Navy Medicine West Office of Neurotrauma
Overview to
Defense Health Board

Program Director
27 August 2018
Agenda

• Organization
• Intrepid Spirit
• Innovation
• Research
• Outreach
Organization
Concussion Care Clinic Functions

Program Director

Deputy Medical Director

Clinical Operations (3 teams)

LPO

PROVIDERS / Support
Clinic Mgr
Nurse Prac
Neurologist
Team RN
Health Tech
MSA

BEHAVIORAL HEALTH PROVIDERS
Clinical Psychologist
Health Psychologist
Neuropsychologist
Psychometrist
LCSW
Chaplain

VESTIBULAR
Vest PT
Speech Path
Vest PT Tech

VESTIBULAR
PT
Tech

REHAB
PT
OT
Tech

Senior Researcher

Outreach/ Education

RESEARCH STAFF
Neuropsychologist
Research Assistant
Organization
Multi-disciplinary Team

- Neuro-Optometrist / Vision Therapist
- MSA/ Clerk
- Health Technicians
- Corpsmen
- Family Therapist
- Yoga/ Qigong/ Acupuncture
- Psychiatrist
- Psychologist
- Creative Arts Therapist
- Speech Pathologist
- Physical Medicine/ Rehab
- Occ Therapist/ COTA
- Physical Therapist/ tech
- Neurologist
- Neuro Psychologist/ Psychometrist
- Audiologist
- Education Coordinator
- Vestibular physical Therapist/ Assistant
- LCSW
- RN
- NP
- Class Care... Anytime,
Camp Pendleton
Intrepid Spirit Center (IS-7)

• Opened May 2018, the Intrepid Spirit center is approximately 25,000 square feet and costs approximately $11 million to build and equip.

• Spirit center incorporating the following facilities: Intake/Clinic area including psychiatric testing, chiropractic treatment, acupuncture, neuro psych testing rooms, and typical exam rooms.

• Physical Therapy with open gym layout with standard physical therapy equipment.

• Sleep Lab equipped with a sleep system and ambient therapy music and a control room equipped with a computer monitoring system.

• Central Park, a calm atmosphere for patient and family member relaxation and family education, with a meditative feel and including ambient therapy music.

• Family Room, centrally located and adjacent to the outdoor patio, providing a space for patients and family to spend time together, a critical part of the healing process.
Complimentary Alternative Medicine (CAM)

- Acupuncture
- Thai chi
- Pet Therapy
- Mind Body Medicine
Innovation

• NeuroTRACT Clinical Database

• TRIDENT Redeployment screening tool

• Fast Track
NeuroTRACT Clinical Database

[Image of NeuroTRACT Clinical Database interface]

- Duty Status
- Outcome Measures
- TBI History
- Intake Summary
- Intake Summary
- Discharge Summary
- Symptom Changes
- Average Referral Time
- REVIEW
- Meeting Overdue Report

Patient's DOD ID: 1111111111
Patient's Name: Doe, John
Active Case Number: 1000001
Intake Date: 6/27/2016

Case History

<table>
<thead>
<tr>
<th>Case Number</th>
<th>Referral Date</th>
<th>Site</th>
<th>Discharge Date</th>
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<tbody>
<tr>
<td>1000001</td>
<td>29-Jun-16</td>
<td>NMCSD</td>
<td></td>
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World-Class Care...Anytime, Anywhere
Each individual symptom automatically displays its relevant goal.
NeuroTRACT
Outcome Measures

Symptom Changes Summary

- **Neurobehavioral Symptom Inventory (NSI)**
- **Personal Health Questionnaire Depression Scale (PHQ-8)**
- **Headache Impact Test (HIT-6)**
- **PTSD Checklist for DSM-5 (PCL-5)**

Charts showing changes in scores from intake to discharge.
Problem: 100% of deployable SEALs are exposed to potential hazards for TBI

- Blast detonations of high/low-order ordnance
- Rocket back blast & heavy weaponry concussive effects
- Hard parachute openings and landing
- Vehicle accidents
- Diving incidents

Solution: TRIDENT Redeployment Screening Tool

- Standalone app can be emailed across the globe
- Screening can be administered by technician without access to the captured information
- Captured data is encrypted and sent to the responsible provider
TRIDENT
Redeployment Screening Tool

- Allows NSW treatment team to evaluate exposure and prioritize appointing
- Allows for synchronization with the NSW inter-deployment training cycle

- Password protected data
- Automatic scoring and reporting
- Quicker evaluation, treatment, and return to duty

World-Class Care... Anytime, Anywhere
“Naval Special Warfare maintains a high operational tempo and a fixed inter-deployment training cycle, making it difficult to schedule and receive care”.

“This gap in scheduling contributes to deteriorated health of the individual, unit, family, and force.”

- CAPT G. B. Hoyt, Navy Special Warfare Command Surgeon
Fast Track
One Day….One Space

Six specialists addressing:

- Attention
- Balance
- Executive Function
- Headaches
- Language
- Memory
- Pain
- Sleep
- Tinnitus
- Vision
Research

• Exploring the Natural History of Traumatic Brain Injury within a Military Cohort- A Longitudinal Database and Blood Banking Study (Caregiver Study)
• Neurocognitive Assessment of Blast Exposure Sequelae in Training (NC-BEST Study)
• Investigating the Neurologic Effects of Training Associated Blast (I-TAB Study)
• Evaluation of the DVBIC Progressive Return to Activity Clinical Recommendation Tool (PRA Study)
• Rehabilitation of Visual Attention Following mTBI (Cog Rehab Study)
• Defense and Veterans Brain Injury Center (DVBIC) Traumatic Brain Injury Clinical Patient Registry (Data Registry Study)
Research with Shoulder Mounted Rocket Launchers

Common Weapon Systems:
- Carl Gustav Recoilless Rifle (Carl G)
- Light Anti-Tank Weapon (LAW)
- Shoulder Mounted Assault Weapon (SMAW)
- Rocket Propelled Grenades (RPG)
Outreach

• Market is supported by DVBIC offices at NMCSD and Camp Pendleton
• Q1-2 of FY 18: over 40 sessions attended by more than 1200 participants.
• Annual symposiums are designed for clinicians from primary care, specialist physicians, nurses, social workers, and other medical personnel involved in the treatment of TBI patients. This year’s topics include:
  – Sports vs Blast Concussions
  – Demystifying ICD-10
  – Insomnia in Post Concussive Patients
  – Mind Body Medicine and Stress Resiliency
  – TBI and PTSD Overlap
  – Advanced Technology for Assessment and Rehabilitation of TBI
  – mTBI and PCS: Course and Treatment
  – The Caregiver Perspective
Questions