Field Hospitals: A Royal Canadian Medical Service Perspective

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FIELD HOSPITALS: A ROYAL CANADIAN MEDICAL SERVICE PERSPECTIVE

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This presentation is UNCLAS
Outline

• Learning Objectives
• Field hospital planning considerations
• Pragmatic field hospital experience
Learning Objectives

• By the end of this presentation, participants will be able to:
  • Describe the modular approach to field hospital planning
  • Describe the stepwise approach to deploying a mobile medical facility
  • Compare field hospital working conditions to a conventional hospital
  • List pragmatic field hospital storage considerations
  • Describe stock tracking options in a field hospital
Field Hospital

Mobile Facility Planning
Today I will do what others won't. So tomorrow I can accomplish what others can't.

Jerry Rice
My Experiences

• Medical Technician from 1993 to 2006
  • Worked in the field, clinics, and equipment depot
• Pharmacy Officer
  • Change of focus
• 1 Field Ambulance
  • Multinational Exercise in UK
  • Brigade Pharmacy
• 1 Canadian Field Hospital
  • Traditional Role
  • Expanding Role
Pre-Mission Planning

• Be self contained
• Practice the harder scenarios
• Use your history to influence your present  
  • But don’t live in the past
• Build relationships
• Buy and store or just in time purchase?

• Beware the good idea fairy!  
  • “I saw this at a conference in Belgium...”
Mission Specific Plan

- Use contacts
- Modular System
  - Lego Blocks
- Go over lists (based on mission specific criteria)
  - Make changes, then make changes to those changes
  - Combine and simplify
- Practice
  - Crawl, walk, run
  - Just set up, add doing interventions, throw everything and the kitchen sink at the team
Ordering, Issuing and Packing

- Stepwise approach
  - Initial Operating Capacity (IOC)
  - Final Operating Capacity (FOC)
  - Surge Capacity
- Issue let the departments pack their own stuff
- Have a central storage area under control of a pharmacist and pharmacy team for overflow
- Plan the movement out early
  - What HAS to move together
  - What can we deploy without
Deployment

- Reconnaissance
  - Many, many considerations
  - Small team
- Space
  - Facility is like a gas
- Prioritize movement
  - IOC moves first
- Set up is labour intensive
  - No one gets to stand around and watch
  - If you want to protect people, don’t bring them in until they are ready to be put to work
- Last minute additions and resupply plan
Field Hospital

Pragmatic Field Hospital Experience and (Hard Earned) Lessons Learned
My experiences

• Deployed to Afghanistan (KAF)- Role 1
  • Officer in Charge (OIC) Forward Medical Equipment Depot (FMED)
  • Ambulatory care pharmacist

• Deployed to Iraq- Role 2
  • Damage Control Resuscitation/Damage Control Surgery
  • 2 Resuscitation bays, 1 OR, 4 bed ICU, Ward
  • OIC FMED
  • Clinical pharmacist

• Long deployments away from home (30-221 days)
“EVERYONE HAS A PLAN 'TILL THEY GET PUNCHED IN THE MOUTH.”

MIKE TYSON
Pearls

• Avoid medical mission creep
  • Focus on expected patients

• Different working environment
  • Hardstand to tents
  • Equipment selected for ruggedness, portability
  • Limited access to decision support tools
    • Paper references

• You will have forgotten items, supplies will run out
  • Be adaptable

• Establish SOPs early
  • Teams may be constituted from various institutions
    • Consistent intravenous administration units
Storage

• Ensure adequate storage space
  • Require storage space beyond treatment areas
  • Shelves

• System for finding supplies
  • Expiry date tracking

• Controlled substances storage

• Temperature regulation/cold chain
  • Unstable power grid?
    • Generators
  • Electronic temperature monitoring with phone warning
    • Set appropriate threshold reporting temperatures
Resupply

• Pivotal importance due to limited storage capability
  • Quantities to start; but, need to be replenished
  • Stock items overlooked during planning

• Track stock levels and triggers for re-ordering
  • Access/Excel databases
  • Pen and paper

• Ensure secure space established for receiving and unpacking supplies

• Controlled substance tracking
  • Packaged separately
    • Unmarked box
Security

• Restrict access to supplies
  • Easier said than done
  • Supplies drawn; but, not accounted for

• Lock up high value items
  • Generators
Pharmacy
Staff Entrance
ONLY

FMED Staff Only
All Others Please Knock and Wait!
The unexpected....

• Flooding
  • Ensure storage containers elevated

• Conduct regular inspections of supplies
  • Medical Technician airway kits rusted
  • Tourniquets became brittle and broke when exposed to the sun
  • IV fluid bags opaque
Conclusion

- Modular approach to field hospital planning enables scaling to mission requirements
- Stepwise approach to field hospital deployment facilitates starting your facility and accounts for an influx of patients
- Field hospital working environment austere
- Don’t underestimate storage requirements, especially cold chain
- Stock tracking options range from pencil and paper to Access databases
Questions

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