PERSPECTIVES OF A DEPLOYED COMBAT HOSPITAL COMMANDER

Presented to Defense Health Board, 10Feb16
Commanding Officer, NATO Role 3 MMU
Kandahar Airfield Afghanistan
Mike Rotation, 30 Mar - 9 Oct 2015
Disclaimer

The views expressed in this presentation are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, nor the U.S. Government.
AOR Roles (Echelons) of Care

Role 1, Point of Injury Care: First aid, buddy aid, Combat Medic; first aid, triage, resuscitation, and stabilization

Role 2, Damage Control Surgery: 100% mobile, 72 hr ops (30 surg max), hold/manager 8 intensive care pts for 6 hrs
- Army FST: 1 Ortho/3 Gen Surg, 2 CRNAs, CCRNs, Surg Techs
- Can deliver packed RBCs, limited x-ray/lab
- Role 2E – basic secondary health care built around primary surgery, intensive care units and ward beds. Able to stabilize post surgical cases for evac to Role 4 without the requirement to first route them through a Role 3

Role 3, All Patient Categories: resuscitation, initial wound surgery, damage control surgery, postoperative treatment, Intensive Care Unit
- Others: Army Combat Support Hospital, Navy Hospital Ships/EMFs
- Neurosurgery, Ophthalmology, ENT, Urology, OMFS can be included
- Advanced Imaging (CT), Comprehensive Lab & Pharmacy

Role 4: CONUS or other safe haven based hospital (Landstuhl Reg Med Ctr)
Kandahar City ~8 miles
- 5th largest city in Afghanistan, ~1M
- Founded by Alexander the Great ~330 BC

Kandahar Airfield (Joint Mil/Civ Airport)
- Built as US refueling base to SWA late 50s
- Soviet air base during occupation
- US airstrikes began Oct 01
- Facility taken by 26th MEU, Dec 01
US Army, 48th Combat Support Hospital Role 2E, 2002-2006
PFC Jerod Dennis

- 82nd Airborne Paratrooper killed in action near Neshkin AFG on 25 April 2003
- Awarded a Silver Star for the action in which he rescued multiple fellow soldiers under fire following an enemy ambush
Canada was Assigned as Lead Nation in 2005 for a New Role 3 Capability

Initial assistance from US, UK, Denmark, Netherlands and New Zealand
Feb 2006: Canada takes possession of the PFC Jerod Dennis Hospital

“The Wooden Palace”
October 15, 2009: US Navy Assumes Lead

- CT scanner x2
- OR x3
- Digital Radiography
- 5-8 ICU beds
- 20-30 Inpt beds
May 23, 2010: NATO Role 3 MMU Opens
Planning & Construction (NATO)
- 3.5 years to plan; 18 mths to build
- German engineered and designed
- 70,000 sq ft
- Cost estimated at $39M

NATO Support Agency (NSPA)
- NATO Version of NMLC
- Facility/Physical Plant maintenance
- Housekeeping

Up to FY 15 Role 3 Budget
- OPTAR - $2.0M allocation

FY 15 Medical Equipment
- 655 items, Current Value = $4.7M
- Acquisition Costs = $8.4M

Mortar/Rocket resistant exterior

Advanced physical plant
- Oxygen generation, air filtration
- Power generation / UPS
- Zoned controlled HVAC and Fire Suppression
Outpatient & Inpatient Data
CY 2013 - September 2015
Emergency Department
MIKE Rotation

4 Full Scope Trauma Bays
+8 ER Beds w/ Portable Trauma Configuration
Emergency Department MIKE Rotation

<table>
<thead>
<tr>
<th></th>
<th>PATIENTS</th>
<th>BATTLE INJURIES</th>
<th>ADMISSIONS</th>
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<tbody>
<tr>
<td>MARCH</td>
<td>17</td>
<td>0</td>
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<tr>
<td>APRIL</td>
<td>79</td>
<td>7</td>
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<td>MAY</td>
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<td>JUNE</td>
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<td>JULY</td>
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<td>3</td>
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<td>AUGUST</td>
<td>81</td>
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<tr>
<td>SEPTEMBER</td>
<td>50</td>
<td>1</td>
<td>3</td>
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<tr>
<td>TOTALS</td>
<td>422</td>
<td>23</td>
<td>58</td>
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86% Return to Unit (RTU) Rate
14% Admission Rate
Forward MEDEVAC to Role 3

Airlift for patients to an initial MTF – Conducted by rotary assets in the forward area

**CAT A**
- Urgent transport to save life, limb, or eyesight (LLE) within 60 minutes

**CAT B**
- Priority transport needed for trauma patients requiring surgical evaluation within 4 hours

**CAT C**
- Routine transport for patients requiring treatment from a MTF with greater than Role 1 capabilities within 24 hours
Role 3 Navy Providers (Total Staff = 87)

- Emergency Medicine - 3
- Critical Care Medicine - 3
- Anesthesiologists - 3
- Trauma Surgeons - 2
- General Surgeon - 1
- Orthopedic Surgeon - 1
- Neurosurgeon - 1
- Radiologist - 1
- Psychiatrist - 1
- Physical Therapist - 1

Role 1 Army Providers

- Family Medicine - 1
- Dentist - 1
- Psychologist - 1
- Social Worker - 1
Nurses, Corpsmen, & Support Staff

- Emergency/Trauma Nurses - 6
- Perioperative Nurses - 4
- Intensive/Critical Care Nurses - 12
- Enlisted Corpsmen/Support Staff - 36
  - General Duty HMs - 12
  - Surgery Technicians - 5
  - Laboratory Techs - 3
  - Radiology Techs - 3
  - Pharmacy Techs - 3
  - BioMed Repair Techs - 3
  - Physical Therapy Tech - 1
  - Psychiatry Tech - 1
Surgery & Operating Room

• Major trauma
  – Neck, chest, abdomen, pelvis
  – Vascular
• Neurosurgical
  – Emergency brain operations
  – Intracranial pressure monitoring
  – Spine stabilization
• Orthopedics
  – Stabilization – external fixation
  – Internal fracture repair
  – Wound debridement
  – Negative pressure dressings

  ▪ Main ORs - 3
  ▪ Minor Procedure Room - 1
  ▪ Laparoscopic equipment - 3
  ▪ Orthopedic Fluoroscopy C-arms - 2
  ▪ Upper Endoscopy - 2
  ▪ Colonoscopy - 1
  ▪ Pulmonary Bronchoscopy - 2
Intensive Care Unit

- Critical Care Physicians - 3
- Critical Care Nurses - 9
- Respiratory Therapists - 2
- Beds - 12
- Bedside Monitors - 12
- Mechanical Ventilators - 14
Inpatient Wards

- Wards - 2
- Beds - 16
- Isolation beds - 4
- Medical Hold (Cots) - 6
- Hospital-wide bed expansion (Cots) - 24
# Trauma Response Plan

<table>
<thead>
<tr>
<th>Tier</th>
<th>Patient Load</th>
<th>Resources</th>
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<tbody>
<tr>
<td>I</td>
<td>&lt;4</td>
<td>• Trauma Teams - 3</td>
</tr>
</tbody>
</table>
| II   | 4-7          | • Trauma Teams - 3  
|       |              | • Navy Auxiliary Trauma Team - 1  
|       |              | • TMC Auxiliary Trauma Team - 1  
|       |              | • Forward Surgical Team - 1  
|       |              | • Walking Blood Bank |
| III  | 8+           | • Trauma Teams - 3  
|       |              | • Navy Auxiliary Trauma Team - 1  
|       |              | • TMC Auxiliary Trauma Team - 1  
|       |              | • Forward Surgical Team - 1  
|       |              | • Walking Blood Bank  
|       |              | • Base Security  
|       |              | • Non-Role 3 Medical Assets  
|       |              | • Logistics/Patient Movement  
|       |              | • External Resources (BAF) |
Historical Summary

Canadian Era: 2006-2009 (44 mths)
- 4134 pts, 6735 procedures
- 25% NATO, remainder = ANSF/civ

USN Era:
Awarded Navy Unit Commendation
- 15 Oct 2009 to 30 April 2012
- 2100 pts treated per year.
MISSION SUCCESS IS DUE TO THE EFFORTS OF 87 DEDICATED AND MOTIVATED PROFESSIONALS SERVING WITH HONOR

MIKE ROTATION: 30 MAR - 09 OCT 2015
US NAVY RESERVE COMPONENT: 48/87, 55%
US NAVY ACTIVE COMPONENT: 39/87, 45%
Questions?