Neurocognitive Testing for
USASOC
Agenda

- Directives
- ANAM
- ImPACT
- Side by Side Comparison
- Plan
- Current Status
Directives

• ASD(HA) Memo 28 May 2008
  – Baseline Pre-deployment Neurocognitive Functional Assessment – Interim Guidance

• ALARACT 173/2008
  – Recommends Military Acute Concussion Evaluation (MACE) as the primary tool
  – If symptoms persist beyond 7 days, then refer to a Level 2 or 3 facility for further neurocognitive evaluation
  – ANAM encouraged, can only be performed at facilities approved by the MNFI/MNCI Surgeon
  – ANAM interpretation will be done only by psychologists or neurologists with specific additional ANAM training
ANAM

- Automated Neuropsychological Assessment Metrics
- Not designed for concussion
  - Designed to assess effect of chemical warfare, sleep deprivation, radiation, temperature extremes
- No proven validity/specificity for mild traumatic brain injury
- No clinical evidence that is can help diagnose mTBI
- Must be interpreted by a trained neurologist or psychologist
- No assessment of symptoms
- Long flash-bang time for follow-up results, not clinically useful for Battalion and Group medical officers
- Centralized administration (coordination with testing center – lead time, special computers, testing facility/classroom)
ImPACT

• Immediate Post-concussion Assessment and Cognitive Testing
• Designed for evaluation of mild Traumatic Brain Injury in athletes, clinically proven diagnostic aid
• NIH, NCAA sponsored research – 100 peer-reviewed publications
• Used by NHL, NFL, MLB, NASCAR to aid in evaluation and return to play decisions
• Available at any FOB/Base with NIPR connection
• Immediate availability of follow-up test and baseline for clinical use
• Includes symptom score
Current ImPACT Use in SOF

• Over 1000 baselines complete
• Unit PA Comments:
  – “Post-injury testing has assisted us in RTD decisions, medical record documentation, and Chain of Command recommendations”
  – “Overall…invaluable, in my opinion…with far greater reliability than the ANAM.”
Comparison

ANAM vs. ImPACT
<table>
<thead>
<tr>
<th></th>
<th>ANAM</th>
<th>ImPACT</th>
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<tbody>
<tr>
<td>Baseline Administration</td>
<td>Centralized</td>
<td>Decentralized</td>
</tr>
<tr>
<td>F/u Testing</td>
<td>Level 2/Level 3 MTF</td>
<td>Anywhere NIPR Access</td>
</tr>
<tr>
<td>Symptom Score</td>
<td>No</td>
<td>Yes (and tracks symptom resolution in med record)</td>
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<tr>
<td>Interpretation</td>
<td>Trained Psychiatrist or Psychologist</td>
<td>Any Trained Medical or Behavioral Health Officer</td>
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<td>Clinical Utility</td>
<td>No immediate proven clinical utility; only given after patient evacuated to higher level of care (7 days post-injury for mTBI)</td>
<td>Immediate proven predictive ability for RTD decisions; useful in tracking resolution of injury back to baseline. Immediate feedback to Commander.</td>
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<tr>
<td>Documentation of Event Circumstances for Medical Record</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Clinical Practice Guideline</td>
<td>Not Addressed</td>
<td>Yes</td>
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ImPACT Plan

• Decentralized pre-deployment baseline testing
  – Training of unit medical officers and medics to administer the test
• Follow-up testing post injury/accident
• Results used in conjunction with clinical evaluation to guide treatment, RTD, and evacuation decisions
Current ImPACT Status

- 5th SFG(A) has started pre-deployment baseline testing
  - 824 done since 1 Dec 09
  - No significant implementation issues
  - Expanding to the rest of USASOC
- 70 USASOC Medical Officers and Medics trained in the course of two sessions (19 Nov 09, 17 Dec 09)
- Training at Fort Campbell for 5th SFG(A) and 160th SOAR(A) Medics and Medical Officers completed 22 Jan 10
- 95th CAB training to commence within the next few weeks
- Article titled “Evidence Based Diagnosis and Management of mTBI in Deployed Settings” to be published in the Journal of Special Operations Medicine, Spring Edition
- USASOC Policy in staffing
- Request sent to MEDCOM to add tracking field in MEDPROS
- Clinical Practice Guidelines and relevant documents posted on USASOC Surgeon Website, and on USASOC Surgeon AKO Website
Questions