supply

system. Subsequently, activities would submit New Item Requests (NIR) to have specific parts cataloged for purchase; a redundant and unnecessarily labor intensive process because 40% of these NIRs were already cataloged and therefore available to order. With the interface, the number of false NIRs has decreased from 40% to less than 10%. Prior to the system interface the reconciliation rate was averaging at 62%; proving that almost 40% of parts ordered via the manual requisition process were lost somewhere in the exchange. With the new system interface, the reconciliation rate is now at 97% for a 56% improvement. The number of evacuated medical equipment pieces has already decreased by 25%; maintenance activities now have the parts on hand to repair the equipment at the unit level as opposed to evacuating to the next higher level of support. In some cases within the past two years, the lack of fully operational life supporting medical equipment has rendered Level I medical activities in the USARCENT Area of Operation less than fully mission capable. Currently a relatively new process, this system interface will continue to decrease medical equipment repair parts CWT thereby improving combat service support capability to all medical activities throughout USARCENT.

SAVINGS ANALYSIS:

Savings Analysis

Monetary

Expenditures:

\$0 Used

Savings: Evacuated Med Equip Reduced Value = Equipment Available;
eliminating the need for loaner equipment

\$3,023,095.85 Saved

Time

Expenditures: Project Expenditure Time Total

18.25 Days Used

SAMS-E to TEWLS Converter created= 12 hours Used

(\$781.28)

SAMS-E to TEWLS Converter Updates= 80 hours Used

SAMS-E to TEWLS Requests processed=.6 hours x 90days=54 hours

Savings: Man-hours Saved

1,146.5 Days Saved

2,556 Repair Parts researched and entered into SAMS-E catalog
x average .5 hours (=1,278 hours)

(\$392,653.32)

x 7 activities (=8,946 hours)

x \$42.81 (=\$382,978.26 cost avoidance)

452 Repair Parts researched and requested external to SAMS-E

x .5 hours (226 hours)

x \$42.81 (=\$9,675.06 cost avoidance)

(Military Composite Standard Pay and Reimbursement Computation of
Medical Maintenance Labor Rate \$42.81 an hour x 8 hours/day)

Personnel

Expenditures:

None

Savings: 68As previously assigned as parts clerks

7

Confidence instilled into the military healthcare system

Priceless

Total System Savings

\$3,023,095.85 Saved



EXCALIBUR AWARD

Winner

TITLE OF PROJECT: HEDIS™ Improvement Initiative

AWARD CATEGORY: Active Component - MTF – Direct Clinical Impact

ORGANIZATION: Population Health, Carl R Darnall Army Medical Center

POINT OF CONTACT: Nancy A. Radebaugh

PROJECT SUMMARY:

An interdisciplinary team at Carl R Darnall Army Medical Center (CRDAMC) developed unique processes using non-traditional staff roles to improve performance on the mandated Healthcare Effectiveness Data and Information Set (HEDIS™) metrics. Proven sustainable, these interventions were recognized with a Health Innovations Program Award for Quality at the Military Health System Conference in January 2010. The CRDAMC staff is constantly faced with the daunting challenge of caring for over 100K enrolled beneficiaries while supporting the high priority of ensuring medical readiness to Active Duty members in the context of continuously rotating patients and medical staff. In 2005, representatives from Departments of Radiology, Surgery, Medicine, Family Medicine, Gynecology, Pathology, Nursing, Managed Care and Information Management integrated clinical and administrative skills to develop and implement processes to improve performance in key quality measures. Collateral goals include preserving precious skilled provider time, improving patient health literacy and self-responsibility, facilitating access to care and generally reducing the hassle factor for the patient-staff team. The team reviewed current facility processes and established programs and determined that many patients were not accessing available resources for health screening or disease management because of knowledge deficits and/or cumbersome clinic procedures.

Beginning in January 2006, the team sequentially targeted breast and colorectal cancer screening processes, followed by diabetes laboratory results monitoring in 2007. For annual breast and colorectal cancer screening and diabetes monitoring, the team determined that non-clinical staff can safely and appropriately enter orders for electronic signature by a privileged health care provider, that these requests are within the scope of practice of a clinical pharmacist and then published facility-approved protocols that include educational verbiage for patient notification letters. Each month the Utilization Management (UM) staff accesses the Military Health System Population Health Portal (MHSPHP), identifies patients who are due for screening and monitoring, enters radiology and laboratory orders and mails patient educational notifications. A Population Health Center (PHC) clinical pharmacist electronically signs these orders, taking responsibility for result management. As the patients submit samples for annual fecal occult blood, HbA1c, and lipid panel testing and have their mammograms completed, the pharmacist forwards all results to the patients' primary care managers (PCMs), ensures appropriate patient contact and notifies the UM staff of all results so the information can be updated in a tracking database. The diabetes and asthma program coordinators also access the MHSPHP action list and interface with the PCMs to encourage

them to refer patients with diabetes or asthma to the PHC for education and/or to the pharmacist-run medication management therapy clinic.

Using data from January 2006 (November 2007 for Chlamydia) as the baseline, performance in these quality measures has continued to improve with an associated increase in Performance Based Adjustment Methodology (PBAM) awards of 73% from May 09 to May 10. Significantly, 15 women have been identified with breast cancer as a direct result of the screening initiative.

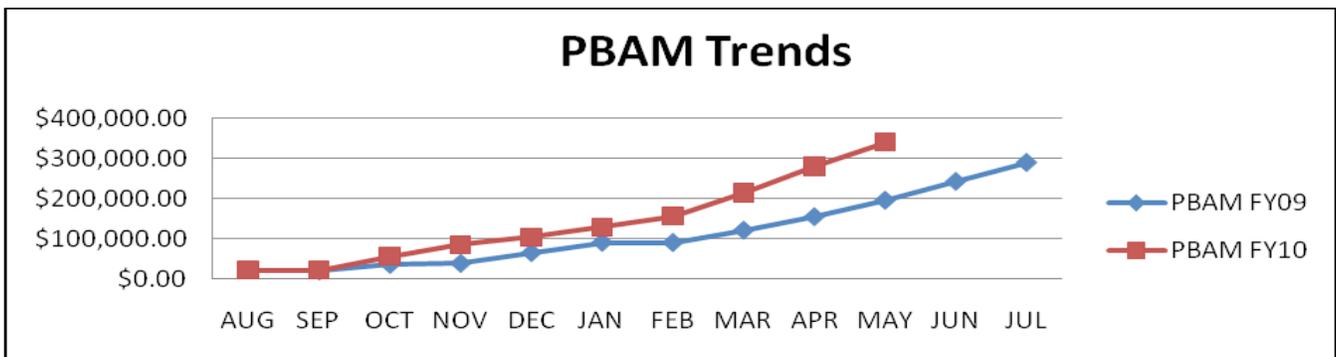
While only 9 Population Health Division staff members support the integrated programs, these new interventions are essentially human resource neutral as the patient identification, order entry and notification processes have been executed by minimal staffing of 3-5 employees who continue to meet the other responsibilities of their positions. While CRDAMC has executed these processes centrally, the model can also be reproduced at the clinic level.

SAVINGS ANALYSIS:

The results of the described interventions are quantified using information from the Command Management System showing facility performance on the mandated HEDIS™ measures. A comparison from a baseline of January 2006 to June 2010 after implementation of the described programs shows the sustained improvement in the percentage of patients meeting each metric. Additionally, 15 women have been diagnosed with cancer directly because of the processes.

Metric	2006	2007	2008	2009	2010
Breast Cancer	77.75	74.59	74.61	77.89	79.53
Cervical Cancer	82.5	83.90	83.80	84.90	85.60
Chlamydia	n/a	81.25	75.67	78.31	79.80
Colorectal Cancer	47.92	59.42	63.16	69.02	72.11
Asthma	96.35	94.91	95.11	96.97	97.14
Diabetes-A1c done	83.40	84.86	87.37	88.26	89.08
Diabetes-A1c < 9	70.10	70.87	71.62	74.39	74.45
Diabetes-LDL <100	43.3	38.90	45.70	45.60	47.60

The following chart displays Performance Based Adjustment Methodology earnings on a rolling 12 month calendar with an increase of 73% between May 09 and May 10.



	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
FY09		\$19,640	\$36,030	\$38,710	\$65,420	\$91,340	\$90,620	\$121,380	\$155,370	\$196,350	\$243,570	\$290,880
FY10	\$22,520	\$22,520	\$56,820	\$85,330	\$104,030	\$129,280	\$156,800	\$215,510	\$279,970	\$340,910		



EXCALIBUR AWARD

Winner

TITLE OF PROJECT: Medical Coding and Healthcare Compliance

AWARD CATEGORY: TDA MTF AC Indirect Clinical Impact

ORGANIZATION: Landstuhl Regional Medical Center

POINT OF CONTACT: LTC John J. Melton

PROJECT SUMMARY:

LRMC is a patient centric service organization delivering quality, accessible, and cost-effective healthcare to our beneficiary population. LRMC is committed to prompt and correct medical record documentation and coding because it is a principle determinant in quality healthcare. The Medical Coding and Healthcare Compliance project optimized existing resources to institutionalize that coders and providers must have a vested interest and are both held accountable for the completeness, accuracy and timeliness of the medical record documentation and coding. The project leveraged Lean Six Sigma (Project #NG4888) techniques to redesign the coding process, to include timelines, documentation accuracy, individual coder accuracy/productivity and work-flow through the various Healthcare Information Systems (HIS). The project synchronized internal evaluation & training efforts, formalized coding education and skill development, established prerequisites for coder assignments, and enabled a “coder-coach” approach with providers. This project fosters collaborative relationships and reinforces a culture of engagement among our providers, certified coders, trainers and auditors to sustain coding accuracy and timeliness standards.

Our in-house coding capability enables the “coder-coach” approach for documentation and coding. LRMC strategically elected to retain an in-house coding capability in lieu of a remote coding service contract. Certified coders demonstrating a higher skill level are assigned to the more complex clinics. The coders maintain these assignments over time to foster continuity and collaborative relationships with providers and medical staff. As a result, our medical coders are incorporated into daily operations of the clinical team. They also proactively assist providers in closing out their records and optimizing documentation of the care delivered as opposed to assisting after a record is closed.

As part of the project, the Patient Administration Division (PAD) established a branch with existing resources entitled, Training, Auditing and Compliance (TAC). The TAC provides objective, reliable information for coders and clinicians. It also formalized a continuous “assess, train and assess” program to develop coding skills. Continuing education on medical coding updates and changes to compliance rules and government regulations sustains this in-house capability. As part of continuing education, certified medical coders also develop engagement skills to “coach” providers on how to improve documentation for more accurate coding. In addition, the TAC coordinates an audit and control system that optimizes performance in medical documentation/coding; capture of other health insurance; medical practice management; and HIPAA.

Any fixed MTF can replicate the Medical Coding and Healthcare Compliance project—without additional cost—and sustain gains thru an “assess, train and assess” program. The project, designed in conjunction with the full spectrum of stakeholders from Clinical and Resource Management work units, sustained medical coding accuracy and timeliness standards while optimizing medical documentation. Applying Lean Six Sigma as the process improvement methodology accounted for effects on other components of our healthcare system. As a result, LRMC significantly improved both coding timeliness and accuracy. LRMC leads the U.S. Army Medical Command in the Patient Administration Systems and Biostatistics Activity (PASBA) Data Quality Metrics enabling LRMC to capture a greater share of pay-for-performance (P4P) remuneration.

SAVINGS ANALYSIS:

The following table reflects the applicable data captured from Oct 2008 thru June 2010.

Source PASBA DQ Cdr Statement	Oct08	Nov08	Dec08	Jan09	Feb09	Mar09	Apr09	May09	Jun09	Jul09	Aug09	Sep09
2b. Outpatient Coding 3 Day Timeliness	89%	90%	91%	91%	91%	91%	93%	92%	92%	91%	88%	91%
6b. E&M Accuracy	78%	69%	83%	82%	80%	82%	79%	79%	87%	81%	85%	87%
6c. ICD-9 Accuracy	82%	78%	86%	85%	81%	82%	83%	89%	95%	96%	98%	93%
6d. CPT Accuracy	80%	80%	83%	87%	89%	86%	85%	79%	89%	89%	89%	90%
RVU	40,763.54	34,389.71	38,931.21	41,268.64	40,975.03	44,981.95	41,090.42	44,975.38	42,286.39	41,884.91	41,367.94	44,622.15
Encounters	34,512	29,278	33,331	35,124	34,332	38,619	36,244	39,978	36,555	35,859	36,048	37,992
Medical Coding and Healthcare Compliance Project Time Period												
Source PASBA DQ Cdr Statement	Oct09	Nov09	Dec09	Jan10	Feb10	Mar10	Apr10	May10	Jun10			
2b. Outpatient Coding 3 Day Timeliness	89%	91%	92%	91%	93%	93%	93%	98%	97%			
6b. E&M Accuracy	91%	96%	96%	96%	96%	93%	87%	91%	95%			
6c. ICD-9 Accuracy	91%	92%	96%	97%	87%	98%	95%	96%	97%			
6d. CPT Accuracy	93%	96%	99%	97%	82%	96%	92%	94%	98%			
RVU	46,541.64	44,682.18	43,941.45	44,911.44	46,152.88	56,640.35	47,574.67	45,604.97	50,565.95			
Encounters	39,644	39,052	38,116	37,862	39,145	47,554	40,285	38,565	44,110			
Medical Coding and Healthcare Compliance Project Time Period												
Source PASBA Clinical Opns Metrics	Oct09	Nov09	Dec09	Jan10	Feb10	Mar10	Apr10	May10	Jun10			
SADR Timeliness	97.27%	97.88%	98.54%	97.69%	98.48%	99.10%	98.77%	99.36%	99.49%			
SADR Timeliness PBAM MAPR P4P	\$ (633)	\$ (490)	\$ (167)	\$ (480)	\$ (219)	\$ 8,233	\$ (64)	\$ 14,305	\$ 24,386			
E&M Accuracy PBAM MAPR P4P	\$ 6,910	\$ 22,506	\$ 28,209	\$ 25,672	\$ 6,683	\$ 2,326	\$ (213)	\$ -	\$ 7,821			
ICD-9 Accuracy PBAM MAPR P4P	\$ 5,361	\$ 5,592	\$ 7,209	\$ 6,425	\$ (112)	\$ 1,877	\$ 1,642	\$ 1,714	\$ 2,019			
CPT Accuracy PBAM MAPR P4P	\$ -	\$ 5,203	\$ 11,990	\$ 9,787	\$ (378)	\$ 3,017	\$ 1,205	\$ 2,551	\$ 4,970			
Total Outpatient Coding PBAM MAPR P4P	\$ 11,638	\$ 32,811	\$ 47,241	\$ 41,404	\$ 5,975	\$ 15,453	\$ 2,569	\$ 18,570	\$ 39,196			

Bottom line, applying the Medical Coding and Healthcare Compliance project significantly improved the following PASBA Coding Data Quality metrics on average per month:

	Monthly Avg Oct08-Sep09	Monthly Avg Oct09-Jun10	Change on Avg Per Month
2b. Outpatient Coding 3 Day Timeliness	90.8%	93.0%	+2.2%
6b. E&M Accuracy	81.0%	93.4%	+12.4%
6c. ICD-9 Accuracy	87.3%	94.3%	+7.0%
6d. CPT Accuracy	85.5%	94.1%	+8.6%
RVU	41,461.44	47,401.73	+5,940.29
Encounters	35,656	40,481	+4,825
Sum of Outpatient Coding PBAM MAPR P4P (Oct09-Jun10)			\$214,857

Concurrently as we worked to improve our Coding Data Quality metrics, LRMC re-engaged tenant patient demand resulting in +4,825 additional encounters on average per month.

By optimizing existing resources without additional costs, our Medical Coding and Healthcare Compliance project improved coding timeliness, accuracy, and productivity.

The project’s efficiency and effectiveness realized \$214,857 in pay for performance (P4P) remuneration as part of the Performance Based Adjustment Model (PBAM) MTF Administrative Progress Report (MAPR) adjustments from Oct 09-Jun10.



EXCALIBUR AWARD

Winner

TITLE OF PROJECT: Multidrug-resistant organism Repository and Surveillance Network (MRSN)

AWARD CATEGORY: Active Component (MEDCOM / MRMC) Non-MTF

ORGANIZATION: Walter Reed Army Institute of Research

POINT OF CONTACT: COL Kent A. Kester

PROJECT SUMMARY:

In response to the epidemic of multidrug-resistant infections in traumatically injured Wounded Warriors, the MEDCOM authorized the Walter Reed Army Institute of Research (WRAIR) to launch the Multidrug-resistant organism Repository and Surveillance Network (MRSN) in July 2009. The MRSN is the first performance improvement and infection control enterprise program initiated in response to the complicated management of battlefield injury-related infections since the start of OEF and OIF. Although limited in scope, similar prospective laboratory surveillance and infection control programs have demonstrated the ability to decrease hospital-acquired infections. However, until the MRSN was launched, there was no enterprise-wide effort to collect or characterize these bacterial isolates in order to inform best practices such as patient management, antibiotic selection or infection control precautions.

In the first year of the MRSN, 7 military treatment facilities (MTFs) including 2 in war zones have been enrolled and actively participate resulting in 3164 bacterial isolates received in the MRSN central lab at WRAIR with 895 characterized, including 715 for the presence of the recently emergent NDM-1 gene from New Dehli, India, which confers resistance to nearly all available antibiotics and has already caused several well-publicized deaths globally. Demonstrating the lack of this resistance gene in the repository of bacteria is a significant public health finding that has been submitted for publication in collaboration with the Center for Disease Control and Prevention (CDC). Additionally, infectious disease outbreak assistance was requested 8 times from 4 MTFs including combat support hospitals in OIF, and for an Acinetobacter outbreak on the USNS Comfort while deployed in support of the Haiti earthquake, a fatal MRSA outbreak in the Neonatal Intensive Care Unit (NICU) at the National Naval Medical Center (NNMC) in Bethesda, and most recently another investigation of Acinetobacter infections of Wounded Warriors at Landstuhl Regional Medical Center and Walter Reed Army Medical Center. Turn-around time from request for laboratory assistance to feedback of actionable information ranged from 3.5 days for MTFs in the National Capital Region to 13 days for the USNS Comfort in Haiti.

The MRSN is the first independent and sustainable centralized laboratory-based infection control and prevention program in the MEDCOM. In addition, the MRSN central laboratory at WRAIR has unburdened the already enrolled MTF clinical laboratories of outbreak investigation and is better informing clinicians and medical policy leaders for their clinical management and therapeutic decisions. As the program matures, the throughput, surveillance

footprint, cost savings, and return on investment will increase while leading to decreased morbidity and mortality in the MHS (see Savings Plan).

The MRSN initiative has provided immediate benefit to deployed and fixed medical treatment facilities in the MHS. Its mission is process-oriented by centralizing laboratory studies and interfacing them with the clinical management of patients in the medical evacuation chain. It was developed in conjunction with the full spectrum of MEDCOM stakeholders to include health care providers, consultants to the Surgeon General, infection preventionists, and information management personnel. Output from the MRSN benefits all medical disciplines and subspecialties, from pediatrics to oncologists to surgeons, to nurse practitioners as well as anybody who prescribes antibiotics, practices infection control, or establishes medical care policy. Through phased implementation, the process is being expanded to facilities and units throughout the MEDCOM (at no cost to them). The MRSN works closely with the CDC and the National Institutes of Health and is initiating collaboration with the Department of Veterans Affairs.

SAVINGS ANALYSIS:

Infection control initiatives such as the MRSN are documented in the medical literature to decrease length of hospital stays, reduce antibiotic treatment, and improve patient outcomes. These savings are often realized in decreased morbidity (illness), decreased mortality (death) and / or cost savings to the enrolled MTF. One such measurable event was the intervention described in the Program Summary at the NNMC NICU in Bethesda. Their Infection Control officer commented, "Due to near real-time feedback from the MRSN, there was an immediate re-location of infants in the NICU, an intensified and repeat terminal cleaning of the pods that housed the affected infants, and the implementation of a new infection control policy wherein all admissions to the NICU are now actively screened for methicillin-resistant *Staphylococcus aureus* (MRSA)." According to one Infectious Disease clinician at NNMC, "It is totally plausible that without feedback from the MRSN, nosocomial transmission of the MRSA strain would have continued resulting in increased morbidity and more lives lost."

Published data also captures the savings of life and resources described above. One smaller, but similarly centralized infection control program showed favorable reductions in the rates of nosocomial (patient to patient, care provider to patient) bloodstream infection (23% reduction), MRSA (22% reduction), and ventilator-associated pneumonia (40% reduction), yielding potential savings of \$578,307-\$2,195,954 per year at 12 community hospitals. By extrapolating this data, and using the parameters of the MEDCOM approved MRSN Program Change Plan, over the next 3 years the MEDCOM will realize a prevention of infection and/or death in 33 in-patients and a cost savings of \$1.7-6.5 million as the MRSN grows to include 12 MTFs. Conversely, for each MTF not under MRSN surveillance, the risk of avoidable infection related morbidity and mortality is predicted to include up to three additional patients at a cost of \$500K at each un-enrolled MTF. Similar literature-based projections suggest the MEDCOM will realize an overall return on investment of \$5 for each \$1 resourced to the MRSN. While a robust evidence base supports investment in programs such as the MRSN, it remains a unique, cost-effective investment among military and other government agencies.



EXCALIBUR AWARD

Winner

TITLE OF PROJECT: Responsible Redistribution and Retrograde of Medical Equipment in Preparation for Operation New Dawn

AWARD CATEGORY: Reserve Component (USAR) TO&E

ORGANIZATION: TF 807 MED Property Book Section, Task Force 807 Medical Command, Camp Victory, Iraq

POINT OF CONTACT: COL Michael C. O'Guinn

PROJECT SUMMARY:

Prior to deploying to Iraq the Property Book Section of Task Force 807 Medical Command quickly realized that it would be facing a unique challenge in regards to medical equipment. With the Responsible Drawdown of Forces (RDoF) in preparation for Operation New Dawn (OND), we knew that we would have to accomplish several key tasks. These critical tasks would include: determining disposition for the medical equipment of units leaving in order to meet ONDs troop cap of 50,000, redistribute medical equipment to the units staying in theater, identify and obtain disposition for all medical equipment deemed Non Mission Essential (NME) by units, bring to proper accountability medical equipment that has not been tracked on the property books properly for over six years, and lastly support requests from Afghanistan for medical equipment. All of this would have to be accomplished under the constraint of not having the ability to bring in new equipment to support units. We basically had to figure out a way to support the same medical footprint in the Iraqi Joint Area of Operation (IJOA) with less equipment, while not sacrificing the ability to remain fluid, maintaining the ability to provide medical coverage for possible future offensives, and not degrade the health care system currently in place. Or in layman's terms, we had to figure out a way to do more, with less.

During our pre-deployment phase the Property Book Section identified several key objectives that had to be met in order to accomplish the above identified key tasks. Following is a table illustrating the objectives we identified and the courses of actions we came up with and implemented once in Iraq:

KEY OBJECTIVE	ACTION IMPLEMENTED
How do we redistribute serviceable NME identified by the units?	We created an easy to view, user friendly SharePoint online, which could be understood by non logisticians, where all NME was posted and constantly update as new NME was identified by units. This became almost like a shopping center where units could let us know if they wanted equipment identified by another unit and then a lateral transfer would be cut.
How do we engage clinicians in the process to ensure we have what we need where we need it?	This same SharePoint was not only sent to the subordinate supply points of contact, but was sent to the clinicians through TF 807 CLINOPS. This ensured that the clinicians were engaged with the selection process, which assisted in ensuring units correctly get what they need.
How do we engage units with other needed commodities and not just medical equipment?	Like the clinicians this SharePoint was sent through other staff channels; for example the S6 worked with subordinate S6s to ensure that they would scrub the list in order to fill any communication or automation needs.
How do we support Afghanistan if needed?	Coordination was made with United States Forces-Iraq (USF-I) and the 3rd MDSC in Kuwait to ensure that any NME not needed in Iraq could be directed to Afghanistan; again the SharePoint was instrumental in this process.
How do we track medical equipment so that we do not lose it in the retrograde process?	Being that equipment had to pass through our hands and be added to the SharePoint it would not slip through the cracks and be missed as medical equipment. Items that were also reflected wrong on the property book, such as medical containers were adjusted to reflect USAH in their serial number across the entire IJOA so that they would not be misidentified as normal containers.
How do we ensure medical equipment not on the property book is brought to proper accountability?	We obtained fielding documents and tracked where current systems were; conducted Staff Assistance Visits to units and had them go LIN by LIN with their Property Books, any equipment left over was taken note of and units were instructed to add them to their books.

This SharePoint was instrumental in the redistribution and retrograde of medical equipment within the IJOA. Though we have automated systems out there that track equipment (PBUSE, TRAM). The need to actually have it pass through our hands and be reviewed before it was placed on the SharePoint and then reviewed by clinicians and subordinate units before retrograding out of theater ensured that we always had adequate medical equipment coverage.

SAVINGS ANALYSIS:

In the process of creating and distributing our SharePoint to our direct reporting units we quickly discovered that other medical units not in our Task Force were also in dire need of medical equipment, such as the line medics and Charlie Companies within the Brigade Combat Teams (BCTs) and Advise and Assist Brigades (AABs). We quickly published this link to our SharePoint to all of the Surgeon Cells within the BCTs, AABs, and Major Commands. Following are the results so far that have directly stemmed from our SharePoint:

ACTION	RESULT
Cut 92 internal lateral transfers for medical equipment so far.	Valued at over \$800,000, which would have had to be purchased through other channels and brought back into theater, therefore not meeting the intent of the RDoF; direct savings to the Army
Identified need for MC4 systems for all BCTs/AABs	Laterally transferred over 20 systems so far that were deemed NME by TF 807 units, valued at over \$10,000; these systems would have had to have been fielded by MC4; direct savings to the Army
Cut 22 lateral transfers to BCTs, AABs, and Other Commands for medical equipment	Valued at over \$950,000, units would have had to purchase through other channels, again not meeting the intent of the RDoF; direct savings to the Army
Identified medical equipment that was needed in Afghanistan, coordinated for over 80 items to be sent there	Valued at well over 1 million dollars, items would have been retrograded back to the states or remained in Iraq as NME for longer had we not had the SharePoint to scrub; direct savings to the Army

Though our SharePoint is heavy on man hours to maintain, and it could be argued that TRAM could possibly track the same thing, the fact is that equipment like medical items need to be directly handled by subject matter experts. The requirement of us having to review each piece as we entered it into our SharePoint ensured that we always had visibility of what it was and how it could be reutilized. The ease of our SharePoint, compared to the difficulty of understanding TRAM and PBUSE, ensured that the clinicians and non logisticians could also use this tool to fill their shortages. This SharePoint could be easily replicated in Afghanistan, or any theater, for that matter where direct supervision over medical assets is needed to ensure adequate medical equipment coverage and where direct savings to the army is maintained and enforced at all times.



EXCALIBUR AWARD

Runner Up

TITLE OF PROJECT: Building an Effective Evidenced-Based Practice Program

AWARD CATEGORY: Active Component, MTF Direct Clinical Impact

ORGANIZATION: Medical Management and Outcomes Division
Blanchfield Army Community Hospital

POINT OF CONTACT: Mary Arrington

PROJECT SUMMARY:

Blanchfield Army Community Hospital (BACH), Fort Campbell strategically developed a sustainable, effective evidenced-based practice program, despite the challenges of limited resources, a mobile population and a continuously deploying force. Although modest gains were being made on quality performance measures prior to fiscal year 2009, the goal was to develop a sustainable program that was process-oriented, improved our productivity and reimbursement, staffed with available resources and yielded measurable healthcare outcomes. With an enrolled population exceeding 80,000, the Medical Management & Outcomes Division (MMOD) refocused efforts to provide a system of support to the clinicians that promotes and achieves patient-centered, quality outcomes. BACH was the first Army facility to reach the 90th Percentile in 7 out of 8 HEDIS measures in June 2009 and has sustained this performance level through June 2010, by meeting 8 of 8 measures. Even with changing criteria, BACH sustained high performance and remained in the top 10 Army facilities. For the last 12-month period, the reimbursement for Evidence Based Practice Performance – Action List via the Performance Based Adjustment Model (PBAM) exceeded \$3.4 million without increasing staff. The core staff in MMOD consists of population health nurses, case/disease managers, utilization management, coding coaches, data quality analysts and RN administrators. The MMOD team worked towards specific goals and interfaced frequently with the Managed Care Director on correcting enrollment issues and with the Primary Care Champion and the Deputy Commander for Managed Care and Compliance to promote and implement various process improvement strategies. The organizational culture and availability of resources is continually assessed for needed support by MMOD.

The support infrastructure consists of using tools and providing direct and indirect patient care functions. Population health nurses directly contact patients via letters, telephone calls, monthly health fairs, clinic visits, marketing with local newspaper articles, handouts in clinics, and through physician champions, and by enhancing community awareness at deployment fairs, etc. Contacted patients are offered appointments and are booked by population health nurses thereby improving wellness access for targeted beneficiaries. Case/Disease Managers focus on high risk diabetic and asthma enrollees as well as on non-compliant patients and high utilizers of the healthcare system. Data from the MHS Portal is critically analyzed for data quality improvement opportunities, validity and for currency by MMOD before it is aggregated and disseminated to the primary care teams. MMOD coders screen and correct targeted AHLTA encounters for accuracy of coding and teach providers for improved documentation. MMOD provides ongoing evidenced-based education to the facility, provides facilitation of multidisciplinary teams in order to reduce the gaps in practice

found through analysis, and develops and implements strategies which lead to a sustainable program. All program processes can be replicated in Primary Care Clinics system wide. In fact, BACH has shared program elements and “how-to’s” on the MEDCOM QMO website, at Army conferences, through teleconferencing, by hosting site visits, and via many networking contacts with peers. Clinic nursing staff and primary care providers are mentored and assisted towards a patient-centered medical home approach as a strategic move for the future. Community Based Primary Care Clinics will be supported and coached by MMOD and trained to use information systems and screening tools.

SAVINGS ANALYSIS:

The primary focus of this improvement initiative was to develop a sustainable, effective evidenced-based practice program. It is one thing to reach multiple targets but another to sustain improvement on multiple targets over time. BACH has been successful and a proven leader in this realm. For the last 12-month period, the reimbursement for Evidence Based Practice Performance – Action List via the Performance Based Adjustment Model (PBAM) exceeded \$3.4 million without increasing staff or space utilization. The promotion of wellness and prevention has been enhanced as healthy populations utilize less resources and healthcare dollars. Initiatives have enhanced access to care without additional administrative burden on the Primary Care Management Team.



EXCALIBUR AWARD

Runner Up

TITLE OF PROJECT: Irwin Army Community Hospital DES Pilot Implementation

AWARD CATEGORY: Active Component, MTF, Indirect Clinical Impact

ORGANIZATION: Irwin Army Community Hospital

POINT OF CONTACT: COL Michael S. Heimall

PROJECT SUMMARY:

Irwin Army Community Hospital's (IACH) Medical Evaluation Board (MEB) team has developed a plan that led to the successful implementation of the Disability Evaluation System (DES) Pilot process. These efforts have been recognized as a preferred practice at the OTSG/MEDCOM Patient Administration level. It has been reported by the OTSG/MEDCOM Physical Disability Evaluation Consultants that the Fort Riley model will be used for future pilot expansion programs by the Assistant Secretary of the Army for Manpower and Reserve Affairs and the Veterans Administration (VA). Success of this facility's process is largely attributable to the cooperative efforts of multidisciplinary participants which included the VA and the internal IACH team consisting of Physical Evaluation Board Liaison Officers (PEBLO), Physicians, Nurse Case Managers, and personnel from a variety of departments throughout the hospital. Internal planning started 11 months prior to implementation enabling the development of communication tools and providing sufficient time to properly train staff, allowing IACH to exceed the standard for DES Pilot cases processed (100 days) from inception of the program. In March 2009, IACH was notified of its selection to participate in the Phase II DES Pilot expansion. The Deputy Commander for Administration, the Chief of Patient Administration, the PEBLO, and representatives from the Kansas Regional VA attended the DES Pilot expansion conference. Upon their return, the IACH and VA team immediately presented an overview of the DES Pilot, established the VA-DoD collaborative business plans, discussed and evaluated the project plan summaries for the facility, and discussed lessons learned from Phase I of the DES Pilot. The primary goals of the project were to develop a common operating picture, to conduct contingency site planning before debut of DES Pilot, to develop crucial working relationships, and to resolve key items prior to the IACH start date of 1 February 2010.

Within the first month after notification, a working DES Standard Operating Procedure (SOP) was developed along with processing flowcharts and an implementation tool used to track planned benchmarks of our business plan. Key areas of consideration were staffing, training, information technology/automation, space utilization, and administrative procedures. In November 2009, the OTSG Expansion Team site visit for DES Pilot training took place with the trainers surprised by the fact that not only had the IACH team already been trained internally, but that the SOP and the IACH DES Pilot process had also been developed. Comments from the OTSG team included, "IACH is the most prepared Military Treatment Facility (MTF) for the DES Pilot". Another factor that led to our success was that once the

IACH DES Pilot procedures were developed, many processes were identified for immediate implementation and were up and running prior to IACH's 1 February 2010 DES Pilot start date.

MTF & Army Average Comparison									
Month	Army Average	Ft. Belvoir	Ft. Carson	Ft. Meade	Ft. Stewart	W. Reed	Ft. Rich.	Ft. Sam	Ft. Riley
Mar-10	136	160	167	125	130	165	135	121	N/A
Apr-10	138	160	176	128	135	165	140	126	*64
May-10	139	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*79
Jun-10	142	N/A	N/A	N/A	N/A	N/A	N/A	N/A	77
Jul-10	144	168	199	139	156	165	188	135	75
Aug-10	146	170	206	145	159	165	189	136	77
Sep-10	145	178	213	147	166	166	196	140	79
Average	141	167	192	137	149	165	170	132	75

Data pulled from the VA's Veteran Tracking Application (* Internal MTF Data Pull)

The overall results of the IACH implementation plan is clearly demonstrated with the above chart. Considering the average DES Pilot processing time for the listed MTF's and the Army averages for the past 6 months, the Fort Riley process has reduced the time by almost 50% over the Army average and well over that percentage compared to several individual MTF's listed. For example, a Soldier processed at Fort Riley potentially separates, due to disability, an average of 117 days (or 4 months) earlier than at Fort Carson. This represents a significant savings both in time and cost. This is not only a better process for the Army in terms of cost savings, but has a positive quality of life impact for the Soldiers and their Families.

SAVINGS ANALYSIS:

The primary focus of the improvement was to increase processing efficiency. However, cost avoidance has also been recognized through the effective planning for implementation of this new process while achieving a significant reduction in the amount of time Soldiers are retained on active duty awaiting disability processing and streamlining the VA disability evaluation process. The standard established to process a Soldier utilizing the DES Pilot program was set at 100 days. Through the proactive planning achieved by the facility, the average time to process a claim at IACH is currently 75 days, which has been sustained and stable over the past 6 month period. The maximum average processing time for other MTF's included in the DES Pilot program is 192 days. This demonstrates a time savings of 117 days per claim by this facility. Estimated base salary cost avoidance for the soldier awaiting disposition of their MEB case at IACH is \$9,656.00 (average E5 base salary for 2010 times 117 days eliminated in processing time) compared to the maximum average time reported by the MTF's participating in the DES Pilot Program. IACH processes an average of 300 claims per year resulting in an estimated potential cost avoidance of \$2,896,800.00 annually. The improvements initiated by IACH's team to not only successfully roll out this program, but to also perform at a level far below either the target standard or peer facilities demonstrates the overall goals and mission to support Army readiness and ensure quality of care to our Soldiers.



EXCALIBUR AWARD

Runner Up

TITLE OF PROJECT: Reducing Attrition in Military Occupational Specialty Courses (MOS) at the AMEDDC&S.

AWARD CATEGORY: Active Component, Non MTF

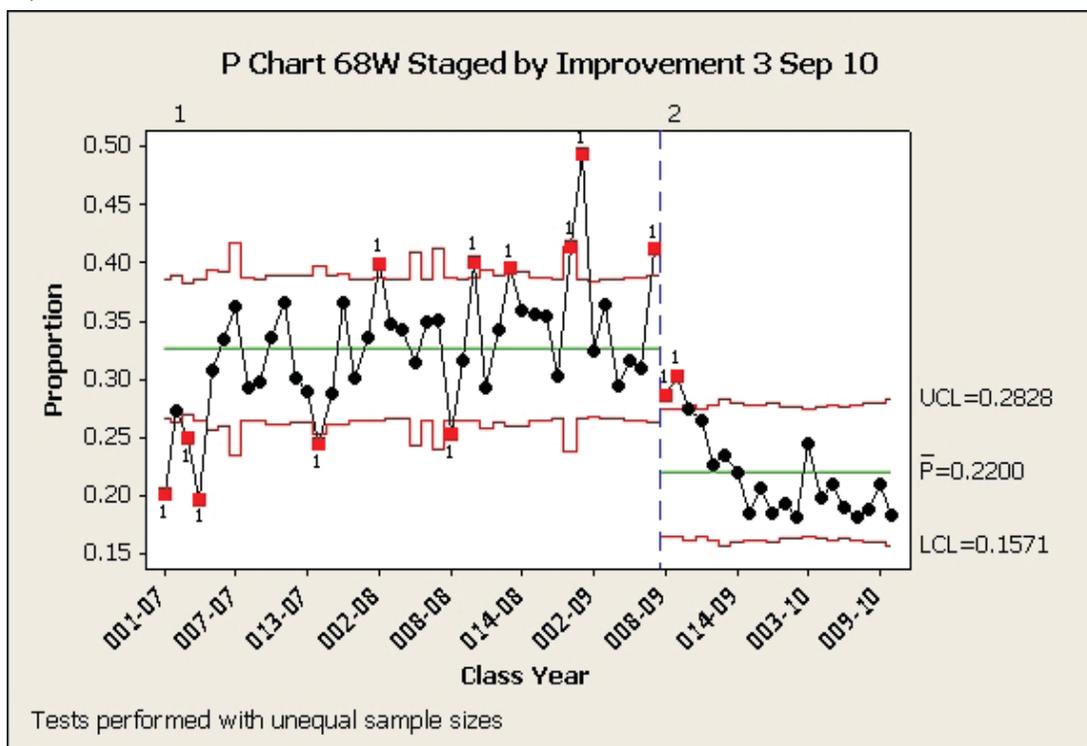
ORGANIZATION: AMEDD Center and School (AMEDDC&S)

POINT OF CONTACT: COL Donna S. Whittaker

PROJECT SUMMARY:

Attrition rates play a vital role in the sustainability management of our medical forces and in fact directly contribute to the effective management of the recruitment, training, and promotion systems and sustainment of our Force. Methods to quantify attrition have been complicated by disparate data collection and reporting procedures, differing definitions of “attrition” and varying methods to calculate “attrition”. The AMEDDC&S is the world’s largest school of Allied Health, graduating over 35,000 annually and as with any other teaching institution, the AMEDDC&S is no less susceptible to student attrition and with such a stupendous student load and a complex menu of 315 Programs of Instruction (POI) including 16 critical medical MOS producing courses, the magnitude of attrition approaches global proportion. Furthermore, attrition costs us dearly both in terms of financial and non-financial costs. **WHAT WE DID:** With the implementation of our Balanced Scorecard (BSC) as the primary strategic development, decision-making, and communication tool we began moving from beehive of disparate activities lacking in strategic alignment, with minimal performance measurement to a high performing organization where management with the new BSC has allowed a better understanding of processes and enhanced performance monitoring and trend analysis. We quickly realized the significant impact of attrition on our core business (we envision, design, and train) and that it must be monitored at the strategic level (Our Executive Committee). Specifically, in support of our Strategic Objectives on the Army Medicine BSC (and the AMEDDC&S), we discovered that we were not using the proper metric for our performance measure of attrition. For years, we had blindly accepted a U.S. Army Training and Doctrine Command (TRADOC) flat attrition rate of 10% that defines attrition in terms of boots in and boots out of a program within a quarter termed “quarterly rolling average”, which is used to smooth out short-term fluctuations and highlight longer-term trends or cycle. Using this flawed method we had been reporting 68W attrition (~7500 student annually) at 22%, furthermore, no one ever asked why or even if we should use this TRADOC metric (should the target attrition rate for an MP or a Food Service course be the same as Pharmacy, Lab, or Radiology?) and a review of historical data found that we have almost never maintained 10% attrition anyway. Our BSC efforts leveraged by our Lean Six Sigma expertise generated an initiative to best measure attrition over time by class (found to actually be a whopping 34% for 68W) and established a “true baseline” (metric) for attrition by class (vs. a flat 10%). As of today, we have redefined attrition not only in words (boots in and boots out by class) but mathematically $(1 - (\text{graduates}/\text{starts})) \times 100$ and correctly measure and graphically display

the attrition rates of all our 16 MOS courses using a Proportions Chart (P Chart) that is read and reviewed by our Executive Committee. The attrition rate of our largest medical MOS 68W is reported to TSG (supporting Strategic Objective LG 18.0). Armed with the new attrition data, the Department of Combat Medic Training (DCMT), Academy of Health Sciences and 232nd Medical Battalion, 32nd Medical Brigade teamed up to review the data, analyze the special causes variation and dissect the process to find the root causes of attrition. The improvements in academic and non academic areas are listed on the next page and along with the P chart demonstrate the sustainment (over a year) of reduced attrition. The sustained 10% reduction attrition rates of more than a year accounts for over 600 68Ws moving from the generating to the operational force. This process served as a valuable learning and communication experience for our employees and our leadership as we all learned about our courses (communication), attrition (our core business), how to measure and display attrition (P-Chart) and why this is strategically important (doing the right things) for our institution and Army Medicine.



- Active leadership communication between the teaching department and the BN
- Created a 3 day head start program while students are awaiting training
- Consistent class size
- Peer tutoring and additional study hall hours
- Improved data quality in ATRRS and RITMS
- Instructor incentive awards
- Changed to a more student centric text book
- Developed an Academic Review Board
- Soldier phasing privileges based on academic and non academic performance
- Company training requirement schedule around major training events
- Reorganized the BN and established H Company for non punitive chapters and Soldiers to be reclassified
- Streamers awarded for Company discipline, academics, PT and overall success

SAVINGS ANALYSIS:

Attrition costs us dearly in terms of financial and non-financial costs. No extra money, personnel or supplies is budgeted for attrition as the expectation is first time pass rate of every student. This requires the training organization to “eat” the cost when students do not pass on the first go around (recycled) or are reclassified into another MOS. The cost per student of a 68W is \$ \$1413 for expendable supplies. With reducing the attrition by 10% and increasing the first time pass rate of over 600 68W annually equates to approximately \$ 847K annually. Additionally, 68Ws who fill TOE slots in the operational force are filled first. So, if the generating force (AMEDDC&S) fails to produce adequate numbers of 68W, the void is felt in our MTFs and other non-TOE units. The replacement cost of a 68W is \$43,400 a year. So the potential savings of reducing attrition and increasing the number of 68W moving from the generating force to the operational force could exceed \$26M. Probably more importantly are the indirect costs of staffing disruptions and paperwork as students are recycled, reclassified, etc, all negatively impact the mission. Another critical aspect is the negative impact it has on a student’s attitude. This can have a “ripple effect” throughout the student barracks resulting in low morale, increase in poor performance (academic) and disciplinary (non-academic) issues that can drain our institution and even impact retention.