Effective FST leadership provided by ANC Officers during Combat Deployment

List of Participants and Their Roles in the Abstract

Name: Dudley Elmore
Organization: 1980th Medical Team (Fwd Surgical)
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Forward Surgical Teams are an invaluable asset to the Army Medical Department (AMEDD) and Theater Task Force Medical Commands. The leadership of FSTs is primarily assigned to Medical Corps Officers in addition to their primary duty as either a General Surgeon (Traumatologist) or Orthopedic Surgeon. Army Nurse Corps Officers provide invaluable leadership in FST assignments during deployed combat operations. While ANC Officers provide expert level care of patients organic to the FST as either Critical Care Nurses (66H-8A) or Nurse Anesthetists (66F), leadership of the entire team by ANC Officers allow a clear cut vision and direction of the FST in support of Task Force Command while freeing surgical providers to focus on their critical arena of expertise.

Learning Objectives
1. Describe challenges faced by FST Commanders in the deployed environment
2. Discuss key characteristics incumbent to successful FST Leadership
3. Describe valuable tools in effectively managing ALL personnel assigned to Forward Surgical Teams.
4. Explain the invaluable role of FST Leadership by Army Nurse Corps Officers
5. Discuss the benefits of defining clear cut intentions and expectations of assigned professional service personnel
Successful Fresh Whole Blood transfusion use in forward deployed FSTs.

List of Participants and Their Roles in the Abstract
Name: Dudley Elmore
Organization: 1980th Medical Team (Fwd Surgical)
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The Joint Theater Trauma System Clinical Practice Guidelines (JTTS, CPG) provide direction and support of theater medical units. The use of Fresh Whole Blood (FWB) Transfusions plays a vital role in the management of severely injured trauma patients. CPGs for FWB provide currently deployed Forward Surgical Teams (FSTs) assistance in managing blood transfusions. The in theater insurgency prefers the use of Improvised Explosive Device (IED). Injuries from IEDs result in severely injured soldiers sustaining mangled extremities and blast injuries requiring replacement and resuscitation of circulating blood volume. Standard blood replacement therapy follows the component transfusion ratio of 1:1:1 of Packed Red Cells (RBCs), Fresh Frozen Plasma (FFP), and Platelets. In most situations the time factor for obtaining the required components supersedes the immediate need for successful patient resuscitation and blood replacement. The use of FWB with the 1980th FST was proved to be the most beneficial in obtaining successful patient outcomes. Additionally the use of FWB resulted in less total transfusion amounts of blood products. The 1980th FST provided successful resuscitation of severely injured patients with FWB provided by the laboratory personnel of the Charlie Medical Company, 701st Brigade Support Battalion.

Learning Objectives
1. Describe the role Fresh Whole Blood transfusions play in a forward located Forward Surgical Teams (FST).
2. Discuss advantages of successful Fresh Whole Blood administration versus traditional component therapy.
3. Explain key differences between component therapy and Fresh Whole Blood transfusions.
4. Explain key differences between component therapy and Fresh Whole Blood transfusion.
5. Explain key differences between component therapy and Fresh Whole Blood transfusion.
6. Identify the key personnel required for successful Fresh Whole Blood transfusion management and their independent roles.
**Abstract Body**

**Unique characteristics**

Shared Medical Appointments (SMA) encourage Veteran self-management skills and adherence to health recommendations.

**Clinical course**

Veteran focus groups, surveys, and outcome studies were used to evaluate four SMA: Move (weight management), MAGIC (metabolic clinic), Tobacco Cessation, and Women Veteran Hyperlipidemia.

**Demographics**

The characteristics of the focus group sample: mean age 62, 94% male, Caucasian 53%, and African American 47%. The characteristics of the hyperlipidemia outcome study: all female, mean age 57.91, Caucasian 63.6%, African American 34.1%, and 2.3% Hispanic.

**Treatment/ intervention**

Peer support within a SMA eliminated the feeling of being alone with a chronic disorder and offered great benefit to Veterans.

**Results/ outcome**

Veterans reported improvement in overall health and well being, improved self-management skills, a feeling of empowerment and connection to the group, and satisfaction with the SMA format. The disparity pertaining to hyperlipidemia decreased with 74% of females and 78% of males with heart disease reaching a goal of a low-density lipoprotein (LDL) under 100. There was a significant decrease in LDL from initial screening (M=151.28, SD 35.656) to final screening (M=122.92, SD 29.999), t (38) =4.619, p less than 0.0005 (two tailed, large effect η2 0.36). There was also a significant difference in weight from the initial appointment (M=186.13, SD 40.020) to the final appointment (M=184.05, SD 38.268), t (38) =2.081, p=0.044 (two tailed, moderate effect η2 0.10).

**Clinical significance**

Veterans reported significant improvement in weight, blood pressure, Hemoglobin A1c, and cholesterol values as well as sustained tobacco cessation.

**Learning Objectives**

1. Describe the benefits and challenges of shared medical appointments
2. Discuss Veteran experiences and satisfaction with shared medical appointments
3. Address health care team concerns about initiating, supporting, and evaluating shared medical appointments
The Efficacy of Auriculotherapy for Smoking Cessation: Placebo Controlled Trial

List of Participants and Their Roles in the Abstract

Name: Deborah Fritz
Organization: VA Medical Center
Role(s): Submitter; Presenter

Name: Joyce S Zeecheng
Organization: Veterans Administration Medical Center
Role(s): Non-presenting contributor

Name: Nina Marie Hill
Organization: St. Louis VA Health Care/John Cochran
Role(s): Non-presenting contributor

Name: Gary D Ditson
Organization: Ditson Chiropractic & Acupuncture
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Abstract

Background: Quitting smoking remains a challenge for almost one-third of the military veteran population. Alternatives to pharmacological therapies such as acupuncture, acupressure, and electrical stimulation have received minimal research attention but have been widely reported to be a popular and safe intervention for smoking cessation.

Methods: This randomized, double-blind, placebo-controlled clinical trial of 125 veterans was conducted to determine whether smoking abstinence rates were higher in those participants who received aural electrical stimulation (auriculotherapy) once a week for five consecutive weeks to those who received sham stimulation.

Results: Auriculotherapy was found to be safe and largely free from significant side-effects. However, there was no difference in the rate of smoking cessation between those participants who received true and those who received sham auriculotherapy. The auriculotherapy group achieved a rate of 20.9% abstinence versus 17.9% for the placebo arm after six weeks. Conclusion: The results of this randomized, controlled clinical trial do not support the use of auriculotherapy to assist smoking cessation. It is possible that a longer treatment duration, more frequent sessions or other modifications of the intervention protocol used in this study may result in a different outcome. However, based on the results of this study, there is no evidence that auriculotherapy is superior to placebo when offered once a week for five weeks, as described in previous uncontrolled studies.

Learning Objectives
1. Identify alternative to pharmacological therapy for smoking cessation such as auriculotherapy, acupuncture and acupressure.
2. Discuss outcomes of VA randomized, placebo-controlled clinical trial for smoking cessation.
3. Describe impact of auriculotherapy for smoking cessation on evidence based practice.
Inter- and intra-observer reliability of clinical movement-control tests for marines

List of Participants and Their Roles in the Abstract

Name Andreas Monnier
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Name Joachim Heuer
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Name Kjell Norman
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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background
Musculoskeletal disorders particularly in the back and lower extremities are common among marines. Here, movement-control tests are considered clinically useful for screening and follow-up evaluation. The aim was therefore to examine the inter- and intra-observer reliability of clinically convenient movement control tests of back and hip in marines. A secondary aim was to investigate the discriminative validity of the best fitting combination of tests for identifying back and lower-extremity pain.

Method
This inter- and intra-observer reliability study used a test-retest approach with six standardized clinical tests focusing on movement control for back and hip. Thirty-three marines on active duty followed a standardized test procedure that covered both low- and high-load (threshold) tasks. Reliability was analyzed using kappa(κ) coefficients, while discriminative power was assessed using a multiple-variable regression model.

Results
Inter-observer reliability for the six tests was moderate to almost perfect with κ-coefficients ranging between 0.56-0.95, with three tests reached almost perfect inter-observer reliability (>0.81). However, intra-observer reliability was fair-to-moderate with mean κ-coefficients between 0.22-0.58. Combinations of one low- and one high-threshold test best discriminated prior back pain, but results were inconsistent for lower-extremity pain.

Conclusions
Clinical tests of movement control of back and hip are reliable for use in screening protocols using several observers with marines. However, test-retest reproducibility was less accurate, which should be considered in follow-up evaluations. Combinations of low- and high-threshold tests have discriminative validity for prior back pain.


Learning Objectives

1. The participant will be able to discuss reliability and validity in general, and in specific for movement control test for marines.
2. The participant will be able to explain and interpret kappa-coefficients and how such measure may be affected by the distribution of failing vs. passing the test.
3. The learner will also be able to discuss and interpret different types of setup for reliability testing of clinical tests.
The perennial ethical dilemma: individual rights or greatest good?

List of Participants and Their Roles in the Abstract

Name: Julie Chodacki
Organization: 375 AMW
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Socio-political philosophers contemplate whether moral actions should be grounded in a Kantian foundation of individual rights or a utilitarian pursuit of the greatest good for the greatest number. In the public health community, the question is similar, but the implications are more practical than academic.

Now the age old question is taking on new intensity, especially for Federal healthcare workers. On the one hand, “Obama care” has advanced the idea that healthcare is an individual right. On the other hand, state and federal financial problems have raised the stakes of funding healthcare. For example, it may not be in the interest of the greatest good to fund long-shot expensive medical procedures, but some might argue that those procedures are an individual’s right.

This presentation will (1) explore the theoretical underpinnings of the ethical dilemma, (2) pose examples to explore application of the concepts, and (3) propose criteria for balancing individual rights with the greater good. The first example will be a challenge for military healthcare: discharging military members who have medical conditions that are duty limiting. The second example will be prison healthcare: providing inmates with healthcare benefits that may exceed what is available to the community at large. The third example will be disaster public health: providing minimal services that aim to “satisfice” rather than optimize.

Learning Objectives
1. Describe the ethical approaches to public health dilemmas
2. Discuss examples of actual federal healthcare ethical dilemmas
3. Identify strategies for balancing individual rights and the greatest good
List of Participants and Their Roles in the Abstract

Name: Christopher Putnam
Organization: Air Force Institute of Technology
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

This presentation will provide an overview of existing carotenoid studies as they relate to visual performance, ocular disease, and cognitive function. Emphasis will be placed on understanding the role of macular pigment (MP) in both a research context and from a clinical perspective.

Macular pigment (MP) is the collective name for three carotenoids, lutein, zeaxanthin, and meso-zeaxanthin, which are uniquely concentrated in the central macula. The term macular pigment optical density (MPOD) refers to a quantifiable value of the peak concentration of MP in the central retina. Due to the prereceptoral anatomic position of the MP, it has the ability to alter the spectral composition and energy of incident light. In addition to its short wavelength filtering properties, MP also possess potent antioxidant qualities that have become the subject of interest for a wide range of retinal conditions, most notably, age-related macular degeneration and diabetic maculopathy. Carotenoid levels have also been correlated with cognitive function (verbal fluency, memory, processing speed, and accuracy).

A detailed description of existing literature will highlight MP’s importance to not only operational military members but also retirees and their dependents.

Measurement techniques, both objective and subjective, will be reviewed as well as implications of the AREDSII data (anticipated Spring 2013 release). Discussion will include previous and on-going studies at the Air Force Research Laboratory (AFRL) as well as current projects underway at University of Missouri – St Louis.

Learning Objectives

1. Describe the 3 proposed roles of macular pigment in the scientific literature
2. Recognize the disease processes in which macular pigment optical density may be vital
3. Identify visual performance measures that may be influenced by macular pigment optical density
4. Interpret current and future scientific literature as it applies to the known functions of macular pigment
5. Apply currently available knowledge in order to enhance clinical care for operational military members and retirees
Prevalence of PTSD among military service personnel has continued rise since initial prevalence findings were reported several years ago. Symptoms of Combat related PTSD are often refractory to standard treatments, leading to continued impairment in personal and professional lives. Questions exist regarding the efficacy of pharmacological interventions and variance in prescribing practices among psychiatric providers. Identifying current treatment practices can further validate and/or lead to revision of current DoD/VA Clinical Practice Guidelines (CPGs) along with potentially improving the efficacy and safety of interventions used for treating combat-related PTSD. This study is a retrospective analysis of prescribing patterns of psychiatrists and nurse practitioners that provided care to 335 patients diagnosed with PTSD within a military outpatient behavioral health clinic. The study also examines concordance with pharmacological recommendations in the DoD/VA PTSD CPG. Results showed that 280 patients were on at least one medication that resulted in a CPG strength of recommendation rating of “C” or lower. Polypharmacy was present in 99% of the cases. Of note, 16% of patients were prescribed at least one medication identified by the CPG as potentially harmful to the patient in the absence of a co-morbid condition. The results begin to illuminate prescribing practices of psychiatric providers and highlight the importance of additional education regarding the existing evidence-base for treating combat-related PTSD with pharmacological interventions. Future studies are needed to analyze prescribing practices of psychiatric providers in the military health system to increase familiarity with CPGs and to ensure that patients receive safe and efficacious evidence-based treatment for PTSD.

Learning Objectives
1. Identify a process for systematically reviewing prescribing practices to improve patient safety and outcomes.
2. Discuss existing evidence-base for pharmacological interventions in the treatment of PTSD.
List of Participants and Their Roles in the Abstract

Name: GERARDO CRISTIANI
Organization: SECRETARIA DE MARINA MEXICO
NAUCALPAN DE JUAREZ ESTADO DE MEXICO
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
There has been a documented increase in the incidence of firearms wounds and fatalities directly linked to the illegal acquisition of firearms in Mexico.

The Alcohol Tobacco and Firearms Bureau (ATF) states that 90% of high power firearms in Mexico come from the United States and that 40% of them are in the hands of drug cartels. The High Speed caliber guns of exclusive military use, used most commonly by civilians in Mexico, are: 7.62 and the 5.56.

Two types of wounds due to firearm projectiles: Slow speed (less than 2500 feet per second), and High speed firearm wounds (more than 2500 ft per second). Transference of energy from the projectile to the object is the most important factor in the pathophysiology of this injuries.

In the majority of Mexican government hospitals the ATLS principles are used as guidelines for medical emergencies. Although we don’t have the medical coverage and infrastructure necessary to attend the 100% of cases, under the criteria and minimum equipment required by ATLS. Paramedic groups are constantly trained in these emergencies, their function is to stabilize and transfer the patient opportunely to a hospital that has trained medical personnel and enough surgical instruments to provide the adequate attention.

Medical specialists are assigned to the treatment according to the organs and systems damaged.

In conclusion, we found that the medical treatment must be immediate and multidisciplinary. Frequently, several surgeries are required and recovery takes numerous months. High mortality is associated with the use of high speed weapons.

Learning Objectives
1. ILLEGAL WEAPONS TRAFFIC IN MEXICO
2. PATHOPHYSIOLOGY OF HIGH ENERGY GUN SHOTS INJURIES
3. TREATMENT OF HIGH ENERGY GUN SHOTS IN MEXICO
Decreasing Inpatient Length of Stay; An Evidence Based Approach

List of Participants and Their Roles in the Abstract

Name Allison Ferro  
Organization: Tripler Army Medical Center  
Role(s): Presenter

Name Katie Rivera  
Organization: Tripler Army Medical Center  
Role(s): Presenter

Name Katrina Mullens  
Organization: Tripler Army Medical Center  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Purpose: The purpose of this project was to decrease length of stay for adult patients in the Department of Medicine and improve patient outcomes.

Model/Plan: The Iowa Model of Evidence-Based Practice guided this clinical innovation project.

Background/Methods: In fiscal year 2012, Tripler Army Medical Center was fined $1.3 million for inpatient inefficiencies due to patients staying longer than the recommended time for their diagnoses. A multidisciplinary team was formed, and 59 articles were selected for critique and synthesis using The Johns Hopkins Tool. A multidisciplinary weekly discharge meeting was implemented based on the evidence, and the role of a discharge advocate was created as a pilot project. A note was created in the electronic medical record to easily track what barriers to discharge were occurring for this patient population.

Outcomes/Results: Identified several inpatient cost saving strategies related to the inefficiencies of the current inpatient care process. There were 417 excess hospital days identified where patients stayed in the hospital past the estimated length of stay based on their diagnoses, thereby potentially saving an estimated $1.26 million over the 65 day course of the pilot.

Recommendations/Implications for Nursing: A dedicated discharge advocate allows for patients and family to be prepared for discharge by ensuring discharge teaching is complete as well as planning for a safe transition to discharge. Multidisciplinary discharge planning rounds create a vehicle for open communication to occur amongst the team using a formal approach. Both interventions aided in decreasing length of stay, and increasing hospital efficiency leading to cost savings.

Learning Objectives
1. Describe the benefits of formal discharge planning.
2. Explain how nurses can impact change by utilizing evidence based research.
3. Describe how the use of a discharge advocate and an interdisciplinary weekly meetings facilitate timely safe discharges
Partner Nation Military Medical Capacity Building: Teaching partner nations to fish

List of Participants and Their Roles in the Abstract

Name: Michael Coote  
Organization: USSOUTHCOM  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
US Southern Command (SOUTHCOM) has extensive experience with building partner nation military medical capacity, particularly in the area of pre-hospital field care. Over the years, most efforts have fallen short of providing an enduring capacity with transfer of U.S. tactics, techniques, and procedures to Partner Nation militaries because of the following factors: 1) Focus on small unit level training not policy; 2) Lack of a systematic approach to address capacity gaps beyond training; 3) Short-term approach which creates a cycle of “co-dependency” between the partner nation and DoD.

SOUTHCOM has developed a model to overcome these shortfalls that has met with considerable success. This model has implications for international capacity building programs far beyond the SOUTHCOM area of responsibility.

Learning Objectives
1. At the conclusion of this presentation the audience will be able to list factors that inhibit partner nation capacity building.
2. The audience member will be able to explain why facilitating the enhanced medical capacities of our partners is beneficial to both the United States and countries that elect to partner with the USG.
3. Conference attendees will be able to discuss how the SOUTHCOM model might work in their theater/setting.
Negative Health Impacts Related to Conflict: Identifying Key Areas for USG Engagement

List of Participants and Their Roles in the Abstract

Name: Bruno Jon Himmler  
Organization: TMA  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

There are significant public health needs that exist in many parts of the world. The NGO community and USAID have led the way in sponsoring developmental projects and relief efforts aimed at reducing human suffering and disease burden. Unfortunately, many of these communities are also suffering from protracted internal conflict which impedes the NGO community’s ability to respond.

The military has looked at achieving the same humanitarian effects in these areas plagued by conflict. Unfortunately, there has been no strategic goal established for engagements and many well-meaning projects have not led to capacity development or long-term reduction in human suffering. Therefore, we need to look at unifying military and civilian humanitarian efforts if we are to succeed in mitigating the disease and suffering in nations ripe with conflict.

Conflict zones show a greater disproportionate of suffering among women and children as there is often a lack of access to health care services. Conflict-stricken countries have seen several instances of declining immunization rates as families are unable or unwilling to take their children to get immunized for fear of becoming victims of violence.

This presentation seeks to provide further guidance of how best to provide public health interventions that will have the greatest impact on human suffering. The ultimate goal is to develop better strategic plans regarding humanitarian assistance for the Federal Government that are complementary to what the civilian sector has already undertaken or will undertake once the security situation allows.

Learning Objectives

1. Describe the indirect affects protracted conflict has on public health via the conflict model.
2. Describe vulnerable populations during conflict and mitigation efforts.
3. Describe the epidemiological factors related to conflict.
Effectiveness of Post-Deployment Mental Health Screening and Risk Stratification

List of Participants and Their Roles in the Abstract

Name: George Appenzeller
Organization: US Army War College
Role(s): Submitter; Presenter

Name: Christopher Warner
Organization: USA MEDDAC-AK
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Objective: To determine the effectiveness of screening, risk stratification and care coordination in decreasing objectively measured negative behaviors in US Army soldiers in the first 90 days after return from a combat deployment.

Method: The post deployment screening process, risk stratification and rates of negative behaviors were reviewed in a retrospective cohort study of 2170 soldiers who screened positive for a mental health problem as part of redeployment processing. The primary focus was on the comparison of negative behaviors with the presence of mental health symptoms and the risk stratification groups assigned by clinicians.

Results: Overall, positive screening alone was not predictive of negative behaviors with the only statistically significant associations seen for psychiatric admissions and property crimes. However, the addition of risk stratification levels were highly predictive of post deployment negative behaviors with those stratified as moderate risk having a rate 25 times higher than those stratified as low risk. Additionally, those who engaged in mental health treatment had a significantly lower rate of negative behaviors (7.5% vs. 28%).

Conclusion: This study provides the first evidence of clinically improved outcomes and reduction of negative behaviors with the combination of post deployment screening, risk stratification, and care coordination during the transition between a combat theater and home station.

Learning Objectives
1. Participants will be able to discuss the application of the current post-deployment behavioral health screenings as a risk mitigation tool.
2. Participants will be able to discuss the impact of continuity of care on negative post-deployment population outcomes.
3. Participants will be able to discuss potential future strategies for improving identification of returning servicemembers with behavioral health conditions.
Overview of Outcome Data of Potential Meditation Training for Soldier Resilience

List of Participants and Their Roles in the Abstract

Name: Brian Rees
Organization: 63rd Regional Support Command
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
In order to identify potential training to enhance comprehensive soldier fitness, this analysis searched medline via PubMed and elsewhere for 33 reasonably significant modalities, screening over 11,500 articles for relevance regarding soldier resilience. Evaluation of modalities that are exclusively educational or cognitive/educational in nature is deferred. Using the volume and quality of research over roughly 40 parameters distributed among the five domains of resilience (physical, emotional, spiritual, social, and family life), these data allow culling of most of the meditative modalities and discrimination among the remaining techniques. The resulting order of merit is Transcendental Meditation, mindfulness, and progressive muscle relaxation, in that order, as those three modalities have the most supporting data. Fortuitously, they also represent a cross section of the domain of techniques regarded as meditation, stress management, or relaxation, with three very different mechanisms of action. They are suitable potential options for improving soldier resilience.

Initial review was published in:

Rees, B. Overview of outcome data of potential meditation training for soldier resilience. Military Medicine, 176, 11:1232, 2011

Subsequent findings are presented here as well.

Learning Objectives
1. Identify the top three candidates for meditation training for soldier resilience.
2. Recognize that there are differences in brain functioning associated with different meditative techniques.
3. List some of the possible obstacles to implementation of meditation training for soldier resilience.
Reduction in PTSD Symptoms in Congolese Refugees Practicing Transcendental Meditation

Abstract

The initial randomized/matched single-blind pilot study tested the effect of Transcendental Meditation (TM) practice on symptoms of posttraumatic stress (PTS) in Congolese refugees. 21 TM group participants were instructed in TM and matched with control refugees. All participants completed the Post-Traumatic Stress Disorder Checklist–Civilian (PCL-C) measure of PTS symptoms at baseline, and 30-day and 135-day post-tests. PCL-C scores in the control trended up; the TM group scores went from high at baseline indicating severe PTS symptoms to a non-symptomatic level, scores below 35, after 30-days TM practice, and remained low at 135-days. Effect size was high (d > 1.0). 95% of subjects (20 of 21) had significant reductions (drop of 11 points or more) at 30 days, and 100% at 135 days. 90% (19 of 21) reached non-symptomatic levels at both 30 and 135 days. No control subjects had significant reductions in symptoms.

The follow-up pilot study evaluated the rapidity of onset of the effect of TM on PCL scores among wait-list controls from the initial study. After the three baseline measures, eleven refugees were taught TM, then re-tested ten days and 30 days after instruction. Average PCL scores dropped 29.9 points from 77.9 to 48.0 in ten days, then dropped another 12.7 to 35.3 at 30 days. Effect size was high (d > 1.0).

There were no adverse events. All refugees who learned TM completed the studies and were able to practice TM successfully.

A three minute video interview of a refugee study participant will conclude the presentation.

Learning Objectives

1. Describe the magnitude of the impact of the intervention upon posttraumatic stress symptoms.
2. Recognize the rapidity of onset of symptom relief found in this study.
3. Identify at least three of the symptoms of posttraumatic stress in the video interview of the study participant.
Brain Based Belligerency Reduction (B3R) comprises groups of persons practicing a meditative technique called the TM-Sidhi Program. B3R can be applied to reduce hostilities in targeted populations. The underlying hypothesis is that consciousness is a field, and that operations in the field of consciousness can affect the brain chemistry, the thinking, and the subsequent behavior of potential belligerents who are not engaged in or even aware of the practice.

This hypothesis has been tested in over fifty studies that have documented reductions in combat deaths, crime, and terrorist acts related to the size of the groups practicing the intervention. Three such representative studies are presented here in some detail, as are potential courses of action for southwest Asia. Findings of beneficial second and third order effects in economics and governance, and a relatively modest cost profile, make B3R an attractive course of action. However, the extraordinarily unconventional nature of this approach may render it unacceptable to decision makers.

Learning Objectives
1. Repeat the hypothesis underlying B3R.
2. Identify at least three areas that have been shown to improve due to the intervention.
3. Examine five possible objections to the validity of the findings discussed.
4. Judge that this is the most esoteric and unusual topic ever presented at AMSUS.
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background: Joint inpatient mental health units have been tried before, but currently there is only one such unit in the United States, at David Grant Medical Center at Travis Air Force Base. The unit has twelve beds, and serves active duty military, activated reservists, military dependents, and veterans.

Methods: The bureaucratic challenges in creating and maintaining a joint unit are considerable, as the VA and DoD have different cultures and computer systems. Ways in which the teams on the unit found ways to work together may serve as a guide for future similar units in other geographical areas. Statistics on patient flow, length of stay and satisfaction will be presented.

Results: The unit has been a clinical success, with a positive reputation for both veterans and military members. Specific successes have been in assisting military patients about to become veterans in the transitional process, and in assisting veterans in recalling the challenges that they faced and resources available when they were active duty. A key challenge is the care of medically complex veterans. The unit has become a favored educational site for VA trainees, as they are able to experience a military environment by working with active duty patients, and alongside active duty healthcare personnel. Data indicates an average length of stay for an acute inpatient unit, with high satisfaction, and care of a significant number of patients with DoD and VA status.

Conclusion: A joint DoD/VA inpatient mental health unit is a bureaucratic challenge that can yield exceptional clinical results.

Learning Objectives

1. Identify the means by which a joint inpatient mental health unit can be formed, and the challenges of doing so.
2. Report on the challenges and successes of a DoD-VA project, in terms of both process and content.
3. Recognize ways in which trainees can learn about DoD and VA parameters in a joint environment.
Tripler Army Medical Center Improves Access to Care for Beneficiaries

List of Participants and Their Roles in the Abstract

Namelawanda D. Warthen
Organization: Tripler Army Medical Center
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Ensuring that patients not only have access to health care but a direct link to their PCM is very important as Tripler Army Medical Center in Honolulu, Hawaii continue to move to Patient-Centered, Soldier-Centered and Community-Based Medical Home Models. Models designed to improve access, effectiveness, and efficiency in the delivery of healthcare. Through consolidation and standardization of template and scheduling management, TAMC will be broadened to streamline coordination of services to create a positive longitudinal relationship between the facility, the patient, and the healthcare team. The implementation of this policy was designed to increase command and control, efficiency and effectiveness by reducing redundancies in an effort to increasing access for beneficiaries. Tripler Army Medical Center (TAMC) in Honolulu, Hawaii under Brigadier General Dennis D. Doyle is no exception. He has charged the TAMC Deputy Commander for Clinical Services, CAPT Andrew Findley, to develop a template scheduling manager cell, under Clinical Support Division, to ensure that health facilities under him have the correct staff, resources, and training for optimum use of the process. The TAMC goal is to make TSM work by (1) reorganizing operational practices, (2) ensuring schedules are open, (3) improving quality and delivery of healthcare, and (4) improving patient experiences.

Learning Objectives
1. The attendees of this lecture will gain a better understanding of how TAMC first reorganized its current operational practice by creating a team of TSMs identified as subject matter experts to assist with appointment template and scheduling- standardizing and building procedures based on standard system rules.
2. The attendees of this lecture will be able to apply practices used at TAMC such as the TSM meeting with the department Chiefs and/or their appointed representative to review compliance reports and submission of templates and schedules in a timely manner which is directly linked to access to care and enhanced access to care.
3. The attendees of this lecture will learn how to enhance and improve quality through managing patients expectations. This means keeping a focus on measures such as access to care and ensuring that patients are seen in a timely manner by their provider and team. Clearly the improvement of patient satisfaction relates heavily to having available appointments open for patients to be seen in a timely manner.
Abstract Body
The U.S. Department of State “pivot” to Asia is complemented by the Department of Defense “rebalance” to Asia. The DOD rebalance is not primarily an operational rebalancing as much as a rebalancing of operational priorities. This presentation will inform participants regarding the six phases of DOD’s operational continuum, and the focus on Phase 0, Shape, as the core of DODs rebalance effort. With a clear understanding of the operational continuum participants will learn how Health, Theater Security Cooperation is a key element of the Phase 0, Shape, rebalance effort, and the potential opportunities for the military healthcare community.

Learning Objectives
1. Participants will understand the operational aspects of DODs “Rebalance to Asia” in the context of the DOD Operational Continuum
2. Participants will recognize the opportunities for the Military Medical community to take the leadership role in the rebalance efforts for Phase 0, Shape.
3. Participants will gain knowledge of Health TSC as the “thin edge of the wedge” in achieving Guidance for the Employment of the Force (GEF) end-states, supporting the Joint Strategic Capabilities Plan, and the Health TSC opportunities identified in the FY14 – FY20 USPACOM Theater Campaign Plan, and subsequent Theater Campaign Orders
Emergency Department Knowledge Base: A Workforce Multiplier

List of Participants and Their Roles in the Abstract

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Health care providers are increasingly being challenged to close the gap between clinical competencies and their own capabilities. The requirement to comply with numerous federal and local directives puts additional stress on providers who are trying to align patient care with administrative procedures. Knowledge sharing is difficult among the numerous full and part-time staff members of an emergency department that is open 24/7. A solution to improve knowledge management and decision support was instituted by the VA Puget Sound Health Care System Emergency Department utilizing an enterprise application, Microsoft SharePoint, to build a knowledge base for improved efficiency and standardization of clinical operations and administrative procedures. Knowledge management actively organizes the accumulated experience and active information that already exists within an organization. An effective and actionable knowledge base is quick to create, easy to search, easy to update, and provides guidance on how to perform actionable tasks. An actionable knowledge base stores information that helps team members perform tasks efficiently and in a consistent way across the department. Knowledge translation is a process that facilitates the transfer of evidence-based, medicine research and demonstrated local best practices into effective changes in clinical practice and helps close the gap between knowledge and clinical implementation. Often this knowledge must be accessed quickly in time-sensitive clinical situations by providers already affected by mental and physiological performance decrements. This gap is particularly challenging in a dynamic setting, such as an emergency department, due to a myriad of multiple service line procedures and policies followed daily, and the large number of rotating full-time and part-time shift workers. Examples of implemented solutions will be demonstrated.

Learning Objectives
1. Explain what a knowledge base is.
2. Describe desired attributes in a knowledge base.
3. List four actionable attributes of a clinical knowledge base.
4. Cite an examples of software capable of providing an actionable clinical knowledge base.
Serving apparently to different causes military profession and medicine have always been in interaction during the history. Military profession always carries the potential of threatening the human life and health whereas medicine aims the protection of human life and health. Yet the word “Military Physician” has a dilemma within itself.

Society has the indubitable expectation of healing for sicknesses, pains and injuries from the physicians. On the contrary military profession is always open to injure or even kill an individual for the protection of the society. How can a physician who will directly serve to the human health be part of a profession which can threat or even injure human beings? In other words how can a physician be a soldier?

Both functioning in professional boundaries and complying with the ethical principles brings in many challenges for the military physician.

Questioning the priority of being a soldier or a physician is not a single-dimensional inquiry and doesn’t have a simple answer for every situation. We can reach to a balanced approach after a comprehensive analysis of each case.

We hope that our study will shade some light on to this dilemma and some possible solutions based on sample cases.

Learning Objectives
1. Identify philosophical dimensions of medicine and soldiery as profession
2. Interpereting the relation between society and professions
3. Discussing about ethical dilemmas in military medical practice
Healthcare leaders have extreme difficulty in measuring outcomes empirically, statistically, and consistently. No single model is available that assists in providing a framework for capturing regular and reoccurring metrics in a uniform methodology over time. This presentation provides not only a simple and empirical model for measuring and capturing health outcomes that any junior administrator can use – but it also – provides a framework that can be used in any health entity.

Seminar description:

The purpose of this presentation is to present a simple one-page technique for identifying, collecting and measuring healthcare outcomes in any facility. The application and use of this technique will also support an organization’s strategic vision for achieving performance outcomes. This methodology is shared with participants through a high-caliber PowerPoint presentation and dynamic lecture followed by a carefully focused practicum designed to maximize learning outcomes and take-away tool potential.

After this Congress session, participants will be able to build simple, one page models, with less than one paragraph of text, that will accurately describe health events of any type, in any organizational setting. Furthermore, participants will learn how one model, constructed by one individual, in one organizational setting, can be leveraged and shared with multiple users across multiple settings. This leveraging of economy of scales provides an opportunity cost in both real money and human resources to the organization. Additionally, the procedure allows for a uniform framework that is frequently looked for by accrediting, licensing and certification organization.

Learning Objectives
1. Participants will be able to compose a 1-page, low text, useable healthcare model that provides practical information for performance evaluation
2. Apply model building techniques to inspectable, measureable and actionable accreditation, certification and licensing criteria regardless of practice, organization size and/or service delivery
3. Create actionable models for healthcare measurement
Abstract Body

Purpose

Optimal wound healing involves: keeping the wound clean; insulated; well protected from trauma and bacterial invasion; and keeping the wound moisture in the ideal range. Selecting a dressing that is appropriate in managing the micro-climate of the wound and promoting homeostasis is extremely important. Gauze, though commonly used as the secondary dressing over biological products, has limitations. We have used polymeric membrane dressing (PMD) as an adjunct wound management protocol and found it superior to the use of gauze. 3 cases are used to illustrate this best practice.

Method

PMDs were applied to 3 cases: 2 diabetic foot ulcers and 1 non-Hodgkin’s lymphoma resection wound. Dressings were changed 3x/wk. rather than the standard daily gauze dressing change. Wounds were evaluated for: 1) desiccation and maintenance of optimal moisture levels; 2) adherence; 3) periwound skin complications; 4) protection from friction and shear; and 5) ease of use

Results

Use of PMDs resulted in significantly improved outcomes. There was no desiccation of the primary biological products, or wounds, and optimal moisture levels were maintained. There was no adherence or trauma to tissue. There was no evidence of periwound maceration, erythema or fungal growth. PMDs protected the diabetic foot ulcers from friction and shear. The dressings were easy to use and were easy to apply.

Conclusion

PMDs significantly improved outcomes, providing an optimal moist wound healing environment, without complication, through wound closure.

References


Learning Objectives

1. Describe use of an advanced secondary dressing in managing and maintaining appropriate moisture balance for promoting moist wound healing.
2. Identify and understand how to prevent periwound skin complications.
3. Discuss the use of an advanced secondary dressing as an adjunct wound therapy in managing difficult to heal wounds.
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background
Previous data collected from tactical health engagements was limited to measures of performance, such as number of procedures performed or people trained. These engagements were sometimes missions of opportunity and were not necessarily aligned with strategic objectives or the Combatant Command (COCOM) Theater Security Cooperation Plan. The MODEL study and the Global Health Engagement Measures of Effectiveness Framework intends to provide a standardized process across Services and COCOMs to assess the value of global health engagements thereby providing senior leadership with information to make data-driven decisions.

Methods
MODEL encompasses a mixed methodological structure with multiple phases: literature review, quantitative and qualitative modeling, assessment, data repository, and site visits. These phases may overlap or occur concurrently depending on resource availability and mission support requirements. MODEL leverages components from the results and logical frameworks, incorporating a range of activities from strategic to tactical activities.

Findings
Through an analysis of the Overseas Humanitarian Assistance Shared Information System database, MODEL determined that an average of 52% of all projects (sample size = 2,522) completed from FY08-FY12 qualified as either health or health related engagements. Additionally, 58% of total funding allotted these health related engagements. Additionally, 58% of total funding allotted these health related engagements.

Interpretation
Health is a military asset that the Services and COCOMs frequently employ as part of their theater security cooperation strategies. The MODEL study will help the Services and COCOMs measure the value, impact, and effectiveness of global health engagements. Next steps include additional retrospective analysis to validate initial findings, framework development, data collection, and statistical analysis.

Learning Objectives
1. Recognize the linkage between strategic objectives and tactical military health engagements
2. Identify qualitative and quantitative metrics to measure the impact of military global health engagements
3. Identify data sources and systems that track military global health engagements
Purpose:
This case report presents the diagnosis and management of a patient with a traumatic cataract subsequent to an IED explosion in 2007. While traumatic cataracts are relatively common, this finding may have long-term implications due to the number of military personnel sustaining blast injuries.

Case Report:
The patient presented to the Optometry Clinic with complaints of decreased depth perception and decreased left eye (OS) visual acuity (VA).

Pertinent findings included best corrected VA OS (20/30-2) and asymmetrical inter-ocular pressure (IOP) 14 and 19 mmHg. Examination revealed Grade 2+ posterior sub capsular cataracts and temporal cortical cataracts in the left lens and temporal lens dehiscence. The patient scored 40 on the Traumatic Brain Injury Questionnaire. Visual Field tests and Ocular Coherence Tomography imaging were performed.

The patient initially denied any history of head trauma or accident. Later, he noted having been hit with an IED in 2007, causing a concussion.

The patient was given Xalatan 0.005%--to lower the IOP OS and was referred for cataract surgery.

The patient underwent cataract surgery with implantation of a Cionni Ring and PCIOL, and is currently deployed.

Record review showed no record of explosion, but noted memory/sleep/concentration problems, and loosing focus “post TBI.”

CONCLUSION/Recommendations
It is possible that similar long-term effects secondary to blast will be seen in increasing numbers in the future. Recommend deployed personnel have all concussive/TBI events documented to enable long-term care decisions.

Learning Objectives
1. Describe potential long-term impacts of blast related trauma
2. Discuss the need for documenting all blast related injuries
3. Identify the advantages of accurate, seamless, comprehensive medical records
List of Participants and Their Roles in the Abstract

Name: Chrisanne Gordon
Organization: Resurrecting Lives Foundation
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The wars in Iraq and Afghanistan have produced over 2 million veterans who are eligible to apply for Veteran’s benefits. An estimated 400,000 veterans will suffer from traumatic brain injury (TBI). The care of these veterans will require newly developed diagnostic procedures as well as extensive rehabilitation. The access to the VA in the United States and to these rehab teams is becoming more difficult, since nearly 80% of patients requiring these services live away from VA facilities in rural areas. Only about 30% of patients receive needed therapy, and 50% do not register for services because of distance and access issues.

It is proposed that local community hospitals, health clinics, physician’s offices and other sites become outreach sites for the VA system as a cooperative effort. Telemedicine is suggested to be a large part of this outreach program since such models already exist at the VA. The combination of local health facilities and telemedicine by the VA in a cooperative fashion will help to alleviate the huge backlog of patients needing diagnosis and care for TBI, and can reach the patients thus far unable to be cared for. This telemedicine network is far superior to that available today and is cost effective.

Learning Objectives
1. To report the scope of OIF/OEF Military Members and Veterans who have Traumatic Brain Injury
2. To discuss obstacles regarding TBI diagnosis and treatment for Military Members and Veterans
3. To discuss the Solution of Telemedicine as a cooperative effort between Civilian, DOD, and VA providers.
Clinical Assessment of Neurological Deficits Resulting From Combat Mild TBI

List of Participants and Their Roles in the Abstract

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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

**Background:** TBI is an extremely important civilian and military health issue. Concussion (mTBI) is the most frequent form of TBI. Identifying residual neurological injury following mTBI (complex mTBI) in a clinic setting may be useful for directing post-mTBI care.

**Objective:** To compare the sensitivity of components of neurological examination for detecting neurological deficits (NDs) following mTBI.

**Design/Methods:** Studied 6 Veteran groups: Combat-acquired mTBI (Iraq or Afghanistan) with loss of consciousness (LOC, 126), without LOC (21), without mTBI (52), civilian mTBI with LOC (21), without LOC (21) and without TBI (21). We examined frequencies of NDs on a 50 element examination including quantitative olfaction (Sensonics, Haddon Heights NJ). ANOVA analyzed ND frequencies. Kendall's rank and Pearson's product-moment tests determined correlations.

**Results:** The frequencies of NDs were: combat/mTBI/LOC - 52%, combat/mTBI/noLOC 9.5%, combat/noTBI - 0%, civilian/mTBI/LOC - 9.5%, civilian/mTBI/noLOC - 0% and civilian/noTBI - 0%. Only 5/50 elements of the neurological examination revealed NDs - 1) reduced olfaction – 65, 2) impaired balance – 14, 3) abnormal eye movements – 13, 4) motor asymmetry – 2 and 5) sensory change – 2. Both combat veterans without LOC who had a ND had only impaired olfaction. The 2 civilians with NDs had impaired olfaction - 2 and impaired balance -1. Among the 69 with NDs, 37 (54%) had only impaired olfaction. Impaired olfaction was not explained by smoking, sinus disease or inhalation of irritants. Impaired olfaction correlated with impaired cognitive function. NDs correlated with abnormal neuropsychological testing.

**Conclusions:** Olfaction was the most sensitive neurological examination biomarker for neurological injury following mTBI with LOC. Olfactory cortex is adjacent to ventromedial prefrontal cortex (vmPFC). vmPFC modulates ipsilateral amygdala and is important in PTSD genesis/maintenance. Impaired olfaction may herald vmPFC damage thereby potentiating PTSD genesis and maintenance.

**Learning Objectives**

1. Describe which components of neurological examination are most likely to be abnormal in Veterans with combat mild TBI (mTBI).
2. Describe the correlation between Veterans who have neurological deficits (NDs) and those with abnormalities on neuropsychological testing. following mTBI
3. Discuss the correlation between areas of the brain responsible for the NDs and the susceptibility of individuals with mTBI to manifest PTSD.
Measuring Quality in the Federal Employees Health Benefit Program (FEHBP)

List of Participants and Their Roles in the Abstract

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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The Office of Personnel Management contracts with 95 health plans to provide healthcare for 8.2M Federal employees and families. To ensure quality, OPM selects National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS) measures that reflect prevalent conditions affecting the Federal population, such as breast cancer, diabetes, cardiovascular disease, and behavioral health. OPM evaluates HEDIS measures in a three-point scoring system that encourages performance at or above the National Commercial 75th Percentile, commends Exemplary and Most Improved performers, and works with plans to develop formal Corrective Action Plans when needed.

The first year of scoring (results issued privately to plans) highlights areas of strength and opportunities for improvement. A majority of plans met or exceeded the HEDIS 2012 National Commercial 25th Percentile. Of those that achieve the 25th percentile, a majority attain the National Commercial 50th Percentile. 24 plans achieved OPM’s Exemplary level. More HMOs perform above the 25th Percentile than PPOs. Breast Cancer Screening has the largest proportion of plans performing below the 25th percentile. Best practices for engaging patients and achieving results are shared among plans.

OPM recently added measures of ER use, readmissions, prenatal care, and well-child visits to the required set. In late 2013, OPM will begin publicly reporting scores and issuing financial incentives to increase transparency and accountability. When combined with measures of customer service and financial performance, a comprehensive quality evaluation system is emerging as the standard to uniformly compare all FEHB plans.

Learning Objectives
1. Quantify
2. Qualify
3. Differentiate
4. Evaluate
5. Educate
**Using Human Fibroblast Derived Dermis for Closure Post-Surgical Wound Dehiscence**

**List of Participants and Their Roles in the Abstract**

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Organization: Carl T Hayden VA Medical Center  
Role(s): Non-presenting contributor

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**
Limb salvage has been defined as the preservation of function and the avoidance of amputations. Diabetics are among individuals at high risk for lower-extremity amputations. Seventy to eighty-five percent of lower-limb amputations are preceded by a chronic foot ulcer in diabetic patients. Dermagraft is a sterile, dermal substitute, derived from human fibroblasts, which contains key active components shown to complement wound healing. The purpose of this study is to report on the use of this fibroblast derived dermis on a “high risk” patient population. We will present three cases where human fibroblast derived dermis was used in post-surgical wound dehiscence in patients with diabetes for limb salvage. As such, we want to demonstrate that this will avoid additional hospitalization and higher amputation level in these complicated patients. Strategies to reduce the risk of re-amputation may result in improved quality of care and provide substantial economic benefits.

**Learning Objectives**
1. Presents 3 cases where human fibroblast derived dermis was used in closure of post-surgical wound dehiscences.
2. Discusses limb salvage in the diabetic population
3. Identifies strategies to reduce risks of re-amputation and hospitalizations
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Statement of Purpose: Surgical site infections (SSI) are one of the most common post-operative complications encountered by foot and ankle surgeons. Patients with Charcot neuroarthropathy (CN) are at increased risk for postoperative infections. The purpose of this study was to retrospectively compare the complications associated with an operatively treated group of patients with a diagnosis of Charcot neuroarthropathy versus a group of patients without the disease.

Procedures. This is a retrospective analysis of a prospective database of approximately 1400 patients who had orthopaedic foot and ankle surgery. The diagnosis of Charcot neuroarthropathy was made based on outpatient medical records.

Results: Diabetic patients with comorbid conditions such as Charcot neuroarthropathy, placed them at increased risk for postoperative infections. This is the case particularly when the disease is poorly controlled. SSI’s was higher in diabetics than nondiabetics in patients undergoing surgery. Hence, tight glycemic control may reduce surgical site infections in patients undergoing surgery with diabetes. It has also been reported that patients with a loss of protective sensation had an increase in postoperative infection rates. These studies provide evidence that peripheral neuropathy predisposed diabetic patients to postoperative infections.

Discussion: Patients with Charcot neuroarthropathy are at increased risk for postoperative complications including infection. This study demonstrates the frequency and determinants of postoperative infections in patients with a diagnosis of Charcot neuroarthropathy compared with patients without the disease. Patient co-morbidities have a substantial impact on infection rates and this should be taken into account when planning a surgical intervention for diabetic Charcot neuroarthropathy.

Learning Objectives

1. Discuss surgical site infections in patients with Charcot Neuroarthropathy
2. Demonstrates that patients with Charcot neuroarthropathy are at increased risk of postoperative complications
3. Discusses the co-morbidities that has an impact on infection rates
Readiness Councils to Reduce the Population of Soldiers Medically Nondeployable

List of Participants and Their Roles in the Abstract

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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The population of Soldiers not medically fit for deployment has created readiness problems for the United States Army in recent years. To address this issue, the 3rd Infantry Division created councils of experts to address the size of its medically-non-deployable population. Our results demonstrate success in effectively reducing the subpopulation of Soldiers who have been medically-non-deployable for long periods of time by enforcing their return to duty or medical retirement. This study also demonstrates that council-based management affects the composition of the medically-not-ready population. Traditional approaches allow a minority subpopulation of Soldiers with poor prognoses to dwell within the medically non-deployable population for prolonged periods of time (6-18+ months) while the healthier majority recovers within the first 6 months. This creates a dynamic in which remaining in the population for longer time periods increases the probability of being medically retired. Our study demonstrates that councils consistently and actively shape the character of the group such that those remaining in the medically-not-ready population for longer periods of time do not have an increased risk of medical retirement. Soldier Medical Readiness Councils have already been adopted by the Army. This article provides evidence to support their efficacy.

Learning Objectives
1. Recognize that unmanaged medical systems may allow members of the military to dwell in medically non-deployable statuses for prolonged periods of time.
2. Recognize that only a small percentage of Soldiers with temporary medical disability greater than 30 days eventually require medical retirement.
3. Define how medical readiness councils not only reduce the time period that Soldiers remain non-deployable but also actively shapes the population in such a way that those likely to recover remain the longest.
Army Selected Reserve Dental Readiness System: Overview, Assessment, and Recommendations.

List of Participants and Their Roles in the Abstract

Name: James Ray Honey
Organization: U.S. Army Reserve Command
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

The Army Selected Reserve Dental Readiness System (ASDRS) is a key dental program directed by the Assistant Secretary of the Army (Manpower & Reserve Affairs) starting in Fiscal Year (FY) 09. The Army National Guard and Army Reserve have steadily implemented ASDRS over the past three years as a means to improve the historically abysmal Dental Readiness of the Army Reserve Component (RC); Dental Readiness is essential for sustaining an Army RC Operational Force. ASDRS is a tool for RC commanders to provide contract Dental Readiness care in support of over 558 thousand non-mobilized Selected Reserve Citizen-Soldiers dispersed throughout the 54 states and U.S. territories, at home station before alert, and if necessary after alert (throughout the Army Force Generation cycle). This presentation examines the status of ASDRS implementation, assesses its effectiveness in improving Army RC Dental Readiness, and provides recommendations regarding the following focus areas: 1) Command emphasis; 2) Program execution; and 3) Synergy with the Military Health System (MHS) and Department of Veterans Affairs (DVA).

Learning Objectives

1. Describe the Army Selected Reserve Dental Readiness System (ASDRS).
2. Discuss the status of ASDRS implementation.
3. Recognize the effectiveness of ASDRS in improving Army Reserve Component (RC) dental readiness.
4. Describe recommendations for further improving ASDRS and the overall continuum of federal dental care.
The Army Trauma Tracking System and the Development of The Combat Lifesaver

List of Participants and Their Roles in the Abstract

Name: Robert John Kasulke
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Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
I will discuss the development and the mechanics Army Trauma Tracking System (ATTS). I will further discuss how the ATTS' continuous real time evaluation of battlefield casualty patients resuscitation and stabilization led to the understanding that there are three main causes for wound related trauma in the current conflict. They are upper airway occlusion, massive hemorrhage and tension pneumothorax. This knowledge was implanted into a new training and provider paradigm: The Combat Lifesaver. I will discuss in detail the skills sets that these providers are trained in and the significant decrease in mortality rates we are experiencing in the current conflict, which are directly related to the implementation of these skills sets on the battlefield.

Learning Objectives
1. discuss the background of the development of the Combat Lifesaver program from the ATTS
2. discuss how the Combat Lifesavers are trained
3. Review the marked decrease in battlefield injury mortality which is directly related to the unique skills used by the Combat Lifesavers
List of Participants and Their Roles in the Abstract

Name: Susan Marie Perry
Organization: Uniformed Services University
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

**Background:** Malignant Hyperthermia (MH) is a threat that is ubiquitous to all anesthesia providers and remains an unpredictable intraoperative risk that may result in patient death or significant morbidity for those that survive. Each year approximately 10 to 20 active duty military members or dependents are referred to the Uniformed Services University (USU) MH Center for suspected MH episodes. MHS individuals typically may experience this syndrome as a result of intraoperative administration of inhalational agents, or non-depolarizing muscle relaxants, and in rare cases as a result of heat or emotional stress. If a causal relationship between catecholamines and intracellular Ca^{2+} handling can be established, it could provide a model for examining the mechanisms or role of stress hormones in normal and MHS B cells.

Malignant Hyperthermia (MH) is a threat that is ubiquitous to all anesthesia providers and remains an unpredictable intraoperative risk that may result in patient death or significant morbidity for those that survive. Each year approximately 10 to 20 active duty military members or dependents are referred to the Uniformed Services University (USU) MH Center for suspected MH episodes. MHS individuals typically may experience this syndrome as a result of intraoperative administration of inhalational agents, or non-depolarizing muscle relaxants, and in rare cases as a result of heat or emotional stress. If a causal relationship between catecholamines and intracellular Ca^{2+} handling can be established, it could provide a model for examining the mechanisms or role of stress hormones in normal and MHS B cells.

Key Words: Malignant Hyperthermia, Adrenergic Response, RyR1 Calcium Release

**Learning Objectives**

1. Describe symptoms and treatment of Malignant Hyperthermia (MH) autosomal inherited disorder associated with the RyR1 receptor.
2. Identify MH triggers in the absence of anesthetics and related to the Adrenergic Nervous System (ANS).
3. Summarize molecular genetics of MH.
4. Describe the role of aadrenergic blocker phentolamine on B-Lymphocytes from Malignant Hyperthermia Susceptible (MHS) individuals.
5. Recognize possibilities of various cellular mediators that contribute to immune response in MHS individuals.
Abstract Body

International assistance, especially through the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), has contributed significantly in supporting the Government of Vietnam to address their HIV/AIDS epidemic. In 2012, there were 210,000 PLHIV and the prevalence rate is 239/100,000 population. Yearly, about 0.24% of military inductees are found HIV positive (report by MOH in 2012 and MOD in 2004).

Amidst increasingly constraint resources to address the need, engaging a broad range of sectors, especially the military healthcare system, in HIV/AIDS prevention and control programs is crucial to sustaining a comprehensive national HIV/AIDS response. As part of this effort, the Vietnam Ministry of Defense (MOD) launched in 2005 a specific HIV/AIDS cooperation program with financial and technical assistance from the U.S. Department of Defense (DoD), funded through PEPFAR Vietnam, focused on five key components in alignment with National HIV/AIDS program: 1) Prevention 2) HIV/AIDS care and treatment 3) laboratory, 4) blood safety 5) health system strengthening.

Since 2008, the program has expanded from 1 to 8 military hospitals and preventive medicine centers across Vietnam. The program also contributed considerable results to the PEPFAR program in Vietnam: In 2012, 50,000 newly recruited military received HIV/AIDS counseling, more than 25,000 clients received VCT, 370 patients are on ART, more than 180 staff received training on care and treatment for PLHIV, VCT, blood screening, HIV testing, infection control, monitoring and evaluation and more than 14,000 blood units were screened.

Among others, a cadre of military technical staff well-trained on diagnosis and treatment of HIV/AIDS, military laboratories accredited nationally, and linkages between military and civilian services significantly improved, particularly with the national guidance on HIV prevention and ARV treatment by the Ministry of Health being well introduced. All have made possible the good quality HIV/AIDS services within the military health system and opened doors for rapid program scale-up and success.

Efforts now are focusing on assuring sustainability the program within the military system through smoothly transferring the program management, implementation and ownership to the Vietnam’s military.

Learning Objectives
1. To present achievements of the PEPFAR program in Vietnam Military
2. To discuss initiatives leading to program success
3. To identify the ways to sustain the program in the military healthcare system.
Abstract Body
The overall objective of the study is to examine the need for suicide prevention services in the local communities where Veterans live from the perspective of a diverse group of VA and community providers. The study identified organizational barriers to care with a focus on those unique to Veterans living in rural areas that are at risk for suicide. Survey and interview data from a diverse group of stakeholders (N=72) that represent key VA and non-VA community-based agencies that provide a range of health and psychosocial services to veteran populations. Interview questions focused on the perception of Veteran's needs for VA and/or community-based services and more specifically, suicide prevention services, as well as referral mechanisms to address service needs and potential barriers to receiving services. Broad themes from a preliminary qualitative analysis suggest that both community and VA providers perceive a need for increased services, both generalized and suicide prevention-specific. Suicide prevention services should be tailored to reach each generation of Veterans where they are most comfortable. More can be done by the VA system to improve connections with community providers in several different service sectors. A variety of platforms for communication, including targeted interventions for providers, public service announcements, and smart phone apps, are discussed.

Learning Objectives
1. To describe the perceived provider-level barriers to care for community-dwelling Veterans seeking mental health services, in particular suicide prevention services, from the VA.
2. To describe the perception of Veteran needs for mental health, particularly suicide prevention services, from the perspective of providers in Midwestern state.
3. To describe organizational barriers to care by setting (rural or urban) and organization type (VA or non-VA community-based agencies).
Infection- To Treat or Not Treat

List of Participants and Their Roles in the Abstract

Name: Mark Joshua Biscone
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Role(s): Submitter; Presenter

Name: Samir Awad
Organization: Michael E. DeBakey VA Medical Center
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
An overview of the normal and abnormal wound healing processes is provided along with their relation to wound infection. Comprehensive patient workup for wound infection is paramount for successful treatment. An emphasis on recognizing the signs, symptoms and risk factors is discussed. Strategies for interdisciplinary collaboration in the comprehensive management of the infected wound is offered. The role of debridement is also presented as an integral component in the treatment of all wound types. Advanced treatment modalities including local and systemic therapies in addition to surgical wound coverage are discussed.

Learning Objectives
1. Describe Normal vs. Abnormal Wound Healing, recognize the signs and symptoms of wound infection and discuss common types and presentations of wound infection.
2. Identify risk factors that lead to wound infection
3. Discuss the work up of the potentially infected wound, recognize when subspecialty consultations can be helpful in treating wound infection and identify methods for prevention of wound infection including those for the "incurable wound"
4. Explain when to use topical antimicrobials, antiseptics, and other local and systemic treatments for wound infection
5. Describe the various types of wound debridement and their indications for use in treating wound infection and maintaining a wound environment conducive to normal wound healing
List of Participants and Their Roles in the Abstract

Name: Kevin Edward Kip
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Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Introduction: From Operation Iraqi Freedom, Enduring Freedom, and New Dawn deployments, prevalence estimates of Military Sexual Trauma (MST) are

Learning Objectives

1. Describe the underlying theoretical basis of ART and its application to treatment of Military Sexual Trauma
2. Describe the basic clinical elements of the ART protocol for treatment of Military Sexual Trauma
3. Synthesize the current empirical base of ART with emphasis on treatment of Military Sexual Trauma, and the types of future studies needed to further evaluate and quantify the benefits of this therapy
Improving Psychological Health Outcomes for Service Members through Outreach and Service Delivery Integration

List of Participants and Their Roles in the Abstract

Name: Susan Jordan  
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Role(s): Submitter; Non-presenting contributor

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Organization: Tri-service Integrator of Outpatient Programming Systems  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Though Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) Service members (SMs) comprise a small fraction of the general population, the prevalence of psychological health conditions (i.e., PTSD) in this group is twice the lifetime prevalence of the general population (Gradus, 2011). The Tri-service Integrator of Outpatient Programming Systems (TrIOPS) is a new Deployment Health Clinical Center (DHCC) initiative whose mission is to optimize and synchronize the efforts of outpatient specialty care programs for the treatment of PTSD across the Department of Defense (DoD). This broadly-defined spectrum of care includes day treatment programs (DTPs), intensive outpatient programs (IOPs), partial hospitalization programs (PHPs), and residential programs.

TrIOPS was established to develop a network of emerging and existing outpatient specialty care program to heighten collaboration and communication. Programs that engage with TrIOPS benefit from an array of resources, products, and services, including guidance on program structure, outcome measures, psycho-educational programming, and program evaluation approaches and techniques. TrIOPS provides opportunities for specialty care programs to see measureable improvements in treatment outcomes, staff functioning, and cost containment.

It is important to not only optimize service provision at the granular level but streamline the system in which care is being provided as well. While consulting with specialty care programs, TrIOPS is constructing a knowledge base and will provide relevant advice to Military Treatment Facility (MTF) and Military Health System (MHS) leadership in the form of evidence-based recommendations that lead to informed decision-making and policies. Ultimately, this initiative will impact the provision of clinical care such that these programs and overarching mental health systems within the military are continuously improving.

Learning Objectives

1. Gain insight on the benefits of an approach and process to systematically develop, track, and assess the performance of behavioral health programs.
2. Gain awareness of the current TrIOPS network and learn how programs approach provision of multidisciplinary specialty care programming to Service members experiencing combat-related psychological health concerns.
3. Increase awareness of TrIOPS as a centralized hub for specialty care programs to assure development of evidence based treatments; efficient use of resources; and decreased cost and administrative inefficiencies.
Subtleties of Trauma Spectrum Disorders: Reintegrating America’s Returning Warriors

List of Participants and Their Roles in the Abstract

Name: Jeffrey Scott Yarvis
Organization: Carl R. Darnall Army Medical Center
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Much attention is given returning veterans and war-induced syndromes such as PTSD. Indeed an estimated 10-20 percent of returning soldiers will have PTSD. However, what about the other 80-90 percent? What are their experiences and are those experiences clinically relevant or indicative of psychosocial problems. Recently a growing literature addressing the issue of subthreshold posttraumatic stress disorder has appeared. However, only a small portion of this growing literature base represents empirical investigations of subthreshold PTSD and its implications. Reliance on diagnostic models of psychiatric disorders has lead to a lack of investigation of the posttraumatic sequelae falling short of criteria for PTSD and limited the way clinicians interact with returning veterans. This very intimate presentation will discuss the subtle aspects of coming home and the nature of sub-clinical presentation and what soldiers and care givers should concern themselves with.

Learning Objectives
1. Participants will understand the impact and opportunities of prevention when given information on sub-clinical trauma presentations.
2. Participants will understand the impact of returning soldiers to garrison or the civilian workplace and how to identify and respond to subtle indicators in a veteran behavior.
3. Through real case vignettes and presentation of research participants will understand the clinical relevance of sub-clinical and subtle presentations in returning veterans with respect to comorbid medical and psychological conditions
4. Providers will understand the the extent to which intimate communication is necessary when reintegrating warriors to their families.
Secondary Trauma in Military Primary and Mental Health Care Providers

List of Participants and Their Roles in the Abstract

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Role(s): Submitter; Presenter

Name: Sara Kintzle  
Organization: University of Georgia  
Role(s): Non-presenting contributor

Name: Brian Bride  
Organization: University of Georgia  
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The purpose of this study was to explore the prevalence and knowledge of secondary traumatic stress in military health care providers. Secondary traumatic stress (STS) refers to the development of symptoms of posttraumatic stress disorder after indirect exposure to trauma (Figley, 1999). For professionals working with traumatized populations, this results from exposure to client or patient trauma. STS has been shown to not only negatively impact professionals but also the care they provide (Bride, 2004). Although the military population could arguably be one of the most highly exposed groups of traumatized populations, very little has been done to explore the potential impacts of working within the military primary and mental health care systems. Result of the study demonstrated that over half of participants were experiencing at least one symptom of STS. One-fourth of the sample reported moderate to high levels of symptoms.

Learning Objectives
1. Examine prevalence of secondary traumatic stress in military professionals,  
2. Explore the prevalence of secondary traumatic stress as related to most frequently reported symptoms and reports of severe symptomatology  
3. Describe the process of vicarious traumatization
Effects of repeated isoflurane exposures on cognitive and behavioral outcomes

List of Participants and Their Roles in the Abstract

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Introduction

Service Members wounded during combat operations, as well as civilian requiring multiple surgical interventions, may require multiple administrations of general anesthetics in a short period of time. How multiple exposures to general anesthetics impacts the brain is unknown.

Methods

We examined long-term potentiation in the hippocampus and spatial learning and memory after repeated exposures to isoflurane. Electrophysiology: Male Sprague-Dawley rats, ages 7-14 weeks were anesthetized with 1.5% isoflurane and 100% oxygen for one hour every other day (3 exposures/week). 24h or 7d after final anesthetic, CA1 hippocampal field recordings were obtained. Morris water maze: Rats were anesthetized using the above paradigm. 24h or 7d after final anesthetic, animals underwent 4 days of water maze training and a probe (memory expression) trial on day 5.

Results

Electrophysiology: 24h after the final anesthetic, hippocampal LTP was increased, while at 7d LTP was inhibited compared to baseline. Morris water maze: 24h and 7d groups did not differ significantly from the sham animals in either latency or distance traveled to platform. However, both experimental groups displayed a significant decrease in speed through the water during the 4 memory training days. During the probe trial number of entries and time spent in the platform quadrant did not differ among groups. However, both experimental groups displayed a significant decrease in both speed and distance traveled.

Conclusion

Repeated exposures to isoflurane altered hippocampal plasticity and induced depressive-like symptoms. Continued study of how repeated isoflurane exposure impacts the brain will advance the development of rehabilitative medicine strategies.

Learning Objectives

1. The learner will be able to list the brain regions implicated for learning and memory.
2. The learner will be able to explain the Morris water maze as a tool for assessing spatial learning and memory.
3. The learner will be able to describe synaptic plasticity and its role in memory and learning.
**Empowering Veterans to Improve Diabetes Self-Management: A Multidisciplinary Approach**

**List of Participants and Their Roles in the Abstract**

Name: Tiffanie Fennell  
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Role(s): Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Background**

Diabetes self-management education (DSME) is an essential component of diabetes care. Our facility recognized a need to provide DSME to Veterans by a multidisciplinary team of dietitians, psychologist, and pharmacist/certified diabetes educator. The DSME program employs behavior modification with basic diabetes education to improve diabetes outcomes and patient self-efficacy.

**Method**

Of 57 Veterans with Type I or Type II Diabetes, results were included from 42 attending at least six sessions. Most were men (90.5%), White (45.2%) or Black (35.7%), with an average age of 59.1 (SD = 8.4).

Groups of 8-12 Veterans met 8 weeks for 1.5 hours. Topics included diabetes overview, nutrition, exercise, medications, managing glucose, coping skills, reducing complications, and problem-solving skills. Group approach was a balance of didactics and discussion with goal-setting.

**Results**

Pre-group A1c values compared to values 0-3, 3-6, 6-12, and 12-24 months post-group did not significantly differ. Self-efficacy to follow diet when preparing or sharing food with others ($t(36)=-2.359, p=.024$), choose appropriate foods when hungry ($t(35)=-3.079, p=.004$), judgment when changes in illness mean visiting the doctor ($t(36)=-2.52, p=.016$), and controlling diabetes so that it does not interfere with one’s desires, ($t(35)=-2.842, p=.007$) significantly improved following group. While improved, self-efficacy did not significantly differ on eating meals and exercising regularly, maintaining normoglycemia when exercising, or managing hyper/hypoglycemia.

**Discussion**

Program strengths include a multidisciplinary approach to the delivery of DSME resulting in an increase in patients' self-efficacy for self-management. As this program is ongoing, more investigation is needed to translate improvements in self-efficacy to improvement in clinical markers.

**Learning Objectives**

1. Describe a multidisciplinary approach to diabetes self-management education.
3. Compare and contrast pros and cons of a multidisciplinary versus single provider approach.
**Evaluation of an Isoniazid-Rifapentine Protocol in the BOP**

**List of Participants and Their Roles in the Abstract**

Name: Sherri Ann Wheeler  
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Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

The standard regimen for treatment of Latent Tuberculosis Infection (LTBI) in the Federal Bureau of Prisons (BOP) is a 9-month regimen of isoniazid (INH) which is administered twice weekly via direct observation. Completion rates for INH regimens are low (60% or less) attributable largely to the lengthy duration of therapy. In December 2011, Centers for Disease Control and Prevention (CDC) published: Recommendation for Use of an Isoniazid-Rifapentine Regimen with Direct Observation to Treat Latent Mycobacterium tuberculosis Infection (Jereb, Goldberg, Powell, Villarino, & LoBue, CDC, 2011 Report). The new treatment regimen requires a once weekly dose of isoniazid (INH) and rifapentine (RPT) via the mouth under directly observed therapy (DOT) for a period of 3 months (12-weeks). The objectives of the evaluation of the implementation of a new INH-RPT protocol, within the BOP, are to evaluate a new short-course regimen for treatment of latent tuberculosis infection (LTBI) in a cohort of Bureau of Prisons inmates (identified by the protocol criteria), assess the occurrence of adverse effects of INH-RPT in an inmate population to determine if it is appropriate to recommend it for use throughout the BOP, and compare compliance rates of the standard isoniazid only 9-month treatment versus the new INH-RPT regimen.

Within the BOP the 3-month INH-RPT regimen has significant potential advantages over 9-month INH because both the total number of doses and duration of therapy are far lower with 3-month INH-RPT. However, the use of the 3-month INH-RPT regimen has not been systematically evaluated in a population of inmates.

**Learning Objectives**

1. Evaluate a new short-course regimen for treatment of latent tuberculosis infection (LTBI) in a cohort of Bureau of Prisons inmates (identified by the protocol criteria)
2. Assess the occurrence of adverse effects of INH-RPT in an inmate population to determine if it is appropriate to recommend it for use throughout the BOP
3. Compare compliance rates of the standard isoniazid only 9-month treatment versus the new INH-RPT regimen
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The Navy Comprehensive Pain Management Program’s (NCPMP) mission is to aid in the restoration of function and relief of pain by broadening access to state-of-the-art, evidence-based, standardized, and multimodal pain care. The NCPMP’s key resources are its R4 Pain Teams & R4 Regional Subspecialty Teams, named after the four core objectives: Readiness, Restoration of Function, Relief of Pain and Research. In addition R4 resources, the NCPMP provides clinical support through its Tele-Health, Complementary & Alternative Medicine (CAM), Prescription Medication Misuse, and Metrics support projects. The focus of this research project is to evaluate the effectiveness of the program to date with emphasis on three areas: patient satisfaction and overall health assessment, provider satisfaction with the R4 program and lastly cost savings for BUMED related to telemedicine support for patients. The end goal is to demonstrate to the Navy Surgeon General the value and effectiveness of telemedicine for management of chronic pain and to serve as a model for telemedicine programs for other chronic medical conditions.

Learning Objectives
1. Describe the current telemedicine pain management program and current locations of activity.
2. Review data from the past 12-18 months related to patient satisfaction and overall well-being.
3. Review data related to cost savings related to decreased medical tdy travel.
4. Review data related to monthly educational sessions.
Global Alliance of Drug Information Specialists: A Partnership among Pharmacists

List of Participants and Their Roles in the Abstract

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Matching the uniqueness of a federal Drug Information Center (DIC) with the needs of hospital and academic based DICs can provide a significant opportunity to build a collaborative community among drug information pharmacists, thereby providing a forum to benchmark best practices, and discuss clinical practice strategies to advance public health. The Division of Drug Information (DDI) within the Food and Drug Administration (FDA) is uniquely positioned as a federal DIC to facilitate this collaboration. As such DDI established the Global Alliance of Drug Information Specialists (GADIS), a new grass roots program for drug information pharmacists. Since launching in December 2011, GADIS has facilitated four successful collaborative events discussing topics of interest to drug information pharmacists. The positive impact of these initiatives is immediate. Agency representatives gain insight to the clinical challenges faced by health care professionals while GADIS members obtain access to Agency resources.

The presentation will feature examples of the collaborative effect of GADIS. For example, through its May 2012 dabigatran Webinar, Subject Matter Experts (SMEs) from FDA’s Division of Cardiovascular and Renal Products joined fifty GADIS members to discuss the clinical management of significant dabigatran bleeding events. Agency SMEs gained insight and feedback on challenges faced by pharmacists managing bleeding events while GADIS members obtained access to the SME’s insights and knowledge of other clinical strategies. GADIS meets the mission of Healthy People 2020 by “engaging multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence, and knowledge.”

Learning Objectives
1. Analyze both federal and non-federal drug information centers and their roles in public health.
2. Identify the need for collaborative partnerships among drug information specialists.
3. Describe the Global Alliance of Drug Information Specialists (GADIS) program.
4. Identify the public health significance and impact of GADIS and its initiatives.
Integrated Disability Evaluation System (IDES): Rules, Tools, and Lessons Learned

List of Participants and Their Roles in the Abstract

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body

“IDES: Rules, Tools, and Lessons Learned” provides an opportunity for both new and experienced providers to increase individual awareness and competency in this critically-important joint collaboration between Department of Defense (DoD) and Department of Veterans Affairs (DVA). The target audience includes 1) Military and Civilian DoD healthcare providers assigned as Medical Evaluation Board (MEB) staff; 2) DVA examiners providing Compensation & Pension examinations in support of IDES; 3) Operational Medical Officers with oversight of profiling and MEB processing in their units; 4) Primary Care Managers (PCM) responsible for managing medical readiness of Soldiers; and 5) Warrior Transition Unit PCMs. Many new policies took effect in 2013, affecting both DoD and DVA providers, and participants will become stronger subject matter experts regarding current policies and procedures in these areas. Through a combination of didactic and case-oriented discussion, emphasizing recent metrics and lessons learned from the field, the following topics are planned: 1) Overview of Physical Disability Evaluation and IDES; 2) Current Trends in IDES across DoD and DVA; 3) Recent Policy Changes and New Regulations Impacting IDES; 4) Physical Profiling & Medical Readiness in the Context of the Medical Retention Determination Point (MRDP); 5) Optimizing the Impact of the MEB Narrative Summary Using the DVA C&P Exam; and 6) Future Initiatives in IDES.

Learning Objectives

1. Describe the Integrated Disability Evaluation System (IDES) and explain its role in military readiness.
3. Discuss recent changes to IDES policies, rules, and regulations affecting operations impacting clinicians, administrators, and patients.
4. Identify lessons learned from IDES operations over the past year, from both DoD and DVA.
Military Sectors Role in Global Health: Historical Context and Future Direction

List of Participants and Their Roles in the Abstract

Name: Derek Licina  
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Canberra AU  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The military sectors role in global health has gained visibility in recent years following disaster responses to the Asian Tsunami and Haiti earthquake as well as humanitarian assistance activities conducted throughout the world. What is less clear is the overall contribution of the sector writ large to population health through direct and indirect investments. These investments range from medical research and development to peacekeeping operations while serving normative, technical assistance, and coordinating roles. Focusing efforts where they are required as identified in international agreements such as the Geneva Conventions and expanding multilateral organizations such as the International Congresses of Military Medicine and Global Uniformed Services Task Force may improve near term efficiencies. A collective military global health financing mechanism to support these efforts is also necessary. Through further enhancement of existing structures, the military sectors role can become more efficient and effective in supporting the global good. The health and security of individuals and states throughout the world deserve nothing less.

Learning Objectives
1. Recognize historical role of international military sectors role in global health
2. Identify current global health contributions of the military sector
3. Describe future investments for military sector to make toward global health in accordance with international law and comparative advantage
The role of hospital ship humanitarian assistance missions in building partnerships

List of Participants and Their Roles in the Abstract

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background: Navy hospital ships are used as a foreign policy instrument to achieve various objectives that include building partnerships. Despite substantial resource investment in hospital ship missions, their impact is unclear. The purpose of this study was to understand how and why hospital ship missions influence partnerships.

Methods: An embedded case study was used and included the hospital ship Mercy’s mission to Timor-Leste in 2008 and 2010 with four units of analysis: the U.S. government, partner nation, host nation, and non-governmental organizations.

Results: Fifteen themes related to how and why hospital ship missions influence partnerships emerged from the 37 interviews and documentary review. The five most prominent included: developing relationships, developing new perspectives, sharing resources, understanding partner constraints, and developing credibility. Facilitators to joining included partner nations seeking a regional presence and senior executive relationships. Enablers included historical relationships and host nation receptivity. The primary barrier was the military leading the mission. Internal constraints included the short mission duration, participant resentment, and lack of personnel continuity. External constraints included low host nation and USAID capacity.

Discussion: The research found the idea of building partnerships exists among most units of analysis. However, the results show a delay in generating action and impact among participants. Without a common partnership definition and policy, guidance, and planning documents reinforcing these constructs, achieving the partnership goal will remain challenging.

Conclusion: This is the first study to scientifically assess the partnership impact of hospital ship missions and could support the DoD’s effort to establish, enable, and sustain meaningful partnerships.

Learning Objectives
1. Describe how hospital ship missions are evaluated in the literature
2. Identify how Navy hospital ship missions influence partnerships
3. Recognize the facilitators, enablers, barriers, and constraints to hospital ship missions building partnerships
Abstract Body

The Department of Defense Instruction (DoDI) 6000.16 entitled Military Health Support (MHS) for Stability Operations was published in 2010 and established policy that Medical Stability Operations (MSOs) would be a core military mission. The instruction set out to institutionalize how the MHS would effectively support MSOs and assist in bridging the gap with other actors operating in the same space. What is less clear is the current status of the MHS in accomplishing the responsibilities outlined in the DoDI. Even more concerning is how these efforts will support the “new” strategic guidance for the DoD published in January 2012 that states *U.S. forces will no longer be sized to conduct large-scale, prolonged stability operations.* In the absence of a publicly available DoDI 6000.16 implementation strategy, this article proposes the use of an organizational transformation process developed by internationally acclaimed leadership and organizational change expert Dr. John Kotter. The eight-step process is used as a framework to explore ways to effectively transform the DoD in meeting the intent of the Medical Stability Operations DoDI. The past decade has transformed how service members think about medical stability operations. Now is the time to transform the MHS with urgency to institutionalize these thoughts.

Learning Objectives

1. Explain how an organizational transformation model can be applied to institutionalize medical stability operations in the MHS
2. Describe the eight-steps in the Kotter transformation model
3. Identify key individual and committee leadership necessary for medical stability operation transformation in the MHS
Are Patient Centered Medical Homes Scalable in Purchased Care Models?

List of Participants and Their Roles in the Abstract

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Name: Christine Hunter  
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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Mary Scheuermann, MSW, MPH
Christine Hunter, MD, RADM, MC, USN (ret)

Federal insurance programs are uniquely positioned to expand PCMH implementation nationwide. The US Office of Personnel Management (OPM) contracts with 95 health plans to provide care for 8.2M lives via the Federal Employees Health Benefits (FEHB) Program. FEHB encourages plans to offer PCMH to enhance access, improve care, and lower costs. Along with direct delivery models, VA, TRICARE, and Medicaid also contract for care. OPM recently issued guidance clarifying PCMH criteria and measures of effectiveness to achieve consistent results.

Recognizing that plans vary in service areas, delivery models, and networks, OPM defines PCMH based on national standards to ensure quality while maximizing flexibility. Medical home certification/recognition from NCQA, The Joint Commission, URAC, and AAAHC is accepted. Alternatively, plans may participate in CMS’ Comprehensive Primary Care initiative. Plans using other criteria must document how they meet PCMH core principles and validate compliance. A standard set of HEDIS measures is required. Using these criteria, >750,000 FEHB members are enrolled in PCMH.

Preliminary data suggests plans offering PCMH to FEHB enrollees are more likely to have HEDIS scores above the national mean in Breast Cancer Screening (p=0.005), Cholesterol Management for Patients with Cardiovascular Conditions (p=0.04), and 7-day Follow-up after Hospitalization for Mental Illness (p=0.05). We acknowledge limitations due to data quality and reporting bias. Additional data will be analyzed to confirm initial impressions. If PCMH impacts performance and outcomes in FEHB, other Federal programs could utilize OPM’s model to improve contracted care.

Learning Objectives

1. Recognize successful strategies for PCMH implementation in Federal purchased care models
2. Explain criteria and methodology to consistently identify PCMH
3. Discuss quality metrics used to document outcomes and establish trends for PCMH populations
Abstract

The military has played a significant role in providing humanitarian assistance globally. Engaging globally for humanitarian as well as training and education, the military annually conducts many Humanitarian assistance projects under the Overseas Humanitarian, Disaster, and Civic Aid program. Although many projects involve patient care, others are health related (e.g., construction, and renovation of clinics and hospitals or donation of excess medical supplies and equipment). The United States joint military medical community has an increasing role in collaborative health sector engagement internationally as part of the government approach to successful operations.

In August 2012, I deployed to Panama for United States Air Force (USAF) Panama MEDRETE, a humanitarian and civic assistance mission. In a nine day period over 9,000 local citizens received medical, optometry, dental care, women’s health and immunization. The Panama Ministry of Health and Panama National Police, and local civilians worked collaboratively with more than fifty U.S. Air Force and Air National Guard personnel during this operation. The success of this mission was due to the collaborative efforts of all members of the mission team.

My primary role was one of the clinical nurse and as International Health Specialist (IHS). As a clinical nurse, it provided numerous opportunities to work with the Panamanian doctors and nurses, and share up to date nursing and Infection Prevention and Control information with local nurses, health care workers, school children, teachers, and the general public. AS an IHS, I engaged in building global health partnership and established relationship with the host nation. While fulfilling my primary mission responsibilities I remained flexible and I was tasked as required to support the mission in other capacities.

The purpose of this presentation is to share my experiences and lessons learned. Resources will be provided for healthcare providers and international colleagues who want to pursue the opportunity to participate in a humanitarian mission.

Learning Objectives

1. Provides medical assistance and services to the Panamanian people
2. Promotes the total-force concept, Joint force between US Armed Forces and Panama Ministry of Health
3. Sustains the ability and know-how for the host nation’s medical providers
4. Allows military airmen the opportunity to use their skills in non-military environment
5. Improves military-civilian collaboration
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Menstrual suppression has been safely used for many years by women around the world to avoid disabling cramps as well as to treat a range of common gynecologic disorders. Menstrual suppression may be particularly important for women working in environments that lack running water, as maintaining appropriate personal hygiene can be challenging with limited sanitation supplies. Thus, undesired menstruation leaves some Servicewomen and women Veterans facing genital irritation, anemia, and urinary tract infections that can create long-term disability. Currently, few military women are counseled about the benefits of menstrual suppression as part of their predeployment preparations. In an effort to optimize troop readiness and guide those caring for women Servicemembers and Veterans, this session will review the evidence supporting use of five therapeutic approaches to freeing women from cyclic bleeding. In addition to highlighting the comparative-effectiveness and cost-effectiveness of various approaches to menstrual suppression, we will discuss recommended screening prior to initiation of each of these therapies, and the potential contraindications to their use. We will review the range of cyclic symptoms (e.g., headaches, asthma, acne, pelvic pain) that frequently improve with ovarian suppression and discuss the effects of menstrual suppression on women’s risk of cancer of the ovaries, endometrium, breast, or cervix. Finally, we will discuss common causes of unscheduled bleeding and review the evidence supporting current therapeutic approaches to treating bothersome unscheduled bleeding (including the use of estrogen supplementation, nonsteroidal anti-inflammatory drugs, and subtherapeutic-dose doxycycline).

Learning Objectives
1. Provide evidence-based guidance on menstrual suppression
2. Identify common causes of unscheduled menstrual bleeding
3. Review current approaches to reducing bothersome unscheduled bleeding
Point-of-Care Enrollment of Patients Into a Secure Online Messaging Service

List of Participants and Their Roles in the Abstract

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Role(s): Non-presenting contributor

Name: Jose Acosta  
Organization: FHCC  
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Secure online messaging is an effective method of enhancing patient-centered care and improving communication between medical teams, patients, and their families. In June 2011, the Pediatrics Clinic at the Captain James A. Lovell Federal Health Care Center (FHCC) adopted RelayHealth, an internet-based communication service endorsed by the Department of Defense (DoD) for military-based primary care clinics. Initially, patient enrollment in this system was accomplished by collecting family email addresses during visits and then sending electronic invitations requesting the addressee to enroll their dependent children in the service. In the first year of initiation, our clinic saw only an 18% success/acceptance rate with just 153 patients registered. In June 2012, we changed our strategy for enrolling patients: instead of email invitations, we used clinic staff (corpsmen and medical assistants) to help families sign up on clinic computers at the end of their visit. Enrollment subsequently soared: in the next 11 months, over 1800 pediatric patients, more than 50% of our total empanelment, were successfully registered in RelayHealth. Clinic staff and providers have enthusiastically adopted online messaging to answer clinical questions, relay test results, and refill medications or renew referrals. As a direct result of this enhanced communication, we have seen dramatic improvement in appointment availability and access, increased patient and provider satisfaction, and decreased message center utilization as well as indirect improvement in our HEDIS measures, influenza vaccination rates, and no-show rates.

Learning Objectives

1. Describe the advantages of enrolling patients into a secure online messaging service at point-of-care instead of through electronic invitations.
2. Report the measurable successes of having a robust online messaging population.
3. Explore future projects to enhance online communication relationships with patients and their families.
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
In October 2010, the Navy and the Department of Veteran’s Affairs (VA) officially consolidated their respective medical facilities in the Great Lakes area to open the nation’s first fully integrated VA-Department of Defense (DoD) medical center, the Captain James A. Lovell Federal Health Care Center (FHCC) in North Chicago, IL. Unique to this partnership was the introduction of pediatric patients into a previously adult-only hospital. Aspects of pediatric healthcare delivery required additional attention from pediatric specialists to ensure safe, age-appropriate, and comprehensive care of the children of active duty and retired military members. Safety concerns, including advocating for pediatric-specific issues in hospital policies and procedures as well as refining emergency responses to pediatric cardiorespiratory arrest and child and infant abduction, were addressed from physical, medical, and administrative perspectives. Despite early challenges encountered with using two electronic medical records (EMR), eventually both systems used were fully integrated and orders were portable ensuring improved safety and better continuity of care. More than two years after the initial integration, the Lovell FHCC Pediatric Clinic is thriving. Patient and staff satisfaction is excellent and continues to improve. The combined facility offers a safe and welcoming environment for children and their families and the medical care has remained excellent. The Lovell FHCC Pediatric Clinic is the first of its kind in a combined VA-DoD medical center. By addressing many of the issues that affect children in a historically adult-based medical system, the Lovell FHCC Pediatric Clinic should be the model for future integrated sites.

Learning Objectives
1. Discuss the challenges of delivering pediatric care in an integrated VA-DoD medical center.
2. Describe lessons learned and strategies for overcoming potential problems delivering pediatric care in a previously adult-only medical system.
3. Analyze next steps for the Lovell FHCC Pediatric Clinic as it relates to future potential integrated facilities.
Post-War to Prison – Continuing Clinical Skills in the Future

PHS
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Name: Michael Joseph Tartaglia
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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
As the Services and budgets adjust to a post-war period following over a decade on the battlefield clinicians are now looking to where they can continue to utilize their skills outside of their Military Service whether retiring or a reduction in available positions. The United States Public Health Service (USPHS), with over 6,000 healthcare professionals provides an opportunity to continue in Uniformed Service for clinicians in the Federal Bureau of Prisons (BOP). With over 1,600 healthcare providers within the BOP there are opportunities as a civilian provider or a USPHS officer within 119 institutions in the United States and territories for clinicians to serve vulnerable populations that are now confined within the BOP.

Working for the BOP provides a unique opportunity to provide a full range of healthcare skills to deliver medically necessary healthcare to inmates effectively in accordance with proven standards of care without compromising public safety concerns inherent to the Bureau’s overall mission. BOP healthcare opportunities and experiences will be explored with BOP staff to gain an understanding on how you can continue in civil or Uniformed Service with the BOP following a military career.

Learning Objectives
1. Participants will be able to describe the clinical settings of the Federal Bureau of Prisons
2. Participants will be able to explain how providers are selected in the Federal Bureau of Prisons
3. Participants will be able to discuss examples of healthcare provided to inmate patients within the Federal Bureau of Prisons
An Innovative Brief Mindfulness Model for Stress Reduction Among Healthy, High-functioning Adults

List of Participants and Their Roles in the Abstract

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Research show that the Mindfulness-Based Stress Reduction (MBSR) model yields a wide range of health benefits among varied populations (Chiesa & Serretti, 2009). However, more data is needed on next-generation, brief mindfulness-based models that are designed to meet the needs of healthy high functioning adults. While effective, MBSR follows a therapeutic model and requires significant instructional and practice time. This may not be attractive or feasible for Federal employees, military service members and health care providers who nonetheless experience chronic stress.

This presentation will introduce a brief next-generation online mindfulness-based stress reduction model and provides practical instruction on teaching mindfulness techniques for stress reduction. The highlighted techniques were developed over the past two years in face-to-face seminars for Federal employees and health care providers deployed overseas. Preliminary data from a recent pilot study suggests that this non-MBSR model reduced stress levels significantly (P=0.0048) among healthy adults. This data, combined with anecdotal evidence provided by Federal workers, suggests that further research is needed on this promising replicable model designed specifically to be palatable and effective among high functioning adult populations.


Learning Objectives
1. Describe the role of mindfulness in stress reduction.
2. Learn and discuss two mindfulness techniques for personal stress management.
3. Present instructions for two mindfulness techniques appropriate for use in clinical settings.
Weak Link of Triage Systems

List of Participants and Their Roles in the Abstract

Name: Robert Colligan
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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The current concepts of trauma triage fail to provide definitive answers to questions regarding appropriate system utilization and measurable effectiveness. In order to obtain the answers we need to develop effective trauma systems we may need to revise the questions. I suggest a pragmatic approach to development of practice management guidelines for the appropriate triage of the victim of trauma. This proposal is based on the basic concepts of General Systems Theory and Sentential Logic from the perspective of the field practitioner.

Learning Objectives
1. Differentiate between trauma triage performance goals and management objectives.
2. Appraise the value of information obtained from patient assessment.
3. Design a trauma management system to fulfill the requirements of any particular contingency.
Integration of Surgical Resident Training Into U.S. Navy Hospital Ship Humanitarian Missions

List of Participants and Their Roles in the Abstract

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Name: Trent Douglas  
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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

OBJECTIVES: The USNS Mercy hospital ship provides regular humanitarian and civic action (HCA) support to countries in Southeast Asia. These deployments foster partnerships between the United States, host countries, partner nations and non-governmental organizations to improve global health in the region. These missions offer the opportunity for Navy surgical residents to develop key operational, operative and non-operative skills. We describe the pre-mission planning, operative experience and the integration of surgical resident training into these humanitarian missions.

METHODS: Pre-deployment surgical plans, after-action reports and operative databases were reviewed for Mercy missions from 2006 to 2012. Operative cases were analyzed utilizing Accreditation Council for Graduate Medical Education (ACGME) General Surgery defined category requirements.

RESULTS: During 4 HCA deployments, in conjunction with 11 partner nations, the Mercy participated in 20 visits among 10 countries in Southeast Asia, where 3,994 patients were evaluated in surgical screening clinics and 2887 surgical procedures were performed. Eighteen surgical residents participated. General, Pediatric, Plastic, Urology, Gynecology and ENT surgery performed 65% of procedures. Of the general surgery eligible operations, 79% were ACGME defined category cases, including the abdominal (31%), skin, soft tissue & breast (21%), head and neck (20.5%), plastics (15.5%), and pediatric (17%) categories.

CONCLUSIONS: Hospital ship based humanitarian surgical rotations provide a diverse operative experience and a unique educational opportunity for young Navy surgeons by exposing them to various global health systems, diverse cultures and complex logistical planning. Additionally, for many residents these rotations serve as their first exposure to operational medicine, preparing them for future deployments.

Learning Objectives

1. Describe the capabilities and the mission of the USNS Mercy
2. Describe how the U.S. Navy integrates surgical resident training into humanitarian and civic action (HCA) deployments
3. Discuss the operative, non-operative and operational skills learned by Navy surgical residents during HCA deployments
4. List four ways U.S. Navy hospital ship based HCA deployments support Navy and national strategic objectives
5. Explain the difference between HCA missions and Foreign Humanitarian Assistance missions and the USNS Mercy role in both
Evidence suggests that approximately 200,000 deaths in US hospitals every year are attributable to preventable medical errors and infections. That’s more than 500 deaths every day! Poor teamwork, communication, and standards discipline are “root causes”. The aviation industry instituted Crew Resource Management (CRM) and standardization almost 3 decades ago and has become a hallmark of safety. Enhanced situational awareness, communication, and accountability significantly reduced errors and mishaps. The same can be true in medicine, particularly military medicine. TeamSTEPPS and Partnership for Patients are DoD initiatives to reduce preventable errors. TeamSTEPPS delineates the fundamentals for team-based healthcare through the key principles of team structure, leadership, situational monitoring, mutual support, and communication. Numerous studies have documented decreased errors and improved patient care with the employment of TeamSTEPPS. Partnership for Patients implemented evidence-based standards for nine high frequency/high risk for harm patient care areas plus readmissions. Early feedback reveals decreasing harm events, infections, and readmissions. The culture of teamwork, standards, and safety so ingrained in the military can readily transition to healthcare and military medicine can be the leading edge for patient safety!

**Learning Objectives**

1. Describe the key principles of TeamSTEPPS and how effective team-based healthcare can decrease medical errors and improve patient care.
2. Describe the evidence-based protocols implemented through Partnership for Patients and how employment of these protocols can decrease harm events and infections.
3. Delineate the root causes of preventable medical errors and infections and how they contribute to 200,000 patient deaths in US hospitals every year.
Federal Medical Center (FMC) Devens, one of 6 Medical Referral Centers (MRCs) in the Federal Bureau of Prisons, has several unique missions pertaining to delivering healthcare to inmates. One of these missions is providing medical care for federal inmates with chronic kidney disease (CKD) and those with end stage renal disease who require dialysis. FMC Devens is the only federal prison where inmates have received kidney transplants while being incarcerated, including a total of 21 transplants done since 2004. The causes of CKD and details of the dialysis program at FMC Devens will be discussed. Vascular access complications and some of the daily challenges dialysis inmates face, such as electrolyte abnormalities, will be included. In this presentation, we will also describe the FMC Devens transplant program in detail, including the pre-transplant workup and post-transplant follow-up. Finally, we will explain how a multi-team approach of medical and correctional professionals play important roles for allowing quality care to be given for the CKD, dialysis, and kidney transplant inmates at FMC Devens.

Learning Objectives
1. To explain the challenges of medical management of CKD and dialysis
2. To explain in detail the FMC Devens kidney transplant program
3. To explain the unique relationship between the correctional institution and transplant centers in coordinating medical care for transplant inmates
BASIC TRAINING IN HUMAN CENTRIFUGE OF SPANISH FIGHTER PILOTS

List of Participants and Their Roles in the Abstract

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Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Introduction. The development of the jet engines has permitted overexceeding the maximum capacity of G tolerance of humans physiology. This fact has supposed a challenge to the aviation medicine which has to provide higher G protection to the pilots by means of specific training.

Material and Methods. 90 SAF student fighter pilots, 86 men and 4 women, with a mean age of 23.6 years and 150 flying hours where sent for the basic G training to the advance human centrifuge of the German AF.

Objectives: 1) Evaluation of the natural Gz tolerance; 2) Assessment of the clinical manifestations during the exposure to +7 Gz during for 15 seconds; 3) To assess if the clinical symptoms are conditioned by the natural G tolerance; 4) To detect students with low natural G tolerance.

Results. The data collection of the G tolerance values shows a normal distribution (Gauss bell) with a relaxed natural G tolerance of 4.72 Gz ± 0.84. Regarding the most common symptoms, 86.7 % reported grey-out, 72.2 % tunnel vision and 40 % experienced blackout. There is a muscle-skeletal involvement during G exposure as consequence of the straining maneuvers and 56.5 % reported forearm pain and 36.7 % arm pain. The appearance of petechiae (87.7 %), tiredness sensation (84.9 %) and motion sickness (72.4 %) where also common. The overall population was divided into four quartiles according to the natural G tolerance.

Conclusions: Blackout is more commonly reported for students with low G tolerance.

Learning Objectives
1. To describe symptoms during G exposure
2. To identify the mean G tolerance of a group of student pilots
3. To correlate the level of G tolerance with the symptoms reported
Abstract Content, Presented in Order Requested from Submitter

**Abstract Body**

Adverse drug events (ADEs) are harms from medications received during medical care. Quantifying the frequency of ADEs that occur in clinical practice is challenging; timely, nationally-representative information on ADEs has been lacking until recently. In 2004, the Centers for Disease Control and Prevention initiated collaboration with the U.S. Consumer Product Safety Commission and the Food and Drug Administration to describe the frequency and characteristics of U.S. emergency department (ED) visits and emergent hospitalizations for ADEs by enhancing an already-existing public health surveillance system, the National Electronic Injury Surveillance System. Nationally, ADEs are common and serious, causing over one million estimated ED visits, of which nearly 20% require hospitalization. Older adults (≥65 years) have the highest ADE rates (per population) and are seven times more likely than younger persons to have an ADE that requires hospital admission. Based on data from 2007-2009, an estimated 100,000 emergent hospitalizations occurred annually among older adults. Just four medications/medication classes were implicated in an estimated 67.0% (95% CI, 60.0 to 74.1) of these hospitalizations: warfarin (33.3%), insulins (13.9%), oral antplatelet agents (13.3%), and oral hypoglycemic agents (10.7%). Opioid analgesics were implicated in an additional 4.8% of hospitalizations. These data have helped focus Federal efforts to reduce ADEs from specific medications which cause clinically significant, preventable, and measurable harms. The Department of Health and Human Services is seeking to marshal the diverse resources of the Department and its Federal partners to encourage safe medication use across Federal and non-Federal clinical settings and achieve reductions in ADEs.

**Learning Objectives**

1. Provide an overview of national surveillance data describing the epidemiology of adverse drug events (ADEs) in outpatient settings.
2. Discuss the importance of targeted public health efforts addressing common, clinically significant, measurable ADEs that are amenable to prevention.
3. Introduce a recently-initiated Department of Health and Human Services (HHS) effort aimed at forming interdepartmental and public-private partnerships with the purpose of encouraging safe medication use and achieving ADE reductions across Federal and non-Federal clinical settings.
Utility of Non-Invasive Brain Computer Interface Communication Device for Veterans with Advanced Amyotrophic Lateral Sclerosis

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Background: Department of Veterans Affairs (VA) Cooperative Study Program (CSP) #567, entitled “Demonstration Programs of a Non-Invasive Brain Computer Interface (BCI) communication Device for Veterans with ALS,” was a pilot project to evaluate the acceptance and utility of a scalp (surface EEG) BCI communication device to enhance the ability of Veterans with advanced ALS to communicate and connect to the outside world via computer.

Methods: 28 Veterans with advanced ALS who had difficulty communicating by speech or writing were enrolled. The device depended on the robustness of a p300 visual identification EEG response to enable subjects to identify letters, symbols and words. All evaluations were conducted in the Veterans’ homes. Care givers were trained 1) to apply the EEG electrode cap, 2) to connect the Veteran to turn on the device and 3) to determine that the Veteran had successfully connected to the Internet and could send and receive electronic communications as well as produce text that could be expressed by synthesized speech or printed message. Each veteran had 5 training sessions conducted in their homes.

Results: The device was well accepted with no complications. 23/28 preferred the BCI to any other communication device. Six veterans died of ALS progression during their 6 month evaluation period. All survivors chose to continue using the BCI after study completion. Care givers rated the device as simple to apply and using the BCI did not complicate home care.

Conclusions: BCI was well accepted as a communication device that deserves further larger scale evaluation.

Learning Objectives
1. Describe the principles of brain computer interface (BCI) technology to record EEG signals and use computer analysis to determine what letter, symbol or word that the subject wishes to select.
2. Describe how the text generated by an individual with the BCI device can be used to produce synthesized speech, printed text and email communications.
3. Discuss the role of adaptive and assistive speech devices in preserving communications skills for people with ALS who can no longer speak or write.
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

According to the National Health Interview Survey (NHIS) of 2009, an estimated 20.6% of adults in the United States were smokers. Among deployed male and female military personnel stationed in Kuwait, 402 military members (383 Enlisted and 19 Officers) with ages ranging from 19-55 years (mean age 32 years) were randomly surveyed regarding their tobacco usage habits. The ethnicity of those surveyed were predominantly Caucasian (80%) followed in descending order by African-American, Hispanic, Asian, and Pacific Islander/Native American. Of the 402 military members surveyed, 41% (164/402) used tobacco products during the Kuwait deployment. Among the tobacco product users, 87% (142/164) were male and 13% (22/164) were female. The mean age of the tobacco users was 30 years. In contrast, of the 238 non-tobacco users, 73% (173/238) were male and 27% (65/238) were female. The mean age of the non-tobacco product users was 34 years. Thus, a higher percentage of males, as opposed to females, used tobacco products. Of the 164 military members using tobacco products, 9% (14/164) did not use tobacco products prior to deployment. During the deployment, 21% (35/164) of tobacco users further increased tobacco product usage, and 6% (10/164) decreased tobacco usage. Forty-six percent (75/164) of military personnel identified craving/habit as the primary motivating factor for their tobacco usage. Thirty-two percent (53/164) of military personnel blamed anxiety/stress; 16% (26/164) blamed boredom; and, 6% (10/164) identified socializing as the primary motivating factor for tobacco usage. Fifty-seven percent (94/164) of all tobacco users during deployment wanted to stop tobacco use upon redeployment. Seventy-five percent (40/53) of those members associating their tobacco use with anxiety intended on stopping tobacco use upon redeployment.

Learning Objectives

1. Know the estimated percentage of adult smokers in the United States
2. Know the estimated percentage of tobacco product usage among deployed military personnel
3. Know the 2 main motivating factors associated with tobacco product usage
4. Know the percentage of deployed tobacco product users intending on stopping tobacco product use upon redeployment
Bilateral complex injuries of upper limbs by weapons of war: rescue attempts with basic means

List of Participants and Their Roles in the Abstract

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Dakar
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Soldier of first class M.M. SOW has been wounded by weapons of war, in southern part of Sénégal, in the circumstances of fighting between Senegalese army and some armed groups. The incident occurred on February 11th, 2011 at 7:35 AM. He received a RPG7 on his left arm and an AK47 bullet on his right forearm. He presented complex and severe injuries related to mass loss of tissues and humeral bone on his left arm. Lesions on his right forearm were: ulnar and radial fractures; ulnar and radial artery cuttings; median and ulnar nerve cuttings; damages of all tendinous and muscular structures in the anterior space. Surgical treatment performed four hours after being injured was as follows: ulnar and radial bone osteosynthesis, radial and ulnar artery sutures; median and ulnar nerve sutures; muscular and tendinous repair; left arm amputation. Medical treatment administered combined heparin with antibiotics, painkillers and whole blood transfusion. There was no secondary ischemia; the follow-up duration was twenty-three months. The revascularization has been obtained with considerably reduced function on his right forearm. Soldier SOW has been ultimately right forearm-amputated as a result of accidental fracture. He benefited from bilateral myoelectric prosthesis in a bid to regain function. The case-report shows up the importance of the concept “stay and play” under certain circumstances with the use of basic means, even if vascular damages are severe with a limited time to intervene surgically.

Learning Objectives
1. complexity and severity of injuries by weapons of war
2. importance of the clinical examination thoroughly conducted
3. concept “stay and play” when basic means are available without much time to evacuate
Neck [1] and low back [2] complaints are common in helicopter pilots. In earlier studies, the musculoskeletal disorders are either self-reported [1, 2] or diagnosed by physicians with the focus on identifying the injured tissue that appears to be the source of the symptoms. Often, these diagnoses determine whether surgical interventions or medication is necessary. In most cases, however, conservative management is the first approach, of which physical therapy is an important component. Diagnoses related to the pathoanatomical source of pain are, however, not designed to guide physical therapy interventions.

Pain is often associated with movement and it has been suggested that alterations in the precision of movement are the cause of the tissue irritation and need to be corrected for in the rehabilitation process [2]. The aim of the study was to describe the spectrum of musculoskeletal complaints in helicopter pilots using both self-reported and physical therapy diagnoses. A second aim was to illustrate the use of a movement system impairment diagnosis for physical therapy in pilots with musculoskeletal complaints.

All pilots at a Swedish helicopter wing answered a questionnaire and performed movement tests. The pilots with self-rated musculoskeletal problems were also examined, were diagnosed with a movement system impairment diagnose and received individually designed physical therapy treatment. The treatment involved education and modification of alignment and movement patterns.

Almost half of the pilots reported musculoskeletal complaints; shoulder, neck and low back pain occurred most frequently. All but one pilot had pain with a mechanical behavior, i.e., their pain was provoked and relieved with postures, movement and/or activities. This study illustrated the positive use of a movement system impairment diagnosis in the air force and positive effects of treatment of pilots with mechanical pain. Prospective, randomized controlled trials should be done to test the efficacy.

**Learning Objectives**

- to describe how a movement system impairment diagnosis can guide treatment prescription in helicopter pilots
- to discuss whether the pilots movement impairments are due to their pain, or whether their pain is due to their faulty movement patterns
- to discuss if and how the work environment and exercise training influence on the pilots movement patterns
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
International assistance, especially through the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), has contributed significantly in supporting the Government of Vietnam to address their HIV/AIDS epidemic. In 2012, there were 210,000 PLHIV and the prevalence rate is 239/100,000 population. Yearly, about 0.24% of military inductees are found HIV positive (report by MOH in 2012 and MOD in 2004).

Amidst increasingly constraint resources to address the need, engaging a broad range of sectors, especially the military healthcare system, in HIV/AIDS prevention and control programs is crucial to sustaining a comprehensive national HIV/AIDS response. As part of this effort, the Vietnam Ministry of Defense (MOD) launched in 2005 a specific HIV/AIDS cooperation program with financial and technical assistance from the U.S. Department of Defense (DoD), funded through PEPFAR Vietnam, focused on five key components in alignment with National HIV/AIDS program: 1) Prevention 2) HIV/AIDS care and treatment 3) laboratory, 4) blood safety 5) health system strengthening.

The program contributes considerable results to confront HIV/AIDS epidemic in Vietnam. In 2012, 50,000 newly recruited military received HIV/AIDS counseling, more than 25,000 clients received VCT, 370 patients are on ART, more than 180 staff received training on care and treatment for PLHIV, VCT, blood screening, HIV testing, infection control, monitoring and evaluation and more than 14,000 blood units were screened.

Among others, a cadre of military technical staff well-trained on diagnosis and treatment of HIV/AIDS, military laboratories accredited nationally, and linkages between military and civilian services significantly improved, particularly with the national guidance on HIV prevention and ARV treatment by the Ministry of Health being well introduced. All have made possible the good quality HIV/AIDS services within the military health system and opened doors for rapid program scale-up and success.

Efforts now are focusing on assuring sustainability the program within the military system through smoothly transferring the program management, implementation and ownership to the Vietnam’s military.

Learning Objectives
1. To present achievements of the DOD PEPFAR program in Vietnam
2. To discuss initiatives leading to program success
3. To identify the ways to sustain the program in the military healthcare system
Tactical Medicine: A Combined Forces Field Algorithm

List of Participants and Their Roles in the Abstract

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Tactical emergency medical support (TEMS) is a relatively new area of specialization within emergency medical services (EMS). Drawing heavily on medical skills and expertise developed by the military, a TEMS component to civilian Special Weapons and Tactics (SWAT) teams may have several benefits for law enforcement agencies. These include readily accessible on-scene medical care, the potential for decreased liability for the agency, and enhanced team morale. The medical interventions performed by TEMS providers are commonly based on local or regional EMS protocols and a variety of TEMS curricula, including Tactical Combat Casualty Care (TCCC). There are ongoing initiatives by national organizations to standardize this care. How medical providers are integrated into a SWAT team so that all members function as one cohesive unit is less uniform. A gap may at times exist between tactical operators and medical providers, resulting from a lack of understanding of each other's capabilities and priorities as well as insufficient joint training. To address this gap, we present a combined forces field algorithm that can be followed by both medical and law enforcement members of a SWAT team during training and when responding to a threat. The algorithm is based on the authors’ military experience in the Israeli Special Forces as combat officers and combat physicians, as well as on EMS and SWAT experience in the United States. It breaks down a tactical mission into individual steps or phases, each of which involves a specific action by tactical and medical members of the team. Its use is intended to promote team cohesion and commonality of purpose. It can also serve as a planning aid for SWAT commanders and TEMS physicians and providers who are developing a TEMS program.

Algorithm:

Learning Objectives
1. The learner will be able to recognize the gaps in the joint work of tactical and medical providers
2. The learner will be able to define the different meanings for medical and tactical personal of each step of a tactical mission
3. The learner will be able to discuss the differences that compose the Israeli response plan/algorithm
List of Participants and Their Roles in the Abstract

Name: Juergen Dr. Meyer  
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Abstract Content, Presented in Order Requested from Submitter

Abstract Body

NATO as well as national German doctrine requires highly mobile operational surgical capabilities providing the procedures of damage control surgery and damage control resuscitation. Medical planning timelines being the driver of the medical contribution to the operational planning process aim at the provision of surgical measures in a timely manner. While the benefit of early surgical treatment has been proven by scientific evidence, deploying these capabilities on operations is still a largely discussed issue. The balance between necessary medical equipment and operational requirements such as mobility and force protection causes challenges in terms of planning and conduct of operations.

From the capability management point of view the full spectrum of medical support on operations requires basically two types of medical treatment facilities. At first a highly mobile, but protected facility following ground forces in high intensity environments. The second solution focuses at medical support to special forces or specialized forces and is therefore represented by an airmobile, tent-based facility.

The lecture discusses the doctrinal background and also the development of these capabilities from the German perspective. In this context first results of an ongoing study investigating specific solutions for an airmobile Role 2 LM will be presented. The lecture ought to be relevant for operational medical planners as well as for surgeons and other clinical staff that are involved in military medical support. In addition to this it is certainly of interest for a broad spectrum of healthcare professionals.

Learning Objectives

1. Discuss differing approaches to the Role 2 LM capability
2. Describe required sub-capabilities being part of this type of medical treatment facilities
3. Take adequate medical support planning considerations into account
Simulation Subject Matter Experts Impact Readiness of Military Nurses

List of Participants and Their Roles in the Abstract

Name Susan Garbutt
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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Medical Simulation has been successfully used in the United States military for over two decades. In the last 10 years pre-deployment medical optimization has been achieved by utilizing high fidelity simulation to improve patient outcomes and decrease risk to the deployed patient population. In addition, the lessons learned have been applied in garrison to improve clinical practice.

Since 2001, the military has cared for over 95,000 combat casualties, achieving a 98% survival rate by providing optimal care at point of injury. Simulation provides deployable nurses with the technical and critical thinking skills to function in high stakes environments. Reservist nurse faculty at the Uniformed Services University of the Health Sciences have played an integral role in preparing advanced practice nurses to provide the best possible care to for those serving in harm’s way using simulation. As citizen airmen, reservist nurse faculty impact military nursing readiness by utilizing clinical simulation in our civilian careers educating Army, Navy, and Air Force ROTC nurse cadets and novice nurses in the USAF Nurse Transition Program.

This presentation will discuss current evidence-based practices and lessons learned integrating clinical simulation into graduate and undergraduate nursing curricula, the use of high fidelity clinical simulation for pre-deployment training, and directions for future simulation scenario development and research.

Learning Objectives
1. Describe various simulation learning activities currently used in military nursing education
2. Discuss the importance of incorporating evidence-based practices and veteran centric healthcare simulation into graduate and undergraduate nursing programs
3. Discuss simulation lessons learned and directions for future simulation scenario development and research
In the field of veterinarians and food-chemists are an integral part of the German Armed Forces in out of area missions. These experts guarantee food and water safety by inspecting mess facilities, canteens and dining-facilities, and also audit food manufacturers and suppliers. In addition, they also examine foodstuffs, articles of daily use and water in deployable laboratories on-the-spot. This is done with a risk-orientated and interdisciplinary approach on a high scientific level and in close collaboration with laboratories in the home base. In this regard, the case of milk samples drawn in various NATO-Camps in Afghanistan, the necessity of on-site controls and the need to consistently monitor food operators are illustrated. It was found here that the determined quantities of aflatoxins exceeded by far the safety limits established by regulatory agencies.

The described inspection and examination capabilities could be of interest to other allies within the initiatives Connected Forces and Smart Defence.

In view of the above, the on-going research and development projects aimed at substantially improving precautionary health protection in mission are discussed.

Learning Objectives
1. The field of official control of foodstuffs in Mission is described.
2. The necessity of on-site controls and the need to consistently monitor food operators are illustrated.
3. The on-going research and development projects aimed at substantially improving precautionary health protection in mission are discussed.
Management of neck and low back pain. A look at chiropractic services within VHA.

List of Participants and Their Roles in the Abstract

Name Jason G Napuli
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Role(s): Submitter; Presenter

Name Christopher Coulis
Organization: VA Connecticut Healthcare System
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

INTRODUCTION:
Musculoskeletal conditions have become an increasing burden on recently returning military veterans and the Veterans Administration (VA) Health Care System that serves them (1). As the recent conflicts wind down in Iraq and Afghanistan, VA is seeing a surge of newer generation veterans with presentations that vary from previous generations. Managing these conditions has proven to be extremely challenging often resulting in suboptimal benefit leaving both the veteran and provider to look for alternative management strategies.

Complementary and alternative medicine (CAM) therapies are part of the standard benefits package available to all veterans. More specifically, chiropractic services, which were introduced to VA in 2004, focus on the management of musculoskeletal complaints. (2) Since its introduction, the service has evolved and successfully integrated into the healthcare system providing benefit for common musculoskeletal conditions. (3-7)

OBJECTIVE:
The aim of this paper is threefold: to discuss musculoskeletal complaints often seen in the US Veterans patient population and overall use of CAM therapy, to describe how chiropractic services have been implemented within VA and to describe outcomes in veterans with neck and low back pain treated with chiropractic.

METHODS:
A literature search was conducted using Medline, PubMed, CINAHL and Google Scholar using combinations of terms related to Veteran’s Administration, pain, spinal manipulation, chiropractic, and CAM.

CONCLUSIONS:
Since implementation of chiropractic services within VA, several studies have been completed to explore characteristics of VA chiropractors and clinics, integration of the service within the healthcare system and patient demographics and to describe outcomes for common musculoskeletal conditions (2, 3-7).

Learning Objectives
1. Discuss musculoskeletal complaints often seen in US Veterans patients and overall use of CAM therapy.
2. To understand how chiropractic services have been implemented within VA and common conditions often seen.
3. To describe the current literature and response to chiropractic treatment with veterans with neck and low back pain.
Dietary supplements (DS) are used by a majority of the population for a variety of reasons i.e., promote general health and physical appearance, boost energy and performance, enhance muscle mass, and lose weight. The accessibility of DS in many retail stores on military bases gives the impression of active endorsement for their use and safety. In addition, requirements to meet body composition and fitness standards and a personal desire to improve performance likely contribute to use. Operation Supplement Safety is a Department of Defense (DoD) initiative to inform Service members, their families, health care providers and other DoD personnel on how to choose supplements wisely and safely.

Service members are often drawn to supplements because they want an edge: they view supplements as a natural way to enhance performance of highly specialized and potentially dangerous tasks under extreme environments (high/low temperatures, altitude). While understandable, consideration must be given to the fact that the impact of DS and potential interactions between DS ingredients under such conditions are unknown. In addition, adverse events from combinations of dietary supplements are relatively common. Certain categories of DS and ingredients are associated with serious adverse health consequences. Thus, DS use by Service members raises a number of unique questions and concerns. This session will introduce participants to common concerns associated with DS use including issues relating to product quality and safe product selection. We will also demonstrate how to report adverse events, and provide educational resources to enhance the health and safety of Service members.

Learning Objectives
1. Evaluate supplements for quality and safety
2. Describe approaches for reporting adverse events
3. Identify educational resources for informing consumers.
4. Recognize potentially dangerous supplements and common adverse reactions
My HealtheVet – How VA is transforming veteran health care through a Personal Health Record

List of Participants and Their Roles in the Abstract

Name: DAVID MORRISON DOUGLAS  
Organization: DEPARTMENT OF VETERANS AFFAIRS  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
My HealtheVet is the VA Personal Health Record. This award winning tool is used by more than 1.7 million veterans for services like prescription refill and secure messaging. In 2013, VA significantly expanded the functionality of My HealtheVet to give veterans electronic access to VA progress notes and other content from the electronic medical record. The large-scale veteran utilization of My HealtheVet is due to functionality that enables 3 things: 1. Self-Service transactions such as prescription refill, 2. online access to patient medical records including progress notes and the treatment plan, and 3. electronic communication with the health care team and other patient-facing medical center programs. This lecture will describe how VA is using My HealtheVet to transform paper and telephone based processes into 21st century medicine.

Learning Objectives
1. Describe the features of a personal health record that veterans find most valuable
2. Explain how to use data to track the incremental shift away from paper or telephone based processes to the electronic processes of the Personal Health Record
3. Discuss the lessons learned to date of allowing veterans easy, electronic access to progress notes and lab values.
Recruitment and retention of medical specialists for the military in competitive markets

List of Participants and Their Roles in the Abstract

Name: Stephan Hofmeister  
Organization: MOD  
Hamburg DE  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
For the last few years available medical capabilities have been considered insufficient to meet NATO´s level of ambition. A shortfall not just in specific material but more so in qualified medical personnel seems to be the limiting factor. NATO´ś Research and Technology Organisation (RTO) Human Factors and Medicine Panel (HFM) has undertaken a social scientific assessment of personnel situations in the military medical services of contributing nations, including existing or expected shortfalls and measures already taken or initiated to overcome those.

CIOMR has correlated the data to the respective Military Reserve / civilian medical system to understand how the results of this study could lead to adaptation of recruiting procedures or retaining efforts for reservists in a very competitive market for medical specialists. It has become evident that new efforts have to be made to share those specialist with other competitors in new ways but at the same time every nation’s particular system and their wide diversity is challenging. Each nation demands own ways to proceed.

Examples for common strategies applying to all will be outlined and a detailed look into the specific challenges will be given using the German system as an example.

Learning Objectives
1. identify reasons for shortfall of medical personnel in NATO militaries  
2. explain diversity of systemic backgrounds in various countries  
3. discuss and define common measures and strategies to mitigate shortfalls  
4. describe specific solutions using one country as an example
Operation Lone Star and the U.S. Public Health Service

List of Participants and Their Roles in the Abstract

Name: Angela Sue Girgenti
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Role(s): Submitter; Non-presenting contributor

Name: James LaVelle Dickens
Organization: DHHS/Office of Minority Health
Role(s): Presenter

Name: Epifanio Elizondo
Organization: DHHS/Office of the Assistant Secretary for Health
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Introduction: Operation Lone Star (OLS) is an annual joint military and civil humanitarian medical mission that takes place along the Texas-Mexico border. OLS unites local, state, and federal partners to execute the largest humanitarian effort in the country. The goal of OLS is to provide free medical and dental services to thousands of underserved communities in South Texas while conducting medical innovative disaster readiness training exercises. The purpose of this presentation is to highlight the contribution and impact of United States Public Health Service (USPHS) on OLS 2012 and OLS 2013.

Method: Operation Lone Star achieves its goal by increasing access to quality care for the under/un-insured residents in South Texas. OLS partners with local, state, and federal personnel to provide health services including immunizations, health screenings, hearing and vision exams, sports physicals, dental services, pharmaceutical service, referrals, and preventive health education. USPHS contributes through its rapid deployment force team, mental health team, service access team, and dental health team.

Conclusion: USPHS Commissioned Corps provided invaluable services to OLS in 2012. Partnering with OLS in providing care to underserved, under/un-insured populations, allowed USPHS Commissioned Corps to enforce its mission of protecting, promoting, and advancing the health and safety of all people. This partnership with OLS offers a real world emergency response exercise that prepares first responders for potential disaster.

Background

Operation Lone Star (OLS) was created in 1999 as an annual joint military and civil humanitarian medical mission in South Texas. Its mission is to provide health services to an underserved population, train for military readiness, and work together for emergency preparedness between community and military partners. OLS provides training to people and organizations that would be involved in setting up and running clinics in the event of a public health emergency. OLS strengthens community relations and interagency cooperation that incorporates local, state, and federal partners, along the South Texas Border. In its 14 years of history OLS has helped more than 100,000 patients in South Texas. OLS operates in Mission, San Juan, Brownville, Rio Grande, Rio Bravo, Zapata Texas

Learning Objectives

1. The learner will be able to discuss the mission and outcomes of Operation Lone Star
2. The learner will be able to explain the results of Operation Lone Star
3. The learner will be able to recognize the factors that contributed to Federal Collaboration in a large humanitarian effort
Abstract Body
Humanitarian contributions in the realm of eye care from the world ophthalmic community at large has occurred in various forms for several decades. Philanthropic efforts to bring eye care services to the people of nations in need are not unique to a single organization. Standardization or regulation of these efforts has not been established to date. Albeit rudimentary in form, coordination of medical humanitarian operations executed by the Department of Defense (DoD) in partnership with Non-Governmental Organizations (NGO), International Governmental Organizations (IGO) and the Recipient/Host Nations is growing. Unification of purpose and transparency amongst all participants is needed in order for desirable outcomes to be more effectively achieved and subsequently sustained. Solidarity in mission objectives, strategies and ways forward in building sustainable capacity within recipient nations proves difficult to obtain in an environment where fundamental organizational differences exist. This lecture does not attempt to establish a standard for the administration of humanitarian eyecare, but provides an informational framework of associated military involvement in humanitarian eye care to offer all involved organizations a better perspective and the ability to jointly liaison and leverage resources to do the best good.

Learning Objectives
1. Comprehend the fundamental need for humanitarian eyecare.
2. Describe the challenges of developing countries in terms of sustainable eyecare.
3. Discuss the strategic importance behind the DoD's disaster relief and humanitarian assistance (DRHA) efforts in terms of eye care.
4. Define and contrast measures of performance (MOP's) and measures of effectiveness (MOE's) in terms of eye care.
5. Explain the main caveats of positive interoperability between military, private non-governmental organizations (NGO's), international government organizations (IGO's) and host nation eyecare resources.
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Objective: To describe prevalence of energy drink/energy shot (ED/ES) use in a cohort of United States (US) military members, to examine patterns in use and to determine effects of use.

Methods: Across-sectional exploratory web-based survey of ED/ES use among US military members. Main outcome measures include: 1) prevalence of ED/ES use, 2) reasons for use and 3) side effects possibly associated with use.

Results: 827 individuals responded to the survey. Of those who responded, 53% reported consuming ED and 23% reported consuming ES at least once a month. A greater proportion of heavy ED/ES users were of enlisted ranks. Common reasons for use included needing an energy boost (44%) and increasing mental alertness (36%). Nearly one in five (17%) respondents reported increased mental alertness following ED consumption. Increased heart rate (10%) was reported as the most common side effect. One in five (19%) respondents mixed ED with alcohol at least once in the past 30 days. Many respondents believed that ED/ES were not safe (29%) or were unsure of their safety (21%).

Conclusions: ED/ES use was common among US military members. Enlisted personnel were more likely heavy ED/ES users. Many military members were either unsure about safety or believed use of these products to be unsafe. A large percentage of respondents mixed ED with alcohol. Data from this cohort will be compared with an ongoing survey of ED/ES use in operational military communities to better understand the prevalence and side effects of using them in the military.

The opinions and assertions expressed herein are those of the authors and should not be construed as reflecting those of the Uniformed Services University, Department of the Army, Department of the Air Force, Department of the Navy or the United States Department of Defense.

Learning Objectives
1. cite the prevalence of energy drink/energy shot use in the general military
2. recognize the reasons military members use energy drinks/energy shots
3. list some of the common side effects associated with energy drink/energy shot use
Sarcoidosis presenting as Extraorbital Mass caused by Caseating Granulomas in Healthy Adult Male

List of Participants and Their Roles in the Abstract

Name: Adam Daniel Maruszewski
Organization: US Navy
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Patient is a 52 year old, US Navy active duty Captain, Caucasian male with past medical history notable for PPD conversion 25 years prior; did not undergo treatment for tuberculosis. Patient has no past surgical history and is presently on no medications.

Patient presented with persistent and worsening exophthalmos of the right eye that was associated with diplopia and generalized eye pain over the course of 2 months.

Physical exam was remarkable for exophthalmos of the right eye, but was otherwise unremarkable to include normal lung exam. Patient was initially sent for MRI of skull/orbit that revealed extraorbital mass suspicious for malignancy. Subsequent biopsy was negative for malignancy, but showed caseating granulomas that proved to be negative on specialized stains for tuberculosis. Patient was then sent for a wide range of labs for etiologies of caseating granulomas that were all within lab limits, and a CT of chest that was notable for multiple noncalcified mediastinal lymph nodes and probable right hilar lymphadenopathy. Given negative labs and CT chest findings suggestive of sarcoidosis, patient was treated with high dose prednisone and showed rapid improvement of eye symptoms; has since remained asymptomatic on maintenance sarcoid therapy.

In this presentation, will describe the patient’s clinical course and generally discuss sarcoidosis. After acclimatization to the patient and sarcoid, discussion will be expanded to the unique aspects of this patient (caseating granulomas in sarcoid, clinical presentation as extraorbital mass, and difficult decision of initiating prednisone), and finally explain its clinical significance to the medical community.

Learning Objectives

1. Discuss patient presentation
2. Describe sarcoidosis, in general
3. Explain the unique aspects of this patient’s clinical presentation and it's clinical significance to the medical community
Multinationality and Interoperability in Military Medicine: overemphasized or realistic perspective?

List of Participants and Their Roles in the Abstract

Name: Thomas Harbaum
Organization: Bundeswehr Joint Medical Headquarters
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Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The overarching goal of Military Medicine is to provide healthcare worldwide that supports the mission readiness of the troops and fulfills the standards of best medical practice. This goal is ambitious and requires significant personal and material resources in order to allow appropriate operational planning. In times of budget cuts and shortage of medically trained experts who are willing and fit for deployments it is challenging if not impossible for one nation alone to provide these resources for a longer period of a mission. One solution can be the formation of multinational medical units for deployments. This approach has gained considerable visibility and is e.g. one of the top ranking NATO projects aiming at a reduction of shortfalls. In the so called tier 1.15 project nations form medical units in a modular approach in which national modules complement each other. However, previous experiences show significant challenges in multinational approaches regarding language, cultural understanding, legal aspects and –last but not least– the necessary political mandate for a common deployment. Throughout the past 5 years considerable progress has been made to bridge the gap between multinationality and interoperability. Besides bilateral activities in this field multinational projects like the multinational evaluation of medical units enhance quality and sustainability of military medical care. The lessons learnt process that is continuously ongoing in this field reveals a significant improvement of multinational procedures and military medical protocols through standardization. Although there is a considerable way ahead to go the results of the past years are promising and military multinationality in medicine will serve as an example for a practical burden sharing between partner nations.

Learning Objectives
1. Description of challenges in MilMed Multinationality
2. stimulate discussion on future improvements
3. evaluation of national procedures in place
Military Pharmacy on operational level by the example of the multinational Joint Headquarters ULM

List of Participants and Their Roles in the Abstract

Name: Thomas Schuler
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Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Military Pharmacy on operational level within a multinational Joint Headquarters is an instrument to optimize the planning of medical supply in JOA and to coordinate the cooperation with IO, GO, NGO and all medical services and civilian organisations and HNS in JOA in order to use and bunch together all available resources, especially according to limited goods like blood and blood products and medical gases, and to release the medical supply chain, and herewith the strategic logistic transport, related to cool chain and dangerous goods.

Learning Objectives
1. Describe procedures to coordinate pharmaceutical resources in a mission
2. List possibilities of cooperation of civil and military pharmaceutical capabilities in area of operations
3. Explain how to prepare missions with several troop contribution nations with different legal standards according to pharmaceutical material
Correlation Of Manual Dexterity Scores With Class Rank Of Nursing Students

List of Participants and Their Roles in the Abstract

Name: Bilal BAKIR
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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
OBJECTIVE: This study is performed in order to determine the correlation between manual skills of the first and fourth year nursing students and their class rank.

MATERIAL AND METHOD: This study was conducted between February to March 2010. The Purdue Pegboard test is utilized to collect data in order to determine the manual skills of the students. This test is based on the applicability principle of the manual skills at standard time intervals. Two types of activity are measured; one involving gross movement of hands, fingers, and arms and the other involving primarily what may be called an assembly or fingertip dexterity. Five separate scores are generally utilized in this application; 1) right hand, 2) left hand 3) both hands 4) right + left + both hands and 5) assembly.

RESULTS: Study included 171 Nursing students. The pin placement average of the students was 15.7±1.7 with the right hand, 14.6±1.5 with the left hand and 12.1±1.6 with both hands and their assembly generation average is determined as 8.7±1.6. At a comparison regarding the manual skills of the students, it is determined that the both hand average of the fourth class students was statistically higher than that of the first class students (p = 0.0009). Significant Positive correlation was determined between class rank and both assembly and both hand scores of the total of the first and fourth class students (p values in order; p=0.014, p=0.044) procedure.

CONCLUSION: Although nursing practice requires manual dexterity, evidence is not sufficient to suggest a manual dexterity test instead of existing cognitive test for the selection of nursing students. It requires further study to identify the exact place of a manual dexterity test in the selection process of nurses. This study also underlines the need of assessing Turkish normative data on manual dexterity.

Learning Objectives
1. To identify the importance of dexterity test for nursing students.
2. To describe the need for normative data regarding manual dexterity.
3. To define what a manual dexterity test.
Musculoskeletal Injury & Its Prevention – Up, Down and All Around: Keys to Human Performance Optimization

List of Participants and Their Roles in the Abstract

Name: Sarah de la Motte  
Organization: Uniformed Services University  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Musculoskeletal injury (MSK-I) is a leading cause of lost duty time and morbidity among our training and deployed populations. Up to 34% of deployed soldiers report a non-combat related MSK-I, and over 20% of outpatient visits in the active duty population are attributed to MSK-I. This is a serious problem that compromises military readiness and deprives the force of critical skills. Non-combat related MSK-I is one of the largest threats to military health, and costs our nation over $548 million in direct patient care costs each year. Although previous research has identified numerous risk factors for MSK-I in military populations, MSK-I remains the leading cause of military morbidity in training and deployed troops. New and targeted attention on identifying those at highest risk and intervening before injury occurs are of utmost importance to curb these human and capital costs. Our symposium will concentrate on the critical issues surrounding the prediction, prevention, and treatment of MSK-I in the military. We will review the latest research in injury prediction and prevention, including key concepts of optimized nutrition and sleep hygiene. We will also detail the common clinical culprits of MSK-I and discuss evidence-based treatments for common MSK-I seen in US warfighters in training, in garrison, and in theatre. Practical and solution-based information for all types of federal health professionals will be offered in this interactive and innovative 3-part symposium.

Learning Objectives
1. Describe the economic impact of musculoskeletal injury in the military
2. Identify current musculoskeletal injury prediction and prevention efforts in the military
3. Delineate practical solutions to common musculoskeletal injuries in the military
OBJECTIVE: The stressors of the deployed environment, frequent deployments, and combat-related trauma exposure on military personnel have been clearly demonstrated in the literature. Multiple studies have additionally identified high levels of job stress for in garrison state-side military personnel. This research examined the relationships among job stress, depression, work performance, types of stressors, and perceptions about supervisors in military personnel.

METHODS: Three groups of military personnel at two locations, totaling 1,366 individuals, answered written survey questions addressing work stress, physical and emotional health, work performance, perceptions about leadership, sources of job stress, and demographics.

RESULTS: More than one-quarter (28.9%) of this military population reported suffering from significant work stress. Both the report of work stress and depression were significantly related to multiple measures of impaired work performance, more days of missed work, poorer physical and emotional health, and negative perceptions about the abilities of supervisors and commanders. Depression and job stress were significantly and positively related to each other.

CONCLUSIONS: These results support accumulating data indicating that work stress is a significant occupational health hazard in the routine military work environment. These health risks are in addition to and independent of those associated with wartime deployments. The policy implications for targeting and eliminating unnecessary sources of job stress amongst military personnel, as well as developing strategies to preserve and protect the mental health of military personnel, are discussed.

Learning Objectives
1. Participants will be able to discuss the relationship between job stress and work performance in military personnel
2. Participants will be able to describe the sources of job stress for deployed and non-deployed military personnel
3. Participants will be able to explain how physical and mental health of military personnel are impacted by job stress
Abstract Body

Combat casualty training programs are facing major challenges to reformulate highly successful medical training programs due to the need to restrict the use of live animal models in training medical procedures. This requirement comes at a time when combat casualty rates have been sustained at a historically low rate, attributed to a large extent, to the advancement of resuscitation training programs throughout the last decade.

The University of Missouri Combat Casualty Training Consortium (MU-CCTC) has been established to accelerate research and development of Simulation Based Technology (SBT) for medical education and is sponsored by the Office of the Secretary of Defense. The multi-institutional coalition of nationally recognized experts in trauma and combat casualty care represents government, industry, and academic stakeholders.

The objectives of the MU-CCTC are to investigate the comparative effectiveness of combat casualty care training across the spectrum of training platforms. This research has produced standardized tri-service curriculum and metrics for training outcomes that are most effective in three critical areas: 1) Trauma Hemorrhage; 2) Trauma Airway and; 3) Emergency Medical Skills. We anticipate that the results will help ensure that trauma education and training utilizes the most effective training methods available for military personnel.

Learning Objectives

1. Describe the collaborative consensus based model for development of research methods.
2. Explain the components in the study design including, instructional systems and curriculum.
3. Discuss the role of this approach as a foundation for further dissemination and implementation.
Psychological Evaluations for the Biological Personnel Reliability Program

List of Participants and Their Roles in the Abstract

Name: Scott Salvatore
Organization: U.S. Army
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Federal and military biological and nuclear surety programs have existed for many years and contain policy and procedures that govern personnel reliability programs. Such programs have garnered heightened attention and scrutiny since a federal scientist, employed at USAMRIID (U.S. Army Medical Research Institute of Infectious Diseases), allegedly distributed anthrax through the U.S. mail. The Army’s Biological Personnel Reliability Program (BPRP) is designed to ensure that military, federal and contact workers, with access to deadly select agents and toxins, meet the highest standards of reliability and suitability. An integral component to determining both initial qualification and continued participation in the BPRP is a medical evaluation, of which includes a behavioral health screen and if warranted a comprehensive psychological evaluation. The purpose of this article is to review psychological assessment methods and issues related to BPRP suitability and reliability standards and fitness for duty to perform related functions.

Learning Objectives
1. Participants will learn qualifying and disqualifying factors related to the U.S. Army Biological Personnel Reliability Program (BPRP).
2. Participants will learn elements of behavioral health screen and psychological evaluation for BPRP.
3. Participants will learn related federal law associated with BPRP psychological evaluations.
Demographics of Wounded, Injured, and Ill Marine Reservists

List of Participants and Their Roles in the Abstract

Name: Samuel Critides  
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Organization: Reserve Medical Entitlements Branch, Wounded Warrior Regiment  
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Name: Brian Pecha  
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Role(s): Non-presenting contributor

Name: Douglas L Mayers  
Organization: Health Services Support, Marine Forces Reserve  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Wounded, ill and injured Marine Reservists (MR) are followed locally by their Inspector/Instructor medical corpsman and centrally by the Reserve Medical Entitlement Determinations Branch of the Wounded Warrior Regiment, in Quantico, Va. MR who are injured on drills, exercises, or active duty periods < 30 days are followed in the Line of Duty (LOD) program. MR with injuries on active duty > 30 days are followed in Medical Hold (Med Hold).

There are currently 355 MR in LOD status with the majority of injuries orthopedic. The average time in LOD status is 274 days. LOD numbers vary seasonally with the largest increases observed during the summer months due to Officer Candidate School programs and military exercises.

There are currently 158 MR in Med Hold with 90% enlisted, 20% battle injury, 20% OEF-related, and 2.5% OIF-related. The most common injuries are orthopedic (75%) involving predominantly the knee, back, or shoulder. Combat related injuries include: mental health (12%), blast injury (11%), neurologic (10%), TBI (5%), amputation (3%). Cases of PTSD and TBI are rising. The average time in Med Hold status is 264 days and has declined significantly over the past 2 years. Med Hold numbers are driven by MR participation in OIF/OEF and are declining with the drawdown from these operations.

Metrics of unit performance in the LOD and Med Hold programs have been established and are actively monitored. MR who served in OIF/OEF or are medically retired are actively referred into the VA health system for long term follow up.

Learning Objectives
1. Understand causes for wounded, injured and ill Marine Reservists to be placed in the Line of Duty Program.
2. Understand causes for wounded, injured and ill Marine Reservists to be placed in the Medical Hold Program.
3. List the most common combat related injuries in wounded, ill and injured Marine reservists.
Change Is Good: A Clinically Focused Change Management Approach for Deploying an Electronic Health Record

List of Participants and Their Roles in the Abstract

Name: Roshni Ghosh
Organization: Deloitte Consulting LLP
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

I. Defining Change Management

Change management is a comprehensive, structured approach for addressing the people aspects of a transformation and its interactions with process and technology.

II. Challenges of Change Management

Change can be hard, but is critical for a successful deployment of a new Electronic Health Record. Before employing specific change management tools, it is important to understand what challenges might be encountered.

III. Change Management Tools

In the process of change management the stakeholder analysis, workflow redesign, high level training strategy and change management deployment plan serve to inform decision making and preparation for adoption of a new system.

1. **Stakeholder analysis** is the qualitative and quantitative analysis of interviewed stakeholders’ concerns with current electronic health record (EHR) systems and prior clinical information system (CIS) deployments. The analysis summarizes key findings from the stakeholder interviews and provides overall recommendations.

2. **Workflow documentation** provides facilities, end users, and other stakeholders with an understanding of the detailed processes and potential points of failure of an existing system. End user interviews and observations of site processes inform the visual representations of departments’ “as-is” workflow and business processes.

3. **Training** is vital to the sustainment of change management. Training design should account for the difference between learning styles of clinical and non-clinical system users and to prepare for the scheduling and facility parameters at specific sites.

4. **The change management deployment plan** is a chronological set of detailed implementation and adoption activities that guide facilities in preparation for change management.

Learning Objectives

1. Define Change Management
2. Discuss Challenges of Change Management
3. Discuss Change Management Tools
TOUR D’HORIZON OF DENTAL ACTIVITIES IN NATO COMEDS REGARDING THE DEPLOYMENT OF DENTAL CAPABILITIES

List of Participants and Their Roles in the Abstract

Name: Christoph Hemme
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Munich Bavaria DE
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Within the North Atlantic Treaty Organization (NATO) different institutions deal with various topics. Among them, the Committee of the Chiefs of Military Medical Services in NATO (COMEDS) is advising NATO’s Military Committee on military medical matters regarding policies, doctrines, concepts, procedures, techniques, programs and initiatives affecting NATO.

The Dental-Services-Expert-Panel within the COMEDS structure is staffing doctrine and procedures on techniques, tasks and on the interchange of information for all aspects of dental and maxillofacial care in the operational environment, including humanitarian support.

With the example of various standardization documents the roles of dental activities are presented in order to show the efforts to further the development of international accepted guidelines for the dental (oral health) involvement in missions with a humanitarian character.

Learning Objectives
1. Explain NATO terms and COMEDS structure
2. Describe the extend of dental treatment at various military medical roles including dental capabilities and treatment outcome
3. Define the skills-sets to fulfill the capabilities needed to provide dental care on each role in NATO operations
4. Interpret the different dental care modules in military medical roles to achieve interoperability and interchangeability related to dental treatment under field operation
5. Discuss the approach of transferring dental skills, capabilities and outcome (modules) of military medical roles to the humanitarian surrounding with the aim to enable local care providers or NGO/IO to take over dental care after deployment
Leading Practices in Population Health Management

List of Participants and Their Roles in the Abstract

Name: Mike Peter Van Den Eynde
Organization: Deloitte Consulting
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Population health has risen in importance as providers consider how to remain viable in a risk based payment model. Population health offers a means for an organization to shift resources to support their patients outside of the hospital setting and reduce the total cost of care for a populace. The clinical expertise to implement such a model is already resident in most integrated delivery systems. But the level of coordination across the continuum of care is a major undertaking with many moving pieces. Deloitte has had the opportunity to work with several organizations to design new population health models focused on the sub-populations with the highest needs. In this presentation Mike Van Den Eynde and Dr. David Plocher will:

- Define a framework for population health and how it differs from the status quo for most provider organizations
- Present some sample programs developed to support the needs of sub-populations with specific conditions, across the continuum of care
- Summarize key program success factors as well as key impediments
- Define the technology needs to support the effort
- Summarize some of the clinical patient engagement tools and strategies some organizations are now piloting to support their population health efforts
- Close with some suggestions on how to get started or re-launch a population health initiative

Learning Objectives
1. Understand leading practices in population health management
2. Understand key success factors for a population health program
3. Understand some of tools and technologies that can help a population health program succeed
4. Leave with a list of initial steps to launch a population health program
Abstract Body
Sulfur mustard (SM) has been used as a chemical warfare agent in several military conflicts since 1917. Existing stockpiles of this vesicant agent are still a threat until today. The presented case describes the progression of an accidental skin injury after liquid SM exposure of a male Caucasian patient. The clinical course showed the typical time course of skin symptoms. The patient was decontaminated, and no clinical signs were noted. Thus, no further treatment was initiated at this stage. The patient noted progressing skin reddening 2 h after contact. Blistering occurred at the abdomen and left arm 6 h after exposure. The pelvic wound showed slow wound healing during the following days. Two weeks later, the abdominal wound was closed with skin transplantation. A smaller wound at the left hand healed spontaneously. Blood analysis showed minor changes of the blood count. Six months later, both wounds showed minor signs of typical SM-induced hyper- and hypopigmentation. The case emphasizes the need of appropriate personal protective equipment, rapid decontamination and a trained surgical team. The observed slow wound healing can be explained by alkylation of basement membrane proteins and the DNA damaging properties of SM. Thus, wound debridement is important to achieve a faster wound closure. Animal data provide evidence that shallow debridement (100 µm) is superior to deeper debridement (400 µm).

Taken together, the surgical management of SM induced wounds is different from other wounds. Understanding of SM pathophysiology is crucial for appropriate treatment.

Learning Objectives
1. The learner will be able to describe the time course of symptoms after skin contact with vesicant chemical warfare agents.
2. The learner will list surgical treatments to improve wound healing of sulfur mustard induced skin injury.
3. The learner will list available special diagnostic methods to verify sulfur mustard poisoning.
4. The learner will explain the pathophysiology of sulfur mustard poisoning.
Does the casualty need emergency surgery before boarding an Autonomous Vehicle for 6 hours?

List of Participants and Their Roles in the Abstract

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<thead>
<tr>
<th>Name</th>
<th>Role(s): Non-presenting contributor</th>
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<tbody>
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Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background: Hemorrhage remains the leading cause of preventable death in the military. Future Combat Casualty Care will include use of rapid field air evacuation in helicopters with no co-located care providers and autonomous resuscitation for up to 6 hours. Continuous automated analysis of photoplethysmograph signals (PPG), “dose” of hypoxemia (↓SpO2) and tachycardia may identify need for life saving interventions (LSI) and discriminate casualties unfit-to-fly during unattended autonomous critical care (ACC) transport by predicting resuscitation requiring emergency surgery to control bleeding.

Methods: Trauma patient demographics, Shock Index (SI= heart Rate(HR)/Systolic Blood pressure (SBP)) were calculated in 557 trauma patient direct admissions to the Shock Trauma Center in Baltimore. PPG, SpO2, and HR were collected continuously during 1h initial resuscitation. We used Receiver Operating Characteristic Area Under Curve (ROCAUC) for prediction of 3h and 6 h emergency surgery, massive transfusion (MT > 9 units 6h) and 10 other LSI.

Results: Of 557 trauma patients with SI >0.62, 165 had LSI, 26 required emergency surgery or massive transfusion <3h, 197 required LSI and 50 required emergency surgery or massive transfusion < 6h. Use of 15 minutes (min) collection of 11 PPG features, interquartile range of abnormal "dose" of SpO2 and HR> 100/min predicted surgery and massive transfusion < 3h with ROCAUC = 0.77 and < 6h with ROCAUC= 0.69, significantly better (p< 0.004) than all other LSI or the most frequently occurring LSI (p< 0.004). Use of 30 min continuous data collection significantly improved (p< 0.004) ROCAUC predictions for emergency surgery and massive transfusion to 0.83.

Conclusion: Signals from a single field monitoring device, the pulse oximeter, can be used to automatically predict emergency surgery or massive transfusion and discriminate those unfit-to-fly in an ACC vehicle for 6 h. PPG features and abnormal HR and SpO2 predicted those trauma patients who should not have ACC but should be triaged to receive immediate care at a nearby medical facility to perform emergency surgery and prevent exsanguination. Such automated decision assistance could improve field triage for both military and civilian pre-hospital providers.

Funded by USAF: FA 8650-11-2-6D01 and FA 8650-11-2-6142 and ONR N00014-12-C-0120

Learning Objectives

1. Explain how automated signal processing of vital signs signals can predict outcomes in acute trauma casualty management
2. Identify features of PPG waveforms that can predict outcomes including emergency surgery and massive transfusion automatically
3. Compare outcomes predicted by signal processing with clinical judgement of expert trauma care providers (Medics, RN and MD)
4. Describe the benefits of automated outcome prediction for management and triage of combat casualties in the field(pre-hospital)
Abstract Body
It is estimated that food allergies are found in 2-5% of the adults in the United States. Food allergies have been observed in increasing numbers and present with symptoms that mimic other common health problems. Symptoms related to food allergy conditions can be difficult to identify but if untreated can lead to life threatening consequences. Many adults are unaware of food allergies because the nonspecific symptoms are often first thought to be related to other health issues. The symptoms are underreported, ignored and could lead to anaphylaxis, a serious risk of an undetected food allergy. These cell-mediated disorders and food intolerances should be considered and appropriately evaluated. Consideration of food allergies and recognition of the symptoms should prompt appropriate testing and management. Expensive, lengthy and unnecessary testing is avoidable if food allergies are among the differential diagnosis for practicing clinicians.

Federal health facilities, temporary medical shelters and correctional settings should consider and be prepared for the management of adults with food allergies. Pharmocotherapeutic management of allergic reactions may provide short term relief of symptoms resulting from exposure to allergens. However, persistent contact poses dangerous clinical risks. Dietitian involvement is needed to prevent nutritional deficiencies by food avoidance, the hallmark of treatment for adults with food allergies. Development of clinical practice guidelines, patient education materials and food substitution planning are some options for public health management for adults with food allergies.

Learning Objectives
1. Discuss the increased prevalence of adult food allergies
2. Describe the clinical presentation and diagnostic evaluation of adults with food allergies and review treatment strategies
3. Explore the impact of adult food allergies for patients of federally managed health care settings
Deployment to super storm Sandy FMS Brookdale, Brooklyn, NY, November 2012 gave me the opportunity to educate fellow nurses, PAs, and Medical Officers on the importance of prevention of skin breakdown. Brookdale Hospital opened two empty floors where three evacuated nursing homes set up residence. USPHS officers were deployed and took over the daily care of these clients.

Upon arrival I identified myself as a wound/ostomy nurse. I asked if a Prevalence and Incidence Study (P & I) had been completed. I described the importance of this P & I study which would provide knowledge of current skin breakdown and potential skin breakdown due to this high risk population. I was reassigned as the wound nurse.

Challenges faced: channels of supplies, nurses incomplete knowledge on the use of current skin/wound products, no prior skin assessments documented, no formal assessment tool in use.

Opportunities: Build relationships with Logistic deployment staff and Brookdale Hospital Central Supply Department for acquisition of supplies, teaching/learning for nursing home CNAs and USPHS medical staff related to prevention of skin breakdown.

The 89 patients cared for at this deployment hospital received two complete P & I studies during the 16 day deployment. They also received daily wound care as recommended via the wound nurse and ordered via PAs and medical officers. Prevention of skin breakdown measures were the main goal with outcomes of zero pressure ulcer incidences during this deployment. This says alot about the nursing staff deployed as a whole. After all 85 of the 89 patients wore diapers related to incontinence.

Learning Objectives
1. Describe potential obstacles to quality patient care that are frequently encountered during a deployment.
2. Re-educate medical staff on basic and complicated wound care.
3. Discuss topics related to prevention of skin breakdown in long-term care facilities.
Joining Forces To Educate Nursing Students To Care For Veteran

List of Participants and Their Roles in the Abstract

Name: Alicia Gill Rossiter  
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Role(s): Submitter; Presenter

Name: Rita D'Aoust  
Organization: University of South Florida College of Nursing  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Only 8 million of the 26 million veterans in the United States are enrolled in the Veterans Health Administration (VHA). As a result, approximately 18 million veterans receive care in the civilian sector where health care providers may be unaware of military culture and health care needs. Many healthcare providers in both the VA and the civilian sector feel ill prepared to meet the challenges of caring for our veteran population. In April 2012, over 600 schools of nursing pledged their support to the Joining Forces campaign. One priority of this national initiative is to make healthcare professionals more knowledgeable about the active duty and veteran population and their unique health care needs, particularly as they return from modern deployments with signature injuries. Long before Joining Forces, The University of South Florida College of Nursing (USF CON) and the James A. Haley Veteran Hospital (JAHVA) joined forces through the Veteran Administration Nursing Academy. From development of a first of its kind online Introduction to Military and Veteran Health course to veteran health care specific curriculum integrated across concentrations at the undergraduate, master's and doctoral level to a military culture that has USF as the fourth friendliest military university in the country to veteran research geared towards restoring the lives of veterans and their families, faculty at the USF CON are transforming the healthcare, transforming the lives of our veteran population. The focus of this presentation is to discuss effective strategies, initiatives, challenges, and lessons learned regarding educating future nurses to care for those who have served in harm’s way.

Learning Objectives
1. Identify our veteran population and their unique healthcare needs
2. Describe strategies for integrating veterans health into nursing programs from the undergraduate to graduate level
3. Indicate veterans health content and education modalities that can be included within core and specialty graduate nursing courses
4. Discuss partnerships between universities and colleges of nursing
5. Introduce the Joining Forces campaign
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

**Purpose:** To provide standardized vascular screening for face transplantation and to provide the initial description of vascular reorganization between the donor and recipient after surgery.

**Methods:** Axial 320-detector row multi-phase Computed Tomography Angiography (CTA) and dynamic Magnetic Resonance Angiography (MRA) methods assessed facial vasculature in allotransplantation candidates. After post-processing and volume rendering using a 3D workstation, image quality was tested subjectively, plus using Signal-to-noise ratio (SNR) and Contrast-to-Noise ratio (CNR) comparisons between CTA vs. MRA, cine vs. static CTA, and images reconstructed with standard CT filtered back projection (FBP) vs. an iterative technique. CTA images before and 1 year after successful transplantation were evaluated for vascular findings.

**Results:** The subjective image quality score of CTA was superior (p<0.001) to MRA, largely from MR metal artifacts. CTA cine loop analysis identified retrograde arterial filling; static CTA images depicted small vessels more clearly. Iterative reconstruction achieved higher SNR and CNR than FBP; iterative methods with simulated 50% tube current had comparable SNR/CNR to FBP with standard radiation dose. After successful full face transplantation, extensive vascular re-organization contributed to perfusion of the external carotid artery or facial artery angiosomes. Blood flow to the recipient’s tongue was maintained from contralateral/donor arteries when the lingual artery was sacrificed.

**Conclusions:** Axial 320-detector row cine and static CTA with iterative reconstruction should be the standardized, first-choice imaging modality for face transplant preoperative imaging. After full face transplantation, all allografts were well perfused via extensive vascular reorganization.

**Learning Objectives**
1. To describe standardized vascular screening for face transplantation
2. To discuss different imaging strategy
3. To describe vascular reorganization between the donor and recipient after surgery
Introduction

The US military widely uses health risk assessments (HRA) to help monitor the health status of service members. The aim of this study was to examine the effects of military deployment length on self-reported health risk behaviors among active duty members of the US Navy.

Methods

- Descriptive statistics with 95% CI’s
- Chi Square test for trend
- Bivariate analyses using Chi square or Fisher’s Exact test
- Logistic regression analysis – Risk categories grouped no/low risk (0-2) versus medium/high risk (3-6)

Results

- 216,729 filled out survey
- 118,589 other than active duty Navy and warrant officers
- 4,475 height or weight meeting exclusion criteria
- 92 incomplete surveys
- 93,573 final sample.
- 73% of participants had no or low risk
- 26% had medium to high risk
- When individual behaviors examined separately, all 6 increased with increasing numbers of days of deployment (Chi Squared test for trend, p<.0001)
- Negative predictors of moderate/high risk: age and female gender
- Positive predictors of moderate/high risk: elevated BMI, enlisted rank, male gender
- Controlling for age, sex, rank, BMI, health risk category worsened with longer military deployment

Conclusion

As deployment length increased, both total health score and percentage of members in the high risk category increased. Military deployment presents unique health challenges for our service members beyond the immediate dangers of the combat zone. With the current trend in defense cuts and sequestrations, special consideration needs to be placed on the deployment cycles and its effect on the health of service member and their families. This study underscores the need to monitor the health status of our service members using tools such as the HRA.

Learning Objectives

1. UNDERSTAND HOW A HEALTH RISK ASSESSMENT TOOL CAN BE USED FOR MILITARY POPULATION HEALTH MANAGEMENT
2. UNDERSTAND THE IMPACT OF MILITARY DEPLOYMENT HOW IT CAN CAN AFFECT HEALTH RISK BEHAVIOR
3. UNDERSTAND HOW THE USE OF HRA TOOL CAN BE USED IN OTHER POPULATIONS OUTSIDE OF THE MILITARY
Objective: To enhance the ability of the US military and partner countries to make informed decisions about sexually transmitted infections (STI) beyond HIV, design programs to reduce their impact and improve global health security.

Methods: Review of STI initiatives supported by the Division of GEIS, Armed Forces Health Surveillance Center (AFHSC-GEIS) program from October 2010 to September 2013.

Results: A network of activities has been established with the collaboration of a dozen partners in eight countries resulting in expansion of STI surveillance, research and education initiatives in both the United States and overseas. Key initiatives occurred in four areas: 1) surveillance for emergence of antimicrobial-resistant Neisseria gonorrhoeae (NG), 2) screening for and assessment of the impact of STI infections among recruits, 3) seroepidemiologic studies of non-HIV viral STIs (such as HSV and HPV), and 4) conduct of clinically-relevant educational efforts for US military healthcare providers.

Conclusions: STI surveillance and research have been enhanced in the global US military community and partner countries beginning in 2010. These have strengthened the capability of US Forces and partner countries to identify and characterize STI pathogens, assess their morbidity, and develop interventions.

Learning Objectives
1. To provide a summary of the STI surveillance and research initiatives which have taken place in the US military during the past three years
2. To outline future challenges in STI field and provide recommendations to address them
3. To discuss major STI public health screening and treatment policy matters of relevance to the military
Randomized Objective Outcome Comparison between Artificial Simulation versus Animal Models for the Training of Cricothyroidotomy

List of Participants and Their Roles in the Abstract

Name: Andrew Hall  
Organization: 81 MSGS  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
This study aims to determine if there is a difference in performance outcomes after initial training with either live animals or simulators. Volunteers without prior experience performing emergency procedures were randomly assigned to receive training in cricothyroidotomy on either a pig model (Sus scrofa domestica) or on a simulator. All volunteers were given identical lectures and trained to proficiency. Two weeks post training students were tested on human cadavers with time, incision size, incision start location, initial placement attempt and final accuracy recorded. Differences were measured in thirty eight volunteers. Average completion time for the animal model group was 278 s and 181 s in the simulator group (p=0.087). Mean incision size in the animal trained group was 3.9 cm and 3.3 for the simulator trained group (p=0.110). Success rate for the animal model group was 60% and 78% for the simulator group (p=0.307). Initial incision site accuracy was 70% in the animal group and 89% in the simulator group (p=0.451). Initial placement location accuracy was 60% and in the simulator group it was 67% (p=0.786). At the end of the study, there were not statistically significant objective differences in any metric between animal and simulator trained groups after cricothyroidotomy training. For initial training, there is no objective benefit of animal training. Any unexplored potential benefit is likely psychological only.

Learning Objectives
1. The learner will be able to predict benefits of initial training of medical procedures on either animal or artificial simulators  
2. The learner will be able to recognize the benefits of animal or artificial simulator models  
3. The learner will be able to cite research when designing training regimens at home institutions
Abstract

The Patient Protection and Affordable Care Act (ACA) became law on March 23, 2010. Full implementation occurs on January 1, 2014, when the individual and employer responsibility provisions take effect, state health insurance Exchanges (also referred to as “Marketplaces”) begin to operate, the Medicaid expansions take effect, and the individual and small-employer group subsidies begin to be distributed.

The Act establishes basic legal protections that until now have been absent: a near-universal guarantee of access to affordable health insurance coverage, from birth through retirement. When fully implemented, the Act will cut the number of uninsured Americans by more than half. The law will result in health insurance coverage for about 94% of the American population, reducing the uninsured by 31 million people, and increasing Medicaid enrollment by 15 million beneficiaries.

Marketplaces will be expected to implement broad federal standards related to access and quality for qualified health plans. Many federal agencies will be affected by the implementation of the ACA. Opportunities for public health involvement include: (1) outreach and enrollment, (2) the creation of integrated systems of care for people with chronic conditions, and (3) working with Exchanges to assure that health plans that conduct business in Exchanges are able to offer quality products whose performance can be measured?

Learning Objectives

1. Describe the ACA state exchange/marketplace infrastructure.
2. Explain the public health implications for the underserved and vulnerable population.
3. Discuss current, future and potential federal interagency collaborations.
A ten year efficiency analysis of Army, Navy and Air Force Hospitals

List of Participants and Their Roles in the Abstract

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Role(s): Presenter

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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
This presentation reviews the historical archives and literature associated with Military Health System (MHS) efficiency from 1999 through 2008. The presentation also recommends an efficiency methodology for MHS service wide adoption. The MHS has no uniform framework for measuring healthcare efficiency; however, efforts to do so have been attempted since 1776. The purpose of this presentation is to present the findings of a ten year MTF efficiency study, as well as, present a consolidated literature review of existing research regarding military medical efficiency over the last two centuries. We also provide healthcare leaders a framework for understanding past and current practices in measuring healthcare efficiency that are valuable in developing new benchmarks in the military healthcare setting.

Learning Objectives
1. Explain strengths and weaknesses with measuring MTF efficiency.
3. Apply best practices in decision making to future efforts in MTF efficiency analysis.
Stellate Ganglion Block as an Adjunctive Treatment for Post-Traumatic Stress Disorder: Preliminary Evidence Shows Promise

List of Participants and Their Roles in the Abstract

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Name Eugene G Lipov
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Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Among the many concerns arising from >12 years of war is the high incidence of post-traumatic stress disorder (PTSD). An estimated 10-20% of active duty service members and 35-40% of veterans suffer from PTSD. Existing evidence-based treatments have a <30% overall success rate. The growing need for more rapid and effective PTSD treatments has fostered interdisciplinary partnerships in military and civilian medicine where multi-specialty care is embraced to advance therapeutic options.

One promising treatment for PTSD is stellate ganglion block (SGB), a 10-minute procedure that involves injecting local anesthetic at the right-sided C6/C7 cervical vertebrae. Since 2008, numerous reports have documented SGB’s rapid effects on reducing PTSD severity. Aggregate patient-reported outcomes using the Post-Traumatic Stress Disorder Checklist (PCL) on 83 cases (n=31 veterans, n=52 civilians) with chronic PTSD treated with SGB revealed significant reductions in anxiety, flashbacks, insomnia, nightmares, hypervigilance, suicidal ideation, substance abuse, and PTSD medication use. On average, these patients were 40 years old and received 1.6 SGBs. Similar results were observed by Army physicians where acute benefit of SGB was evident in 6 cases (5 active duty, 1 veteran) who experienced markedly reduced PTSD symptoms. The average age of the Army cohort was 37.7 years and they received a mean of 1.3 SGBs. Using the Clinician-Administered PTSD Scale (CAPS), Navy physicians also reported a 56% improvement in PTSD symptoms among 9 service members after 2 SGBs. Collectively, treatment effects in case series varied from 1 month to > 2 years. Building on these benchmarks, a randomized placebo-controlled trial was initiated by Navy Medicine. To date, 32 have been enrolled and 24 have completed the trial. Long-term follow-up is pending but interim results on 22 patients (13 SGB, 9 placebo) indicate the SGB group had greater PTSD severity than the placebo group (mean CAPS score=88 vs. 79, respectively). At 1-month, PTSD symptoms improved in both groups but were not significantly different between the groups (mean CAPS score drop=10.2% vs. 6% for SGB and placebo groups, respectively). Taken together, the preliminary evidence-base on SGB’s utility for PTSD is hopeful but additional rigorous studies are needed to validate early reports.

Learning Objectives
1. The learner will be able to describe how to administer stellate ganglion block to patients with PTSD
2. The learner will be able to identify which types of patients with PTSD could be good candidates for stellate ganglion block treatment
3. The learner will be able to describe which PTSD symptoms are improved by stellate ganglion block treatment
4. The learner will be able to recite what is known and unknown about the utility of stellate ganglion block as an adjunctive treatment option for PTSD
Reducing unintended pregnancy in the U.S. military through increased use of highly effective contraception

List of Participants and Their Roles in the Abstract

Name: Daniel Grossman  
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Organization: Ibis Reproductive Health  
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Unintended pregnancy among active duty servicewomen is twice that of the US civilian population. Recent research suggests several barriers to contraceptive access for deployed women. This session will review unintended pregnancy and contraceptive use in the military, as well as highlight findings from a study with deployed women about contraceptive services. The US Medical Eligibility Criteria for Contraceptive Use (MEC) and US Selected Practice Recommendations for Contraceptive Use (SPR) from the Centers for Disease Control and Prevention (CDC) will also be presented, as well as how this evidence-based guidance can be used by military health professionals. Case studies will be reviewed, and participants will gain experience using simple hand-held tools to operationalize the MEC.

Learning Objectives

1. To describe the unintended pregnancy rate in the military and populations within the military that are at higher risk of unintended pregnancy
2. To identify barriers to contraceptive use among military servicewomen
3. To demonstrate evidence-based clinical tools that assist military health professionals with prescribing contraception to servicewomen with certain medical conditions or characteristics
The use of ANTHRAX and ORTHOPOX THERAPEUTIC ANTIBODIES from HUMAN ORIGIN in BIODEFENSE

List of Participants and Their Roles in the Abstract

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Role(s): Submitter; Presenter 

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Introduction

It is impossible to protect whole nations from the effects of bioterrorism by preventive vaccination. There are too many possible agents, the costs would be exorbitantly high, and the health risks associated with complex mass vaccination programs would be unacceptable for the public health authorities. Adequate protection, however, could be provided via a combination of rapid detection and diagnosis with proper treatment for those exposed to biological weapon agents. Preferably this should be done with therapeutics, which would be beneficial in all stages of infection to disease. Monoclonal antibodies, preferably from human origin, can be used to prevent severe complications by neutralizing or blocking the pathological elements of biological agents and these are the optimal candidates to be deployed in case of biological warfare or a bioterrorist event.

Methods

Recent research in aerosol challenged rabbits has shown that the application of a combination of a human monoclonal antibody against the protective antigen (PA) and one against the lethal factor (LF) of the anthrax toxin is highly efficacious even when given 48 hours after the exposure.

Results

In this models, all animals are symptomatic around 30 hrs after exposure and all exposed but untreated rabbits have died around 90 hrs after exposure. The successfully used effective therapeutic antibodies were fully human IgG1 (κ-light chain) antibodies, with an affinity of around 10-10 M against the protective antigen (PA) and 10-9 M against the lethal factor (LF) toxin components of Bacillus anthracis.

Discussion/Conclusion

The lifesaving treatment of the animals with a normal dose has proven to still be effective when the treatment is given 48 hours after the lethal dose in a model where the mean time to death of untreated animals is around 90 hrs after exposure. This is important for the real life setting as not everybody will immediately be aware of the infection with anthrax spores, or will have access to immediate treatment. The ability of the dual antibody approach, enabling successful treatment even when victims are clearly symptomatic, will have a significant impact on managing the anthrax threat.

Learning Objectives

1. Vaccination versus therapy in biological disaster response management  
2. The response after an anthrax infection  
3. Awareness of the risks on bioterror  
4. Therapeutic antibody adverse reactions  
5. Risks of mass vaccination
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Simulation is becoming increasingly important in medical education for students and physicians alike; more sophisticated disease-base scenarios coupled with improved technology has greatly enhanced the value and potential application of this training. One such advancement, the Human-Worn-Partial-Task-Surgical Simulator (CutSuit), is a unique simulation suit worn by an actor that provides for all of the human factors in the scenario. It allows for real-time performance of lifesaving interventions such as cricothyroidectomy, tube thoracostomy, needle decompression, control of major hemorrhage, as well as major laparotomy and thoracotomy. The CutSuit, whether used for individual or team training, more accurately replicates the situational urgency and treatment from point of injury through the recovery room in hospital settings. Currently, failure rates of both oral and written surgical board examinations are rising. Owing to the lack of preparedness for third year surgical clerkship, and to improve the acquisition of technical skills and knowledge during this time, a unique course has been developed to train sophomore medical students prior to commencement of these rotations. The course, which consists of five days of intensive surgical training utilizing the CutSuit, introduces students to the majority of knowledge and technical skills necessary to pass junior year surgery rotation. Data from this training, which enrolled military scholarship recipients (HPSP), along with additional data from US Ski Team training, and US Navy training using the CutSuit will be presented. We feel this training will become a mainstay in future training operations and drills across all aspects of healthcare and medical education.

Learning Objectives
1. Gain awareness of new approaches to both individual and team medical simulation training
2. Understand the benefits of these new approaches over traditional methods
3. Understand the possible scope and use of this training
Industrial chemicals as a threat in unstable environments

List of Participants and Their Roles in the Abstract

Name: Stef Stienstra
Organization: Royal Dutch Navy Reserve
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Introduction

The chemicals in the WW1 chemical weapons were weaponized as they were left overs of the chemical industry, which could not continue the production of their regular products due to the war. In modern threat scenarios this is still valid and as it is easier to transport chemicals nowadays, harmful chemicals are a realistic threat for safety and security.

Methods

The OPCW (Organisation for the Prohibition of Chemical Weapons) organised an international meeting in Tarnow, Poland, discussing the chemical safety and security and both threat scenarios and consequent management schemes were put together and discussed. This gave an overview of threats and provided new ideas for the prevention of chemical incidences, which can be a ROTA (Release other than attack) or a chemical terror attack.

Results

With proper regulations, which do not interfere too much with the normal operations of chemical factories, laboratories and other chemical facilities, the public risk can be reduced enormously. Both a ‘Code of Conduct’ for those involved with chemicals as computer assisted administration and regulation help with improving the chemical safety and security.

Discussion/Conclusion

International organisations, like the UN (United Nations) organisation OPCW in The Hague can help to suggest and/or to make formats in which misuse of dangerous and/or toxic chemicals by terrorists and/or failed states can be limited. Self-regulation by the chemical industry organisations is preferred, but international guidelines should be initiated by politically well supported international organisations.

Learning Objectives

1. Inventory of chemicals, which can be a threat for public health
2. Disaster response management after an incident with toxic or dangerous chemicals
3. Prevention of misuse of chemical compounds by terrorists
Efficacy of Actuarial Databases in Detecting Deceptive Eyewitness Memory Accounts

List of Participants and Their Roles in the Abstract

Name: Charles Alexander Morgan
Organization: VA National Center for PTSD
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Introduction: At present, forensic experts have few objective, validated means for detecting deception when evaluating eyewitness accounts. Indeed, the vast majority of scientific studies demonstrate that when asked to detect whether a person is being deceptive or truthful, professional and lay-persons alike perform at levels of accuracy one might achieve by chance. Over the past decade numerous studies suggest that cognitive interview based speech content variables can be used to distinguish between genuine and false eyewitness accounts. In this study we tested whether actuarial databases derived from speech content variables could be used to detect deception in individuals who are independent of the database.

Method: 36 military personnel (17 truthful claims, 18 deceptive denials, 17 false claimants) were interviewed in Phase One. Speech content variables (response length, unique word count and type-token ratio) were calculated for each of the groups. 15 additional military personnel (4 truthful claims; 11 false claims) participated in Phase Two.

Results: Cognitive Interview derived speech content variables differed significantly between the three groups of participants in Phase One; Use of the actuarial database from the Phase One participants permitted a classification accuracy of 80% for participants of Phase Two. This accuracy was superior to judgments made by credibility assessment professionals (52%).

Implications: These data provide support for the idea that actuarial databases derived from speech content offer a valid, objective tool for professionals and may offer an additional tool when evaluating claims of combat related PTSD

Learning Objectives

1. The learner will be able to describe methods of cognitive interview based forensic statement analysis
2. The learner will be able to identify the strengths and limitations of the methods
3. The learner will be able to discuss how these methods may be applied to forensic examinations for PTSD
List of Participants and Their Roles in the Abstract

Name: Michael B. Moore
Organization: Department of Family Medicine, Madigan Army Medical Center
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
There has been much discussion in the general healthcare press about the evolving role of social media in healthcare, both at the individual level as well as the system level. However, there is a relative lack of discussion about the role of social media technologies within the Federal Health Care system, despite the fact that many Federal Health Agencies use Social Media systems to enhance and coordinate care. This lecture will discuss the current social media systems available for clinicians and health care administrators and describe their integration both into personalized and population-based clinical practice. In addition, participants will be able to discuss this integration within the context of current regulatory, ethical and legal guidelines. Finally, the participant will develop an understanding of the future developments pending within the social media space, to include quantified self and self-diagnostic technologies within the context of current clinical medical, mid-level and nursing practice.

Learning Objectives
1. Describe new innovations in the use of social media for both individualized clinical practice and population health.
2. Recognize the potential for the integration of social media into effective clinical practice.
3. Interpret new developments in medical/social technology.
4. Explain the skills needed to provide effective leadership as a clinician or administrator through social media.
**Collaboration between Vietnam and U.S. militaries on Infection Control program**

**List of Participants and Their Roles in the Abstract**

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**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Issues:** Infection control is vital element of medical service quality and has been a major emphasis for all health care facilities national wide. It is not only benefit for patient but also for health care professional safety. Under the PEPFAR, the U.S. Military has worked closely with the Vietnam government counterpart – Ministry of Defense/ Military Medical Department to promote the infection control (IC) program.

**Description:** Since 2010, with the support of DoD PEPFAR and in collaboration with experts from Vietnam Nurses Association (VNA), the IC program has been initiated to implement in the military health system. Activities are included: workshop/training, technical assistance (TA), and pilot a Nursing model of patients focused for HIV and other infectious disease care.

**Results:** As of March 2013, around 500 health care staff were trained on IC by using the CME-National training curriculums. Technical assistance has been continuously provided to sites by National and International expert. 5 nursing models has been piloted at 3 major military hospitals in Hanoi and HCMC which to provide knowledge and best practice on care for HIV and other infectious diseases, standard precautions for infection control. At national level, the collaboration also helps to standardize training curriculum related to infection control and develop the National Master Action Plan on Infection Control for the period of 2011 – 2015.

**Conclusions:** The MoD’s medical system continues to work closely & actively with DoD and its technical partner (Vietnam Nurses Associations) to build capacity on Infection Control for military health care. These activities have resulted in positive policy update and awareness at all levels

**Learning Objectives**

1. To share experience on implementing IC program in the Military Medical system in Vietnam
2. To advocate for support the National program on standard guideline and policy development
3. To strengthen the linkage between military and civilian
**Engaging the Military Healthcare System in addressing the HIV/AIDS Epidemic in Vietnam**

**List of Participants and Their Roles in the Abstract**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Role(s)</th>
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<tr>
<td>Thi P Chu</td>
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<tr>
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<td>Non-presenting contributor</td>
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**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

International assistance, especially through the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), has contributed significantly in supporting the Government of Vietnam to address their HIV/AIDS epidemic. In 2012, there were 210,000 PLHIV and the prevalence rate is 239/100,000 population. Yearly, about 0.24% of military inductees are found HIV positive (report by MOH in 2012 and MOD in 2004).

Amidst increasingly constraint resources to address the need, engaging a broad range of sectors, especially the military healthcare system, in HIV/AIDS prevention and control programs is crucial to sustaining a comprehensive national HIV/AIDS response. As part of this effort, the Vietnam Ministry of Defense (MOD) launched in 2005 a specific HIV/AIDS cooperation program with financial and technical assistance from the U.S. Department of Defense (DoD), funded through PEPFAR Vietnam, focused on five key components in alignment with National HIV/AIDS program: 1) Prevention 2) HIV/AIDS care and treatment 3) laboratory, 4) blood safety 5) health system strengthening.

The program contributes considerable results to confront HIV/AIDS epidemic in Vietnam. In 2012, 50,000 newly recruited military received HIV/AIDS counseling, more than 25,000 clients received VCT, 370 patients are on ART, more than 180 staff received training on care and treatment for PLHIV, VCT, blood screening, HIV testing, infection control, monitoring and evaluation and more than 14,000 blood units were screened.

Among others, a cadre of military technical staff well-trained on diagnosis and treatment of HIV/AIDS, military laboratories accredited nationally, and linkages between military and civilian services significantly improved, particularly with the national guidance on HIV prevention and ARV treatment by the Ministry of Health being well introduced. All have made possible the good quality HIV/AIDS services within the military health system and opened doors for rapid program scale-up and success.

Efforts now are focusing on assuring sustainability the program within the military system through smoothly transferring the program management, implementation and ownership to the Vietnam’s military.

**Learning Objectives**

1. To present achievements of the DOD PEPFAR program in Vietnam
2. To discuss initiatives leading to program success
3. To identify the ways to sustain the program in the military healthcare system
Computer Assisted Rehabilitation Environment (CAREN) is a system that integrates a training platform (motion base), a virtual environment, a sensor system (motion capture) and D-flow software. It is useful for both diagnostic and therapeutic use. The human gait pattern can be impaired due to disease, trauma or natural decline. Gait analysis is a useful tool to identify impaired gait patterns. Traditional gait analysis is a very time consuming process and therefore only used in exceptional cases. With new systems a quick and extensive analysis is possible and provides useful tools for therapeutic purposes. The range of systems will be described in this presentation, highlighting both their diagnostic use and the therapeutic possibilities. Because wounded warriors often have an impaired gait due to amputations of other extremity trauma, these systems are very useful for military rehabilitative efforts. Additionally, the virtual reality environment creates a very challenging situation for the patient, enhancing their rehabilitation experience. For that reason the US Armed Forces have 2 systems already in use. The most recent experiences will be discussed; including new developments both in the extension of the range of systems and the improvement and adaptation of the software. A new and promising development, the use of CAREN in a special application for patients with PTSD, will also be reviewed.

Learning Objectives

1. Inform the audience about existing computer assisted rehabilitation environments
2. Show experiences of current use in rehabilitation of wounded warriors
3. Outline new developments in the use of CAREN for the treatment of PTSD
**Project “Common Effort”: Cooperation starts before we meet abroad in a crisis!**

**List of Participants and Their Roles in the Abstract**

Name: Ingo Hartenstein  
Organization: 1 GERMAN/NETHERLANDS CORPS  
Muenster NRW DE  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

The military contribution to solving a national crisis or conflict is usually relatively small in comparison to the political, diplomatic and economic efforts that are required to ensure success. The Comprehensive Approach is a banner under which all the stakeholders in a conflict can rally and bring about a coherent methodology for crisis management and resolution.

In 2011 First German/Netherlands Army Corps HQ (1GNC) organized an exercise, called Common Effort, where the Corps HQ served as a training platform for various civil actors (Governmental Organizations, Non-Governmental Organisations and International Organizations) inviting them from the very first moment to come up with own training objectives. The aim was to script the exercise together with them rather than for them. The civil organizations were in lead of the process. Commonly developed desired outcomes formed the design of the Campaign Plan. The organizations were also part of Exercise Control as well as Exercise Evaluation. The scenario played in a fictitious poor and failing state on a southern. Because healthcare sector is always amongst the top five criteria when it comes to measuring the stability of a country, it played a significant role during the planning and conduct of this exercise. More than 130 civilians from around 20 organizations and various nations took part. With the unique project Common Effort cooperation between civilian and military organizations was taken to a higher level.

For the establishment of mutual trust the exercise preparation phase was at least of equal importance than the exercise itself. One of the biggest challenges was the balance between sharing information versus operational security. This was solved by an “open Command Post (CP) concept” and the establishment of an Inter Agency Centre as part of this CP.

The feasibility of such a common training has been clearly demonstrated. An uninterrupted civil/military lead approach, based on equality and mutual respect before and during the exercise, must be ensured. The mutual understanding of the institutional “Do's and Don’ts” and the principle of accepting the organizational identity of every partner is crucial

**Learning Objectives**

1. discuss the role of military medical support within the comprehensive approach to crisis and war  
2. initiate common civil-military exercises  
3. recognize the role of military medical service within a campaign to stabilize a failing state
**Family Reintegration Experiences of Soldiers with Combat-Related Mild Traumatic Brain Injury**

**List of Participants and Their Roles in the Abstract**

Name: Kyong Hyatt  
Organization: Walter Reed National Military Medical Center  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Background:** More than 300,000 soldiers have returned from Southwest Asia (i.e., Iraq and Afghanistan) with combat-related mild traumatic brain injuries. Despite less visible physical injuries, these soldiers demonstrate varying levels of physical and cognitive symptoms that impact their post-mTBI family reintegration. This study explored the family reintegration experiences of soldiers following mTBI.

**Method:** Nine active duty soldiers with mTBI who were between 2 and 24 months post-deployment and their civilian spouses participated in total of 27 interviews, both joint and separate.

**Findings:** The core variable of this study was the family’s attempt at seeking a new normal. A new normal was defined by participants as the couple’s new, post-mTBI expectation of the family unit or family routine. In addition, participants described chasing the care, which was described as having to be persistent in order to receive adequate and appropriate care following mTBI. Delayed diagnosis, difficulty accessing mental health care, and having to navigate an unfamiliar military healthcare system were reported as biggest challenges. The findings from this study indicate that couples who accepted post-mTBI changes and limitations on the soldier’s functional capabilities successfully renegotiated household roles and responsibilities and looked toward rebuilding a new normal for their family.

**Conclusion:** In order to achieve successful family reintegration, couples need to resolve mismatched expectations of the soldiers’ post-mTBI functional capabilities. These results indicate the need for marital relationship enhancement intervention during post-mTBI reintegration. A policy that incorporates optional counseling and marital assistance may greatly assist couples as they adapt to post-mTBI expectations.

**Learning Objectives**

1. The audience will understand the empirical evidence regarding post-mild traumatic brain injury (mTBI) family adjustment.
2. The audience will understand combat-related post-mTBI family reintegration experiences of soldiers and their spouses.
3. The audience will understand soldiers’ and their families’ recovery/rehabilitation challenges and management strategies after mTBI.
Sleep quality assessments: Evaluation of Pittsburgh Insomnia Rating Scale

List of Participants and Their Roles in the Abstract

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Organization: Center for Military Psychiatry and Neuroscience Walter Reed Army Institute of Research  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Sleep disorders are prevalent among military populations. **Purpose:** Tools for assessing sleep need to be evaluated for quantifying the extent of sleep issues. **Methods:** US Army active duty, Reserve, and National Guard members (n=14,148, 83.4% male) completed the Comprehensive Soldier and Family Fitness (CSF2) Global Assessment Tool (GAT), which include five fitness dimensions: social, family, emotional, and spiritual, and physical. Sleep quality was assessed by the Pittsburgh Insomnia Rating Scale questions: 1) "In the past week, how much were you bothered by lack of energy because of poor sleep?" (Not at all bothered, Slightly bothered, Moderately bothered, Severely bothered) and 2) “Over the past week, how would you rate your satisfaction with your sleep?” (Excellent, Good, Fair, Poor). Responses were scored 0 to 3, and the total score ranged from 0 to 6. Three references groups were used: 1) Not at all bothered versus Severely bothered; 2) Excellent versus Poor satisfaction 3) Good Sleepers (0 or 1) versus Poor Sleeper (5 or 6) from the scale total. Odds ratios (OR) and 95% confidence intervals were obtained from binary logistic regression comparing relationships between nutrition and lifestyle behaviors and sleep quality. Independent variables included: age; gender; Active duty, enlistment, and marital status; dietary behaviors; physical activity and Army Physical Fitness Test scores; body mass index and waist circumference; and the GAT fitness dimensions. **Results:** The reference group “Poor satisfaction” had 16 out of 22 variables with the strongest ORs. **Conclusion:** Sleep satisfaction is the preferred determinant of sleep quality.

Learning Objectives
1. Assess sleep quality using the Pittsburgh Insomnia Rating Scale (PIRS)-2.
2. Interpret results from PIRS-2 using three methods.
3. Describe sleep quality status in a military population and its' relationship to the GAT dimensions, body composition, nutrition, and physical activity.
Reaching Immigrant Population on Health Promotion and Disease Prevention

List of Participants and Their Roles in the Abstract

Name: Linda A Egwim
Organization: DIHS
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Reaching Immigrant Population on Health Promotion and Disease prevention – LCDR Linda Egwim, DNP, ANP-BC, GNP-BC

PURPOSE: Numerous qualitative studies on immigrants have addressed the barriers to health promotion and disease prevention (HPDP), but there has been less emphasis on methods to correct the barriers and promote increased participation in HPDP. There are limited HPDP education programs for this population to increase participation in preventive care. This project focuses on educating the immigrant population on the benefits of HPDP. To achieve this, it is essential to identify the barriers to HPDP practices. A desired outcome of this project would be to increase participation in preventive healthcare services offered by the local healthcare community for this population. Nola Pender’s Health Promotion Model (HPM) will serve as the conceptual underpinning for this project.

METHODS: The project used a one-group pretest and posttest design, a convenience sample of Immigrants at a Community Center in Minnesota Metropolitan area.

RESULTS: The post-score improved an average of 4.5 (.88) points from the pre-score. The difference between the pre and posttest scores were statistically significant \( t_{35} = -30.9, [P=.001] \) This indicated that the education intervention had a positive impact in participants’ knowledge about HPDP.

CONCLUSION: The project demonstrated the desired outcome that health education of immigrant elderly Africans will increase their knowledge of HPDP, which in turn will hopefully increases their participation in HPDP measures. Although the project implementation was with a small sample size and weak evaluation design, there is a significant expression of interest among the population because of their responses.

Learning Objectives
1. Identify 2 barriers to participation in health promotion and disease prevention
2. Identify 2 modifiable behaviors to increase participation in health promotion and disease prevention measures
3. Utilize knowledge gained to increase participation in health promotion and disease prevention
Visual Performance, Quality of Life and Ocular Injury in Veterans with Blast-induced Traumatic Brain Injury

List of Participants and Their Roles in the Abstract

Name: Glenn C Cockerham  
Organization: Veterans Administration Palo Alto Health Care System  
Role(s): Submitter; Presenter

Name: Sonne Lemke  
Organization: Veterans Health Administration  
Role(s): Non-presenting contributor

Name: Kimberly Cockerham  
Organization: Cockerham Eye Consultants  
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Objectives: To describe blast characteristics, visual performance, visual quality of life, ocular injuries and other associated conditions in blast-exposed veterans.

Study Design: Observational cohort,

Methods: Veterans with traumatic brain injury from blast exposure were recruited within a Polytrauma Rehabilitation Center. Blast characteristics included traumatic brain injury severity level, type and location of blast, and use of ballistic eyewear. Visual acuity, contrast sensitivity, automated perimetry, dry eye testing, visual quality of life questionnaires, videonystagmography, neuro-ophthalmology and ocular trauma examination were performed.

Results: 65 of 66 eligible patients provided consent for testing. 24 age and gender-matched subjects formed a comparison group. The majority of injuries were due to improvised explosive devices. There were equivalent numbers of mild, moderate-severe and penetrating brain injury. The majority of subjects had at least one abnormal visual function test. Visual fields (mean deviation, pattern standard deviation) were most commonly abnormal, followed by contrast acuity, and visual acuity. Significant dry eye disease was present using standard testing methodologies, unrelated to brain injury severity, age or time since injury. Significantly-reduced visual quality of life was present in blast-injured subjects, and correlated with abnormal afferent tests (visual acuity, contrast acuity, visual field), but not with ocular or brain injury. Neuro-ophthalmic disorders were common, including reduced accommodation, increased saccadic latency, and fixation instability. Closed-globe (non-penetrating) ocular injuries were found throughout the eye, and did not correlate with reported use of ballistic eyewear.

Conclusions. Combat blast exposure is a common cause of injury in the Global War on Terror. There is increasing awareness of impaired visual functions and occult eye damage in veterans exposed to blast forces, despite reported use of ballistic eyewear. A spectrum of visual dysfunctions, reduced visual quality of life, oculomotor disorders and closed-globe eye injuries may be present in Wounded Warriors. The Veterans Health Administration requires thorough visual and ocular testing in all blast-exposed veterans in rehabilitation centers. We recommend such testing in all veterans exposed to blast forces sufficient to cause any level of traumatic brain injury.

Learning Objectives
1. Describe blast characteristics and common eye disorders associated with combat blast.
2. Discuss relevant visual and other testing in blast-exposed veterans.
3. Recognize correlations between injury patterns and possible outcomes.
Dengue Awareness & Prevention for Mission Trips to Africa

List of Participants and Their Roles in the Abstract

Name: Gettie Audain
Organization: HRSA
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Dengue is a mosquito borne viral disease with four distinct strains. After a primary infection with flu-like symptoms, subsequent infection with another strain can cause an immune response leading to hemorrhagic or septic shock syndrome. Frequent travelers into endemic areas are at increased risk for severe dengue. Volunteers with faith-based organizations performing routine medical mission trips to endemic areas are at high risk. There is no drug or vaccine for dengue, and only palliative care for acute cases. Protection measures include personal repellent, bed nets, wearing full clothing in layers, screening of homes and worksites, and removal of breeding sites.

A developmental research method was applied to create a specific instructional product, to provide knowledge based on data systematically derived from practice. A PowerPoint® presentation was developed with the appropriate information on dengue disease for a group of church-based medical mission volunteers deploying to Africa. The topic of dengue was chosen due to its hyperendemicity in Africa and the impact on community health in every country in Africa and travelers returning home. Furthermore, a PowerPoint® tool was selected due to its pedagogic versatility, and the increase of medical missionary activities to Africa from churches worldwide. Most importantly, the desired outcome is that travelers to endemic areas may not serve as human hosts for the spread of dengue upon their return.

Learning Objectives
1. Identify the Triple T contributions to the distribution of dengue in Africa and a global pandemic
2. Understand the difference between dengue fever, hemorrhagic fever, and shock syndrome
3. Recognize self-protection and prevention measures
4. Distinguish the differences of global dengue before 1970 and after the 1980s globally
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Sam Zakhari, Ph.D., and Raymond Scalettar, M.D.

Although the vast majority of military personnel use alcohol in moderation, the harmful use of alcohol by some members of the military continues to be an issue of serious concern both as a matter of combat readiness and as a matter of personal health.

While moderate alcohol consumption may confer health benefits to the cardiovascular system, improve camaraderie, and lift morale, both heavy chronic consumption and episodic binge drinking are likely to be harmful to social and occupational functions, as well as to short and long-term health. Excessive drinking can be the result of many factors including stress, peer pressure, group norms or genetics.

Military personnel who drink heavily at young age have high risk of becoming alcohol-dependent. Stress related to combat, frequent deployments, military lifestyle and related family pressures can all play a factor in excessive consumption. These situations, observed in the aftermath of Iraq and Afghanistan conflicts, have highlighted the importance of prevention education, prompt treatment, as well as moderation campaigns.

Identifying individuals at risk for alcohol abuse is paramount. Screening, brief intervention, and referral for treatment are important not only in identifying at risk individuals but also in avoiding harsh consequences if these individuals left untreated. The presentation will outline the scope of alcohol problems in the military and trends in alcohol abuse in DOD and will highlight the progress of research on screening and brief intervention, pharmacotherapy for alcohol abuse, community-based prevention and intervention, and alcohol moderation campaigns.

Learning Objectives

1. Discuss prevalence of alcohol use/abuse in the military
2. Highlight consequences of alcohol abuse
3. Introduce moderation campaign
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The Spinal Cord Injury (SCI) Center at VA North Texas Health Care System has implemented organizational, management and cultural change strategies that have strengthened the use of outcomes in sustaining a culture of continuous improvement. Staff can clearly visualize and participate in a new health service management framework that allows for a free flow of ideas to be communicated within an organizational structure that leads to program development, new initiatives and overall growth. Idea development from all management staff and front line clinical providers is a critical component of the Center's strategic plan. Technical, intentional management and quality improvement strategies will be shared, along with motivational and cultural strategies implemented to promote and support growth. A presentation and discussion of completed process improvement projects designed to promote excellence in health care in service of our veterans will be provided. The focus on these initiatives' effect on the SCI System of care, the culture of continuous improvement, and the accompanying human stories will facilitate the audience's appreciation of overall impact.

Learning Objectives
1. Be able to describe an interdisciplinary management structure which can be implemented in a spinal cord injury system of care to promote staff engagement at all levels with creating a culture of continuous improvement
2. Be able to describe six specific performance improvement projects in a spinal cord injury health care setting and their impact on staff and patient outcomes
3. Be able to describe several specific ways to introduce human story into staff development and health care delivery strategy in service of motivating providers to be more creative and compassionate in their work to help veterans with spinal cord injuries and disorders achieve healing and meaning in their lives
4. Attendees will learn specific strategies they could potentially apply in their own health care setting.
Abstract

Purpose: The aim was to evaluate the efficacy of the self-reporting tool used for early detection of post-traumatic stress syndrome (PTSD) among Army active-duty service members (SMs) who were deployed in Operation Enduring Freedom/Operation Iraqi Freedom (OIF/OEF) over the last decade. For the duration of this period up to the current the revised self-reporting tool utilized immediately post deployment is the DD form 2796, which remains a subjective instrument.

Method: Multiple sources of literature were accessed to screen and select the more supportive literature for the integrative review. The operative terms for the literature review were post-deployment and PTSD, which is a major mental disorder associated with significant morbidity, psychosocial impairment, and disability. The integrative review of the literature described explicit data on PTSD symptoms in post-deployed SMs who self-report on the DA2796, also known as the post-deployment health assessment (PDHA).

Findings: The findings demonstrated throughout the integrative review of the literature clearly depict the relationship between PTSD and post-deployment; however, the instrument used to achieve the PTSD diagnosis has been shown to be insufficient for early detection of PTSD. As much of the literature included in the integrative review reveals, self-reporting of PTSD like symptoms may not capture early symptoms. The PDHA self-reporting tool is useful, but some additional objective measures should be implemented.

Clinical Relevance: Early identification of and intervention in PTSD for post-deployed SMs who are at risk for PTSD issues and induced problems will result in more referrals to programs that may reduce the chronic severity of the problem and parallel mental distress. This paper will, therefore, recommend a protocol to augment the self-reporting tools and to enhance early detection of PTSD.

Learning Objectives
1. What is the definition of PTSD
2. Identify military populations affected by PTSD and the impact on the service member's overall well-being
3. How effective are the of current instruments to detect early PTSD in post-deployed combat service members
4. What are other measures to assess and manage early PTSD in post-deployed combat service members
Urine Toxicology Screening: High Incidence of Abnormal Findings Among Patients On opioid Therapy

List of Participants and Their Roles in the Abstract

Name: Mauricia Alo  
Organization: NYU HJD  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Purpose

To examine the incidence of abnormal urine toxicology screening among patients prescribed opioids for their chronic pain in the Comprehensive Pain Treatment Center and to relate this to compliance of pain management agreement.

Physicians are advised by the Federation of State Medical Boards to monitor opioids treatment compliance occasionally in the areas of pain relief, function, quality of life and opioid misuse. Reconsideration of opioid therapy in cases of aberrant drug behavior is stated in these guidelines, to be certain that opioids are serving a legitimate medical purpose.

Methodology

From December 2007 to March 2008, patients coming in for routine consultation or follow up visit were asked to do urine toxicology. The center has a pain agreement that each patient signed when they were started an opioid therapy. Many of these patients, due to time constraints had not been tested for a while and were not expecting the drug test. These patients were not told prior to their appointment that a urine screening would be done at the scheduled appointment.

Implications for Clinical Practice

Although this study is limited, it confirmed the value of initial urine drug screens on patients being considered for opioid treatment and from time to time at random, during follow up visit. The increasing pace of prescription drug abuse even faster than the increase in medical use of prescription drugs should concern every practitioner that prescribes opioids. Diversion of prescription medications to non medical use is a critical and increasing public health problem. Adherence to pain management agreement should be emphasized often and violation of such agreement should be a ground for discharge from the practice.

Learning Objectives

1. Define Urine toxicology.  
2. Identify normal and abnormal or consistent and inconsistent results in urine toxicology screening.  
3. Discuss individuals responsibilities when prescribing opioids.
Abstract:

**Background:** Evaluation of surgical patients with fever and leukocytosis (FAL) for an infection source often results in unnecessary laboratory and radiographic tests. Average cost of a FAL workup ranges from $2200 - $5600. Lack of a systematic approach drives costs higher than necessary. We evaluated differences in using usual methods of FAL workups versus FAL workups using an established fever practice guideline (FPG). We compared time to treatment and costs of fever workups using the two methods.

**Methods:** Retrospective electronic chart review of adult surgery patients who underwent FAL workups. Divided into two phases: Phase I: Retrospective review of 82 patient records with FAL workups. Time from initial temperature presentation to fever treatment and total cost per fever evaluation were determined. Phase II: Applied established FPG to 30 ICU patients from the original group of 82 using Phase I data points. We then were able to determine fever workup costs and time to treatment differences by comparing the two groups using paired t-test.

**Results:** The mean time to fever treatment decreased from 51.57 hours pre-FPG to 11.23 hours post-FPG (p<0.001), a 78% reduction in time to definitive treatment. Mean cost of FAL workup decreased from $1009.73 pre-FPG to $399.00 post-FPG (p=0), representing a 68% reduction in the average fever workup cost.

**Conclusions:** Using a standardized FPG, FAL workup time to treatment and associated costs can be significantly reduced based on individual clinical indications for each patient.

**Design and Methods:** This project was performed using a retrospective electronic chart review of former adult surgery patients who had undergone FAL workups within a large Naval Medical Treatment Facility (MTF) General Surgery service (not all of our patients were General Surgery patients, but included all surgical services).

**Learning Objectives**

1. Identify three clinical indications for using a Fever Practice Guideline (FPG).
2. Explain the difference between "Pan-Culturing" and a clinically focused fever workup.
3. Identify three benefits of using a Fever Practice Guideline.
List of Participants and Their Roles in the Abstract

Name: Kenneth Leon Mattox
Organization: Baylor College of Medicine
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Trauma in Disaster – Realistic Planning & Action

Kenneth L. Mattox, MD, Houston

Fire, earthquake, explosion, war, acts of terror, floods, penetrating injury, falling buildings, and multiple vehicle injury on the freeway are examples of the “disasters” which routinely result in injury. Trauma and EMS systems around the world respond to similar trauma etiologies every day and should be the infrastructure for disaster trauma planning and response, using the same trauma leaders, rather than activate others who are unfamiliar with the trauma interlinking structures.

- Utilize transport, triage, evaluation and treatment systems and facilities used in the region during non-disaster times.
- 10% Rule
- “Triage” Principles
- Hospital Trauma “Surge”
- Manpower reflex voyeurism
- Disaster medical humanitarian response (when not invited)
- Over evaluation and treatment
- Use of “protocols”, policies, procedures, not used during routine trauma responses
- Communications

Both the Public Health service and the American College of Surgeons have their regional systems organization in the Hospital Incident Management Systems and the Trauma Center networks. In addition, many states have a regional trauma advisory network, the one in Texas being very linked and sophisticated as manifest during Hurricanes Allison, Katrina, Rita and Ike, as well as during recent area wide fires. These systems are all very effective, but respond in different times and for differing purposes. Integration of the national, regional, and local assets of each during times of public need only increases individual effectiveness.

Finally, the national and international trauma organizations have a standardized approach to injury classification and outcome measurement; all risk adjusted and centrally monitored via data registries. These systems are especially effective when analyzing disaster needs, preparedness, predicting surge issues, and integrating available public health resources.

Learning Objectives
1. Trauma risks during disasters
2. Trauma networks
3. Interaction between Public Health and trauma organizations
Objective: We aimed to analyze the professional identity of Turkish military physicians which is created by military culture, education, and social setting and to explore their moral excellence.

Material: We reviewed and analyzed five memorial books which belong to Turkish military physicians and contain the memories written by themselves, concerning the determination their thoughts, feelings, and emotions related to their values and moral ideals.

Results: Military doctors have to make decisions under the difficult conditions especially in wartime. Their judgments are affected by their education and their social environment. Their behaviors are also affected by their virtues and moral ideals. We tried to characterize the professional identity of the Turkish military physicians, concerning the military social context and focusing on the interactions between external and internal influences, in order to respond to uncertain, unexpected, or critical moments in military setting. We explore from their memories whether they faced deep adversity, difficult tasks, or high risk. What were their thoughts, feelings, and emotions under such kind of conditions? How these conditions might impact their judgments and decision-making and the possible mechanisms of this interaction. Which adjectives they emphasized are related to the moral excellence of a military physician?

Conclusions: Some qualitative data can be obtained from memorial books. Especially some memorial books that were written by prominent professionals contain important knowledge about professional identity. One of the reasons for being a successful military physician is the moral excellence, which has similar moral ideals, ethical and humanitarian values.

Learning Objectives
1. The learner will be able to recognize a military physician's professional identity.
2. The learner will be able to explain military physicians' moral excellence.
3. To discuss military physicians' moral ideals, humanitarian values, and ethical principles.
The conscientious objection concept in Turkey as a country which has military conscription; Media reflections

List of Participants and Their Roles in the Abstract

Namefatih namal
Organization: gata
ankara TR
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

The military conscription raised by advances in war technologies and strategies in the 18th century, in the last quarter of the 20th century began to disappear again in parallel with developments of war technologies, and strategies. Besides the developments in technologies and strategies of war, especially the post-cold war world, as a result of such concepts began to emerge as the dominant values; democracy, multiculturalism and freedom of religion has been effective in the discussion of the application of military conscription. In this context, many countries around the world as well as the Republic of Turkey on the right to conscientious objection to compulsory military service have begun discussing intensively.

Turkey has an important place in its geography both in the term of geopolitical position and historical and cultural features. Additions to its own internal dynamics, has culturally and historically close relations with the Middle East, the Balkans and the Caucasus regions which have continuous high-and low-intensity armed conflict. For these reasons after from the 1980’s as a necessity brought about by age which is alive ever the issue of transition from military conscription to professional military services.

Because of the resumption of the traditional approach that requires "quantitative" precedence instead of the professional approach that requires "qualitative" precedence in terms of technical and manpower, currently joining the army is an imperious obligation for every male gender Turkish Citizen. Therefore, conscientious objection issue, has been engendering serious controversies since the years 1980 that it came into question. These debates have crossed the national boundaries and there has been some court-cases that were adjudicated in European Court of Human Rights (ECHR).

In this study, we intended to review the arguments of the parties ethically by analyzing the news and articles those featured in Turkish Media.

Learning Objectives

1. Evaluation of ethical reflection in the media as the issue of conscientious objection
2. Try to reveal dilemmas that arise on conscientious objection in Turkey with the concept of compulsory military service
3. The philosophical dimension of conscientious objection in Turkey
Blunders

List of Participants and Their Roles in the Abstract

Name: Kenneth Leon Mattox  
Organization: Baylor College of Medicine  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Blunders in Disaster Medical Response

While the public incident command is broadly applicable to medical disaster response, both have evolved differently, and the latter employs a separate and distinct set of principles than those associated with civil planning and response to a local or regional “disaster. Except in a relatively few locations in the world, regional disaster responses, especially medical responses, rarely reoccur in the same areas, so building on real time experience to build upon is not a real consideration. Blunders are, therefore, common in areas of planning, understanding, response, public health, triage, distribution, decision making, manpower management, resource allocation, use of outside resources, endgame timing, voluntarism, and even sheltering. Additionally, blunders of medical credentialing, medical ethics, and utilization of medical supplies often confront the medical disaster team.

Specific real time examples and modeling of blunders will be detailed during the presentation and will include, among others:

- Because they are open, have food and fuel, and are convenient to the disaster response EMS, using specialized health facilities, such as trauma centers, as shelters for nursing home patients
- Having excessive numbers of medical personnel with each patient (even with minor conditions) in an emergency room following a disaster, especially when compared to a busy Friday night, when volume, surge and acuity are greater but personnel numbers are often barely adequate
- Saturating the communications “bandwidth” with repetitious news and nonsensical social chatter, when those same towers and bandwidth are needed by security, rescue and medical personnel.
- Using DIFFERENT EMS transport, triage, and even treatment medical record keeping systems than are used once a disaster is declared – resulting in much confusion

Using social science and regular scientific research technology, the most effective trauma (routine) and disaster triage, surge, and record keeping technologies can be examined, standardized and applied. Many of the silently acknowledged “blunders” are maintained for cultural, traditional, and political reasons, as opposed to scientific and system analysis.

Learning Objectives

1. Learn inappropriate use of critical medical facilities
2. Excessive numbers of personnel
3. Understanding surge
List of Participants and Their Roles in the Abstract

Name: Fred Stone
Organization: University of Southern California
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The health professions have the highest rates of burnout—emotional exhaustion, disengagement, and lack of fulfillment at work. Mental health professionals are particularly prone to burnout. In the federal service, three demands make burnout a potential problem—the demands mental health professionals place on themselves, the demands of their clients, and the demands of the agency. This presentation examines the potential for burnout among military mental health professionals and ways to prevent it. It looks at individual and organizational factors. Attendees will leave the presentation with skills to prevent burnout in themselves and ways to reduce the potential for burnout of others in their workplace.

Learning Objectives
1. Participants will be able to identify the causes of burnout and a lack of professional fulfillment in themselves and others
2. Participants will recognize specific elements in people and the work environment that hinder fulfillment and workplace efficiency
3. Participants will be able to develop a personal action plan for their own professional progress and to avoid burnout
Chronic Multi-Symptom illness and war-related exposures

List of Participants and Their Roles in the Abstract

Name: Drew Helmer
Organization: VA-NJHCS, War-Related Illness & Injury Study Center
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Veterans of combat deployments commonly experience symptoms that are not easily attributed to recognized disease entities or specific environmental or occupational exposures. Chronic multi-symptom illness (CMI) is the term currently used to describe this phenomenon in deployed Veterans. CMI has been documented in Veterans of all modern conflicts, although the clusters of symptoms and prevalence may vary by deployment. For example, up to 30% of Veterans of the first Gulf War report burdensome symptoms that continue more than 10 years after deployment. This presentation will define CMI, its association with military deployments and its prevalence. We will present an evidence based evaluation and management strategy emphasizing important communication strategies. Finally, we will introduce a conceptual framework for understanding the relationship between predisposing, precipitating and perpetuating factors related to chronic multi-symptom illness, including war-related exposure concerns.

Learning Objectives
1. The learner will recognize chronic multi-symptom illness as a relevant clinical phenomenon.
2. The learner will be able to define chronic multi-symptom illness.
3. The learner will be able to discuss key concepts in the evaluation and management of chronic multi-symptom illness in deployed patients.
**Stepped post-deployment care model with overview of WRIISCs**

**List of Participants and Their Roles in the Abstract**

Name: Drew Helmer  
Organization: VA-NJHCS, War-Related Illness & Injury Study Center  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

The Veterans Health Administration (VHA) offers comprehensive healthcare services for all eligible Veterans, but is a recognized leader in healthcare for deployment-specific health issues. Combat has many and diverse effects on health and function and other systems of care may not have the critical mass to address the special needs of deployed Veterans. Post-deployment care has been growing in importance and visibility within VHA since 2001 and a stepped-care approach to deployment health is increasingly apparent. VHA offers services to address post-deployment needs, including point-of-care post-deployment health screening reminders, post-deployment clinics, polytrauma/traumatic brain injury clinical evaluations, amputation care, and specialty mental health care. With regionalized specialty care centers such as the War-Related Illness and Injury Study Centers (WRIISCs), Polytrauma Rehabilitation Centers, and a Pain Rehabilitation Center, the VHA promotes a national system of post-deployment healthcare. This presentation will focus on the WRIISCs, whose mission is to promote clinical care, research and education related to deployment health concerns of Veterans of any era, particularly those with difficult to diagnose or unexplained illnesses. We will present a case of a Veteran referred to the WRIISC to highlight the different steps of the VHA post-deployment care model, the range of deployment health concerns, and the patient-centered, multidisciplinary approach practiced by the WRIISC. We will then discuss how to apply lessons learned from the WRIISC clinical approach to primary care, particularly medical homes.

**Learning Objectives**

1. Describe the VHA stepped post-deployment care model.
2. Describe the WRIISC clinical program and how and when to refer a Veteran for services.
3. Discuss the opportunities and challenges of implementing key attributes of the WRIISC comprehensive clinical evaluation in primary care medical homes.
Extended storage of blood platelets in a phase of hibernation induced by a chemical bioregulator

List of Participants and Their Roles in the Abstract

Name: Stef Stienstra
Organization: Royal Dutch Navy Reserve
Beek-Uubbergen Gelderland ZK NL
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
A bioregulator, a chemical compound, is synthesised, which can bring mammalian cells in a phase of hibernation like the squirrel and Syrian hamster have in winter time. In hibernation mammalian tissue and blood cells are protected against oxidative stress damage as the metabolism changes towards minimal need for oxygen and nutrition. It changes the metabolism and the tissue and blood cells of hibernating animals can cool down to temperature just above freezing point without damage or even losing vitality.

The developed compound initiates a phase of hibernation in human blood platelets, which enables the storage of platelets at 4°C without suffering the so-called cold activation. In a German blood bank experiments were done, which showed that it was possible to store platelets several for weeks in a phase of hibernation in a refrigerator without losing too much vitality. In hibernation in the presence of the developed compounds the platelets don’t show shape change on cooling down. After rewarming the ex-vivo vitality tests done in an aggregometer, haematology counter and with a flow cytometer indicated that the platelets have similar properties as fresh apheresis platelets for transfusion.

The compound is tested for toxicity and can be washed out after it has been used to trigger the hibernation phase enabling the cold storage for an extended period without the conventional shaking on a flat-bed shaker. Platelets have been stored for 21 days without sever loss of functionality. Animal tests in rabbits have shown positive results as well.

This new storage technology for platelets would make it possible to supply platelets for transfusion to role 2 and role 3 hospitals in remote areas of deployment with the same logistics as is present for the distribution of packed red blood cells for transfusion.

Learning Objectives
1. Prolonged storage of platelets
2. Blood component logistics
3. Hibernation in mammalian cells
THE DILEMMA OF DUAL LOYALTIES IN THE GUANTANAMO CONTEXT

List of Participants and Their Roles in the Abstract

Name: Albert Joseph Shimkus
Organization: U.S. Naval War College
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The presentation discuss the role of the military health care provider when providing care to the enemy combatant detained in Guantanamo. Briefly discusses what dual loyalty is related to the officer's oath of office and the duty as a provider to 'do no harm;' and why it is important for the provider to consider these issues.

Learning Objectives
1. The listener will be able to identify what Dual Loyalty are or may be in the context of Guantanamo
2. The active listener will be able to describe avenues that might be used to address dual loyalties
3. The active listener will be able to identify resources that could be utilized if faced in a dual loyalty situation
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
In the past three decades there has been a large increase in the number of women employed outside the home and remaining in the workforce during pregnancy, including members of the US military. Practical authoritative evidence-based guidelines are needed to inform allowable work activity levels for healthy pregnant workers. A multi-disciplinary multi-service workgroup was established, and empirically-based lifting criteria developed by the National Institute for Occupational Safety and Health (NIOSH) to reduce the risk of overexertion injuries in the general U.S. working population were evaluated for application to pregnant workers. Our evaluation included a review of existing clinical guidelines on physical activity restrictions for pregnant military women and civilians, as well as a detailed review of the scientific literature linking occupational lifting to maternal and fetal health. Based upon our findings, we developed clinical guidelines with provisional recommended weight limits that most pregnant workers with uncomplicated pregnancies should be able to perform without increased risk of adverse maternal and fetal health consequences. Except for restrictions involving lifting from the floor and overhead, the guidelines are compatible with NIOSH lifting recommendations adopted in the early 1990s for the general working population. These guidelines should be useful to occupational health practitioners in the evaluation and redesign of lifting tasks and to clinicians in advising patients about manual lifting restrictions at work. Adoption of these guidelines by obstetric and occupational health medical providers would narrow the variability in decisions about employment restrictions related to lifting by pregnant workers.

Learning Objectives
1. Describe health challenges related to occupational lifting in general, and lifting during pregnancy in particular.
2. Explain the significance of occupational guidelines in supporting an increasing population of pregnant workers.
3. Interpret newer guidelines for occupational lifting during pregnancy, as developed by NIOSH and DoD professionals.
List of Participants and Their Roles in the Abstract

Name: Sarah Christine Brown  
Organization: USUHS  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The focus will be on Partnering to Support International Health Regulation (IHR), Peacekeeping Operations, Humanitarian Assistance/Disaster Response (HA/DR) and other Military Operations. AMSUS provides a unique opportunity to build partnerships with international partners in an effort to expand our educational base and perspectives. Albert Einstein is reported to have said, “Learn from the past, watch the present, and create the future.” The goal of this conference is to create a way forward, with a firm perspective of the past, and a complete understanding of the plans and programs affecting missions today so that participants can act in alignment with strategic guidance.

Learning Objectives
1. View from the top on coalition partnerships
2. Set the state for open dialogue and sharing of military medical experiences in support International Health Regulation; Peacekeeping Operations; and Humanitarian Assistance/Disaster Planning/Preparedness/Response
3. Identify lessons from military medical health support to IHR, PKO, HA/DR
Health Support to Peacekeeping Operations (PKO)

List of Participants and Their Roles in the Abstract

Name: Sarah Christine Brown
Organization: USUHS
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The panel will focus on the myriad of issues impacting national and regional security in poorly developed states, with the understanding that such instabilities can be eased through PKOs. They will discuss the role of the UN, its political and military constraints, its supporters, and the unique challenges medical support roles face in these missions.

Learning Objectives
1. Share best practices in health support to peacekeeping operations
2. Learn about successes and challenges of peacekeeping a particular country/region
3. Understand the challenges of peacekeeping a particular country/region
4. Include PKSOI SMEs from US (DoD, HHS, etc)
Health Support to Humanitarian Assistance/Disaster Planning, Preparedness and Response

List of Participants and Their Roles in the Abstract

Name: Sarah Christine Brown
Organization: USUHS
Role(s): Submitter; Non-presenting contributor

Name: Charles Beadling
Organization: Uniformed Services University
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Focused on educating participants on DoD policy guidance regarding these types of missions, as well as the principles for designing and executing Global Health Engagements (GHE) with Partner Nations. The leads, Dr. Charles Beadling from CDHAM and CDR Dan Belisle from DIMO, will also focus on the roles of institutions, such as CDHAM and DIMO in GHE and HA/DR.

Learning Objectives
1. At the end of the panel, seminar participants will know the Department of Defense (DoD) policy guidance to DoD agencies and Services regarding Global Health Engagements for Humanitarian Assistance/Disaster Preparedness (HA/DP).
2. At the end of the panel, seminar participants will understand how to apply the principles for designing and executing effective Global Health Engagements with Partner Nations.
3. At the end of the panel, seminar participants will know the best practices learned through Partner Nation engagements by DIMO.
4. At the end of the panel, seminar participants will understand how Global Health Engagements can impact Partner Nations and be used effectively to build relationships and partnerships between the USG and the PN.
5. Seminar participants will be able to ask questions to clarify statements made by panel members or inquire about issues not discussed.
**Summary of Best Practices and Lessons Learned (L2)**

**List of Participants and Their Roles in the Abstract**

Name: Sarah Christine Brown  
Organization: USUHS  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

The lecture will identify best practices/L2 relating to each of the preceding panel topics.

**Learning Objectives**

1. Identify best practices/L2 in military medical support International Health Regulation
2. Identify best practices/L2 in health support to Peacekeeping Operations
3. Identify best practices/L2 in health support to Humanitarian Assistance/Disaster Planning, Preparedness and Response
Common Causes of Morbidity among Explosive Ordnance Disposal Personnel

List of Participants and Their Roles in the Abstract

Name: Jennifer Cockrill  
Organization: Department of Defense  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background and Objectives:

Upon entrance into the military, individuals are assigned a military occupational specialty (MOS). The MOS explosive ordnance disposal (EOD), has experienced high operational tempo during Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation New Dawn (OND). For this study, we examined numbers, rates, and risk ratios of medically relevant conditions of explosive ordnance disposal (EOD) personnel across all services for the duration of armed conflict in Iraq and Afghanistan (2001-2011).

Methods:

We examined the rates and trends of nine key deployment-related injuries and illnesses in active component EOD personnel in the US Army (USA), US Navy (USN), US Air Force (USAF) and the US Marine Corps (USMC), as defined by ICD-9 coded medical encounters. Service members with an MOS indicating EOD were identified and DMSS records were examined from the period of January 1, 2001 to December 31, 2011. The following morbidities were examined: (1) adjustment disorders, (2) anxiety disorders, (3) post-traumatic stress disorder (PTSD), (4) traumatic brain injury (TBI), (5) alcohol use disorder, (6) substance use disorder, (7) depressive disorders, (8) migraine headache, and (9) amputation.

Results:

During the 10-year surveillance period, rates of adjustment disorder, anxiety disorder, and TBI increased among EOD personnel in the USA. Rates of adjustment disorder, anxiety disorder, migraine headaches, and amputations among EOD personnel in the USN tended to increase after 2007. Rates of adjustment disorder, anxiety disorders, PTSD, depressive disorders, TBI, and amputation among EOD personnel in the USMC tended to increase across the entire surveillance period.

This study is the first of its kind to explore medical issues relevant to EOD personnel in the U.S. Armed Forces. Rates of morbidity reliably increased, sometimes dramatically, beginning in 2007, and this increase may reflect the troop surge in Iraq. Rates of amputations, TBI, and PTSD were substantially higher in USMC EOD personnel than in all-occupation personnel from other services, indicating a potential difference in training, culture, or tactical approach in performing EOD duties in the field. These results could be utilized by senior level military officers to make improvements to EOD force health protection.

Learning Objectives

1. Define the primary duties of explosive ordnance disposal (EOD) personnel
2. List the common causes of morbidity among EOD personnel
3. Interpret how EOD rates differ from the rates of their non-EOD counterparts
4. Discuss how senior military leaders could intervene to reduce highest rates of negative health outcomes
Abstract Body
This session will explore the potential added value of embedded behavioral health providers in specialty care teams. Tripler AMC Hematology/Oncology team will be used as an exemplar of active partnership with a behavioral health provider in daily care of patients and the dynamic interaction possible between team members resulting in positive outcomes for patients and their families.

Being diagnosed with cancer can be a frightening and distressing event that impacts our military members, retirees, and their family members. The cancer diagnosis often includes extensive testing, invasive procedures, complex treatment regimens and referrals to multiple specialty services. This can be challenging to navigate and can seem overwhelming to the patient and family members alike. During this stressful time, providing a holistic approach of incorporating bio-psycho-social-spiritual needs of the patients can promote trust and faith in the medical system. When patients feel understood and supported by their medical team, they may be able to better embrace their new cancer journey by fully engaging in their care leading to a better outcome.

Embedding a behavioral health provider ensures that patient and family members’ psychological needs are addressed comprehensively. Both traditional and nontraditional modalities are used at Tripler AMC to accomplish this goal.

A powerful, innovative venue used to facilitate expression of thoughts, emotions and experiences of the cancer journey is done through the use of art where the entire oncology team works together to create a safe, nurturing environment that facilitates communication between patients, their families and staff. This annual event is one example that might be helpful to consider in other specialty care teams in their comprehensive care of patients.

Learning Objectives
1. List 3 added value factors of full partnership between specialty care services (exemplar given of Tripler AMC Oncology Clinic) and how such collaboration promote trust and the faith in the medical system for patients, which enhances their treatment experiences and subsequent outcome.
2. List 3 contributions an embedded behavioral health provider in a specialty care team can provide to patients.
3. List 3 possible outcomes of incorporating novel strategies such as use of art to express the cancer journey.
Common Exposure Concerns of Returning Veterans

List of Participants and Their Roles in the Abstract

Name: Omovunmi Yejide Osinubi
Organization: War-related Illness & Injury Study Center, VA NJ Healthcare System
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Approximately 45 million Americans have served in support of 12 major conflict operations from the time of the American Revolution War in the 1700’s to the present day war in South West Asia. With technological advances in combat techniques and medical interventions, greater proportions of deployed soldiers are returning home having survived the war and without major physical injuries. Nonetheless, many bear the invisible wounds from varied combat stressors that adversely impact on their ability to re-integrate successfully back into their respective communities.

In addition to physical and psychological stressors of combat, the war environment poses unique chemical and biological hazardous exposures that may be detrimental to health. In a 2010 National Survey of Veterans, 36.8% reported that they may have been exposed to environmental hazards in the course of their military service.

Nine out of 10 Iraq and Afghanistan Veterans evaluated at the New Jersey War-related Illness and Injury Study Center (NJ-WRIISC) - a VA national referral post-deployment center, reported concerns about their deployment exposures. These exposure concerns correlate with physical symptoms and poor health. As the time since deployment increase, Veterans experience deterioration in their physical health and functioning. Proactively addressing military exposure concerns should be an integral part of Veterans’ post-deployment healthcare evaluation and medical management.

This presentation will summarize the most common military exposure concerns including exposures that are unique to conflict eras, and the associated health effects. It will provide a frame work that equips the attendees with the skills to conduct an exposure assessment evaluation, and to effectively address the Veteran’s health concerns in the context of the reported war-related exposures.

Learning Objectives

1. The learner will be able to identify the most common war-related environmental and occupational exposures.
2. The learner will be able to obtain an exposure history in the course of the Veteran’s medical assessment.
3. The learner will be able to discuss and address the identified military exposure concerns and any related health conditions with the Veteran.
The Infectious Disease Clinical Research Program: Leading the Way with Multi-Medical Center Research

List of Participants and Their Roles in the Abstract

Name: Mark Kortepeter  
Organization: USUHS - Dept of Preventive Medicine  
Role(s): Submitter; Presenter

Name: David Tribble  
Organization: Uniformed Services University of the Health Sciences  
Role(s): Non-presenting contributor

Name: Brian Agan  
Organization: USUHS - IDCRP  
Role(s): Non-presenting contributor

Name: Timothy Burgess  
Organization: WRNMMC  
Role(s): Non-presenting contributor

Name: John H Powers  
Organization: SAIC in support of NIAID, NIH  
Role(s): Non-presenting contributor

Name: Gerald V Quinnan  
Organization: Uniformed Services University of the Health Sciences  
Role(s): Non-presenting contributor

Name: Edmund Tramont  
Organization: NIH  
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Headquartered at the Uniformed Services University (USU), the Infectious Disease Clinical Research Program (IDCRP) was established through an interagency agreement between USU and the National Institute of Allergy and Infectious Diseases/National Institutes of Health (NIAID/NIH) to conduct clinical research on infectious diseases of importance to the military. Now in its eight year, with research activities in 13 military treatment facilities, this innovative program has demonstrated the feasibility of conducting multi-center research in the Department of Defense (DoD) utilizing central scientific and IRB reviews, with collaborations across the Army, Navy and Air Force, multiple specialties, military research commands, and military hospital commands. The IDCRP has also networked DoD investigations with other government agencies, including NIH and CDC as well as academic and industry partners. This presentation will cover establishment of the program, program structure, challenges of maintaining success across multiple sites, and an overview of current research activities, results in trauma-related infections, travel/deployment infections, HIV/sexually transmitted infections, skin/soft tissue infections, biodefense/emerging infections, and respiratory infections. Key research activities, such as the characterization of emerging invasive fungal infections in severely combat wounded, ongoing studies on diarrheal disease, utilization of HIV data/serum repository, measures to reduce skin and soft tissue infections and respiratory infections in military personnel (especially trainees) and dependents will be described.

Learning Objectives
1. 1) Describe the challenges of establishing a multi-center DoD research network
2. 2) Discuss research findings of an emerging entity of invasive fungal infections in combat wounded
3. 3) Demonstrate the benefits partnering across multiple commands for a common purpose
Lessons Learned on Becoming a CDE: A Pharmacist's Perspective

List of Participants and Their Roles in the Abstract

Name: Tamy K Leung
Organization: Tuba City Regional Health Care Corp
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Currently there are 26.2 million people who have diabetes in the U.S, and 79 million who have prediabetes according to CDC. This epidemic puts a heavy burden on the healthcare system in terms of access and economic costs. In some Native American communities, diabetes affect 33% of their population. What can we do as health care providers to prevent this trend and curb disease progression? The presentation will feature various services a pharmacist can provide in managing a patient with diabetes.

Learning Objectives
1. Describe the current role of a clinical pharmacist working in the Diabetes Clinic
2. Formulate novel interviewing techniques to help patients with diabetes achieve their goals
3. Identify processes for areas of improvement in the diabetes clinic
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
A primary ethical concern for uniformed and civilian behavioral health providers is the balance of maintaining confidentiality while ensuring personnel readiness. This presentation provides a comprehensive review of limits to confidentiality in behavioral health settings as outlined by U.S. Army regulations and Department of Defense directives. Specific limits will be discussed under several major categories, including: medical treatment and oversight, command notification, threats to safety, public health purposes, judicial or administrative proceedings, law enforcement investigation, and specialized personnel programs. Specific attention is given to war crimes reporting, special duty, and command involvement. A collaborative model for balancing treatment needs and command requirements will be presented, with a focus on real-world application of ethical dilemmas surrounding patient information disclosure to command. Lessons learned for best practice from a number of settings also will be presented, including the military treatment facility, the deployed environment, and the embedded behavioral health initiative.

Learning Objectives
1. Cite relevant regulations regarding limits to confidentiality based on DoD Directive 6025.18-R.
2. Identify appropriate contexts for the disclosure of service member information to commanders based on a collaborative model.
3. Interpret and balance conflicting interests and ethical concerns in the disclosure of health information.
**Military Sexual Trauma in Veteran Men: Applying Empirically Supported Treatments**

**List of Participants and Their Roles in the Abstract**

Name: Tim Hoyt  
Organization: U.S. Army  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

The bulk of literature on sexual trauma experienced in military contexts focuses on women veterans. However, significant rates of military sexual trauma in men have been identified in both DoD and VA studies. This presentation will focus on treating men who have experienced military sexual trauma, including reviews of reported rates of men’s military sexual trauma over the past 30 years, common themes reported by men, and symptoms reported by male victims. A two-tiered treatment approach will be discussed, in which a skills-focused group is utilized as an initial step to prepare victims to manage the emotional upheaval of engaging in exposure-based treatment. Specific applications of Prolonged Exposure and Cognitive Processing Therapy for this population also will be discussed, with suggestions for modifying both individual and group therapy approaches. Finally, a model for providing ongoing care through peer-led support groups will be presented.

**Learning Objectives**

1. Describe identified rates of and common themes in men's military sexual trauma.  
2. Utilize a multi-tiered approach to treatment planning for men's military sexual trauma.  
3. Discuss common themes and treatment barriers associated with men's military sexual trauma.
List of Participants and Their Roles in the Abstract

Name: Jeffrey Greenberg
Organization: Data Recognition Corporation
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Providers in the psychological health community have long focused on models of skills acquisition to treat or prevent psychological health disorders and psychological distress. For more than four decades, researchers have examined social problem solving (also known as real world problem solving) as an evidenced base approach to prevent negative health outcomes and reduce various types of risk. The social problem solving model conceptualizes problem solving as a multi-dimensional construct consisting of problem orientation and problem solving style. Thus, social problem solving is an affective and behavioral model. Prior research suggests that this model will benefit providers and policy makers across federal agencies. For example, evidence exists which identifies that irrespective of exposure to combat effective social problem solvers were less likely to experience PTSD than their ineffective problem solving cohort. Individuals with numerous chronic health problems experience positive recovery curves when they are effective problem solvers. The following proposes an introduction to the social problem solving model, reviews the literature across behavioral health challenges and posits as an approach which applies evidence based skills acquisition (problem solving) to improve outcomes, reduce risks and mitigate costs. The research base which supports social problem solving suggests that it is a feasible model for utilization across agencies. Moreover, social problem solving can be delivered as a manualized treatment and aids development of case conceptualization. This enhances diagnostic accuracy, supports mapping of pathogenic processes and can be delivered as a unitary or adjunctive treatment/prevention model suitable for cross agency application.

Learning Objectives

1. Participants will understand the rationale for social problem solving as a cross agency model for behavioral health
2. Participants will be introduced to the evidence base for social problem solving in behavioral health
3. Participants will understand the rationale for social problem solving as a cross agency model for behavioral health
Abstract Body

Service members and Veterans that deployed to Iraq and Afghanistan may have been exposed to airborne health hazards, mainly through respiration of high levels of ambient particulate matter from local and regional sources. This presentation will provide an overview of the potential hazards and the joint VA and DoD response. Details of the VA Airborne Hazards Open Burn Pit Registry, required by Public Law 112-260, will be provided. After attending this lecture, health care professionals will understand the goals of the Registry, how to discuss health risks of potential exposures with Veterans, the clinical and administrative processes involved in the Registry, and resources available to care for Veterans with environmental health concerns related to deployment.

Learning Objectives

1. Cite three potential airborne health hazards related to deployment to Iraq and Afghanistan
2. Discuss the objectives of the joint VA and DoD response to Veterans and Service members
3. Describe the benefits of participating in the registry to Veterans
Biomarkers for TBI Implications for Diagnosis and Management of Contusions

List of Participants and Their Roles in the Abstract

Name: John Mullins
Organization: GaANG
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

AMPA and NMDA receptor antibodies in assessment of chronic phase of contusion

J.D. Mullins, MD, Col. USAF MC FS, Joint Surgeon, Georgia National Guard, G. Cary, MD, S.A. Dambinova, DSc, PhD

1 Piedmont Hospital, Atlanta, GA, 2 Shepherd Center, Atlanta, GA, 3 Kennesaw State University, Kennesaw, GA

Purpose/Aims: The question posed was whether AMPAR and NMDAR antibodies in a blood draw could differentiate a brain injured patient from a normal control. Correlation with neuroimaging should then be examined to evaluate the usefulness of these tests.

Population Studied: A total of 40 persons of age of 19-50 were enrolled in the pilot blinded study at Shepherd Center. Of 40 subjects, 20 had clinically defined contusion and 20 were age and gender-matched uninjured controls.

Methods: Patients with contusion (1-2 mo. after the impact) diagnosed by conventional CT/MRI. AMPAR and NMDAR antibody blood assays were performed using ELISA.

Findings: AMPAR Ab preliminary threshold of 1.4 ng/mL for contusion was determined. AMPAR Ab concentrations (1.70–16.8 ng/mL) were increased in 13 TBI persons and 3 controls. It yielded a 15% (n=3) false positive and 35% (n=7) false negative. NMDAR Ab was increased above the threshold of 2.5 ng/mL in total of 5 controls that calculated of 20% false positive and 15% (n=3) false negative. In individuals with contusions, high AMPAR Ab values reflected minor structural changes in subcortical areas, while NMDAR Ab levels (2.6-14.8 ng/mL) correlated with MRI findings of persistent changes in cortex.

Conclusion/Recommendations: AMPAR and NMDAR antibody assays in conjunction with other neurological and radiological findings are promising tools for risk assessment of contusion. It was demonstrated that contusion causes persistent changes in cortical and subcortical structures. Future clinical uses would be establishing degree of brain injury, prognosis of outcome, efficacy of treatment and potentially disability assessment.

From/To Period of Study: April - December 2012.

Learning Objectives
1. report a category of glutamate receptor peptides that are detectable in brain injury subjects
2. describe the method of studying exposed populations at risk
3. discuss the significance of a detectable biomarker as to diagnosis, management, and future investigations
Overview and Presentation of Selected Findings from VA Post-Deployment Health Epidemiology Program

List of Participants and Their Roles in the Abstract

Name: Aaron Ira Schneiderman
Organization: Department of Veterans Affairs
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The Department of Veterans Affairs (VA) Post Deployment Health Group Epidemiology Program (EP) has conducted epidemiological surveillance and research activities in various potentially exposed and deployed cohorts of US Veterans from WWII to the present. This presentation will provide an overview of the current activities of the program, the strengths and challenges of population based research in Veteran populations, and a presentation of results from recent research on Veterans health from Vietnam, the 1991 Gulf War and Operations Enduring Freedom and Iraqi Freedom (OEF/OIF). An overview of the methods and preliminary results will be presented from two studies that are currently in the field: the Army Chemical Corps Vietnam-Era Health Study (ACC) and the Follow-up Study of Gulf War and Gulf-Era Veterans (GWFS). Both of these studies have engaged historical panels of deployed and non-deployed Veterans of the respective eras over a period of one or more decades. The ACC has applied survey measures, medical record validation, and in-person measures to assess hypertension and chronic obstructive pulmonary disease (COPD), both issues of concern in the continuing recognition of service connected disability for Vietnam Veterans. The GWFS has used traditional survey methods over a period of 20 years and three waves of data collection to gather data that has influenced the scientific dialogue regarding Chronic Multisymptom Illness and provided information on the general health status of Veterans of the 1991 conflict. Additionally, findings from analyses of survey research and mortality reviews of the OEF/OIF population will be presented.

Learning Objectives
1. Attendees will be able to describe the methods deployed in VA studies of combat deployed cohorts.
2. Attendees will be able to list 2 significant issues that are the primary foci of two conflict cohorts.
3. Attendees will be able to explain at least two strengths of findings from population based research of Veterans.
ED Utilization Patterns among Veterans of Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn

List of Participants and Their Roles in the Abstract

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  **Role(s):** Submitter, Presenter

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body

**INTRODUCTION:** The healthcare needs among veterans from the Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND) campaigns have challenged the Veterans Health Administration (VA). Concern for veterans’ access to emergency care has led us to identify the frequency and correlates of emergency department (ED) utilization, and frequent ED utilization, among this cohort.

**METHODS:** With IRB approval, we conducted a retrospective study of OEF/OIF/OND veterans using VA administrative data. OEF/OIF/OND veterans receiving VA care at least once in 2010-2011 were included. We assessed the frequency of ED visits, and primary ED diagnoses, in 2011. We defined frequent utilization as 4+ ED visits annually. We used Anderson’s Behavioral Model to identify factors associated with our primary outcomes. After performing bivariate analyses, we constructed two logistic regression models whose dependent variable were any ED utilization, and among those with ED care, frequent ED utilization. Models were tested for interactions, collinearity, and goodness-of-fit. Analyses were performed using SAS 9.2.

**RESULTS:** Of 311,402 veterans (15% female), 111,021 (35.7%) sought ED care in 2011; 17,012 (5.5%) had frequent ED use. The most common ED diagnoses were: counseling, musculoskeletal pain, and injury. In the final model, homeless veterans in 2011 were nearly 2.5-times as likely to have 1+ ED visit (OR=2.5, 95%CI=2.3-2.6), or frequent ED use (OR=2.5, 95%CI=2.3-2.7). Veterans with an ED visit in 2011 were over 3-fold more likely to have had 1+ ED visit in 2010, and over twice as likely to have frequent ED visits in 2010 (OR=3.6, 95%CI=3.5-3.7, and OR=2.6, 95%CI=2.5-2.7, respectively). Conversely, veterans without PTSD, TBI, or depression were less likely than those who did to have any ED use (OR=0.82, 95%CI=0.79-0.85). Compared to veterans aged 25-40, those 41-55 were less likely to have any ED use (OR=0.78, 95%CI=0.76-0.79).

**CONCLUSION:** In this study of OIF/OEF/OND veterans, ED use was common. Homeless veterans, and those with prior-year visits, were more likely to have ED use. Older veterans, and those without PTSD, TBI, or depression, were less likely to seek ED care. Understanding the factors relating to ED utilization may guide VA in addressing the emergency care needs of these veterans.

**Learning Objectives**

1. Describe the Anderson Behavioral Model, a conceptual model proposed by Anderson, et al, which outlines factors (i.e., predisposing, enabling, and need-based factors) that lead to health services use.
2. Cite known predictors of emergency department (ED) utilization in the civilian context
3. Identify the factors that are related to 1) any ED use, and 2) frequent ED use among veterans of the OEF/OIF/OND conflict
A public health crisis is emerging due to Human Papilloma Virus (HPV), the most common sexually transmitted infection in the world, according to the National Cancer Institute.

HPV infection is a well-known cause of cervical cancer; over the past decade HPV has emerged as a cause of head and neck cancer. Epidemiologic data indicates that head and neck cancers related to tobacco are decreasing, while the incidence of HPV associated cancer is rapidly rising.

Historically oropharyngeal tumors occur in heavy smokers and drinkers, most frequently in the 5th through the 7th decade of life. HPV associated oropharyngeal cancers present in younger individuals, often in white males, and in non-smokers. There are no known pre cursor lesions or reliable screening tests for HPV related head and neck cancers. HPV tumors often present at a higher stage as metastatic lymph nodes in the neck, most often arising from the tonsils and the base of tongue.

The only preventive method available is vaccination prior to becoming sexually active. The new HPV vaccines — recommended for both boys and girls at age 9 to 12 — have been shown to protect against cervical, vaginal and vulvar cancers. No data exists for oropharyngeal cancers. Animal tests suggest that an HPV vaccine would be preventative, and both approved vaccines block HPV 16 and 18, the subtypes of the virus that cause most of these cancers.

This is an early stage public health epidemic which needs to be stopped through education and vaccination.

Learning Objectives

1. Recognize the features of this new disease process
2. Understand that there is a new population at risk
3. Learn to provide the information necessary to educate and vaccinate the population at risk
HEALTH PERCEPTION AND WELLNESS IN MILITARY RETIREES AND FAMILY MEMBERS

List of Participants and Their Roles in the Abstract

Name Fujio McPherson
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Role(s): Presenter

Name Kristal C Melvin
Organization: US Army
Role(s): Submitter; Non-presenting contributor

Name Donna Belew
Organization: Madigan Army Medical Center
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Name Leigh McGraw
Organization: Madigan Army Medical System
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Despite efforts targeted toward health promotion and wellness, little research describes military beneficiaries’ perceptions of health, actual wellness behaviors and healthcare utilization in a system with no costs associated with healthcare delivery.

Objective: To explore wellness behaviors and subscales of the RAND Health Perceptions Questionnaire in a military population.

Method: Surveys (N = 978) were distributed to adult patients waiting for appointments in primary care clinics, with 63% returned (N = 613).

Results: An inverse relationship existed between Current Health Perception and number of current prescriptions (p < .001) and number of primary care visits in the preceding six months (p < .001). Not surprisingly, participants engaging in healthy behaviors of regular exercise and tobacco-free lifestyle had higher health perception scores than non-exercisers and smokers (30.3 [6.9] vs. 26.6 [7.5] p < .001; 29.8 [7.0] vs. 25.7 [7.8], p < .001, respectively). Of interest was that compared to the 60+ year old group, the youngest group (18-29 years) reported both a perceived lower resistance to illness (13.5 [3.9] vs. 14.8 [2.8], p = .005) and a higher health worry/concern (13.4 [3.0] vs. 12.3 [2.8], p = .007). Nearly two-thirds of participants expressed interest in an individualized, comprehensive wellness program.

Conclusion: These findings suggest that increased health care utilization and use of prescriptions are related to current health perceptions. There is a demand from military beneficiaries for integrated, holistic approaches to foster wellness. Programs are needed to empower healthy behaviors and to positively impact patients’ perception of health, especially in young adult military beneficiaries.

Learning Objectives
1. Describe the wellness and health perceptions of a military beneficiary sample.
2. Explain how health beliefs and behaviors are (or are not) associated with one another.
3. Discuss the implications of wellness perception findings in military populations.
Partnerships in Military Aerospace Medicine

List of Participants and Their Roles in the Abstract

Name: Diana Roesner
Organization: Office of Surgeon General, German Air Force
Siegburg DE
Role(s): Submitter, Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Expertise in Aerospace Medicine and Altitude Medicine for the German Federal Armed Forces has to be provided by the German Air Force Center of Aerospace Medicine. It supports flying operations in Army, Navy, and Air Force and operations in or from high altitudes in specialized, special and mountain forces. For these customers the expertise has to cover a broad specter of human sciences from multi-speciality clinical medicine and physiology to psychology, sports sciences, forensic toxicology, ergonomics and aerospace engineering. Ongoing operations, new scenarios, and progress in technology permanently create new problems to be solved and questions to be answered.

Own resources, on the other hand, with regard to staff, equipment, methods and professional sub-specialties available within the own organization are limited, and so is the budget available. Co-operation with other institutions, with external partners, military and civilian as well as national and international therefore is mandatory.

These partnerships both for the own institution and the partners are beneficial in so far, as experience and methods can be exchanged, equipment can be used more efficiently by sharing it, while pooling allows for greater impact. Interesting projects for masters’ or doctoral theses can be offered to young scientists. Of special interest to our partners are the access to highly specialized populations and operations, and the use of sophisticated equipment like a high performance human centrifuge, altitude chamber, and various simulators related to aviation. Of special interest to our own institution is the connection to university level research and highly specialized methodology.

The partnerships range from single projects with limited scope to long-term strategic partnerships. Examples will be presented.

With the latter institution further development of a strategic partnership is under way. Apart from research projects it will include common use of newly built infrastructure and the development of a post graduate training program in Aerospace Medicine.

In the international arena partnership takes place within the institutional framework of NATO’s Science and Technology Organization’s Human Factors and Medicine Panel, the Medical Directors Board of the European Air Group and within professional organizations as the European Society of Aerospace Medicine and the Aerospace Medical Association.

Learning Objectives
1. Partnership
2. Military
3. Aerospace Medicine
**Team Documentation in a Fast Track Setting: Primary Care**

**List of Participants and Their Roles in the Abstract**

Name: David Hernandez  
Organization: SAMMC-BAMC  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Problem/Background:** Mcwethy Troop Medical Clinic is a standard primary care clinic that oversees the care of the training population in Fort Sam Houston, TX. Military students have long wait times in the clinic and have a limited amount “loss training time”. Limited access to appointment due to influx of sick call patients. Current clinical practice does not support tenants of Patient Care medical home, team documentation and fast track processing which may contribute to the extended wait times.

**Purpose:** Clinical process improvement to introduce and measure the effect and efficiency of team documentation as part of the fast track sick call processing. Reduce Service member (SM) sick call wait times; minimize loss training time; Improve continuity of care; Align sick call process with the Patient-Centered medical home model and Promote multidisciplinary team documentation during sick call encounter. Demonstrate that specific encounters do not warrant traditional 20 minute appointments.

**Goals:** 1) Train selected team members in the Fast Track Team Documentation. 2) Utilize team documentation and Fast Track methods to reduce wait time and introduce 10 minutes appointments. 3) Support the patient medical home process (PCMH). 4) Maintain data quality assurance and standards of practice.

**Methods:** Data collection from the providers in Fast Track (2 each) was taken and measured against traditional clinic providers. CHCS reports provided the end of day workload. Chart checks were used to determine data quality for selected variables.

**Outcomes:** 1) Selected trained personnel included Nurse practitioner, physician assistant, registered nurse, licensed practical nurse and medical assistants/ medics. Efficiency in the training was measured in routine After Action Reports and adjustments were done. 2) Fast track documentation and processing enabled patients to be seen on average 6 encounters /hr. 3) Data quality was measured met or exceeded standards. 4) Continuity of care and support of the PCMH model was maintained.

**Significance:** The team documentation format can be an effective form of delivering care without compromising the outcomes in health and can reduce wait times in the primary care setting.

**Learning Objectives**

1. Discuss Team Documentation and Fast Track processing.
2. List the training phases utilized in Team Documentation and Fast track process.
3. Discuss measured outcomes during the implementation of Team Documentation in the Fast track processing.
Care of the Young Veteran—Considerations in Primary Care

List of Participants and Their Roles in the Abstract

Name: Kate Mitchell  
Organization: TBI Clinic, Fort Drum  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The current generation of young combat veterans are dubbed “The ‘New’ Greatest Generation”. They have more combat exposure than veterans from past conflicts with more severe mental and physical wounds due to increased survival of previously lethal injuries, and increased use of unconventional weapons like improvised explosive devices. This presentation is aimed at educating providers about the unique medical and mental health considerations of the young veteran. Specifically, this presentation will explore the deleterious health effects of chronic stress, poor sleep quality, PTSD, TBI, Suicide, Substance Abuse, Sexual Trauma, Infertility issues. Additionally, the presentation will provide the primary care provider with resources to assist in working with and caring for this segment of the population.

Learning Objectives
1. describe the population of Young Veterans
2. explore individual mental and medical conditions of this group: stress, insomnia, PTSD, TBI, Suicide, Substance Abuse, Sexual Trauma, Infertility
3. provide examples of methods of care and resources available to the primary care provider working with this population
Outpatient Pediatric Overweight and Obesity Evaluation and Recognition in U.S. Military Treatment Facilities

List of Participants and Their Roles in the Abstract

Name: Wayne Dickey  
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Role(s): Non-presenting contributor

Name: David Richard Arday  
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Name: Joseph Kelly  
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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
TRICARE analyses of electronic clinical data show that approximately 14% of children and adolescents (ages 3-17 years) seen in military treatment facilities (MTFs) during fiscal year (FY) 2011 were overweight and an additional 11% were obese, by pediatric body mass index (BMI) percentile. We undertook manual electronic medical record (EMR) abstraction to validate electronic data derived quality of care metrics. Samples of 341 obese (BMI percentile ≥ 95%) and 579 overweight (BMI percentile = 85.0-94.9%) pediatric patients were drawn from the analytically identified patient populations. Manual EMR abstraction was performed on all MTF outpatient visits among the sampled populations during FY11. Generic height, weight, and BMI recordation exceeded 97% for the year. The more specific pediatric BMI percentile assessment was recorded for 37% of overweight and 48% of obese patients. Provider diagnostic recording was 7% of overweight and 29% of obese, while allowing any mention of the patient’s weight status increased provider recognition to only 11% of overweight and 32% of obese patients. This compares to administrative record diagnostic coding rates of 5% for overweight and 23% for obese patients. However, documentation of nutrition or activity counseling exceeded diagnostic documentation, with 48% of overweight and 63% of obese receiving counseling. Counseling rates were higher among those with diagnoses. Despite finding little evidence that providers were recognizing in their notes, but not explicitly recording overweight/obesity diagnoses, just over half of the total overweight/obese population had record of receiving some form nutrition or activity counseling. Administrative diagnostic coding rates approximate provider recognition rates, but counseling rates are much higher.

Learning Objectives
1. Describe the discrepancy between TRICARE estimates of pediatric overweight/obesity derived from AHLTA electronic clinic data and that diagnosed and recorded by MTF providers.
2. Explain the importance of pediatric BMI percentile assessment in recognizing and diagnosing pediatric obesity.
3. Discuss the importance of accurate diagnostic recording with respect to quality of care delivery and quality of care metric monitoring.
**Tuberculosis Among Nonimmigrant Visitors to US Military Installations**

**List of Participants and Their Roles in the Abstract**

Name: Kevin Bruce West  
Organization: USAF/ Wilford Hall Ambulatory Surgical Center  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**ABSTRACT**

**Background:** Nonimmigrant visitors are not required to be evaluated for tuberculosis (TB) before entering the country. Little literature exists describing the challenges of TB control among this demographic. This report reviews the challenges in managing TB in this population on U.S. military installations.

**Methods:** Six cases were identified from reportable medical event reports. Information was obtained from public health personnel via phone interviews. Verified cases from 2004 to 2011 were included.

**Results:** Challenges were congruent among locations including: lack of procedures to screen for infection and disease among individuals at time of entry allowing one case to be admitted with acquired immunodeficiency syndrome and another concurrently on treatment for active TB; delays in the diagnosis of active TB as median time from entry to diagnosis was 62 days; and the need to conduct an effective contact investigation as the mean contact index was 77 including 1 secondary case of active TB.

**Conclusions:** These cases emphasize the need for screening for TB in visitors from high-risk countries at time of entry, prompt diagnosis and treatment if found, procedures for evaluation of contacts, and interjurisdictional cooperation in large contact investigations. These challenges are common to nonimmigrants in both military and civilian settings.

**Learning Objectives**

1. cite the issues faced when allowing TB un-screened international students at your facility  
2. discuss road blocks to having new international students screened  
3. define steps YOU can take to facilitate early/mandated international student screening at your facility
**Introduction of Digital Pathology into AFMS: Design and Implementation of a Model Network**

**List of Participants and Their Roles in the Abstract**

<table>
<thead>
<tr>
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<th>Organization</th>
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<tbody>
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**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Background:** Air Force Medical Service (AFMS) is exploring ways to introduce digital pathology (DP), utilizing whole slide imaging (WSI), into its pathology practice. A Department of Defense (DoD) award to UPMC is supporting research to design and implement a model DP network within the AFMS. **Aim:** Establish and evaluate a model DP network that will allow sharing of digital slides between several AFMS pathology centers. **Methods:** To support the design of the network, unique needs and requirements of AFMS pathologists were identified using the contextual inquiry method by Holtzblatt et al 1998. A review of US commercially available WSI systems (scanners and software) was performed. The selected WSI system had to support pertinent AFMS clinical applications and the manufacturer had to dedicate resources to complete the DoD Information Assurance Certification and Accreditation Process (DIACAP). **Results:** A contextual inquiry study was conducted at pathology centers by a UPMC team and revealed that DP will be highly beneficial for the AFMS, mainly due to the global distribution of pathology centers and the unique demographics and staffing pipeline for pathologists and histotechnologists. The clinical applications identified to benefit from DP implementation were consultations, quality assurance, and global workload distribution. Comprehensive evaluations of WSI scanner assessed a variety of technical features, image quality, and usability. Aperio WSI systems were selected and installed at six AFMS pathology centers. Training was conducted and studies were developed to encourage slide scanning and interpretation. Prior to obtaining DIACAP, systems were connected to isolated networks at each center. Pathologists utilized a web application, Aperio’s eSlideShare, to share digital slides and to conduct subspecialty virtual grand rounds. Following the completion of all DoD and Air Force security processes the systems will move from isolated networks to the Air Force network. Digital slide sharing will then enable the establishment and testing of relevant clinical applications, such as consultations. **Conclusions:** AFMS is the first military healthcare system to establish a DP network that connects pathology centers distributed across the US. This model network provides building blocks for future DP enterprise systems for military pathology.

**Learning Objectives**

1. Discuss digital pathology in general
2. Discuss implementation of digital pathology within a large organization, with focus on the DoD
3. Provide general guidelines for selecting whole slide imagining scanners and supporting software
Implementation of Telemedicine at the Houston MEDVAMC for Hematology and Oncology Care of Veterans

List of Participants and Their Roles in the Abstract

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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Approximately half of the patients treated at the MEDVAMC for cancer & blood diseases reside in rural areas or close to Community Based Outpatient Centers (CBOCs). Their care involves multiple trips to the Houston Cancer Center for diagnostic testing, education, therapy and follow-up. However physical & financial issues limit multiple trips. In addition, family members are often not able to accompany the Veteran due to limited space on the VA vans/work schedule.

The Office of Rural Health (ORH) Strategic Plan seeks to improve access and quality of care delivered to rural and highly rural Veterans by optimizing the use of health information like Telemedicine technology at the MEDVAMC and CBOCs. Through a grant supported by the ORH, our VA has implemented VTEL clinics for patient and care-giver education of the disease, therapy & diagnosis. These clinics are also used for ancillary services like Social services, Nutrition care among others.

The program has been successful with 457 encounters between Jan 2012 and March 2013, with very high satisfaction ratings (mean 4.8/5) and program approval (97%). The 457 encounters included 200 for Oncology, 178 for Benign Hematology and 79 for malignant hematology. Currently we partner with 6 CBOCs where our VTEL clinic is available. We plan to expand our services to include Genetic counseling, survivorship and palliative care.

This is an efficient and innovative model of health care delivery and outreach for cancer, hematology and ancillary services care.

Learning Objectives
1. Use of Telemedicine Technology in Cancer and Hematology Care
2. Subspecialty community outreach and care of Rural Veterans
3. Ancillary and supportive services through Telemedicine
**Health Culture and Communication Competence in Global Health Engagements -- Critical Mission Enablers**

**List of Participants and Their Roles in the Abstract**

Name: David Tarantino  
Organization: USUHS/Center for Disaster and Humanitarian Assistance Medicine  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

Background: The Center for Disaster and Humanitarian Assistance Medicine at the Uniformed Services University has conducted a multi-year analysis of health culture and language competence in global health engagements as part of a grant from the Office of the Secretary of Defense.

The Department of Defense (DoD) has increasingly recognized the critical role of general culture and language competence as mission enablers in global engagements. However, there has been scant attention to health-specific culture and language competence in DoD. In the US, the Department of Health and Human Services has promulgated standards for culturally and linguistically appropriate health services, and much has been published regarding culture and language issues in domestic clinical settings. However, to date there has been insufficient analysis of health culture and language issues in global health engagement settings.

This presentation will summarize our multi-year analysis, including:

-- Comprehensive USG document review regarding general culture and language competence;
-- Comprehensive literature review regarding health culture and language competence in international settings;
-- Explanation of core health culture and language competence definitions and principles;
-- Proceedings of a national symposium on health culture and language in international settings;
-- Emerging construct for understanding and engaging in global health: Health Context as the cumulative and overlapping influence of general culture, health culture, determinants of health, and the health system(s);
-- Critical role of health culture and language competence and health context understanding in global health engagements;
-- Methods and tools to optimize global health engagements through the application of health culture and language competence and health context understanding;
-- Policy recommendations to develop standards and training to enhance health culture and language competence in the Department of Defense.

**Learning Objectives**

1. Describe the core principles of health culture and language competence  
2. Identify the essential parameters for understanding a foreign health context  
3. Recognize the essential role of health culture/language competence and health context in global health engagements  
4. Optimize global health engagements by application of health culture/language competence and health context
Health Culture and Communication Competence in Global Health Engagements

List of Participants and Their Roles in the Abstract

Name: David Tarantino  
Organization: USUHS/Center for Disaster and Humanitarian Assistance Medicine  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

USUHS/CDHAM has developed a series of training courses:

I. Health Culture and Language 101 - a 1.5-2 hour course of instruction targeting DoD health personnel who may participate in global health engagements. The course objective is to provide general awareness and basic health culture and language competence in order to optimize global health engagements.

-- General Cultural Awareness

-- Health-Specific Cultural Awareness

-- Understanding Foreign Health Systems and Health Context

-- Cross-cultural Communication

Learning Objectives

1. Identify essential principles of health culture and language competence
2. Identify essential principles of health interpretation in an international setting
3. Apply health culture and language competence to optimize global health engagements
4. Apply health interpretation competence to optimize global health engagements
Patient-Centered Pain Care: Redesigning pain management to improve outcomes and contain costs

List of Participants and Their Roles in the Abstract

Name: Alex Cahana
Organization: University of Washington
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Pain medicine has struggled to ascertain itself as a legitimate focus of health care. This effort has succeeded in establishing pain assessment as a focus of regulatory civilian (JCAHO), Military and Veteran (DoD-VA Pain Task Force) attention. But efforts to reduce pain intensity among patients have generally not improved their lives. For example, expenditures on back pain care have greatly increased in the past decade without improvement in patient outcome. The goals of outpatient pain care are often pain-centered rather than patient-centered. This has often produced symptom reduction over the short-term, but rarely long-term global improvement in patients’ ability to live their lives and achieve their personal goals. In the case of chronic opioid therapy, this has led to increases in opioid abuse and overdose, but little improvement in patient function. A narrow focus on eliminating pain is no more patient-centered than the focus on eliminating pain-causing disease that it sought to replace. Incentives within fee-for-service care have promoted use of disease-focused procedures, but have not increased patient centered outcomes. We will present a model of care that focuses on outcomes broader than pain reduction per se that include five components: (1) Coordinated Care between Primary and Specialty Care Providers (2) Collaborative Care & Community Outreach using Telemedicine technology, (3) Measurement-based Care through Outcomes Assessment, (4) Effective Prescription Opioid Management through guidelines, novel clinical workflows, and care plan monitoring, and most importantly (5) promoting Program Evaluation and Research through infrastructure designed to continuously monitor outcomes and inform policy and guidelines. This model has been presented as a prototype for Pain Care for the Military and Veterans health systems.

References:


2. CDC press release: (accessed May 9, 2013)
   http://www.cdc.gov/media/releases/2013/p0220_drug_overdose_deaths.html


Learning Objectives

1. To learn how to design patient-centered pain care processes, thereby improving patient safety and satisfaction
2. To understand why pain reduction is not a patient-centered outcome
3. To appreciate the challenges in prioritizing reimbursements and incentives for pain care on individual and population levels
Immediate Bed Availability and US Hospital Disaster Preparedness

List of Participants and Their Roles in the Abstract

Name: Robert Scott Dugas
Organization: DHHS/ASPR/OEM
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background:

During disasters, the ability to rapidly make acute care beds available to handle patient surges is response essential. Building a planning framework that guides the US healthcare industry toward improved/measurable disaster preparedness is a question.

Articles examining benefits to hospital collaboration during disasters exist. However, knowledge gaps remain to define core healthcare preparedness capabilities – hindering national preparedness achievement discussions.

Methods:

A recent release helped fill this gap - the “2012 Healthcare Preparedness Capabilities: National Guidance for Healthcare System Preparedness”. The Hospital Preparedness Program, USG grant within the Department of Health and Human Services, Assistant Secretary for Preparedness and Response, expert developed a set of 8 healthcare preparedness capabilities and roadmap for US hospital implementation. Within are guiding development of sub-state regional healthcare coalitions (HCC) and their execution of Immediate Bed Availability (IBA) through disaster response operations and daily care delivery. These capabilities, the HCC, and its IBA intersection will 1. be presented as a learning objective, to 2. demonstrate a healthcare system’s ability to continuously monitor, discharge and offload/onboard patients, and ultimately make beds available.

Results:

I argue that (learning objective 3.), US hospital business practices can be nudged through a preparedness framework and Federal grant that builds IBA concepts into an evolving HCC construct for use during disasters/daily care delivery.

Conclusion:

In conclusion, this strategy will not only close the research gap/provide improvement evidence, but advance IBA within the US healthcare industry’s new preparedness architecture.

Learning Objectives

1. Understanding of healthcare preparedness capabilities, healthcare coalitions and Immediate bed availability
2. Demonstrate a healthcare system’s ability to continuously monitor, discharge and offload/onboard patients, and ultimately make beds available
3. Consider that US hospital business practices can be nudged through a preparedness framework and Federal grant that builds IBA concepts into an evolving HCC construct for use during disasters/daily care delivery
Cooperative Health Engagement: US PACOM Strategy to Health Security

List of Participants and Their Roles in the Abstract

Name: Raquel Bono  
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Role(s): Presenter

Name: Mark D Evans  
Organization: PACOM  
Role(s): Non-presenting contributor

Name: Norman Thomas Greenlee  
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Role(s): Non-presenting contributor

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Role(s): Submitter; Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

The DoD Asia-Pacific rebalance initiative presents a unique opportunity to advance a strategy utilizing Cooperative Health Engagements (CHE) to build capacity while fostering enhanced relationships and interoperability. Health engagements and exercises are organized to address disease burden, population health status, and medical infrastructure concerns, working with the embassy country team and U.S. Government (USG) agencies to validate the areas for engagement while complementing the ongoing activities of other agencies. The approach incorporates the long standing regional relationships of DoD overseas labs to coordinate activities, align with National Security Strategy, and has culminated in a health-specific Theater Campaign Order building component services’ health engagements by type and country. Synchronizing efforts ensure military services execute engagements that support host nation interests, complement ongoing interagency efforts and advance sustainable COCOM theater security objectives.

Properly developed CHE tie into whole of USG health efforts. The USPACOM Surgeon’s office recently sponsored an interagency working group comprised of DoD, DoS, USAID, CDC, DHHS and other U.S. representatives to synchronize USG health stability and health systems strengthening efforts in the Asia-Pacific region. After the October 2012 kickoff, quarterly updates have facilitated interagency communication and synchronization. Additionally, the USPACOM Surgeon has shifted towards multinational meetings to address issues involving cross-border and transnational health threats. The inaugural Southeast Asia Malaria Forum was sponsored to address regional malaria burden and artemisin resistance, affecting military force health protection and civilian populations. Nine nations along with representation by USAID, CDC, and the Presidential Malaria Initiative worked to ensure military efforts complemented existing civilian efforts. As the USPACOM Surgeon continues the shift toward capability and capacity building in a coordinated, collaborative manner, the theater campaign plan advances the health security of our partners and allies.

Learning Objectives

1. Define current cooperative health strategy at PACOM
2. List areas of concern and focus topics for engagement development
3. Describe examples of recent engagements and how they build capability
Abstract
To reduce the number of readmissions of our vulnerable Veteran patients, the Veterans Affairs Palo Alto Health Care System (VAPAHCS) has implemented a multidisciplinary, comprehensive program to approach discharge. An effective and comprehensive discharge process improves the patient’s ability to stay in his or her preferred environment, improving quality of care, patient-centeredness and reducing costs for the facility. The evidenced-based, eleven-element approach of Project RED (Re-Engineered Discharge) was utilized to improve the discharge process. These elements include: educating the patient throughout the admission, making discharge appointments prior to discharge, discussing the plan for follow up tests and studies, organizing post-discharge services, confirming the medication plan, reconciling the discharge plan with national guidelines, reviewing what to do if a problem arises, completing the discharge summary in a timely manner, assessing the degree of understanding with the discharge plan, providing the patient with a comprehensive discharge plan booklet, and following up with telephone reinforcement after discharge. Opinion leaders within the system were each tasked with an element and given the opportunity to structure interventions to drive success of that element. Through this effort and with continued support from Senior Leadership, the health care system has realized an increase in multidisciplinary collaboration, the addition of innovative techniques and technology, improved communication between inpatient and outpatient settings, improved patient engagement, and, most importantly, reduced readmission rates. From this session, learners will be able to describe the RED model, be able to explain common barriers to readmission reduction, and discuss application of strategies to reduce readmissions through an efficient discharge process at their respective facilities.

Learning Objectives
1. Describe the RED model
2. Explain common barrier to readmission reduction
3. Discuss application of strategies to reduce readmissions through an efficient discharge process at their respective facilities
List of Participants and Their Roles in the Abstract

Name: Terrence Town Clark  
Organization: Group Health Permanente  
Role(s): Submitter; Presenter

Name: Allison Joe  
Organization: Home  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body  
The goal of the course is to better understand functional vision loss with the ultimate goal to bring these patients to appropriate treatment. This is achieved by presenting complex cases of functional vision loss that are difficult to diagnose, and which have multiple medical complications. Methodologies for diagnosing these complex cases are explored, as well as the psychological bases of functional loss. As with all medical pathologies, the most important action is to bring these patients to appropriate therapy. Techniques to helping these patients understand treatment possibilities and enrolling them in treatment is presented in detail.

Learning Objectives  
1. Understand the underlying pathology in functional vision loss  
2. Learn techniques for diagnosing functional vision loss  
3. Learn techniques for enrolling functional vision loss patients into a treatment program
Joint Psychological Health Support for Service Members Facing Disciplinary Action: Service Member Justice Outreach Project

List of Participants and Their Roles in the Abstract

Name: Edward Simmer  
Organization: Naval Hospital Oak Harbor  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

The Service Member Justice Outreach Project (SMJOP) is a joint project of the Department of Defense, the military services, and the Department of Veterans Affairs. Service members facing disciplinary action often face significant psychological stress which can exacerbate existing mental health problems. Facing disciplinary action places a service member at increased risk for suicide, and in civilian and Veteran populations, legal problems are associated with an increased rate of mental illness. Disciplinary problems often lead to adverse discharges. These in turn can impact eligibility for Veterans benefits, including health care. Thus ensuring these Service members receive needed psychological support both before and after discharge is particularly important. Until now, however, there has been no system-wide program designed to ensure this population was consistently screened and offered needed services both before and after a potential discharge from the military.

To address this need, the Service Member Justice Outreach Project was created, based on the successful Veteran Justice Outreach (VJO) program. This program focuses on identifying Service members facing disciplinary problems, screening them for psychological health issues, and then providing or referring them to needed care and services. The program also involves educating commands and military justice officials. The program is currently being implemented as a joint DoD/VA pilot project at four sites, each with a concentration of Service members from one service.

This presentation will review the evidence that Service members facing disciplinary action are at increased risk for mental health problems, including suicide, discuss the challenges that they face obtaining needed care, and then focus on the program itself, including how Service members are identified, the types of services provided, and challenges identified in the implementation of the program. The presentation will also discuss how VA and DoD have effectively partnered to bring this project to fruition.

Learning Objectives

1. Summarize research findings about mental health issues in Service members and Veterans facing disciplinary/legal issues.
2. Describe the challenges that can interfere with mental health support for Service members facing disciplinary separation.
3. Discuss the Service Members Justice Outreach Program.
4. Describe how to refer a Service member to the SMJOP.
VA Post-Deployment Care in PACT

List of Participants and Their Roles in the Abstract

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Organization: VA Puget Sound  
Role(s): Submitter; Presenter

Name: Lucile Burgo-Black  
Organization: VA Connecticut Health Care System  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
In response to the health care needs of Veterans returning from GWI and OEF/OIF/OND deployments, VA recognized the need for a more systematic approach to post-deployment care for Veterans entering the system. The approach, called integrated post-deployment care, is a Veteran centered, interdisciplinary, collaborative, team based model with the core team comprised of a primary care medical provider, a mental health provider and a social worker. The team provides a comprehensive initial assessment focusing on the three domains in which health is generally impacted during deployment: physical health (including environmental exposures), psychological health and psychosocial health. Ongoing care is then delivered by the same integrated team. Care is oriented toward health recovery and optimal reintegration with a focus on symptom management and enhancing function in all three domains.

The model was implemented nation-wide in 2008 through the Post-Deployment Integrated Care Initiative; within two years, 84% of VA Medical Centers had integrated post-deployment care platforms in place. Given that the model is Veteran- centered and team based, there was little difficulty in aligning the post-deployment integrated care programs with the Patient Aligned Care Team (PACT) model. Current efforts are being made to insure optimal post-deployment care not only in times of war, but also in times of peace.

Learning Objectives
1. Attendee will be able to describe the physical, psychological and psychosocial impacts of war
2. Attendee will gain skills in managing the health consequences of combat
3. Attendee will understand the value of collaborative approaches to readjustment and recovery following combat deployment
The Afghanistan International Security Assistance Force aims to weaken the insurgency through strengthening security forces, improvement of governance, and advancing socio-economic conditions to promote a more stable and secure environment. In 2008, RAND Corporation found that military veterinarians contributed to economic development in Afghanistan through capacity building, education, and provision of animal health services. Moreover, veterinarians have the potential to improve public health by detection, control, and prevention of zoonotic diseases through One Health.

One Health is a global strategy to improve public and animal health through the expansion of interdisciplinary partnerships in clinical medicine and biomedical research. Because 60 percent of human pathogens are zoonotic and 75 percent of emerging diseases originate in animals, public and animal health fields interface continuously in regions of the world that rely on animals for food and income. In Afghanistan, more than 80% of the country’s inhabitants depend on livestock and agriculture to live. While animals are vital, the veterinary sector is poorly equipped to detect infectious and zoonotic diseases that negatively impact public health.

Although familiar with One Health, collaboration between Afghan public and animal health professionals is inconsistent and fraught with challenges. Cultural sensitivities, hierarchical status, and lack of communication and knowledge related to zoonoses, contribute to poor cooperation across sectors. Provision of education and promotion of One Health programs through existing efforts could improve public health, health security, and the food supply, and have a more significant impact on enhancement of national stability than promotion of veterinary capacity building alone.

Learning Objectives
1. The listener will be able to identify the key elements of the One Health Initiative applied to animal and human health in Afghanistan
2. The listener will be able to describe the areas where animal and human health intersect in association with stability operations.
3. The listener will be able to discuss the challenges and opportunities in developing the One Health model in developing countries.
4. The listener will be able to describe how health engagement’s success or failure is measured in the context of stability operations.
A Collaborative Navy Sports Medicine Clinic Developed in a Primary Care/Medical Home Setting

List of Participants and Their Roles in the Abstract

Name: Peter M. Lundblad
Organization: NH Bremerton
Role(s): Submitter; Presenter

Name: ERIN EILEEN PATTERSON
Organization: PHYSICAL THERAPY - SMART CLINIC
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The U.S. Navy utilizes Sports Medicine And Rehabilitation Teams (SMART) in numerous training locations around the globe. These clinics are designed to allow early/open access to musculoskeletal care, and they exclusively cater to active duty. The SMART clinic model resembles a training room. It has been proven to decrease the amount of time patients are on light duty and reduce the number of patients that are placed on limited duty and subsequently evaluated by the Physical Evaluation Board (PEB).

Naval Hospital Bremerton Washington and its Puget Sound Family Medicine Residency did not have a dedicated SMART clinic. Developed in June 2012, unique decisions were made to expand the SMART concept by locating it in a Primary Care Clinic and broaden the access to care to include dependents of active duty, as well as retirees and their dependents. Physical and Occupational Therapy, Chiropractic, and Acupuncture services were also co-located to create a team of providers that focus on “Keeping the Fleet and Families Fit.”

By utilizing proven SMART clinic concepts and implementing an expanded access to care, this SMART clinic hopes to not only care for the warfighter, but also to apply the same expert multidisciplinary musculoskeletal care to the entire family team, while being located in a medical home setting. It is also expected that our SMART clinic will reduce non-surgical referrals to our Orthopedic Surgery colleagues. Areas of improvement include continuing to expanding the scope of care, incorporating athletic trainers, and developing meaningful metrics.

Learning Objectives
1. Describe the Sports Medicine clinic model used by Navy and Marine Corps
2. List 3 advantages of employing a SMART clinic to assess and rehabilitate MSK injuries and conditions
3. Discuss 3 ways in which the NH Bremerton SMART clinic differs from the typical SMART clinic and the potential advantages
Workplace Stress and Burnout Among Correctional Healthcare Providers: A Needs Assessment for Workplace Health Promotion

List of Participants and Their Roles in the Abstract

Name: Alnissa Carter
Organization: Federal Bureau of Prisons
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Abstract

Research on workplace stress and burnout among healthcare providers working in prisons is limited. The focus of this study was to investigate the prevalence of stress and burnout among physician assistants and nurse practitioners working in corrections. A cross-sectional survey was distributed to 221 correctional healthcare providers. More than one-third of the sample population completed the survey tools. Results revealed that the majority of participants (>90%) did not meet criteria for burnout. Although study data suggested there is a low incidence of burnout in this correctional setting, investigators suspect there is a heightened awareness of the potential for burnout in this environment. Further research is needed to offer comparative data on burnout in this setting and should include other correctional healthcare providers, such as physicians.

Key words: health promotion, burnout, correctional health, stress.

Learning Objectives
1. Describe workplace stress and burnout in a target population, i.e. correctional healthcare providers.
2. Explain the three dimensions of the burnout syndrome: Emotional Exhaustion, Depersonalization, and Personal Accomplishment.
3. Identify potential workplace stressors and report the incidence of burnout among physician assistants and nurse practitioners working in correctional healthcare.
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Mental Health Nurses have not traditionally been included in the development of the comprehensive plan of care for veterans in the specialty mental health outpatient setting. A paradigm shift towards patient-centered care and the medical home model necessitates an inclusive approach to patient care, challenging nurses to practice to the full extent of their education and training.

A pilot program encouraging nurses to incorporate King’s theory of goal attainment and American Nurses Association (ANA) nurse coaching method into their practice was implemented at the Orlando Veterans Affairs (VA) Medical Center located in Orlando, Florida. Participants are veterans who see nurses on a frequent basis, including those veterans treated with stimulants, clozapine, or injectable antipsychotic medications.

Nurses meet with eligible veterans individually and assist them to develop patient-centered specific, measurable, attainable, realistic, and timely (SMART) goals. At a minimum of monthly intervals, the nurse and veteran meet to review progress. Any identified barriers to meeting goals will prompt nurses to coach the veteran to explore possible solutions. Veterans who attain their goals are provided with positive feedback and encouraged to identify new goals. This process will continue throughout the duration of care in outpatient mental health services. At the initial six month benchmark, veterans will be asked to provide feedback on the process and report on how it impacted progress towards their goals.

Veteran goal attainment can be attributed to engagement of the veteran in personal goal setting leading to improved healthcare outcomes. Nurses play a vital role in this process.

Learning Objectives

1. Describe integration of King's theory of goal attainment and nurse coaching in relation to the nursing process and the development of the plan of care.
2. Review relevant literature and evidence-based practices currently in use.
3. Discuss examples of cases of veterans whose care plans were developed utilizing this process.
Canadian Forces Health Services: Integrated Mental Health in a Primary Care system

List of Participants and Their Roles in the Abstract

Name: Scott McLeod
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Role(s): Presenter

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Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The past decade of intense operations has seen an unprecedented number of Canadian soldiers return from operations with mental injuries and our small but agile system has been able to adapt and meet the needs of those who have come forward. The past decade has also seen an incredible increase in the recognition of mental illness as a major contributor to loss of operational capacity not to mention the personal impact it has on the members of the Canadian Forces (CF) and their families.

As the stigma of mental illness decreases and the barriers to care are removed it is imperative that we have an effective and efficient mental health system that is well integrated with many other organizations to optimize prevention, education, research and quality health care. This presentation will outline how the Canadian Forces has developed and continues to evolve the integration of our mental health and Primary Care system. It will focus on the multidisciplinary approach to care, the integration with primary care, our research capability that is integrated with other military and civilian research organization and our close working relationship with national civilian organizations and other federal departments such as the Royal Canadian Mounted Police and Veterans Affairs Canada. Our vision is to improve the mental health of the Canadian Forces and decrease the impact of mental illness on operations and a fundamental part of that is to build on our collaborative team approach to prevention, education, research and treatment.

Learning Objectives
1. Have an understanding of the Canadian Forces Health System
2. Describe the goals of the Canadian Forces Mental Health program
3. Outline the benefits of the integration of Mental Health programs in a Primary Care system
Integrating Behavioral Health: The Fort Carson Model

List of Participants and Their Roles in the Abstract

Name: Charles Weber  
Organization: Evans Army Community Hospital  
Role(s): Submitter; Presenter

Name: Kay Beaulieu  
Organization: DoD  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Behavioral Health (BH) in the Army and the Nation has never had more emphasis, programs and scrutiny. There has been an increase in suicide rates, substance abuse, domestic violence and behavioral health complaints. As the urgency to help our Service Members (SMs) and their family members grows, we have grown exponentially. With fiscal constraints and the reality of over a decade of war the BH community is looking for the way forward. Our focus on evidence-based care that improves the lives of our beneficiaries, increases readiness and makes use of limited resources all weigh on our system of care. The delivery of health care is about process, optimization of resources, and reducing suffering and illness.

Challenges can reveal stagnation or lead to growth and change. Ft. Carson’s Evans Army Community Hospital (EACH) epitomizes growth and change in regards to Behavioral Health delivery and the integration of multiple initiatives. EACH started and is home to the successful Embedded Behavioral Health (EBH). EACH also has a unique Intensive Outpatient Program (IOP), Child and Family Assistance Center (CAFAC), School Based Behavioral Health, a robust Family Advocacy Program (FAP) and offers specialty services such as sleep and neuropsychological testing. EACH also has embedded BH providers in support of the Army Substance Abuse Program (ASAP) and the Warrior Transition Unit (WTU).

The integration of our multi-disciplinary Medical Command (MEDCOM) BH assets with Forces Command (FORSCOM), Installation Management Command (IMCOM) and our network civilian providers are considered a best practice which results in fewer tracked risk behaviors, fewer inpatient admissions and reduced length of inpatient stays. Ft. Carson’s approach is one model of success to deliver the best care to the most individuals in a cost effective method.

Learning Objectives
1. Describe how Evans Army Community Hospital’s behavioral health care is integrated.  
2. Explain the components of EACH’s BH multi-disciplinary care.  
3. Discuss how this integration of care is cost effective.
Screening Iron Status in Military Women: A Clinical Practice Guideline

List of Participants and Their Roles in the Abstract

Name: Candy Wilson
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Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

**Background:** Female military members comprise 14.6% of active duty, 19% of reserve, and 15.5% of National Guard forces. Iron deficiency (ID) and iron deficiency anemia (IDA) is the only persistent mineral deficiency in the population of the developed world. Military women in physically demanding roles, such as basic training, are at twice the rate of non-active women. ID and IDA detrimentally impact physical, mental, and emotional performance.

**Aim:** To develop a clinical practice guideline (CPG) that provides health care practitioners a research-based approach for ID and IDA screening.

**Methods:** Evidence was found in the Cochrane Central Register of Systematic Reviews, Medline, Web of Science, and CINAHL using the search terms: iron deficiency, iron deficiency anemia, female, female athletes, female military, ferritin, iron status, anemia, iron deficiency, and practice guidelines.

**Findings:** Based on research evidence, we recommend screening all healthy and non-pregnant females in the United States Armed Services at the following intervals: pre-accession; 30 days after entry into basic training; 90 day intervals during intense training; pre-deployment; and annually during health exams.

**Discussion/Implications for Practice:** Application of the CPG will improve the surveillance of healthy women who need medical and dietary interventions early in their training or fitness testing. Identifying women early with ID and IDA will save lost training time and health care dollars.

**Conclusions:** A CPG will standardize iron surveillance by military and civilian health care practitioners to improve female military members’ physical, emotional, and cognitive performance.

**Learning Objectives**

1. Describe the risk factors for ID and IDA in military women during intensive training or intensive duty environments.
2. Explain the laboratory tests needed and the timing of the screening as outlined in the clinical practice guideline (CPG).
3. Discuss the female military member outcome improvements expected by adhering to the CPG.
### Abstract Body

According to the 2012 National Suicide Prevention Strategy, suicide is the tenth leading cause of death; more than twice as many people die by suicide as by homicide annually. Suicide is an ongoing challenge in many federal settings (Department of Defense, DoD, Veterans Administration, VA, Federal Bureau of Prisons, BoP, Indian Health Services, IHS). Although the 2012 National Suicide Prevention Strategy identifies connectedness as a protective factor, and although it identifies the need for “healthy and empowered individuals, families, and communities,” it provides little assistance regarding how to deliver primary prevention in the form of building connectedness before a crisis occurs.

Joiner’s Interpersonal Theory of Suicide contends that disconnection is a major feature of why people want to kill themselves. Mohatt, et al (2011) report that for Native Americans connectedness is a protective factor against suicide. Junker, et al (2005) report that federal prisoners who lack close friends outside prison or fail to engage in activities within prison are at greater risk for suicide. This presentation will focus on identifying what local communities can do to work toward enhancing connection. Using knowledge about developmental levels and generational variances in communication styles, the presentation will explore how different population groups feel connected, cared about and understood.

### Learning Objectives

1. Describe the role of connectedness as a protective factor against suicide
2. Identify key factors of the 2012 National Suicide Prevention Strategy
3. List various ways to enhance community connectedness
**Abnormal Scores on ANAM4 TBI-MIL: Not so Unusual among Healthy US Military Service Members**

**List of Participants and Their Roles in the Abstract**

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**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Objective:** In the US military, service members with mild traumatic brain injury (mTBI) are frequently assessed with a computerized battery of seven cognitive tests called Automated Neuropsychological Assessment Metrics (version 4) Traumatic Brain Injury-Military (ANAM4 TBI-MIL). The purpose of this study was to establish base rates of abnormal scores on ANAM4 TBI-MIL among healthy male active duty US Army soldiers and compare these rates to those from soldiers clinically evaluated for mTBI.

**Methods:** Base rates of abnormal ANAM4 TBI-MIL scores were calculated in a convenience sample of 683 healthy male active duty soldiers using available military reference values for the following cutoffs: <=2\textsuperscript{nd} percentile (2 SDs), <=5\textsuperscript{th} percentile, <10\textsuperscript{th} percentile, and <16\textsuperscript{th} percentile (1 SD). Rates of abnormal scores were also calculated in 51 active duty male soldiers who sustained an mTBI an average of 18 days (SD=19.6) prior.

**Results:** Having two or more scores below 1 SD (i.e., 16th percentile) occurred in 22.0% of the healthy sample and 58.8% of the mTBI sample. Having one or more scores <=5th percentile occurred in 18.6% of the healthy sample and in 52.9% of the mTBI sample. Rates of abnormal scores in the healthy sample were influenced by cutoffs, demographics, and level of intelligence. **Conclusion:** Some healthy soldiers have at least one abnormal score on ANAM4. Comparison of these base rates to abnormal scores from the mTBI group illustrate how they can be used to inform clinical decision making and evaluate the utility of a test battery.

**Learning Objectives**

1. Describe correlates of low scores on ANAM in healthy soldiers.
2. Explain how base rates of abnormal scores can be used to inform clinical decision making.
3. Show how base rate data can be used to evaluate the clinical utility of a test battery.
Use of a Digital Pen for Army Field Medical Documentation

List of Participants and Their Roles in the Abstract

Name: Phil Cohen
Organization: Adapx Inc
Role(s): Submitter; Presenter

Name: Melissa Trapp-Petty
Organization: WSDOH
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Although the Army has provided medics with a rugged handheld device (called the BMIST) for field medical documentation, medics still document either on paper, or directly on the wounded soldier’s uniform or bandages. However, legible documentation most often does not arrive at the next level of care. Our study compared the use of digital pen/paper technology with use of the BMIST device for field care documentation.

Eighty-one medics engaged in their tactical trauma certification class at Madigan Hospital’s Medical Simulation and Training Center were equally trained to use both the BMIST and a digital pen to fill out the standard Army triage form. Medics were randomly given a device for documentation during their final field exam. We compared time to complete the form, # of fields filled, # of help requests, errors, and self-corrections. Medics also completed a 13-question 5-pt Likert scale survey.

Medics required on average 55% (3m16s) less time to fill out the form with the digital pen vs the BMIST. During documentation, no digital pen users asked for help, vs 100% of BMIST users. Medics found the pen easy to use, and to be triage and mass casualty appropriate, while medics said the opposite about the BMIST.

We conclude that the digital pen better supports field medical documentation than does the standard BMIST. Documenting >3 minutes faster could be decisive in having any record at all. Finally, we suggest that other handheld devices similar in size and user interface to the BMIST will have similar difficulties for data entry.

Learning Objectives

1. Identify aspects of the field medical situation that influence the reasons for adopting a given device for documentation
2. Describe advantages and disadvantages of field documentation devices
3. Apply knowledge of successful devices to other documentation scenarios
Over 177 million Americans suffer from diabetes mellitus, which can lead to cutaneous compromise of the skin. The World Health Organization (WHO) reported this number would increase to over 300 million by 2025 ("Diabetes," 2013). Foot infections are a common and serious complication of diabetes. Most diabetic foot infections are caused by neuropathic ulcerations (Lipsky et al., 2012). The total healthcare cost to manage diabetes is becoming an epidemic that is both taxing and draining on the nation. The national cost of diabetes is in the upward figures of over 200 billion dollars (“Diabetes.” 2013). The cost could be both direct and indirect.

Direct cost includes medical care, medication, and cost for healthcare insurance. Indirect cost is considered intangible resulting in pain, anxiety, and poor quality of life (“Diabetes,” 2013). The correctional medicine population is not immune to this epidemic. Over 2 million people are incarcerated throughout the United States and approximately 80,000 inmates have been diagnosed with diabetes (American Diabetes Association [ADA], 2011). This population has a higher prevalence of inactivity and obesity than the national population. The prison demographic mirrors the nation, with an increasingly aging population. This older populations’ risk of an impending diabetic ulcer, is greater than younger patients due to compromised immune systems and other comorbid diseases, that ultimately lead to death.

Diabetes places a severe burden on healthcare systems like the Federal Bureau of Prisons (International Working Group on the Diabetic Foot, 2012). The National Commission on Correctional Health Care (NCCHS) has acclimatized to the American Diabetes Association (ADA) clinical practice recommendations to combat this epidemic. Impelled by continuous quality improvement (CQI) models, the NCCHS has attempted to tackle the challenging complications of diabetes. The most impactful complication is amputation of an inmate’s lower extremity. The risk of a diabetic requiring a lower leg amputation averages 30% higher than the public (Lipsky et al., 2012). The myriad of factors that support successful treatment of diabetic foot ulcers, require a multidisciplinary theoretical medical model, which can be accomplished within the Federal Bureau of Prisons.

Learning Objectives
1. Discuss the direct and indirect impact Diabetic Foot ulcers have on the Federal Bureau of Prisons
2. Review the Federal Bureau of Prisons Clinical Practice Guidelines in Management of Diabetic Foot Ulcers
3. Examine Lower Extremity Amputation Prevention (LEAP) strategies from a multidisciplinary approach
**Latent Viral Immune Inflammatory Response Model for Chronic Multi-symptom Illness**

**List of Participants and Their Roles in the Abstract**

Name: Sean Robert Maloney  
Organization: Department of Veteran Affairs  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

A Latent Viral Immune Inflammatory Response (LVIIR) model will be presented which integrates factors that contribute to chronic multi-symptom illness (CMI) in both the veteran and civilian populations. The LVIIR model for CMI results from an integration of clinical experience with a review of the literature in four distinct areas: 1) studies of idiopathic multi-symptom illness in the veteran population including two decades of research on Gulf War I veterans with CMI, 2) new evidence supporting the existence of chronic inflammatory responses to latent viral antigens and the effect these responses may have on the nervous system, 3) recent discoveries concerning the role of Vitamin D in maintaining normal innate and adaptive immunity including suppression of latent viruses and regulation of the immune inflammatory response, and 4) the detrimental effects of extreme chronic repetitive stress (ECRS) on the immune and nervous systems.

Key Words: Latent Virus, Inflammatory Response, Multisymptom Illnesses, Immune System, Idiopathic


Latent Viral Immune Inflammatory Response Model for Chronic Multisymptom Illness  
Medical Hypotheses, Vol. 80 (March 2013) pp. 220-229

The LVIIR model describes the pathophysiology of a pathway to CMI and presents a new direction for the clinical assessment of CMI that includes the use of neurological signs from a physical exam, objective laboratory data, and a new proposed latent viral antigen-antibody imaging technique for the peripheral and central nervous system. The LVIIR model predicts that CMI can be treated by a focus on reversal of immune system impairment, suppression of latent viruses and their antigens, and healing of nervous system tissue damaged by chronic inflammation associated with latent viral antigens and by ECRS.

**Learning Objectives**

1. Present a new model for explaining the pathophysiology of chronic multisymptom illness, which has previously been described as a war illness/syndrome, Gulf War I Syndrome, neurasthenia, irritable heart, etc.
2. Describe how extreme chronic repetitive stress and chronic low vitamin D states can adversely affect the immune system
3. Explain the possible role of common latent viruses in causing an immune system inflammatory response in both the peripheral and central nervous system
4. Review methods for diagnosing a chronic multisystem illness based on the Latent Viral Immune Inflammatory Response (LVIIR) model utilizing patient's symptoms and signs on physical exam, and laboratory data.
Health outcomes in explosive ordnance disposal (EOD) personnel in the US military.

List of Participants and Their Roles in the Abstract

Name Jennifer Cockrill
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Role(s): Submitter; Presenter

Name Sara Olsen
Organization: Shoulder2Shoulder
Role(s): Non-presenting contributor

Name Gi-Taik Oh
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Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background and Methods:

Upon entrance into the military, individuals are assigned an occupational specialty. Personnel serving as explosive ordnance disposal (EOD) technicians, have experienced high operational tempo during Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation New Dawn (OND). For this study we examined the rates and trends of nine key deployment-related injuries and illnesses in active component EOD personnel in the US Army (USA), US Navy (USN), US Air Force (USAF) and the US Marine Corps (USMC), as defined by ICD-9 coded medical encounters. Service members with an MOS indicating EOD were identified and DMSS records were examined from the period of January 1, 2001 to December 31, 2011. The following morbidities were examined: (1) adjustment disorders, (2) anxiety disorders, (3) post-traumatic stress disorder (PTSD), (4) traumatic brain injury (TBI), (5) alcohol use disorder, (6) substance use disorder, (7) depressive disorders, (8) migraine headache, and (9) amputation.

EOD-specific counts of the nine disorders of interest were determined in the active component, by year and Service. These data were compared to service specific rates of the same morbidities, both in aggregate and per year across the 10-year surveillance period.

Results:

During the surveillance period, rates of adjustment disorder, anxiety disorder, and TBI increased among EOD personnel in the USA. Rates of adjustment disorder, anxiety disorder, migraine headaches, and amputations among EOD personnel in the USN tended to increase after 2007. Rates of adjustment disorder, anxiety disorders, PTSD, depressive disorders, TBI, and amputation among EOD personnel in the USMC tended to increase across the entire surveillance period. This study is the first of its kind to explore medical issues relevant to EOD personnel in the U.S. Armed Forces. Rates of morbidity reliably increased, sometimes dramatically, beginning in 2007, and this increase may reflect the troop surge in Iraq. Rates of amputations, TBI, and PTSD were substantially higher in USMC EOD personnel than in all-occupation personnel from other services, indicating a potential difference in training, culture, or tactical approach in duty execution. These results could be utilized by senior level military officers to make improvements to EOD force health protection.

Learning Objectives

1. Define the primary duties of explosive ordnance disposal (EOD) personnel
2. List the common causes of morbidity among EOD personnel
3. Interpret how EOD morbidity rates differ from the morbidity rates of their non-EOD counterparts
4. Discuss how senior military leaders could intervene to reduce highest rates of negative health outcomes
Integrating Mobile Health Technology into Treatment for the Military Community

List of Participants and Their Roles in the Abstract

Name: Julie T Kinn
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Role(s): Submitter; Presenter

Name: Robert Ciulla
Organization: National Center for Telehealth & Technology (T2)
Role(s): Presenter

Name: Karl (Skip) Moe
Organization: National Center for Telehealth & Technology (T2)
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
This workshop is intended for providers who work with psychological health (PH) and traumatic brain injury (TBI) patients. The workshop addresses common questions/comments on identifying and using technology-based solutions for delivering high-quality evidence-based solutions available to facilitate high-quality evidence-based care. Mobile applications offer new opportunities to maintain the fidelity to research-proven approaches and can be applied to self-help care, prevention efforts, and development of resilience skills and attitudes. Similarly, appropriate websites offer opportunities for use in the context of patient education and as therapeutic tools. Participants will be introduced to a range of web-based applications and mobile device applications derived, in part, from DoD and VA efforts to meet the needs of PH/TBI patients, their families and, if still on active duty, their military units. There will be some demonstrations and hands-on experience depending upon the number of participants. Participants are welcome to bring Apple- and Android-based mobile devices.

Learning Objectives
1. Participants will know the background or mobile and web applications for use in behavioral health settings as well as predictions for the future of their use.
2. Participants will know the ethical considerations for use of mobile and web applications in behavioral health settings.
3. Participants will know how to integrate mobile and web applications into clinical work in behavioral health and in primary care settings.
The Bundeswehr Joint Medical Service in Multinational Operations - LI/LL and Further Development

List of Participants and Their Roles in the Abstract

Name: Col Beetz
Organization: Bundeswehr Joint Medical Service
Koblenz Rheinland Pfalz DE
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

The Bundeswehr Joint Medical Service has been in existence since 2001. These 12 years have put their mark on the Service, as it was deployed to as many as three parallel missions abroad conducted in a multinational setting. Building upon this experience, especially with ISAF, lessons identified and lessons learned have been formulated on the following issues:

- Rotary Wing MEDEVAC (including assignment of a DEU physician to the U.S. base in KUNDUZ / AFG; qualification of medical personnel during Forward and Tactical AIRMEDEVAC);
- lessons learned with land-based Mobile Emergency Physician Teams;
- lessons learned with multinational cooperation in NATO Role 2/3 medical facilities (especially with U.S. FST in MAZAR-E-SHARIF and KUNDUZ / AFG);
- preventive health care (lessons learned about measures to prevent leishmaniasis and malaria);
- PTSD incidence rate for German soldiers and suggestions to minimize the chances of our soldiers developing these disorders and similar types of mental impairment.
- rescue chain quality management; use of lessons learned by U.S. Joint Trauma Theater System;
- network enabled operations (NEO) and command-and-control capability of Medical Service assets deployed abroad;
- experiences of German medical Service with the SMART DEFENCE Project TIER 1.15 during Vigirous Warrior.

In closing, a brief overview is given on the structural changes in the Bundeswehr Joint Medical Service. As the general conscription system is no longer in effect, the Bundeswehr – and with it the Joint Medical Service – is facing further modifications as part of the ongoing transformation process.

Learning Objectives

1. The Bundeswehr Joint Medical Service has been in existence since 2001.
2. Rotary Wing MEDEVAC (including assignment of a DEU physician to the U.S. base in KUNDUZ / AFG; qualification of medical personnel during Forward and Tactical AIRMEDEVAC);
3. PTSD incidence rate for German soldiers and suggestions to minimize the chances of our soldiers developing these disorders and similar types of mental impairment.
4. Preventive health care (lessons learned about measures to prevent leishmaniasis and malaria);
5. Experiences of German medical Service with the SMART DEFENCE Project TIER 1.15 during Vigirous Warrior.
OPERATION HEALTHY WARRIORS

PILOT PROGRAM TO ASSESS AND PROMOTE THE MENTAL HEALTH OF RESERVISTS PRE- AND POST-MOBILIZATION AT NOSC NYC

DET A, OHSU PORTSMOUTH

CDR(S) ELIZABETH VARAS, MC; CDR RUMEI YUAN, MC; LCDR SUDHIR GADH, MC

Transition between the military and civilian community can be stressful for reservists pre and post mobilization. There may not be enough accessible resources and services at the Navy Operational Support Center (NOSC) level to assess and promote their mental health. We have developed a pilot program utilizing resources available at NOSC New York City to support a sailor’s transition between military and civilian life. The program is designed to identify those in or en route to distress and to improve their resilience.

Pre and post mobilization questionnaires are reviewed with the sailor by providers face to face as a part of the Periodical Health Assessment (PHA). If a sailor scores high enough on said questionnaire, he/she will be evaluated by a psychiatrist and be provided referrals to a VA mental health clinic, local mental health providers, Psychiatric Outreach Program (PHOP) and other services. These sailors will be followed at subsequent defined drill weekends. From December 2011 to June 2012, 15 reservists have been assessed and 7 have received more specialized assistance.

Future works include educating unit leadership and members about mental health awareness, formation of support groups for reservists and families. We believe that this added filter will help us catch those most in danger of falling into depths of conditions that are still taking the lives of our men and women.

Learning Objectives
1. Recognize how the Operation Healthy Warriors plan helps to assist those most in need of support.
2. Discuss some of the factors that are driving increasing rates of readjustment difficulty.
3. Identify strategies and limitations to implement the same or similar operation at NOSCs elsewhere.
Bundeswehr Medical Service – Lessons Learned From Humanitarian Aid Operations

List of Participants and Their Roles in the Abstract

Name: Stefan Dr. Kowitz
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Koblenz Rheinland Pfalz DE
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Also, the number of devastating damage caused by strong winds, heavy rainfalls and other weather-related natural disasters has more than tripled since the 1970s, following a tendency which has been found to exist all over the globe.

This is why the Bundeswehr Medical Service needs to be prepared for this subsidiary task, as it is the medical forces in particular which can provide important input.

Rendering military medical services as part of a humanitarian relief effort in a foreign country requires mission planners to develop an overall concept to clearly establish the mode of cooperation with relevant civilian activities in the theater of operations, notably civilian health services and governmental, nongovernmental organizations.

Measures taken by the Bundeswehr Medical Service primarily focus on medical assistance and survival-oriented relief activities. All measures are intended to augment, rather than to replace, the capabilities of civilian health services. All relief and support activities will be based on the standards set by the WHO.

The principles outlined above were successfully applied during the Tsunami Relief Mission in late 2004 and early 2005. Lessons learned from this mission caused the Bundeswehr to further develop its medical facilities by adopting a modular approach so as to be able to deploy even smaller elements.

The Bundeswehr Medical Service was called out during the 2002 flood disaster at the Elbe river to apply its special capabilities in assisting with hospital evacuations in the Dresden metropolitan area, where its central coordination of AirMedEvac forces and its military medical expertise were employed with success.

An important lesson learned from our past missions is that – in addition to providing on-the-spot assistance – it is psychosocial post-mission care which is gaining in importance both for the victims and the rescuers.

The capabilities of our so-called CBRN medical defense task force, which build on the mission experience of NATO response forces, have proven their worth. The Bundeswehr Medical Service cooperated closely with civilian authorities during major events in Germany, such as the Soccer World Cup and the G8 summit. In the future, this task force is to be augmented by task groups specializing in infection epidemiology.

Learning Objectives
1. All relief and support activities will be based on the standards set by the World Health Organization / WHO.
2. In addition to providing on-the-spot assistance it is psychosocial post-mission care which is gaining in importance both for the victims and the rescuers.
3. The so-called CBRN medical defense task force in the future is to be augmented by task groups specializing in infection epidemiology.
## Abstract Content, Presented in Order Requested from Submitter

### Abstract Body

**Background:** On October 1, 2012, the Department of Defense (DoD) learned of a multistate outbreak of fungal meningitis following sterile injection with methylprednisolone acetate (MPA) from a single compounding pharmacy. No military treatment facilities received MPA from this pharmacy. However, clinics receiving implicated MPA lots were located throughout the United States, potentially exposing active-duty service members (ADSM) and other DoD healthcare beneficiaries through purchased care. Military populations are at high risk for deployment and relocation; cases in highly mobile military members may not be detected through standard local and state public health channels. Additionally, fungal infections can have a prolonged incubation period. Therefore, we required a method to understand exposure and detect outcomes among DoD personnel. In response, the Armed Forces Health Surveillance Center (AFHSC), working with Tricare Management Activity (which manages TRICARE medical and dental programs for DoD healthcare beneficiaries), initiated an investigation.

**Methods:** Exposure was defined as receiving a steroid injection into sterile epidural or joint space from clinics that received implicated MPA during the CDC-defined risk-period. Tricare regional offices compiled a line-list of exposed military population members by combining submitted claims data with a request for unsubmitted claims data for the defined procedures from clinics that received lots of MPA. AFHSC developed an ongoing search within the Defense Medical Surveillance System (DMSS) to track exposed beneficiaries for possible fungal infection outcomes.

**Results:** A total of 471 beneficiaries receiving epidural or sterile joint injection were identified, 43.9% were male. Of 469 with military status reported, 63 (13.4%) were active duty. Among four cases detected, 75% were meningitis; 2 (50%) of cases were in ADSM. One case, diagnosed with meningitis, had deployed post-injection and pre-diagnosis, and was subsequently medically evacuated out of theater. No new cases have been detected through ongoing surveillance since November 2, 2012.

**Conclusions:** This investigation utilized a unique approach combining the use of claims data to identify an exposed population across potential deployments and other personnel relocations with ongoing outcome surveillance for additional cases within the DMSS.

**Learning Objectives**

1. Participants should be able to describe the unique challenges related to health surveillance with a military population in the face of an emerging outbreak.
2. Participants should be able to discuss the use of insurance claims data in an outbreak investigation.
3. Participants should come away with an understanding of the interactions of state and local health departments with federal agencies in disease reporting.
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
We report on “Mission Reconnect,” a National Institute of Mental Health-sponsored project to develop and evaluate a self-directed intervention program for home use to support the long-term reintegration and mental health of OIF/OEF veterans and their relationship partners. Phase I data are reported on 43 dyads who used a multimedia package of guided meditative, contemplative, and relaxation exercises on CD, and instruction in simple dyadic massage techniques via DVD and photographic print manual, to reduce stress and pain, and promote interpersonal connectedness. A repeated measures design with standardized instruments established stability of baseline levels of relevant mental health domains, followed by the 8-week intervention with assessments at 4 and 8 weeks. Weekly online reporting tracked utilization of guided exercises and massage. Significant improvements for both veterans and partners were seen in PTSD, depression, and self-compassion. Veterans reported significant reductions in ratings of physical pain, physical tension, irritability, anxiety/worry, and depression after receiving massage, and longitudinal analysis suggested declining baseline levels of tension and irritability. Qualitative data from focus groups will be discussed, along with the design of a four-arm randomized trial currently in preparation.

Learning Objectives
1. Attendees will be able to describe the rationale for autonomous, self-directed intervention for this population
2. Attendees will be able to explain the importance a home-based intervention
3. Attendees will be able to explain the rationale for utilizing a dyadic intervention
4. Attendees will be able to discuss how an evidence-based, self-directed program may complement or enhance established mental health services for veterans and their family members living in the community
Screening for asymptomatic coronary artery disease in pilots

List of Participants and Their Roles in the Abstract

Name: Richard Earl Blair
Organization: 14 Medical Group
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

ABSTRACT
Introduction: Clinically significant coronary artery disease (CAD) in military and civilian pilots may result in disastrous consequences. Pilots with undiagnosed CAD occasionally suffer acute coronary syndrome (ACS) in flight. In single-pilot operations, ACS often ends in crew and passenger fatality. Current standards for assessing the presence of CAD are inadequate. In other nations, additional modalities are used to assess pilots for CAD. Case: A 38-year-old F-16 pilot with no cardiac risk factors presents with chest pain following an 8-hour flight. Angiogram reveals significant single lesion stenosis. The pilot undergoes coronary artery bypass graft. Discussion: Significant CAD is present in a very small minority of young pilots and more so in older pilots and those with cardiac risk factors. Exercise treadmill test (ETT) followed by multislice computed tomography (MSCT), in lieu of coronary angiography, is highly sensitive and specific in the diagnosis of CAD. MSCT has been implemented by the German Air Force with good results.

Learning Objectives
1. Discuss the ramifications of asymptomatic coronary artery disease (CAD) in pilots
2. Discuss current screening methods for CAD in pilots
3. Discuss additional more sensitive methods for screening for CAD in pilots
Occupational and environmental medicine specialty teleconsultation: the VHA experience

List of Participants and Their Roles in the Abstract

Name: Stephen Hunt
Organization: VA Puget Sound
Role(s): Non-presenting contributor

Name: Jennifer Lipkowitz Eaton
Organization: Office of Public Health and DC WRIISC
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Demand for Occupational and Environmental Medicine (OEM) physician specialist expertise continues to grow across the Veterans Health Administration. OEM specialty involvement has been demonstrated to improve quality of care for post-deployment Veterans, particularly within an integrated, patient-centered care model. OEM specialists perform a variety of consultative services across VHA including military occupational exposure assessment, evaluation of complex cases in post-deployment care, medical center employee health service management, and individual health risk communication. The challenge of rational allocation of OEM physician specialists and improving access to this specialty resource is well recognized. The purpose of this panel is to describe the provision of Occupational and Environmental Medicine specialty consultation to the largest integrated healthcare system in the US, through a novel telemedicine model. We will discuss how OEMedicine teleconsultation works to support VHA Employee Health providers and Veteran care teams to better identify, evaluate, and manage general and military-specific occupational medical conditions. Case material is presented that explains our approach to program development, business practices, and initial results.

Learning Objectives
1. To describe the provision of Occupational and Environmental Medicine specialty consultation to the largest integrated healthcare system in the US, through a novel telemedicine model
2. To discuss how OEMedicine teleconsultation works to support VHA providers to better identify, evaluate, and manage general and military-specific occupational medical conditions
3. To explain our approach to program development, business practices, and initial results.
List of Participants and Their Roles in the Abstract

Name: Corry J. Kucik  
Organization: US Navy Bureau of Medicine and Surgery  
Role(s): Submitter; Presenter

Name: Danielle Reeves  
Organization: Self Health Network  
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The proliferation and world-wide portability of social media applications provide engaging, and thus effective, platforms through which Active Duty, Reserve, Retiree, and Dependent populations are empowered to better manage their health needs and goals. For a comprehensive solution, a platform includes personal assessments, educational and motivational materials, tracks and reports on progress, leverages social support, and includes appropriate healthcare consumption in the panel of recommended healthy behaviors. Subsuming a powerful, HIPAA-compliant architecture, such a system bridges gaps between medical guidance and common levels of health literacy in order to achieve greater adherence, anticipate epidemiological trends, incentivize healthy behavior, and augment trust across traditional patient-provider and newer community-based constructs in health maintenance. This health-focused system adjusts to individual preferences and health needs throughout the spectrum of age and health status, assisting in health management from prevention, health improvement, and basic wellness through acute care, critical illness, palliation, and even end of life planning. As mobile as one's email accounts, such a system will enable a smooth transition of uninterrupted care and health maintenance for an entire family over the course of multiple military moves, and through community- or condition-based initiatives. It is particularly well suited to support specific vulnerable populations, such as survivors of traumatic brain injury, post-traumatic stress injury, or sexual assault. Proactive at its base, the platform also has capability to respond to the particular needs of any patient, anytime, anywhere. This powerful capability will give the MHS an extremely effective tool in the transition from healthcare to health.

Learning Objectives
1. Discuss the current organization, features, enabling technologies, and benefits of a web-based social media health maintenance system.
2. Describe current barriers to implementation of such a system, as well as mitigating strategies that might enable smoother adoption.
3. Explore future applications of a social media-based system throughout the MHS and VA system.
**Vitamin D Deficiency in US Marines and Navy Sailors at Camp Lejeune, NC**

**List of Participants and Their Roles in the Abstract**

Name: Sean Robert Maloney  
Organization: Department of Veteran Affairs  
Role(s): Submitter; Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

A retrospective chart review was conducted of initial serum 25 OH levels drawn from 182 Marine and 13 Navy Sailors at the Naval Hospital Camp Lejeune Sports Medicine Clinic and at the medical department of the Deployment Processing Command-East (DPC-East) Camp Lejeune, NC between September 1, 2010 and July 24, 2012. Thirty one percent (62/195) of serum 25 OH Vitamin D3 levels were within the deficient range. 

The ratio of the number of normal to deficient serum 25 OH vitamin D3 levels increased with age: 0.71 (n:25/35) ages 19 to 30, 1.00 (n: 19/19) ages 31-40, 1.17 (n:7/6) ages 41-50, and 1.5 (n:3/2) ages 51-59. This finding of increasing ratio of the number of normal to deficient levels as a function of increasing age is supported by a similar analysis of three recent independent studies conducted at the Department of Veterans Affairs Health Care Facilities: a Salisbury, NC VA Outpatient study, a VA Intensive Care Unit study, and a VA Long-Term Care Facility study.

In the sub group of 25 service members who were seen for acute pharyngitis, and who had both a serum 25 OH vitamin D3 level and acute mono-spot test run to diagnose acute mononucleosis, the ratio of normal to deficient levels was 0.25 for 9 service members with positive test results and the ratio was 2.0 for 16 service members with negative mono-spot test results.

Preliminary results from this study suggest that vitamin D deficiency may be a significant problem among service members at Camp Lejeune, NC.

**Keywords:** Mononeucleosis, Vitamin D Deficiency, Age Bias


McKinney JD, Bailey BA, Garrett LH, Peiris P, Manning T, Peiris AN. Relationship Between Vitamin D Status and ICU Outcomes in Veterans. JAMIDA-March2011; pp. 208-211


**Learning Objectives**

1. To review the process of vitamin D synthesis and the factors which can influence vitamin D levels in our bodies.
2. To review the role of vitamin D in physiological processes within the body including the immune system.
3. To present preliminary findings from a review of vitamin D status in U.S. Marines and Navy sailors serving at Camp Lejeune, NC.
4. To discuss the possible consequences of chronic low vitamin D status in U.S. Marines and Navy sailors as well as service members in the other branches of the U.S. Military.
Forensic Imaging of Blast Injury

List of Participants and Their Roles in the Abstract

Name: Howard T Harcke
Organization: Armed Forces Medical Examiner System
Role(s): Submitter; Presenter

Name: Edward L Mazuchowski
Organization: Armed Forces Medical Examiner System
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Blast injury is encountered in accidents and incidents of terrorism as well in the combat environment. Postmortem imaging of casualties from Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF) and Operation New Dawn (OND) by the Armed Forces Medical Examiner System has afforded opportunity to document the spectrum of blast injury and its effects on body structures. Radiographs and computed tomography (CT) have been correlated with autopsy and primary, secondary, tertiary and quarternary blast effects demonstrated. Imaging is especially useful in detecting injury at locations such as the spine and pelvis which are difficult to examine by conventional autopsy.

Recovery of blast fragments provides forensic evidence; cross sectional images guide retrieval. Postmortem images can be compared to antemortem studies, if available, and can aid in casualty identification. While postmortem imaging has limitations in detecting soft tissue and vascular injury, the use of techniques such as postmortem angiography can help to overcome these limitations.

Updated forensic imaging is likely to be used in mass casualty events. Current emergency plans are being reviewed with consideration of the use of CT in disaster mortuaries.

Learning Objectives
1. List four components of blast injury.
2. Describe four manifestations of blast on the thorax and its contained structures.
3. Discuss two limitations of postmortem CT in the detection of blast injury and possible methods to overcome them.
Advancing Pharmacists Patient Care Services: The Future of Pharmacy, Be Part of the Creation!

List of Participants and Their Roles in the Abstract

Name: Stacia Spridgen  
Organization: American Pharmacists Association  
Role(s): Submitter

Name: Anne L. Burns  
Organization: APhA  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The American Pharmacists Association (APhA) represents more than 62,000 practicing pharmacists, pharmaceutical scientists, student pharmacists, and pharmacy technicians to improve medication use and advance patient care. Through collaborative efforts with other professional pharmacy organizations and outreach to medicine, APhA is advancing pharmacists’ contributions to improved patient health through effective Medication Therapy Management (MTM) service delivery in collaboration with other members of the health care team; facilitating the involvement of pharmacists in medication-related transitions of care from acute care to home settings; and integrating pharmacists into emerging care models such as medical homes and accountable care organizations (ACOs). These initiatives have led to a consensus within the profession on a definition of MTM, a foundational MTM service delivery model, and an initiative to identify and profile care transitions best practice models that are scalable to facilitate broad adoption. Although the federal sector leads the way with experience of integrating pharmacists into the health-care team model; continued efforts in pharmacy practice are underway to improve collaboration among pharmacists, physicians, and other healthcare professionals to optimize medication use, improve patient outcomes, reduce morbidity and mortality, while lowering total healthcare costs.

Learning Objectives
1. Define and describe the MTM definition and MTM Core Elements Service Model
2. Discuss concepts of integrating medication management into team-based care
3. Define the role of the pharmacist and describe best practice examples of pharmacist involvement in care transitions
The Department of Veterans Affairs (VA) has worked diligently to provide programs to support Veterans who may have been adversely affected while serving in the Armed Forces. VA’s Office of Public Health (OPH) provides subject matter expert input into health policy formulation related to military service-associated environmental exposures. OPH also provides oversight for many of VA’s programs associated with Veteran environmental exposures. The Agent Orange Registry, created in 1978, has proven to be one of VA’s largest such programs, and currently includes over 500,000 Veterans who have self-reported exposures to Agent Orange. This presentation will cover the history and science of the Agent Orange issue and demonstrate how both have shaped policy decisions over the past four decades.

Learning Objectives
1. Describe VA policies and programs related to military exposures.
2. Explain the history of Agent Orange exposure issues and associated policies.
3. Discuss lessons learned from the Agent Orange Registry.
The safety of dietary supplements (DS) is a topic of high interest and concern in both civilian and military communities due to contamination and/or adulteration. Use is common and discussions regarding appropriate regulation, or lack thereof, are being heard across the country and around the world. People take DS for a variety of reasons, but most often to promote health, improve athletic performance, and for weight-loss. In the medical setting, oftentimes, a patients’ health condition may warrant the use of a DS to correct a deficiency or improve a healthcare outcome. Third party certification is one way to ensure consumers are getting safe, high quality products, free of contamination and adulteration. We reviewed the DS dispensed by prescription from all military treatment facilities in the DoD over a 5-year period to determine which products had been third party certified. Over 1.5 million dietary supplement prescriptions and 750 different products had been dispensed from 2007 to 2011. By using product name and manufacturer, we searched three of the most popular third party certification and/or verification organizations. Less than 5% of the products had been reviewed and third party certified: nine products were verified by Consumer Labs; 24 were verified by United States Pharmacopeial Convention (USP); and none of the products were certified or verified by NSF International. Having products third-party certified may lessen potential hazards of unsafe products by ensuring honest product descriptions and ingredient disclosures and safe production practices.

**Learning Objectives**

1. Identify third party certification companies that evaluate supplements for quality and safety.
2. Describe third party certification/verification process of dietary supplements.
3. Identify educational resources for informing consumers about the safe use of dietary supplements.
**Infection Rate of Intramedullary Nailing following External Fixation in Closed Fractures of the Femoral Diaphysis**

**List of Participants and Their Roles in the Abstract**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Role(s)</th>
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<tbody>
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<td>Joseph Galvin</td>
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**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Introduction:** Damage control orthopaedics utilizes external fixation to achieve initial fracture stability in a critically injured patient to minimize operative time, blood loss, and hypothermia. Once adequately resuscitated, the patient can undergo definitive fracture fixation. An area of controversy with respect to damage control orthopaedic surgery is the risk of infection following conversion of external fixation to intramedullary fixation in long bone fractures. The injuries sustained by military personnel in the Global War on Terror (GWOT) presents a large subset of closed diaphyseal femur fractures which were treated with a damage control approach. The objective of this study is to determine the infection rate of intramedullary nailing following external fixation in closed fractures of the femoral diaphysis.

**Methods:** Military personnel serving in support of the GWOT who underwent damage control external fixation of a closed femoral diaphyseal fracture with later conversion to an intramedullary nail between 2003 to 2012 were identified. Data were collected from the JTTR and the Department of Defense electronic medical record.

**Results:** A total of 124 American casualties sustained 127 closed femoral diaphyseal fractures from May 2003 to July 2012. External fixation was performed at a mean 0.2 days, [range 0-3], post-injury. Mean time to intramedullary nail conversion procedure was 6.9 +/- 4.2 days. The intramedullary nail conversion procedure was performed < 7 days in 56%, 7-14 days in 39%, and >14 days in 5% of femurs. All conversion procedures were performed at less than 21 days. Infection rate was 2.4% with a 95% confidence interval of 0.5-6.5%. There were 2 deep infections and 1 acute bacteremia which occurred one week after IM nailing and resolved with no identified source. Average follow up was 41.4 +/- 29 months.

**Conclusion:** Infection rate following conversion of external fixation to intramedullary nailing in closed femoral diaphyseal fractures is low. Our results indicate that external fixation in a damage control scenario can be safely converted to a definitive intramedullary device within 21 days. We found that our infection rate was similar to those values previously reported in the literature for early definitive management of femoral diaphyseal fractures without external fixation.

**Learning Objectives**

1. Describe the concept of damage control orthopaedics and its applicability to femoral diaphyseal fractures
2. Discuss the results of our findings for a large cohort of active duty soldiers who sustained femoral diaphysis fractures in the Global War on Terror managed with a damage control approach
3. Assess the infection rate for the damage control approach to femoral diaphysis fractures
Moving Patient Satisfaction Scores from Metrics to Impact

List of Participants and Their Roles in the Abstract

Name: Jack Fentress  
Organization: Data Recognition Corporation  
Role(s): Submitter; Presenter

Name: Herbert M. Baum  
Organization: Data Recognition Corporation  
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Stimulated by federal initiatives, there is increasing emphasis on patient satisfaction and improving the patient experience. Specifically, CMS has heightened patient experience awareness and directly impacted provider behaviors and protocols by tying financial incentives to survey instruments and metrics. If asked, most providers believe they treat patients well, but now there is greater movement toward the provider/patient interaction being quantified. Like most people, providers want to be part of an organization that has satisfied “customers,” which makes good business sense in an increasingly competitive environment. Through a variety of review sites, social media, and direct communication, patients are communicating their experience and impacting provider choice.

Improving the patient experience is a priority for nearly all medical organizations. There is no shortage of data from satisfaction and loyalty studies. These data can be analyzed and effective tactical blueprints developed. Unfortunately, many well devised plans fail to impact. This is not unique to healthcare, nor a result of faulty surveys, samples, analyses, or tactical planning. It is most often the result of a failure to evoke action.

This presentation will focus on the rationale for and provide effective techniques for leveraging patient satisfaction data to achieve action and impact. We will evaluate the need to balance system-wide and unit-level tactics; limit action items; provide focused direction; provide tools that fix the problem; engage all organizational levels; require accountability; support action; and integrate continued evaluation. These are steps that organizations can implement that will most effectively stimulate coordinated action and improve the patient experience.

Learning Objectives
1. The presenter will discuss the factors that limit action, implementation and impact of patient satisfaction results.
2. Using patient satisfaction results, the presenter will describe specific actions that organizations can take to affect action and impact the customer experience.
3. The learner will be able to identify and report specific actions and practices that organizations can take to enhance the impact of patient satisfaction research findings.
Interagency Care Coordination: A new model for serving those who have served

List of Participants and Their Roles in the Abstract

Name: Brian Hurley  
Organization: Ward Circle Strategies  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

In May 2012, the Secretaries of the Department of Defense and Veterans Affairs established an interagency Task Force to assess and improve warrior care and coordination within and between the Departments. The Departments conducted a comprehensive review of all aspects of warrior care coordination – encompassing health care, benefits and services. The Secretaries established a new governance structure reporting to the DoD/VA Joint Executive Committee for warrior care coordination known as the Interagency Care Coordination Committee (IC3).

This presentation will review both the new processes being establish and emerging best practices associated with implementing the three initial priorities for the IC3. These priorities are to: 1) Introduce a model of care coordination that increases clarity and reduces confusion for Warriors and their families by designating a primary point-of-contact on a care management team; 2) Create a tool to help Warriors and their families consider and avail themselves of care, benefits, and services options across both Departments; and, 3) Develop overarching, interagency policy that establishes a common set of practices, definitions, and responsibilities for application across the Departments to ensure that all Service members and Veterans who require complex case coordination receive optimal delivery of the full spectrum of authorized care, benefits, and services during their recovery, whether we are at war or in peacetime.

Proposed Speakers: Dr. Karen Guice, Principal Deputy Assistant Secretary of Defense (Health Affairs). Ms. Mary Carstensen, Senior Advisor to the Secretary of Veterans Affairs, Ms. Karen Malebranche, DoD/VA Interagency Collaboration Office, Department of Veterans Affairs

Learning Objectives

1. Describe the rationale for establishing the Interagency Care Coordination Committee
2. Discuss the new model of care coordination being developed and piloted within the VA and DoD
3. Describe the technologies and tools being utilized to support the new care coordination process
4. Explain the goals of the new policies being established to improve care coordination across the Departments
Nightmare on Abu Nawas Street: Understanding the Evolution of PTSD in Modern War

List of Participants and Their Roles in the Abstract

Name: Javier A Muniz
Organization: US ARMY/MEDCOM
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
With over a decade of war behind us, a significant amount of new information about Post Traumatic Stress Disorder (PTSD) is available, potentially changing our traditional definition, understanding, and treatment of this condition. We will look at the incidence of trauma and the prevalence of post-traumatic conditions on vulnerable subpopulations. Attendees will understand the evolution of the diagnosis, from early concepts of trauma-spectrum conditions, the birth of the PTSD diagnosis, through the DSM-5. We will review the neurobiology of psychological trauma, fear, and avoidance. As we focus on specific neurotransmitters, brain regions and circuits, attendees will be able to apply current psychotherapeutic and pharmacological treatments to theoretical PTSD models. We will explore combat exposure, TBI, and the development of psychological casualties in the Iraq and Afghan war. We will summarize current American Psychiatric Association and VA guidelines. Finally, we will discuss latest evidence-based treatments and future areas of development.

Learning Objectives
1. Understand the current concept of PTSD
2. Review and apply the neurobiology of PTSD
3. Familiarize participant for current PTSD guidelines
Test of a Visibility Strategy to Promote Hand Hygiene in Health Care Workers.

List of Participants and Their Roles in the Abstract

Name: Babatunde Kayode Oloyedeb
Organization: USPHS
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Nosocomial infections are an important hospital quality issue. Poor hand hygiene among health care workers contributes to nosocomial infections. However, hand cultures have not previously been used as a quality indicator. Visible placement of hand washing stations around patient rooms may improve hand hygiene but this simple environmental change has not been tested. The purpose of this study was to assess whether a simple environmental change could prevent Methicillin Resistant Staphylococcus Aureus (MRSA) from growing on the hands of health care workers. This was an experimental single site study in which four bed-sections (80 employees) of a community based hospital were randomly assigned to the intervention group and the remaining two bed-sections (70 employees) served as the control group. Hand cleaners were placed in prominent locations inside and outside patient rooms for the intervention group. MRSA culture was the dependent variable (positive versus negative). The findings showed that placing hand-hygiene products inside and outside patient rooms significantly reduced MRSA infection in health care workers.

Learning Objectives
1. Explain the new approach to reduce Methicillin Resistant Staphylococcus aureus in health care facilities.
2. Discuss how to treat minor as major to increase hand washing compliance by health care workers.
3. Identify strategies to sustain hand hygiene practices in health care settings.
Perfect Storm Disaster:  WestCoast MegaEarthquake, Flu Pandemic, Southeast Superstorm, War, terrorism and Resulting Fiscal Tsunami.

List of Participants and Their Roles in the Abstract

Name: Ha C Tang  
Organization: USPHS  
Role(s): Submitter, Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

The Perfect Storm Disaster Scenario:  Mega Earthquake in West Coast, Flu Pandemic, Superstorm in the South East, Mounting US Casualties in the Korean Peninsula or Middle East and Terrorist Striking Key major American Cities and the Resulting Fiscal Tsunami.

Throughout history, the occurrence of the unthinkable often humbled the ill-prepared. Anticipating catastrophic events is unreliable at best, downright improbable at worst. No one expert can claim the mantle of foresight in matters involving Mother Nature and nature of youthful untested or unpredictable leaders. However, a measure of certainty can be established in spite of inexact science or caprice of despotic leaders. In the context of the fact that any of the single event above can humble any nation, a combination of these events in a span of a year or two will be beyond devastating. If fateful to take place within a matter of a few weeks or even months, three or four of the events above will usher in global economic collapse. Recognizing this potential is the beginning of preparedness for those tasked with the duty, obligation and mission to protect, promote and advance the health and safety of the nation. In 2013, four or five of the above events-mega earthquake in the West Coast, H7N9 pandemic and superstorm in the Southeast and war breaking out with North Korea or Iran can take place anytime without notice. Terror in the American heartland can be preemptively characterized to be akin to an opportunistic infection in a nation with a weakened civic order compounded by fiscal collapse on the global scales. Global commerce will be steeply reduced or decimated, setting up the world for the greatest misery since the Great World Wars. This perfect storm is the type that can lead to a collapse of an empire.

Learning Objectives

1. Recognize the potential for a perfect storm scenario
2. Appreciate the likely cascade of events to unfold in this scenario
3. Understanding the potential empire ending implications of the once a century perfect storm
4. Appreciate the social, economical and therefore political fall outs on a global scale
5. Seek better understanding for better preparedness
Earthquake Preparedness for Civic Leaders

List of Participants and Their Roles in the Abstract

Name: Ha C Tang  
Organization: USPHS  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Predicting when an earthquake will strike a region is at best an inexact science in spite of the thousands seismic events taking place annually on many continents. Anticipating and cleaning up after the wrath of Mother Nature following a mega earthquake is far more quantifiable-range of hundreds of billions of dollars. The cascade of deaths, injuries, socioeconomic, civic unrest, public health impacts to follow are unequivocal. Mega earthquakes invariably unleash massive damages to the infrastructure that will disrupt commerce to regions hundred or even thousands of miles away from the epicenter. The recent published study in January 2013 on the Journal Nature by co-author CalTech Professor Nadia Lapusta showed that the mega-earthquake in the California could include the entire state, not as previously thought to include only the Southern region only. This unsettling news should be greeted with a renewed rigor on the part of civic leaders, public health officials to continually improve on earthquake preparedness. The most successful earthquake preparedness can be achieved when citizens take responsibility for themselves, civic leaders recognize and preemptively take actions to prevent breakdown of civic order and to ensure collaborative steps are taken long before the event.

Learning Objectives

1. Understand possible evolving risk and extent of earthquake event to the US  
2. Recognize the kind of damages to the infrastructure and global commerce implications  
3. Appreciate the social, economic and perhaps political implications of earthquake  
4. How best to prepare for this natural disaster by the citizenry  
5. How best to prepare for this natural disaster by civic leaders
Abstract Body

There are three faces to this health IT effort — the provider, patient and system — that must work together to enable VA to look across patient data, identify trends and improve approaches to care.

Several management principles — guide the effort: health data must be acquired as part of the workflow process; technology must support workflow, not encumber it; users must have real-time access and visibility into the system; delivery of effective health care must have sound business practices and principles of systems engineering; new capabilities must be easy to use; and complexity must be managed.

VA operates under the premise that you can’t have healthy patients without a healthy health care system. So leaders job is to make sure that the system is as healthy as possible.

VHA has begun reorganizing its health care teams, technology and knowledge around patient needs to achieve the goal of accountable care. Under its patient aligned care team (PACT) program, a team of people, led by primary care physician, with the involvement of other staff such as nurses and mental health providers, supports a patient.

Technology must support this team-based approach. Veterans Health Information Systems and Technology Architecture (VistA) allows health care providers to review and update a patient’s EMR, order procedures and medicine, and track treatment.

VA recently announced plans to turn to the private sector and open-source software to improve VistA, including making it more configurable based on who is using it and where, and making data more accessible and a shared resource.

There is also continuing progress on the Virtual Lifetime Electronic Record (VLER) which allows health information on members of the military to flow among VA, the Defense Department and private providers. VLER and the expansion of the eBenefits portal will give veterans and service members access to health care records, benefit applications, benefits information and other personal information through a web portal.

Learning Objectives

1. Define healthcare transformation at VA
2. Explain the patient-centered approach being taken by VA
3. Describe the technology evolution through Health Management Platform
Impact on operating room efficiency measures with implementation of Team STEPPS

List of Participants and Their Roles in the Abstract

Name: Kenneth Allen Heida  
Organization: Madigan Army Medical Center  
Role(s): Submitter; Presenter

Name: David Wilson  
Organization: Madigan Army Medical Center  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background: Madigan Army Medical Center implemented Team STEPPS as a unified, methodical approach to enhance patient care and safety as well as ensure expediency and efficiency in a busy operating theater in 2009. A retrospective analysis of prospectively collected data was undertaken to evaluate the effectiveness of this implementation in lower extremity arthroplasty procedures.

Methods: Operating room data was retrospectively analyzed from two independent systems designed to log and track different indices associated with operating room efficiency from 2005 to 2013. Specific points of focus were total number of turnovers, total time of a turnover, total case duration, and time from patient entry to procedure start. The data was also assessed for delays related to equipment availability and processing. These points were compared prior to and after the implementation of Team STEPPS.

Results: Data was collected from 2005 to present and represented 558 primary total knee arthroplasties and 318 total hip arthroplasties. The number of each procedure performed each year varied with the presence and number of surgeons performing them. The number of delays as a function of total number of cases in a given year decreased over time. Downward trends were also seen in time to procedure start as well as total case duration for both procedures. While the implementation of Team STEPPS did not produce marked changes in these areas, the trends suggest improved communication leading to a more efficient use of operating room time. One trend which was not observed was a decrease in turnover times between subsequent cases; average turnover times per year varied without specific direction for both procedures.

Conclusions: Team STEPPS provides a well thought out method of pre-operative briefing that shows capability of reducing turnover and some operative delays. The finding of prolonged turnover times not varying in conjunction with the other measures of operating room efficiency suggests areas that would benefit from further focus in the future for continued improvement.

Learning Objectives

1. Discuss areas that impede efficiency in operating
2. Discuss benefits and problems involving the pre-operative team brief
3. Discuss areas for improvement following implementation of the team brief
Early Spine Surgery in the Multiply Injured Patient: Implications of Damage Control Criteria

List of Participants and Their Roles in the Abstract

Name: Joseph Galvin
Organization: Madigan Army Medical Center Orthopaedic Surgery Department
Role(s): Submitter; Presenter

Name: James Mok
Organization: US Army
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background: Damage control orthopaedics is the concept of achieving initial fracture stability with an external fixator in a critically injured patient to minimize operative time, blood loss and hypothermia with return for definitive fracture fixation after the patient had been adequately resuscitated. How it applies to spinal trauma remains unclear. The performance of spine surgery in the Afghanistan theater allows analysis of the morbidity of early surgery on military casualties, many of whom meet Damage Control criteria.

Objective: The objective is to describe surgical morbidity based on Damage Control criteria.

Methods: Clinical data were obtained in retrospective fashion via the Theater Medical Data Store. Patients were considered “Stable” or “Damage Control” depending on the presence of at least one of the following: ISS>40, ISS>20 and chest injury, exploratory laparotomy or thoracotomy, lactate>2.5, platelet< 110,000, >10 units PRBC transfused pre-op.

Results: Thirty American and NATO military casualties underwent 31 spine surgeries in theater during a 12-month period. Spine surgery was performed at a mean 1.41 days (0.34-3.32) post-injury. Seventeen of 30 patients met Damage Control criteria. Damage Control patients had significantly higher operative time (mean 4.3 vs. 3.0 hours, p=0.01), blood loss (1,372 vs. 366 mL, p=0.001), PRBC transfused intra-op (3.88 vs. 0.14 units, p< 0.001), and total PRBC transfused in theater (10.18 vs. 0.31 units, p< 0.001). Damage Control patients had significantly lower pre- (10.97 vs. 13.75 g/dL, p=0.001) and post-operative Hb (9.98 vs. 11.12 g/dL, p< 0.05). Improvement in neurologic status, including spinal cord injury, cauda equina syndrome, or nerve root injury, was considered present in 2 of 17 (12%) Damage Control patients and 4 of 13 (31%) Stable patients. There was no significant difference in surgical invasiveness index (7.4 vs. 6.7, p=0.7).

Conclusion: Morbidity of spinal surgery was higher in Damage Control patients than Stable patients. When considering early spine surgery in the multiply injured patient, the indication, urgency, and extent of the planned procedure should be carefully weighed against potential morbidity. Early spine surgery performed in theater on military casualties had significantly higher morbidity when Damage Control criteria indicating a borderline-unstable patient were present.

Learning Objectives
1. Describe surgical morbidity of spinal surgery in the Afghanistan theater based on Damage control criteria
2. Discuss how damage control orthopaedics applies to spinal trauma and spine surgery
3. Analyze the role that damage control spine surgery has in the Afghanistan theater and how this performance improvement project may change management
**Abstract Body**

This introductory lesson in the 2-day Joint Humanitarian Operations Course, provided by the Office of Foreign Disaster Assistance, reviews the primary make-up of a disaster (man-made or natural), along with how the type of emergency is determined based on several factors, including the time and type of onset. The three OFDA criteria for a US response are outlined, as is the basic US government response process. The importance of understanding the host country's or region's capacity for disaster response, and who the potential partners in the affected country are, including their roles and responsibilities, is reviewed. Discussions will center on student responses about options that they believe OFDA should apply to the disaster, and the identification of potential mitigation opportunities to be applied to the disaster response. Additionally, the total cost for a disaster response in both human and capital resources will be reviewed and used to highlight the need for a streamlined US government response. The average time for this lecture is 90 minutes.

**Learning Objectives**

1. Be able to identify and/or list the key facts needed in responding to a disaster
2. State how a/the disaster meets OFDA’s three criteria for response
3. Understand the potential partners in the affected country and their roles and responsibilities
4. Identify potential mitigation opportunities to be applied to the disaster response
The Integrated Health Community: improving the health of military beneficiaries through enhanced care management

List of Participants and Their Roles in the Abstract

Name: Angela Dunn
Organization: Ward Circle Strategies
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Naval Medical Center San Diego (NMCSD) has created a population health initiative, the Integrated Health Community (IHC), to enhance health coordination and health management of a targeted population resulting in significant cost-savings, decreased healthcare utilization, and improved health outcomes. IHC has developed a framework for identifying the most complex patients defined as high healthcare utilization, high healthcare costs, and multiple chronic conditions. Utilizing an enhanced care management model to care for the identified complex patients, the IHC fosters interdisciplinary team management, patient activation, and connection to health and social services. In addition, we have created a set of tools for healthcare providers that allow the interdisciplinary team to address the holistic needs of the complex patients. We have also developed measures for population health outcomes, per capita costs, and the quality of social, community, and health services.

We chose to first focus on tertiary prevention in order to achieve maximum cost-savings. The long-term vision of the IHC is to move toward secondary and primary prevention, thus decreasing the total number of complex patients. IHC implementation began in November 2012. We expect to have results showing the cost-savings and health impacts, such as decreased emergency room use, by early Fall 2013.

Learning Objectives

1. Describe the characteristics of the most complex patients in the San Diego military beneficiary community.
2. Describe the enhanced care management framework designed to address the needs of complex patients.
3. Explain how the enhanced care management framework will result in cost-savings and improved health outcomes.
**Abstract Body**

Scientific evidence shows that lifestyle modifications—changes in diet and nutrition, physical activity and exercise, adopting stress management methods, and strengthening one’s social networks not only lowers an individual’s risk of specific diseases and improve overall health but also supports resilience. Total Force Fitness provides DoD leaders within the framework to develop programs that address the multi-dimensional aspects of wellness, this proposed model for “fitness” also opens numerous opportunities for outreach and to build partnerships with local community resources.

In this program we will share how a Command through its Chaplain’s Office and a local community organization created a partnership model to bring services in support of warriors' health and well-being. The non-pharmaceutical modalities along with health and wellness education set the foundation for a pilot to allow active duty Marines and their families to access highly needed services. This presentation will provide two perspectives, the Command’s Chaplain and a Medical Service Corps officer (retired) who leads the wellness efforts in the local community.

The goal is to learn from the experience and to help build a culture of wellness within the military by bringing programs and services that support healthy lifestyle changes, the use of natural approaches to address chronic pain, stress, insomnia, anger management and educational programs to help prevent chronic disease.

While we all have a personal responsibility to care for our own health, creating a culture of health and wellbeing within the military will require a multidisciplinary team with engaged leadership. We already know that our health system is a “disease care system”. The cultivation of health starts at home and within the “unit” with the everyday choices we make—how we live, what we eat, what we think, how we feel, and the way in which we care for each other. Wellness is the new paradigm because it is multi-dimensional. Total Force Fitness requires it!

This presentation covers the lessons learned from the pilot project to date using an integrative wellness model to deliver programs and services.

**Learning Objectives**

1. Understand the role of Wellness in the Total Force Fitness Model
2. Become Familiar with Community Engagement and Partnership Opportunities
3. Learn to Design and Deliver a No-Cost Wellness Program for Warriors
Negative Pressure Wound Therapy (NPWT) is used widely in military wounds. There is considerable debate as to whether this technique should be used, whether sponge or gauze should be used, and whether it should be used in role 2/3 or during aeromedical evacuation. The UK introduced ‘home made’ NPWT in Bastion Field Hospital in Afghanistan in 2009, and in 2011 this was replaced with a pump which was specially designed for military use. These pumps travel back with the patients to Birmingham, to the only UK role 4 facility. Our experiences will be demonstrated. Advantages including exudate management and wound isolation will also be discussed, as well as potential disadvantages.

Learning Objectives
1. The learner will be able to identify which war wounds are best managed by NPWT
2. The learner will be able to recognize the difference between the available fillers
3. The learner will be able to predict problems that may arise during this therapy
Perceived Deployment Stressors and Well-Being among Iraq and Afghanistan Veterans

List of Participants and Their Roles in the Abstract

Name: Abigail Fuller
Organization: San Antonio College
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Purpose

Service members that have deployed to Iraq and Afghanistan are experiencing a number of stressors that may have implications during their post deployment adjustment. The purpose of this study was to identify the perceived deployment stressors of a group of Iraq and Afghanistan veterans, and determine if there was a relationship between these perceived stressors and the health and well-being of these war fighters after returning home.

Methods

Thirty eight U. S. Marines and Sailors that deployed to Iraq and Afghanistan were recruited for the study. The instruments used were the Deployment Risk and Resilience Inventory and the General Well-Being Schedule. Data was collected online through Survey Monkey and by paper and pencil method. Frequency statistics were used to determine what service members deployed to Iraq and Afghanistan perceived as stressors. Multiple regression analyses were employed to examine the strength of relationship between the variables of interest, perceived deployment stressors and participant well-being.

Results

Deployment Concerns/Perceived Threat, Combat Experiences, and Post-battle Experiences were identified as stressors by participants. Although no significant relationship (p < .05) was found between deployment stressors and participant well-being, the coefficient of determination was 0.22, indicating the variables, deployment stressors, explained 22 percent of the variance in well-being scores. Two of the deployment stressors, Life Concerns (r = -0.37, p < 0.05), and Deployment Concerns (r = -0.32, p < 0.05), had significant correlations with participant well-being.

Conclusions

The U.S. Marines and Sailors in this study did identify certain deployment stressors associated with combat that could put them at risk for impaired well-being. This knowledge will help health care providers have a better understanding of the mental and physical health care needs of Iraq and Afghanistan combat veterans. Indeed, this knowledge will lead to the design of more holistic treatment and wellness programs for our returning war fighters.

Learning Objectives

1. Describe stressors experienced in a combat environment.
2. Discuss how combat stressors may impact veteran health and well-being.
3. Recognize how a thorough understanding of combat stressors experienced by these warfighters can lead to holistic treatment programs.
Abstract Body

Does the topic of medical ethics sound interesting, but you do not know where to start? Are you going to be on the Ethics Committee? Let’s be practical, do you need continuing education hours in ethics? This is the class for you.

After a very brief introduction to ethics and ethical theory, we will address the primary methods of ethical decision-making in healthcare, concentrating on the most frequently used --principlism. We will address the four most accepted ethical principles (autonomy, beneficence, nonmaleficence, and justice), the rule of double effect, determination of capacity, and surrogate decision-making. We will also teach the Army-Baylor 7-Step Model for Clinical, Ethical Decision-Making, and we will leave you with a “Smart Sheet,” summarizing all this.

Learning Objectives

1. Identify the two primary ethical theories
2. Identify the four primary ethical principles
3. Explain how each ethical principle relates to your area of practice
4. Explain how the Rule of Double Effect relates to the Principle of Nonmaleficence
5. Explain how you would resolve an ethical conflict
The Federal Tort Claims Act and Liability of the Federal Healthcare Provider

List of Participants and Their Roles in the Abstract

Name: Karin Waugh Zucker
Organization: Army - Baylor University Graduate Program in Health and Business Administration
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Who can sue the government? Can servicemembers? Can military healthcare providers be sued for malpractice? Can they be court-martialed? What if they are engaged in off-duty employment? Is it different for those in the VA? What is the real story?

Very recently, we were asked, "Is it true that I can't sue a military doctor now but that if he gets out of the military I can sue him then?" Where do these ideas come from?

We have been working in this area for years and most recently teaching this subject in the Army-Baylor Graduate Program in Health and Business Administration and the Interservice Physician Assistant Program. We will explain the Federal Tort Claims Act and the Feres Doctrine. We will make them understandable, and we will answer your questions.

Learning Objectives

1. List the two purposes of the Federal Tort Claims Act
2. State the rule in US v. Feres, i.e., the Feres Doctrine
3. Explain how the Feres Doctrine impacts the Federal Tort Claims Act
4. Given a scenario involving a servicemember and dependents select the individuals who might successfully sue for medical malpractice by a federal healthcare provider in a military medical treatment facility
Abstract Body
The ethics of a people are generally thought to inform that people's legal system and its decisions. This presentation shows that the converse is also true: decisions within a legal system inform, or influence, ethics. The cases discussed are at the foundation of medical ethics. They address informed consent, abortion, refusal of medical care, the right to die, physician-assisted suicide/death, surrogate motherhood, medical research, and the military. For example --

- Schloendorff v. The Society of the New York Hospital (1914) - Perhaps the first statement in US law of the ethical principle of autonomy
- U.S. v. Karl Brandt (1947) - A military tribunal case which gave us the 10 point Nürnberg Code, which still grounds US law and regulation regarding human subject research
- Feres v. U.S. (1950) - Set out the rule that servicemembers incident to service at the time of their injury could not successfully sue the government under the Federal Tort Claims Act.
- Roe v. Wade (1973) - The foundational case on abortion grounds a woman's limited right to abortion in the right to privacy and, for legal purposes, delineates the three stages of pregnancy and a rule regarding abortion for each stage
- Canterbury v. Spence (1972) - The most complete statement of the rules regarding informed consent to medical care
- Fosmire v. Nicoleau (1989) - Identifies State's interests that must be considered when an individual's right to refuse medical care is likely to result in his or her death

All cases are taken from a monograph, *Foundations in the Law: Classic Cases in Medical Ethics*, which resulted from a seminar facilitated by Dr. Zucker in the Army - Baylor Program a decade ago. Taken together, these cases demonstrate balance between the rights of individuals and the rights of society. Moreover, they show the tension that will forever exist in medical ethics among the principles of autonomy, beneficence, nonmaleficence, and justice.

**Learning Objectives**
1. Identify the case most closely identified with autonomy or respect for persons
2. Identify a case where autonomy and justice were both argued
3. Identify the foundational case in abortion law
4. Explain the nexus between medical law and medical ethics or vice versa
Creating a Patient Centered Culture: Lessons Learned from an Implementation Project

List of Participants and Their Roles in the Abstract

Name: Marlene Abbott  
Organization: PriceWaterhouseCoopers (PwC)  
Role(s): Submitter; Presenter

Name: Russell Kohl  
Organization: TransforMED  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

This presentation is applicable to established Headquarters and clinic level staff changing to a Patient Centered model of care. It will specifically provide an overview and lessons learned from a Patient Centered Medical Home (PCMH) implementation project within a Federal healthcare environment. The presentation will cover the importance of designing a multi-tiered collaborative training and change management approach that is adaptable to Military Treatment Facilities (MTFs) of various sizes (from Medical Centers to clinics), beneficiary types (retiree and dependants to large Active Duty Populations) and varying employee mixes (Military, Civilian and Contractors).

The presenters will discuss the value of a mix of learner activities to improve PCMH administrative and clinical skills and provide continued support to practices as they implement PCMH. The presentation will also cover the program management aspects of both the design and implementation of a phased approach to creating a patient centered culture, including key drivers and challenges. Lastly, presenters will discuss how change was measured and program success evaluated.

Learning Objectives

1. Recognize the importance of designing a flexible and adaptable approach to meet individual clinic and audience needs.
2. Identify key elements, support and potential risks to a successful practice transformation approach.
3. Discuss the importance of ongoing program evaluation and facilitation through evaluations, and the use of established leadership teams and Patient Centered Medical Home practice coaches.
**Military Acuity Model and Tri-Service Patient Acuity Staff Scheduling for Improving Care Team Cost-Effectiveness**

**List of Participants and Their Roles in the Abstract**

Name: Terry Rajasenan  
Organization: ProcessProxy.com  
Role(s): Submitter; Presenter

Name: Douglas Howard  
Organization: Acuity Consulting, LLC  
Role(s): Presenter

**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

The Military Acuity Model (MAM) and Tri-Service Patient Acuity Staff Scheduling (TS-PASS) projects are helping develop patient risk models to determine healthcare resource demands, and enables cognitive load balancing of personnel, to improve task execution by healthcare resources. Cognitive psychology, and Air Force studies on “task saturation” of pilots, showed similar findings. Multitasking “tipping points” of individuals in teams increase errors and lead to slowdowns, reducing productivity by 20% or more. Interruptions, in another study, showed an estimated 20% reduction in tasks. “Decision fatigue” also decreased productivity over time in our research, and finally “perceived complexity” of tasks was shown to reduce productivity 20% or more. Together, these constricted cognitive capacity or bandwidth (the ability to process the complex thought required in care processes to make more cost-effective process choices in care). Using process mining, cognitive capacity modeling, and “arbitrage” of process tasks lead to improved patient safety and efficiency. Through this modeling, teams redesign processes, and reduce risk factors to become more cost-effective and responsive as a team. MAM is similar to LEAN, except resource constraints are cognitive rather than physical. ROI has proven significant (over 300%), helping MAM win the MHS Innovation Award. Findings showed compliance increasing, and costs decreasing dramatically as the team improved problem-solving and critical thinking and needed less staff. Also significant: Caregiver cognitive overload led to reduced patient compliance (thus more readmissions), and comparative advantage of team members is dynamic, not static, due to bandwidth.

**Learning Objectives**

1. Describe the Military Acuity Model (MAM) Background and Scientific Research behind it  
2. Explain MAM Benefits and Business Case  
3. Identify the Steps Needed for the MAM Approach
The Effectiveness of an Educational Program on Compassion Fatigue Prevention

List of Participants and Their Roles in the Abstract

Name: Kathleen Flarity
Organization: HQ USAF
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

The Effectiveness of an Educational Program on Preventing Compassion Fatigue Among Emergency Nurses

Colonel Kathleen Flarity, DNP, PhD, CEN, CFRN, FAEN

Abstract

Military health care providers often suffer “the cost of caring” or compassion fatigue (CF). This is often unrecognized and untreated. The purpose of this qualitative study was to examine the treatment effectiveness of a multi-faceted education program to decrease CF and increase compassion satisfaction of emergency nurses participating in the training. The goal of the CF multi-faceted intervention program was to demonstrate a statistically significant improvement in the three CF subscales: an increase on the compassion satisfaction subscale, a decrease on the secondary traumatic stress and burnout subscales in the participants’ pretest and posttest scores as measured by The Professional Quality of Life test (Stamm, 2010). Military health care professionals work in an environment that is stressful and routinely bear witness to personal tragedies. Repetitive exposure to chaos, high patient acuity, workplace violence, prolonged patient holding, overcrowding, trauma, and death can be challenging and emotionally draining. The existing data suggest that caregiving can take an emotional, physical, professional and relational toll upon care providers. The study sites were two emergency departments in Colorado Springs, Colorado. A convenience sample consisted of emergency nurses who self-selected to participate in the study. Univariate statistics were used and data were examined for normalcy of distribution. Because the data were not distributed normally, Wilcoxon signed-rank tests were used to evaluate the differences between the baseline and post-intervention groups. The multi-faceted education program resulted in a statistically significant increase in CS (p=0.004), a decrease in burnout (p<0.001) and secondary traumatic stress symptoms (p=0.001).

Learning Objectives

1. Summarize the causes and effect of compassion fatigue that include burnout, secondary traumatic and caregiver stress
2. Differentiate between Post-traumatic Stress Disorder (PTSD) and compassion fatigue
3. Discuss the results and implications of the study The Effectiveness of an Educational Program on Preventing Compassion Fatigue Among Emergency Nurses on military medical care providers

List of Participants and Their Roles in the Abstract

Name: Elizabeth Ann Lybarger
Organization: US Public Health Service
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
In a collaboration that was the first of its kind in this region, the US Army Medical Command worked with the Republic of Korea’s Armed Forces Medical Command to enhance medical readiness to identify and respond to chemical and biological threats on the Korean Peninsula, an area of high threat for use of weapons of mass destruction (WMD). Personnel from the US Army Medical Institute of Infectious Diseases, the US Army Medical Research Institute of Chemical Defense, and the US Public Health Service spent approximately three weeks on the peninsula training both US and Korean troops in the Medical Management of Chemical and Biological Casualties (MCBC) and the Field Identification of Biological Warfare Agents (FIBWA). The training we provided further increased response capabilities of US and Korean troops in the event of a WMD event, and emphasized the importance of militaries working with their public health partners for increased medical readiness.

USPHS personnel were also able to teach the Korean troops how the US performs medical surge operations, and demonstrated PHS-2 Rapid Deployment Force's response capabilities during hurricanes Gustav and Ike as an illustration of how our Strategic National Stockpile (SNS) is composed and functions, thereby highlighting both the work and mission of the USPHS. By the end of this session, participants should be able to discuss the importance of increased collaborative efforts between US services, understand the positive impact of international collaborations of uniformed and armed services, and evaluate potential future collaborative opportunities.

Learning Objectives
1. discuss the importance of increased collaborative efforts between US services
2. understand the positive impact of international collaborations of uniformed and armed services
3. evaluate potential future collaborative opportunities
When a Bomb Explodes, What to do?

List of Participants and Their Roles in the Abstract

Name: Ha C Tang
Organization: USPHS
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Bombing has for decades been the favorite weapon of choice for the weak but determined foes of established institutions and powerful nations. In many ways, it is the ultimate equalizer for the inherent massive imbalance between the states and the lone wolves or terrorist organizations. For the thousands of bombings taking place globally each year, they do have a number of things in common. They are relatively inexpensive to make, widely disseminated know how that is only a few keystrokes away, can be leisurely assembled and deployed, and therefore, the unrivaled means to inflict terror at a distance. Those gravitating toward this deadly weapon are blessed with a number of advantages that are difficult to anticipate or neutralize, i.e. multiple bombs can be deployed to exact great paralyzing terror while they command the unsurpassed element of surprise. They can pick and choose where, when and how. For token cost to make bombs, it is abundantly evident that the lopsided enormous response, clean up and recovery costs can be staggering. Responders at all levels, however, must recognize that all bombs are not equal. The type of bombs used should and will dictate how to best respond to a given scenario. Once this range of scenarios are understood at all levels of responders and responsible officials, we are better equipped to mitigate the otherwise crippling terror to a manageable response level.

Learning Objectives
1. Why bombs are the weapons of choice?
2. Appreciate the wide range of explosives
3. What to do first and recognize inherent dangers in responding
4. Different kind of bomb scenarios and implications
Are We Ready for All Disasters?

List of Participants and Their Roles in the Abstract

Name: Ha C Tang
Organization: USPHS
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
In April 2005, the Federal interagency community has developed fifteen all-hazards planning scenarios (the National Planning Scenarios or Scenarios) for use in national, Federal, State, and local homeland security preparedness activities. All uniformed services officers tasked with the duty to protect, promote and advance the health and safety of the nation must recognize and understand the risks analyzed and finally agreed upon consensus by Federal homeland security experts. Awareness of such wide range of risks is the beginning of preparedness for all eventualities. The more leaders at all levels of government aware of this risk, the greater likelihood that an emerging event can be swiftly identified, effectively contained and damages subsequently mitigated by first responders. Awareness is the beginning of knowledge. Without knowledge of the entailed risks, there can be no effective response. However, it is important to remember that threats do evolve with the passage of time with emergence of new technological developments. The most fearsome of all, ironically is the creativity of evil minds to seek out and bring about wider scale calamity. For a nation as vibrant as ours, there are an infinite number of targets to choose from. A reexamining of other threats beyond those agreed upon by expert consensus is perhaps beyond reasonable in outflanking those living for the prospect of killing and harming more innocent lives. We must constantly seek to make their tasks more difficult by always a step or two ahead of them.

Learning Objectives
1. Know the fifteen all-hazards planning scenarios
2. Understand and recognize limitations of our ability to anticipate and respond to all scenarios
3. What are the other possible, although unlikely threats?
4. What to do with new information?
5. How severely limited are we in mounting a response in an era of unending austerity?
Advances in Analytics – What your current data are trying to tell you.

List of Participants and Their Roles in the Abstract

Name: Donald A Donahue
Organization: Diogenec Group
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Name: Ganesh Vaidyanathan
Organization: Quantum Leap Innovations
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

The unprecedented changes in healthcare delivery are being accompanied by a dizzying array of new technologies. The Cloud, Big Data, business intelligence demands, and pressures driven by the Patient Protection and Accountable Care Act to identify and control costs and quality challenge leadership’s ability to assimilate and employ effective tools. Yet, even as new means to gather data are developed, volumes of existing data go underutilized. This seminar will identify emerging analytical capabilities and their application, both to the growing HIT sector and with existing data.

Healthcare organizations hold expansive caches of information, often residing in disparate data bases. The forthcoming access to greater volumes of data must be accompanied by innovative analytical capabilities. The ability to “hear what your data are saying” can have a monumental impact. A 2013 report by McKinsey & Company estimated that using big data could reduce health care spending by $300 billion to $450 billion annually -- or 12% to 17% of the $2.6 trillion baseline in annual U.S. health care spending.

During this seminar, case studies of identifying cost outliers and root causes for adverse outcomes are presented. Attendees will gain an understanding of advances in analytics and their application to current operations. This presentation is relevant to anyone who may need to understand the value of data and how to use rapidly expanding collection and analysis technologies. This includes those working in executive leadership, operations, quality, finance, cost containment, business intelligence, process analysis, biotechnology, research, population and public health, and manufacturing.

This seminar will identify emerging analytical capabilities and their application, both to new technologies and for use with existing data. During this seminar, case studies of identifying cost outliers and root causes for adverse outcomes are presented. Attendees will gain an understanding of advances in analytics and their application to current operations.

Learning Objectives

1. Following this session, attendees will be familiar with emerging concepts in data collection, processing, and analysis
2. Participants will understand emerging concepts in data collection, processing, analysis, and the applicability of novel data technologies
3. Attendees will be able to recognize ways to enhance processes, reduce costs, and improve quality
Abstract Body

Military Treatment Facilities (MTFs) in collaboration with the Defense Logistics Agency supply chain professionals have spent the last two decades adopting commercial supply chain management practices. This has led to impressive reductions in on-hand inventories, reductions in obsolescence and product expiration costs and the requisite resources of space and FTEs to maintain them.

At the same time, manufacturing of much of the class 8 materiel has moved to the Far East; technology, information sharing, more consistent quality, and more reliable transportation has allowed the supply chain to squeeze inventories out from the factories and from importers.

End result is a total supply chain that is so efficient, that global shortages on common medical surgical items can be caused by a single minor event, ex: closing of factories for 2 weeks in and around Beijing for the Olympics, a fire in a single plant in Malaysia, the most minor threat of a pandemic, etc.

Key Points:

Has elimination of safety stock levels and depot stocks left us vulnerable?

Do we have a viable plan for addressing supply chain for the “Just in Case” supply chain needed for our Readiness missions?

Who should have ultimate responsibility for ensuring Supply Chain for Readiness missions?

Can we apply basic portfolio management concepts to determine the optimal trade-off in our readiness programs?

Is this a classic risk/reward optimization modeling problem?

Conclusion:

While there is little doubt our Medical Supply Chains have become far more robust over the last two decades in our MTFs, it is clear it has come at a significant cost of increased risk to our future supply chains in direct support of warfighter readiness. While we may not yet be at the tipping point of totally re-engineering our current supply chain, this may well be one of those areas where a purely commercial solution is less than optimal when given the unique nature of military surge requirements. All is not lost; the answer is a hybrid model that considers both our MTFs and our Readiness platforms in a combination of the Just in Time and Just in Case supply chain solutions.

Learning Objectives

1. Identify vulnerability of eliminating safety stock levels and depot stocks of common medical surgical items.
2. Recognize need for a viable support plan addressing medical supply chain for the Readiness missions
3. Review how to identify Military Treatment Facilities (MTFs) and/or Defense Logistics Agency supply chain professionals responsible for ensuring medical supply for Readiness missions
Real Warriors Campaign: Leveraging Partnerships to Encourage Help-Seeking Behavior in Military Culture

List of Participants and Their Roles in the Abstract

Name: Katie Duthaler
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Role(s): Submitter;

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The Real Warriors Campaign, launched May 2009, is a multimedia public awareness campaign designed to encourage service members and veterans coping with invisible wounds to reach out for appropriate care or support. Sponsored by the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE), the campaign successfully utilizes stakeholder research, social marketing theories, grassroots outreach and a partnership network of more than 215 organizations to engage diverse military stakeholders.

The presentation will address the important role of health professionals in supporting the transition and adjustment of service members during any deployment phase, and best practices for collaborating with like-minded organizations to encourage help-seeking behavior in the military community.

Learning Objectives
1. Understand the importance of building strategic partnerships to create awareness of the psychological health tools and resources available to service members, veterans and military families.
2. Identify best practices for identifying, securing and leveraging partner relationships to communicate the positive aspects of seeking treatment for psychological health concerns within military culture.
3. Recognize the importance and role of health professionals in supporting service members with psychological health concerns, and describe various successful concepts, partnership efforts, resources and health communications strategies that resonate with military audiences.
Screening for Deployment-Related Traumatic Brain Injury: A Validation Study

List of Participants and Their Roles in the Abstract

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NameGurvaneet Sahota
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Organization: VA Puget Sound Health Care System
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Organization: Warrior Recovery and Neurology Clinic
Role(s): Non-presenting contributor

NameAnn Scher
Organization: USUHS
Role(s): Non-presenting contributor

Objective

Evaluate the validity of two brief Traumatic Brain Injury (TBI) screening instruments in soldiers returning from deployment in Afghanistan and Iraq.

Background

Between 15 and 23% of Service Members returning from deployments are estimated to have had concussion(s) while in theater. DoD and the VA screen returning Service Members for TBI with brief questionnaires in order to triage individuals into appropriate evaluation and care. These screening tools have not been fully evaluated in military populations. We report on the validity of the Brief Traumatic Brain Injury Screen (BTBIS), and the Post Deployment Health Assessment (PDHA) for identifying soldiers who sustained TBI(s) during their last deployment.

Design/Methods

During routine post-deployment health assessments, soldiers were classified as screen positive/negative for TBI as part of a larger longitudinal study of soldiers recently returned from Afghanistan and Iraq. A random sample of screen +/- subjects completed the "gold standard" Ohio State structured interview for lifetime head injuries (OSU) administered in face-to-face interviews lasting approximately 20 minutes. The OSUs were conducted "blind" to soldiers' answers on the screens.

Results

The BTBIS/PDHA screens were both found to have good sensitivity (78.2%/85.7%) and specificity (90.3%/77.5%) for identifying soldiers who sustained a recent TBI when compared to the OSU. Implications of these findings and the challenges of identifying the high percent of soldiers with multiple mild TBIs received during deployment and previously will be discussed.

Conclusions

These brief screens appear to be valid instruments for identifying soldiers with recent deployment-related concussions.

Learning Objectives

1. Describe the importance of TBI Screening for Service Members returning from theater.
2. Discuss the frequency of multiple mild TBIs in this population, the challenges of capturing them, and implications for screening.
3. Discuss the evidence supporting the use of TBI Screening for Service Members.
Military/Veterans Administration partnering strategies for homelessness and suicide prevention in under served veteran populations

List of Participants and Their Roles in the Abstract

Name: Kenneth Earl Dempsey
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Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
In recognition of the increasing incidence of suicide and homelessness in the military and veteran populations, recent presidential initiatives have provided funding commencerate with the goal of eliminainge homelessness in veterans by 2015.

Returning from recent deployment, one author collected statistics demonstrating that 30-35% of patients traversing the medical aerevac system have primary psychiatric diagnoses. Many of these service members will be discharged into the community where they will have access to follow up in the VA system. To use, or not to use is the question; available services are often not utilized by the population which is most in need of these services. Identification of these individuals, and comprehensive follow up is key to program success.

The WPB VAMC has pioneered an outreach program to identify and locate those most in need and at risk, and who, for various reasons, either do not avail themselves of programs, or who do not follow up or return for appointments.

One immediate goal is closer cooperation between Active Duty Military and VA in identifying the most vulnerable service member/veterans and assuring seamless transition of care upon return to the civilian sector.

Major themes: preventing suicide, homelessness issues, community outreach in unusual and unorthodox ways (e.g. seeking out homeless in parks, under bridges, in alleys and hidden spots), and insuring proper distribution of available funding in the most effective way.

The current initiative at the West Palm Beach VA Medical Center focuses on proactively identifying those most at risk, partly through post-deployment referrals and alerts, and partly through the MHICM program, with a system in place to rapidly share information between the various disciplines, featuring red flagging and quick response time. No-shows are sought out on the spot, telephonically and then by visiting the vets at their various locations. A new innovative adjunct is being discussed wherein cell phones are to be distributed, allowing the vet to call and the provider to locate through built-in GPS as well as calling access.

Discussion points: Statistics, demographics, funding, programs, resources, on-line chats, crisis lines, disciplines involved, effectiveness of delivery, and future plans.

Learning Objectives

1. Recognize characteristics of the underserved population in order to improve methodology of outreach
2. Discuss effective collaboration between Military and VA to assure seamless transition of access to needed services
3. Describe some of the barriers to seeking healthcare by this group
4. List strategies effective in reaching under served or reluctant beneficiaries of veterans healthcare
5. Describe future best practice strategies based upon visible evidence and accumulated knowledge
Prescription Synchronization in the Community-Based Medical Home

List of Participants and Their Roles in the Abstract

Name: Beverly A. Morrow
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Role(s): Submitter; Presenter

Name: Jaime McKay
Organization: Madigan Army Medical Center
Role(s): Non-presenting contributor

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Background: With the introduction of the Community-Based Medical Homes (CBMHs) that currently serve Army families, the concept of patient-centered care utilizing healthcare teams that work together to coordinate care and engage patients has shown tremendous potential. To address concerns related to polypharmacy, one CBMH utilized the monthly polypharmacy report to identify patients that may be at risk. During the comprehensive review of medication profiles, prescription synchronization was considered.

Since Prescription Synchronization was introduced by the National Alliance of State Pharmacy Associations (NASPA) a few years ago, multiple organizations have implemented the concept, retrospective studies have been conducted and the National Community Pharmacists Association (NCPA) has launched the “Simplify My Meds” program.

Results: By synchronizing prescriptions, medication adherence and persistency rates have been increased while calls and visits to the clinic and/or pharmacy have been reduced. Fewer calls and visits to the pharmacy have resulted in improved workflow, increased efficiency and the opportunity for pharmacy staff to perform diverse task with the healthcare team at the CBMH. Though not yet measured in the CBMH, Sinsky and Sinsky reported synchronization to save providers 1 hour per day, which has the potential to improve patient access to care. These benefits combined with a reduction in adverse drug events associated with polypharmacy reviews where duplicate therapies are eliminated and drug interaction minimized, clinical outcomes are optimized while health care costs are controlled.

Conclusion: Collaboration between CBMH staff (Providers, RNs, LPNs, Pharmacy staff and Administrators) aligns with the Institute for Healthcare Improvement’s Triple Aim – improve population health, provide a better experience of care and reduce per capita costs.

Major theme: Impact of team-oriented care which focuses on continuous process improvement.

Expanded Learning Objective: 1) Polypharmacy at the CBMH - 8 or more active prescriptions, 2) Involvement of pharmacy, patients, RNs and providers. 3) Reduction or maintenance of Pharmacy serve time, reduced calls to RNs, fewer T-cons to providers, high patient satisfaction scores, increased access to care, and reduced per capita costs. Issues to be discussed: Results of various studies, pilot programs and the CBMH project completed in 2012.

Learning Objectives
1. Describe how the Polypharmacy Report was used to identify opportunities to improve pharmacy workflow and improve access to care.
2. Explain the process of synchronizing prescriptions.
3. List potential benefits of Synchronization or Bundling Prescriptions.
4. Provide results of prescription synchronization project completed at a CBMH.
Critical Analysis of the True Costs of Proposed Reductions in Army Medical Center Operative Capacity

List of Participants and Their Roles in the Abstract

Name: Douglas Roderick Stoddard  
Organization: Madigan Army Medical Center  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Over the last decade, the military health system (MHS) beneficiary population has increased by approximately 10% to 9.7 million beneficiaries in 2013, while the Defense Health Program (DHP) budget to support the needs of this population has increased disproportionately over the same period by 116% to $43.3 billion in 2013. Regardless of which factors are driving these cost increases, the overall demand for healthcare and operative services are not expected to decrease in the near future. However, in response to increasing federal financial restraints over the last six months, the Army Medical Department (AMEDD) has proposed decreasing Army Medical Center (MEDCEN) operative capacity as a cost saving measure. The goal of this study is to provide a critical analysis of the impact of this proposal to the AMEDD using Madigan Army Medical Center (MAMC) as a case study. MAMC conducts approximately 11,000 operative cases per year (2581 inpatient surgeries and 8396 ambulatory surgeries) in 14 main operating rooms across 13 surgical lines of service (i.e. General Surgery, Plastic Surgery, etc). These cases generate approximately $106 million dollars in productivity. Unlike our civilian counterparts, the MHS is charged with caring for the same beneficiary population regardless of budget constraints. Beneficiaries who are unable to obtain surgical care at MAMC as a result of decreased OR capacity will be sent to outside, network providers. This care is purchased by the MHS as “purchased care.” If the AMEDD reduced MAMC’s operative capacity by either shuttering two operating rooms (OR), or by reducing the hours of operation of all 14 OR’s, operative productivity would decrease by 14% - 24%. This translates into $14 - $25 million dollars in purchased care. Beyond the bottom line, this decreased operative capacity would negatively affect residency training, maintenance of surgeon skill, business productivity for ancillary departments (namely Radiology, Anesthesia and Perioperative services), and morale. It is critical in this austere fiscal climate to critically analyze how we deliver surgical services, and to search for opportunities to standardize and make our practices more efficient, while at the same time providing care for all beneficiaries.

Learning Objectives

1. Define and describe the current financial environment in military health care, as well as important trends over the last ten years. Included in this will be a discussion of what is contributing to these trends, and what are the major drivers of the substantially increased cost of delivering healthcare services to military health system beneficiaries.

2. Develop a framework with which to critically analyze the productivity and financial performance of surgical services delivered across the Army Medical Departarment. This will include a critical analysis of available performance metrics and how these can be applied to identifying practical opportunities in the AMEDD and in each particular MEDCEN to improve resource utilization and efficiency.

3. We will use the metrics developed in Learning Objective 2 to put forth a series of proposals to improve the delivery of surgical services across the AMEDD, and then analyze those proposals critically with a business case analysis for each one.
Looking Over the Technology Horizon--Innovations That May be Health Solutions Down the Road

List of Participants and Their Roles in the Abstract

Name: Don E Workman
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Name: Robert (Bob) Kayl
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Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
This seminar will introduce participants to a number of emerging technologies that are not yet to market or have just entered the marketplace as well as some initial concepts for how they might be developed into applications for addressing issues in behavioral health. The National Center for Telehealth and Technology has been actively scanning these kinds of “over the horizon” opportunities for a number of years in order to fulfill its mission for providing leading edge solutions for Psychological Health and TBI. Examples will include applications of artificial intelligence, virtual reality and virtual world simulations as well as big data exploitation, biosensor data tracking, and thermography. All of these concepts would be at the investigational stage only, and will be clearly identified as such in the presentation materials.

Learning Objectives
1. Participants will be able to identify several emerging technologies that show promise for development into future behavioral health technology solutions.
2. Participants will be able to describe a number of ways in which modern technologies can be applied as behavioral health solutions.
3. Participants will be able to consider ways in which current behavioral health technology solutions (including investigational products) might be applied to their clinical practice.
Abstract Content, Presented in Order Requested from Submitter

Abstract Body
The health of U.S. military personnel is critical to the success of the armed forces. In line with the Military Health System’s goals of managing per capita costs and improving access to care, the development of interactive virtual agents to promote health behavior change offers a tremendous opportunity for promoting population-level behavioral health. Obesity is an example of such a behavior-related problem within the military community. In addition to health consequences, failing routine tests applying military physical fitness standards can lead to severe consequences including separation from service. Improving lifestyle choices improves the readiness of the force and supports efficient use of medical resources.

While person-to-person obesity-related lifestyle coaching is proven to be an effective preventative and treatment option, utilization of existing coaching services is not widespread in the military, due in part to the logistical burdens of additional in-person appointments. A website or mobile application (app) that provides lifestyle coaching specific to the requirements of the military population addresses the issue of access to care and fits the technology-intensive lifestyle of today’s military.

The National Center for Telehealth & Technology is developing a Virtual Lifestyle Coach which users experience in a virtual 3D environment. The advantages afforded by virtual world environments include:

- An enhanced experience of active engagement with the material, enabling the user to make their own choices and see the potential results.

- Repetitive choice: enabling users to work through the material as many times as they wish to view the consequences of their choices.

- Visualization and virtual enactment of the behaviors associated with achieving personal goals in ways that are not immediately available in the user’s physical environment.

- Encouragement of active learning and behavior change in support of the program goals of weight loss, and maintenance of that target weight over time.

- Opportunities for social interaction with other users, initially through social media connectivity. In later versions, this may include multiplayer opportunities for groups of users and families.

- The use of dashboards to integrate data from mobile, online and virtual environment applications.

Learning Objectives
1. Learners will be able to describe some of the advantages of using an interactive virtual agent for improving population-level behavioral health.
2. Learners will be able to discuss the way in which such a virtual agent that is developed for weight management might be integrated into the healthcare system.
3. Participants will recognize the opportunities inherent in the application of modern technologies for enhancing efforts at behavior change.
**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Background:** Wound care challenges are compounded by emphasis on outcome measures such as decreased lengths of stay and avoidance of readmissions. Meanwhile, patients are overwhelmed by path forward ideas, hospitalization costs, and potential deficits. This paradigm warrants creative, bold efforts to maximize patient/health care.

**Methods:** To provide a patient-centric comprehensive approach to care coordination, we developed an Acute Surgical Wound Service (ASWS). This specialized team is comprised of Board of Surgery certified Trauma surgeons and a Wound-Care certified nurse practitioner who are committed to management of wounds meeting any of the following criteria: result of a traumatic injury; infection; complex open surgical site; require multiple, surgical interventions; potential for loss of limb(s); high resource case. It is a continuum of care provided for patients from admission, into surgery, during inpatient stay, and post discharge. Priorities include: communication amongst all service providers, patients, and families; coordination of safe discharge; and close follow-up.

**Results:** For over 150 patients from inception thus far, we have successfully coordinated care, engaged all healthcare providers and families; provided tailored surgical interventions; followed-up with frequent outpatient office visits to ensure durability of outcome; communicated with multiple disciplines to avoid readmissions; monitored wounds at home via computerized software; and decreased length of stay.

**Conclusion:** The commitment of comprehensive wound management team combined with collaborative efforts of ancillary health care providers and diligence of patients/family members can lead to enhanced patient care with decreased healthcare costs.

**Learning Objectives**

1. Describe detailed factors that impede the care of complex wound patients.
2. Identify ways a clinician can facilitate patient care in complex cases.
3. Describe the positive effects that coordination of care can have on patient outcomes and use of resources.
Active military members who were stationed at Marine Corps Base Camp LeJeune, NC from 1950s until the middle 1980s were potentially exposed to contaminated water. In the early 1980’s, two water supply systems on the base were found to be contaminated with the industrial solvents trichloroethylene (TCE) and perchloroethylene (PCE).

In response to the Navy’s request, The National Research Council (NRC) convened the committee on contaminated drinking water at camp LeJeune to examine what is known about the contamination of the water supplies at Camp Lejeune and whether contamination can be linked to any adverse health outcomes. The NRC report reviewed the epidemiologic and toxicologic literature and characterized the health outcomes in relation to TCE, PCE, or solvent mixture.

Under a law signed on Aug 6, 2012, veterans and family members who served on active duty or resided at Camp Lejeune for 30 days or more between Jan. 1, 1957 and Dec. 31, 1987 may be eligible for medical care through VA for 15 cancerous and non cancerous health conditions.

This presentation will summarize the health outcomes related to solvent exposure based on the five categories used by IOM to classify association. It will also provide a framework that equips the healthcare providers with the skills to perform risk analysis in the context of contaminated water exposure at Camp Lejeune.

Learning Objectives
1. To review the Epidemiologic and Toxicologic Evidence on Solvents
2. Attendees will learn about potential health effects due to contaminated water exposure at Camp LeJeune
3. Attendees will also learn about Honoring Americas Veterans and Caring for Camp Lejeune Families Act of 2012
**To threatment of vascular injuries due to high velocity missiles**

**List of Participants and Their Roles in the Abstract**

Nameaytekin unlu  
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**Abstract Content, Presented in Order Requested from Submitter**

**Abstract Body**

**Introductions:** Military conflicts frequently create high velocity missile related injuries. High velocity missiles (initial speed >600-900 m/sec) created by explosives and firearms cause more severe tissue damage. The objective of this study was to describe the patterns, management and complications of vascular injuries.

**Method:** Our hospital consists of 7/24 available trauma surgeons and medical teams. The first objective of Role 2 hospital is to encounter and prioritize the casualties. The second objective is damage control surgery; to stabilize life- and limb threatening injuries. Detailed vascular injury (arterial and venous) data was reviewed retrospectively. Data included patient profile and date of admission, site, type and mechanism of injury, associated injuries, vital signs, treatment, type of vascular repair and outcome.

**Result:** Retrospective data analysis revealed 25 (6.8%) vascular injuries. The mean age of these casualties were 22 ± 2 years. Explosives accounted for 70% of all injuries and 72% of vascular injuries. Vascular injuries sustained from gunshot wounds were 28%. Of all vascular injuries, 14 (56%) were documented as venous and 11 (34%) as arterial injuries. Of the venous injuries 93% and of the arterial injuries 45.5% were due to explosive mechanisms. Overall, 44% (n=11) of vascular injuries were associated with other injuries that required surgical intervention. In 2 patients (with brachial and femoral artery injuries) vein graft thrombosis was diagnosed. According to the vascular injury protocols, upon stabilization in the general status, all casualties were evacuated to a higher level of care in ≤ 4 hours, postoperatively.

**Discussion:** In our study, extremity injuries predominate, representing 65% of all injuries treated between 2005-2009. Extremity vascular injuries were also the most common; 44% in the lower extremity. Young age of our patients, expeditious evacuation and prompt surgical exploration probably contributed to successful limb salvage in our series. However, the decision to ligate or repair a venous injury was made according to the tactical situation, availability of the operating theatre, coexistent injuries in the same patients and physiological status of the casualty.

**Conclusion:** However, despite our success in treating vascular injuries, systematic research to improve care given to casualties is still needed.

**Learning Objectives**

1. Hemorrhage from various blood vessels remains the leading cause of preventable death, accounting for more than 50% fatalities, on the battlefield.
2. To describe the patterns, management and complications of vascular injuries are difficult.
3. In military settings, the treatment of casualties in a dynamic, rapidly shifting and hazardous combat environment is a real challenge for the medical personnel.
VA/DoD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide

List of Participants and Their Roles in the Abstract

Name: Eric Rodgers  
Organization: Department of Veterans Affairs  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

This guideline applies to adult patients (18 years or older) with Suicidal Self-Directed Violent (SDV) behavior or related suicidal ideation (identified as being at risk for suicide) who are managed in the VA and DoD healthcare clinical settings. The population at risk includes patients who have suicidal ideation with or without an established diagnosis of a Mental or Substance Use Disorder; and patients with any level of risk for suicide ranging from thoughts of about death or suicide to SDV behavior or suicide attempt.

This guideline recommends a framework for a structured assessment of person suspected to be at risk of suicide, and the immediate and long-term management and treatment that should follow once risk has been determined.

• Topics addressed by the CPG include:

• Definitions, classification of etiology, risk factors, and severity

• Assessment and determination of risk

• Management of urgent/emergent risk - indications for referral to specialty care

• Treatment interventions (modalities) based on risk level

• Safety planning for patient at risk

• Monitoring and re-assessment of patients at risk

The guideline is relevant to all health care professionals providing or directing treatment services to patients at risk for suicide in any VA/DoD health care setting, including both primary and specialty care, and both general and mental health care settings. This guideline may also be relevant to any provider or health care system providing care and services to military members or veterans. Many of the recommendations are also relevant to all clinicians caring for patients at risk for suicide.

Learning Objectives

1. Identify key elements of the VA/DoD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide.

2. Discuss implications of the VA/DoD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide for the respective DoD and VA populations.

3. Identify appropriate knowledge-based clinical issues that are unique for the patient with depression and/or suicidal ideation.
Optimizing Use of Health Interpreters in Global Health Engagements

List of Participants and Their Roles in the Abstract

Name: David Tarantino  
Organization: USUHS/Center for Disaster and Humanitarian Assistance Medicine  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Optimal Use of Health Interpreters - a 1.5-2 hour course of instruction targeting DoD health personnel who may participate in global health engagements. The course objective is to provide basic competence in the use of health interpreters in an international setting in order to optimize global health engagements.

-- Principles of Health Interpretation
-- Selection of Interpreters in International/Field Settings
-- Military and Security Considerations
-- Standards and Ethics in Health Interpretations
-- Roles and Responsibilities in Health Interpretation
-- Techniques for Optimal Health Interpretation
-- Cross-Cultural Communication

Learning Objectives
1. The participant will be able to apply basic principles of Health Interpretation  
2. designate appropriately from a selection of interpreters in International/Field settings  
3. apply standards and ethics in Health Interpretation  
4. list roles and responsibilities in Health Interpretation
Abstract Body
This brief review of basic wound dressings will provide an Introduction to moist wound healing, and offer reasons why wet-to-dry dressings are not evidence-based for most wounds. The speaker will describe some of the most common/familiar wound products with brief indications for use, offering 'how to apply', and 'how to order' tips for clinicians. The basics of determining when a wound dressing is doing an adequate job, and what factors may indicate when to change products will also be reviewed. There will also be a brief word about concerns when considering combining wound products.

Learning Objectives
1. Discuss the principles of moist wound healing.
2. List at least 3 reasons wet-to-dry dressings may not be ideal for wound healing.
3. Describe important factors to consider when selecting a wound dressing.
4. Recognize when a topical wound therapy may not be adequate and when to move to another treatment type. List at least two types of wound products which should not be combined.
Wound Bed Preparation

Wound Care

List of Participants and Their Roles in the Abstract

Name: Shanitia McCoy
Organization: VA
Community Living Center
Philadelphia VA Medical Center
Role(s): Submitter; Presenter

Name: Linda Cowan
Organization: VA
North Florida/South Georgia Veterans Health System
Role(s):

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
A healthy wound bed is a prerequisite for optimal wound healing and treatment in both acute and chronic wounds. Wound bed preparation is an inter-relation that focuses on both the local components of wound healing (tissue debridement, control of moisture balance etc.) and an holistic approach to the patient as a whole. This presentation will provide a brief overview of the essential aspects of wound bed preparation.

Learning Objectives
1. Discuss the components of wound bed preparation.
2. Identify factors impeding the process of wound healing.
3. Describe various types of treatment options for wound bed preparation.
Prevention and Treatment

Wound Care

List of Participants and Their Roles in the Abstract

Name: Linda Cowan
Organization: VA North Florida/South Georgia Veterans Health System

Name: Shanitia McCoy
Organization: VA Community Living Center Philadelphia VA Medical Center
Role(s): Submitter, Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Learning Objectives

1. Identify risk factors for developing a pressure ulcer.
2. List the principles of pressure ulcer prevention.
3. Discuss treatment strategies for managing pressure ulcers.
Despite the best healthcare and services rendered to our patients, there are still factors that are present that place our patients at high risk for successful wound healing or for developing wound/skin issues. Many factors can attribute to or impede wound management treatment and we hope to bring an awareness of a few of these factors.

The skin is an amazing organ and is capable of regeneration and repair. However as patients age, develop co-morbidities, and experience end of life issues, it is imperative to understand the underlying mechanism that impact wound management.

There will be discussion on goals of hospice and palliative care. What is the difference and what is the expectation of each? Is there a phenomenon known as skin failure? Are there avoidable and non-avoidable pressure ulcers? We will also discuss mental health and pain. How can mental health and psychosocial factors impact wound management?

The format for the program will be open discussion with the participants and dialogue about strategies for minimizing the impact on wound management.

Learning Objectives
1. Distinguish between palliative and hospice care.
2. Describe a Kennedy ulcer.
3. Identify four interventions used to achieve goals in palliative wound care.
4. Describe mental health/psychosocial factors that impact wound management.
Despite the best healthcare and services rendered to our patients, there are still factors that are present that place our patients at high risk for successful wound healing or for developing wound/skin issues. Many factors can attribute to or impact wound management treatment and we hope to bring an awareness of a few of these factors.

The skin is an amazing organ and is capable of regeneration and repair. However as patients age, develop co-morbidities, and experience end of life issues, it is imperative to understand the underlying mechanism that impact wound management.

There will be discussion on goals of hospice and palliative care. What is the difference and what is the expectation of each? Is there a phenomenon known as skin failure? Are there avoidable and non-avoidable pressure ulcers? We will also discuss mental health and pain. How can mental health and psychosocial factors impact wound management?

The format for the program will be open discussion with the participants and dialogue about strategies for minimizing the impact on wound management.

**Learning Objectives**

1. Distinguish between palliative and hospice care.
2. Describe a Kennedy ulcer.
3. Identify four interventions used to achieve goals in palliative wound care.
4. Describe mental health/psychosocial factors that impact wound management.
InTransition: Maintaining Continuity of Care Across Transitions

List of Participants and Their Roles in the Abstract

Name: George Lamb  
Organization: Defense Center of Excellence for Psychological Health and Traumatic Brain Injury  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Learning Objectives
1. Identify the need to decrease the number of service members who disengage in psychological health treatment while transitioning.
2. Explain the transition process used to assist service members who are receiving psychological health treatment to ensure they have continuity of care.
3. Describe the methods used to empower service members to take charge in their own well-being and mental wellness.
Basic Training: Common Wound Dressings - Application and Documentation Essentials

Wound Care
List of Participants and Their Roles in the Abstract

Name: Mary Ann Nametka
Organization: Optum Clinical Services
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
This presentation will include content on basic wound dressings and essential wound care documentation including an introduction to moist wound healing, with reasons why wet-to-dry dressings are not evidence-based for most wounds. The speaker will describe some of the most common/familiar wound products with brief indications for use, offering 'how to apply', and 'how to order' tips for clinicians. The basics of determining when a wound dressing is doing an adequate job, and what factors may indicate when to change products will also be reviewed. There will also be a brief word about concerns when considering combining wound products. The importance of wound documentation will be discussed providing an introduction to methods of measuring wounds – including tracking/tunneling and undermining. We will touch upon the basic pros and cons of obtaining wound photography with mention of medico-legal considerations and principles of taking effective wound pictures for monitoring purposes.

Learning Objectives
1. describe three of the most common wound product categories with brief indications for use
2. briefly explain why wet-to-dry dressings are not considered best practice for most wounds
3. name four essential components of effective wound care documentation with examples
Traumatic War Wounds: Collaborative Results of Complex Wound and Limb Salvage

Wound Care

List of Participants and Their Roles in the Abstract

Name: Stuart Hitchcock
Organization: Walter Reed National Military Medical Center
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
An overview presentation and discussion of the challenges and breakthroughs in treating complex war wounds from Iraq and Afghanistan treated by the staff at Walter Reed National Military Medical Center over the past 12 years. These experiences have led to the initiation of new research, the application of evidenced based practice, and the development of numerous clinical practice guidelines in a joint operational environment.

At the conclusion of this activity, the participant will be able to:

1. Define Polytrauma and differentiate between Civilian and Military causes.
2. Name the consequences of trauma.
3. Describe some of the developments as a result of over a decade of combat operations.
4. Demonstrate a working knowledge of Heterotopic Ossification.
5. State the advantages of conservative residual amputated limb revisions.
6. Identify the 5 “P”s of Compartment Syndrome
7. Discuss the morbidity associated with the management of high bilateral amputations
8. Identify traumatic injuries
9. State the challenges associated with fighting fungal infections of war wounds
10. Discuss the complications related to soft tissue injuries of the perineum.
11. Name the 4 types of translational research being developed as result of combat injuries.
12. Describe 4 types of surigical repair options for coverage of large tissue defects and amputations.
13. Compare and contrast the benefits and disadvantages of:
   a. Laparotomies
   b. Balloon catheterization tamponade
   c. Arterial ligation
   d. Celiotomies
   e. Damage control resuscitation

Learning Objectives
1. Define Polytrauma and differentiate between Civilian and Military causes
2. Name the consequences of trauma
3. Describe some of the developments as a result of over a decade of combat operations
4. Demonstrate a working knowledge of Heterotopic Ossification
5. State the advantages of conservative residual amputated limb revisions
Placental Abruption: the not so silent killer

List of Participants and Their Roles in the Abstract

Name: William Edward Michael
Organization: Naval Hospital Bremerton, Department of Family Medicine
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Vaginal bleeding is one of the most common and potentially worrisome chief complaints upon presentation to OB triage. The obstetrician must be able to quickly recognize potential life threatening conditions and act to ensure the best possible outcomes.

We present a case of placental abruption secondary to hypertensive emergency in a 41-year-old at 32 +5. Her pregnancy course was complicated chronic hypertension, gestational diabetes, and advanced maternal age. Patient presented with complaint of bright red vaginal bleeding and review of previous ultrasound (US) revealed placenta was posterior and clear of os. Her BP on presentation was 194/108 with a HR of 73. Speculum examination demonstrated pooling of blood but no active bleeding. Cervical examination was closed, long and high. The patient was placed on continuous fetal monitoring (CFM) and had a reactive, category I fetal heart tracing (FHT). Tocometry did not show any contractions or evidence of uterine irritability. Bedside US performed showed adequate amount of amniotic fluid with no evidence of abruption. Pre-eclampsia, DIC labs, urinalysis were drawn and all unremarkable. Patient was treated with 20mg IV labetolol that was redosed at 40mg 10 minutes later with improvement of her BP to 164/87. IV Betamethasone was given and patient was put in Trendelenburg. Patient’s blood pressures remained stable and FHT continued to be reassuring, however she continued to have a moderate amount of bright red bloody discharge. As the evening progressed, she developed regular, non-painful contractions every 4-5 minutes. Eight hours after initial presentation, patient was checked again and her cervix was unchanged but there was a significant amount of blood noted. An outside hospital with a level 3 neonatal intensive care unit was contacted and immediate transfer arranged. Mom delivered 12 hours later via c-section to a healthy baby boy and discharged without further maternal or fetal complications.

Placental abruption carries high rates of maternal and fetal morbidity, mortality and often time emergent delivery is indicated. However, the clinician must take into account several maternal and fetal indicators when deciding on the best management course and often times the pregnancy can be prolonged to ensure best fetal outcomes.

Learning Objectives
1. Define placental abruption and the different types
2. Discuss the different management options depending on gestational age and maternal and fetal indicators of well being
3. List the risk factors that are associated with placental abruption
4. Discuss the role of ultrasound in diagnosis of placental abruption
5. Recognize placental abruption and how it differs from other types of vaginal bleeding in the pregnant patient
Management of Hyperlipidemia in the Correctional Environment; a team approach.

List of Participants and Their Roles in the Abstract

Name: Glenn E. Hamilton  
Organization: Bureau of Prisons-Federal Medical Center, Carswell  
Role(s): Submitter; Presenter

Name: Susan Beardsley  
Organization: Bureau of Prisons  
Bldg 3000 - J Street  
Fort Worth TX 76127  
Role(s): Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Federal Medical Center, Carswell in Fort Worth, Texas is a federal correctional health care system for women. The Medical management of Hyperlipidemia was not reaching the National Lipid Management Benchmark. A Nurse managed healthcare team was developed to determine, if a Nurse Managed health care team could facilitate a change through education; in so doing increase the benchmark. The starting benchmark was 35 %, well below the National Benchmark of 60%. Dyslipidemia was the initial criteria for the 250 inmates that started with the project as well as either Diabetes and/or Hypertension. The teams were divided into 3 groups. Each team had one healthcare provider (Nurse Practitioner, Physician Assistant, and Pharmacist) and one Nurse. The remaining members were a Dietician, Psychologist, Health Educator, Laboratory Technologist and Quality Manager. The Nurse Practitioner, RN, and Health Educator met at the beginning with each inmate to describe the program. The teams referred inmates to the Fit for Life Program and educated them about exercise options. The Dietician gave group dietary suggestions. All of the Task Force Staff met twice quarterly to discuss the progress, share strategies. The groups were designed to educate the inmate regarding lipids, how lipids affected their health, taking of current medications. Our study showed that a Nurse Managed health care team could affect patient’s outcome through individual tutoring, exercise, and dietary education, meet the 60 % National Lipid Benchmark. The end result is to improve patient's health and disease management.

Learning Objectives
1. Describe how a Nurse Managed team met the Lipid National Benchmark?
2. What education was given to meet benchmark?
3. Explain how the team approach applied to this project?
Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Demographics
Telehealth technologies enable remote wound assessment and treatment, increase access to specialty wound care and improve overall health. Vast distances, patient inconvenience, high cost, and increased risk of travel are barriers to patients’ access to specialty wound care. Programs to provide rural veterans with interdisciplinary specialty wound care consultation and remote practitioners with complex wound care continuing education were needed.

Unique Characteristics
VA Healthcare has an infrastructure of ‘Hub’ medical centers and distant ‘Spoke’ hospitals to care for rural Spinal Cord Injured (SCI) patients.

Intervention
Two innovative programs were developed leveraging Telehealth technologies to improve veterans' access to specialty care for complex wounds and pressure ulcers.

The VA San Diego Plastic Surgery/SCI Telehealth Program utilizes Real-Time ‘Live’ CVT (Clinical Video Telehealth) enabling ‘Hub’ specialist to remotely evaluate distant patients located at rural ‘Spoke’ facilities and provide detailed assessment and treatment recommendations. CVT sessions are used for consultation, follow-up, discharge planning, post operative evaluation and patient/family education.

The VA San Diego SCAN (Specialty Care Access Network) Plastic Surgery/SCI/Wound Program provides access to specialty wound care for remote patients unable or unwilling to present to VA facilities for care. An interdisciplinary team of 'Hub' practitioners including plastic surgeons, physiatrists, SCI specialty nurses, physical therapists and dietitians engage remote 'Spoke' participants in a live ‘grand rounds/tumor board’ style multi-point tele-video conferencing discussion to formulate complex wound treatment plans and provide an accredited CME (Continuing Medical Education) lecture.

Results
TeleWound and SCAN result in improved access to specialty wound care, reduction in bed days of admission, decreased time to operative wound reconstruction, improved healthcare outcomes and quality, and improved patient and provider satisfaction. Prevention of pressure ulcers and complex wounds, avoiding delays in diagnosis and early intervention for wound management are facilitated. Complex wound care knowledge is transferred to patients, caretakers, families and providers.

Learning Objectives
1. Learn strategies to develop a successful TeleWound and SCAN (Specialty Care Access Network) program
2. Understand the differences between a live TeleWound consultation and a SCAN (Specialty Care Access Network) consult session
3. Discuss the benefits of TeleWound and SCAN consultations for patients and providers including the impact of the Interdisciplinary Team Approach to complex wound care
Telehealth

Wound Care

List of Participants and Their Roles in the Abstract

Name: Kevin Broder
Organization: VA San Diego
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body
Telehealth technologies enable remote wound assessment and treatment, increase access to specialty wound care and improve overall health. Vast distances, patient inconvenience, high cost, and increased risk of travel are barriers to patients’ access to specialty wound care. Programs to provide rural veterans with interdisciplinary specialty wound care consultation and remote practitioners with complex wound care continuing education were needed. VA Healthcare has an infrastructure of ‘Hub’ medical centers and distant ‘Spoke’ hospitals to care for rural Spinal Cord Injured (SCI) patients. Two innovative programs were developed leveraging Telehealth technologies to improve veterans’ access to specialty care for complex wounds and pressure ulcers. The VA San Diego Plastic Surgery/SCI Telehealth Program utilizes Real-Time ‘Live’ CVT (Clinical Video Telehealth) enabling ‘Hub’ specialist to remotely evaluate distant patients located at rural ‘Spoke’ facilities and provide detailed assessment and treatment recommendations. CVT sessions are used for consultation, follow-up, discharge planning, post operative evaluation and patient/family education. The VA San Diego SCAN (Specialty Care Access Network) Plastic Surgery/SCI/Wound Program provides access to specialty wound care for remote patients unable or unwilling to present to VA facilities for care. An interdisciplinary team of ‘Hub’ practitioners including plastic surgeons, physiatrists, SCI specialty nurses, physical therapists and dietitians engage remote ‘Spoke’ participants in a live ‘grand rounds/tumor board’ style multi-point tele-video conferencing discussion to formulate complex wound treatment plans and provide an accredited CME (Continuing Medical Education) lecture. TeleWound and SCAN result in improved access to specialty wound care, reduction in bed days of admission, decreased time to operative wound reconstruction, improved healthcare outcomes and quality, and improved patient and provider satisfaction. Prevention of pressure ulcers and complex wounds, avoiding delays in diagnosis and early intervention for wound management are facilitated. Within the continuum of care, TeleWound and SCAN are new innovative programs that utilize Telehealth technologies and the Interdisciplinary Team Approach to improve access to specialty wound care and complement other established multispecialty collaborations including face-to-face consultation, inpatient interdisciplinary SCI Skin/Wound Rounds and annual SCI evaluations.

Learning Objectives
1. The participant will
2. The participant will
3. The participant will
A review of the civilian and military literature reveals that significant medical and technological improvements continue to evolve in aerospace medicine: the specialty that encompasses preventative, occupational, and emergency medicine through the application of principles of physics, physiology, life support and engineering to protect and manage patients in the realm of aerospace.

The decision making process surrounding the movement of patients, typically to upgrade medical care, is a complex and multifactorial function of which the application of aerospace medicine is but a component. Complex because it involves virtually every aspect of the assistance platform including, but not limited to: knowledge of the natural history of the disease at hand, knowledge of the institution's capabilities in the management of the said disease, cultural preferences, immigration issues, cost-benefit analysis, fitness to fly and logistical coordination.

International standards of medical care are outlined herein along with the criteria to upgrade care. The logistical approach to upgrade management/treatment of a patient in an inadequate healthcare facility will be outlined. The challenges facing the flight surgeon, in the context of flight physiology, will also be addressed along with the merits of air ambulance and escorted commercial carrier.

The movement of two government employees across international borders, both with complex cardiac conditions, will be presented as case studies. Each of these two cases represented a "first" in the medical transport industry. Although creative thinking was required in both cases, fundamental principles of case management, both before and during flight, were never violated.

**Learning Objectives**

1. understand international standards of medical care
2. criteria to upgrade care-the value of the medical report
3. fitness to fly
4. flight physiology
5. air ambulance vs. escorted commercial carrier
Prescription Drug Diversion and Opioid Overdosage

List of Participants and Their Roles in the Abstract

Name: Andrew W Gurman  
Organization: American Medical Association  
Altoona Hand and Wrist Surgery, LLC  
Role(s): Submitter; Presenter

Abstract Content, Presented in Order Requested from Submitter

Abstract Body

Prescription Drug Diversion and Opioid Overdosage

Learning Objectives

1. Understand the roots of increase in narcotic analgesic prescribing since 2001
2. Understand the magnitude of narcotic overdosage
3. Understand the role of physicians in the narcotic supply chain
**Abstract Body**

CDR David Lau and Officers from USCG and USPHS

Agency: DHS

Panel Presentation: “Operation Arctic Shield 2012: USPHS Medical Teams in the Largest Ever US Coast Guard Deployment in the Arctic”

Arctic Shield is an annual US Coast Guard Exercise which brings numerous assets to the Arctic Region, including USPHS medical, dental, and veterinarian assets into a collaborative partnership with Alaskan Native communities and villages. These medical services are part of an important and highly appreciated community medical outreach effort the USCG/USPHS provides to a number of the more than 170 rural Alaska villages. Arctic Shield 2012 is the largest-ever deployment of the USCG in the Arctic.

**Learning Objectives**

1. Gain an understanding and appreciation of the uniqueness in the practice of medicine in the Arctic Region, including opportunities.
2. Participants will be able to understand the critical role telemedicine, IT and satellite communications plays in Arctic medicine.
3. Participants will gain an understanding of the network of community health care resources and the roles they play in serving the remote populations in the Arctic Region, and how Operation Arctic Shield makes an important impact in the healthcare of the region.