The Army Medicine RESET
Hospitals Do Fly

IHI 29th Annual National Forum on Quality Improvement in Health Care

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This presenter has nothing to disclose
At the conclusion of this brief, the learner will be able to…

1. Understand how Army Medicine is applying aviation and occupational safety models for investigation of adverse Patient Safety events
2. Understand what Army Medicine has learned about the root causes for its most important adverse Patient Safety events
3. Understand how the Root Cause Analysis Event Support and Engagement Team (RESET) has improved Army Medicine’s quality improvement efforts
Purpose: This information brief provides an overview of the U.S. Army Medical Command (MEDCOM) Root-cause-analysis Event Support and Engagement Team (RESET)

Outline:
1. Background
2. Developmental Approach
3. RESET Structure
4. RESET Process
5. RESET Outcomes
6. RESET Performance
7. Lessons Learned
“It appears as though there could be as many as 40 veterans whose deaths could be related to delays in care.”
Background

Mandated Armed Services of the U.S. "...collect and analyze medical error data with the MHS;
Patient Safety Program

Independent review of DoD (MHS) medical quality improvement program
*Lumetra awarded contract

"Medical Quality Assurance (MQA) and Clinical Quality Management in the MHS" - published.
• Updated; DODM published OCT 13

Access to Health Care
• Safety of Care
• Quality of Care
At A Glance

Personnel

<table>
<thead>
<tr>
<th></th>
<th>AMEDD Total</th>
<th>OTSG/MEDCOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total AC¹</td>
<td>51,056</td>
<td>27,259</td>
</tr>
<tr>
<td>Civilian (All Medical)*²</td>
<td>43,226</td>
<td>40,613</td>
</tr>
<tr>
<td>Contractors³</td>
<td>~7,789</td>
<td>~5,559</td>
</tr>
<tr>
<td>Compo 2/3</td>
<td>49,420⁴</td>
<td>1,698⁵</td>
</tr>
<tr>
<td>Total</td>
<td>151,491</td>
<td>75,129</td>
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</table>

*AMEDD: All of MC/CS/W00LAA + All Army CP53; OTSG/MEDCOM is Appropriated Funds Only (No LN/NAF) and includes CS/W00LAA OTSG pay & non-pay

Beneficiaries⁹

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Duty (AD)</td>
<td>497.1K</td>
</tr>
<tr>
<td>Family Members (AD)</td>
<td>745.2K</td>
</tr>
<tr>
<td>Dependant Survivor</td>
<td>230.1K</td>
</tr>
<tr>
<td>Eligible NG/RC</td>
<td>103.3K</td>
</tr>
<tr>
<td>Family Members of NG/RC</td>
<td>154.3K</td>
</tr>
<tr>
<td>Retired</td>
<td>815.3K</td>
</tr>
<tr>
<td>Family Members Retired</td>
<td>986.8K</td>
</tr>
<tr>
<td>Inactive G/R</td>
<td>97.8K</td>
</tr>
<tr>
<td>Family Member IGR</td>
<td>157.7K</td>
</tr>
<tr>
<td>Other</td>
<td>24.5K</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.81M</strong></td>
</tr>
</tbody>
</table>

Army TDA Facilities⁸

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Centers</td>
<td>8</td>
</tr>
<tr>
<td>Community Hospitals</td>
<td>14</td>
</tr>
<tr>
<td>Health Centers</td>
<td>10</td>
</tr>
<tr>
<td>Primary Care Clinics</td>
<td>125</td>
</tr>
<tr>
<td>Occupational Health Clinics</td>
<td>26</td>
</tr>
<tr>
<td>Dental Clinics</td>
<td>135</td>
</tr>
<tr>
<td>Veterinary Facilities</td>
<td>51</td>
</tr>
<tr>
<td>Research &amp; Development Labs</td>
<td>37</td>
</tr>
<tr>
<td>Laboratory Support Activities</td>
<td>5</td>
</tr>
</tbody>
</table>

Over 1000 individual administrative and healthcare buildings totaling over 24 million square feet

Resourcing⁵

FY15 Funded: $11.83B (all appropriations)

FY16 SRC08 EAB TOE Units⁷

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
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<tbody>
<tr>
<td>Combat Spt Hosp (CSH)</td>
<td>10 / 16 (AC/RC)</td>
</tr>
<tr>
<td>FWD Surg Tm (FST)</td>
<td>16 / 22 (AC/RC)</td>
</tr>
<tr>
<td>Other Active Units</td>
<td>88</td>
</tr>
<tr>
<td>Other Army NG Units</td>
<td>53</td>
</tr>
<tr>
<td>Other Army AR Units</td>
<td>132</td>
</tr>
<tr>
<td><strong>AC / NG / AR Units</strong></td>
<td><strong>114 / 53 / 170</strong></td>
</tr>
</tbody>
</table>

| Total                           | **337 Total** |

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¹ MODS, 21 AUG 2015
² DCPDS/Box/ HQACPERS, 21 SEP 2015
³ TDA, 31 MAR 2013
⁴ MODS, 21 SEP 2015
⁵ G-3/57 RAMC/ MOB 90 Day BOG, 31 MAR 2013
⁶ GFEBS/ PBAS, 30 SEP 2015
⁷ FMS Web Latest Approved FY16 documents
⁸ DMIS/Baseline Inventory DB, SEP 2015
⁹ TRICARE Operations Center, NOV 2015 as of 10 DEC 2015
A Day in Army Medicine

- 71 births
- 54,799 outpatient visits
- 84,806 laboratory procedures
- 57,365 outpatient pharmacy prescriptions filled
- 12,852 radiology procedures
- 9,388 immunizations
- 1,083 beds occupied
- 253 patients admitted
- 24,915 dental procedures
- $23.3M of food inspected
- 401 food safety visits

Care to 3.81 million Soldiers & beneficiaries worldwide and operational facilities across 5 continents
Developmental Approach

“...the DCS-QS is tasked with establishing an adverse event assistance team capability to execute root cause analysis on sentinel events and establish a capability with centralized investigation, collection, analysis, and that will consolidate and communicate MEDCOM adverse event findings and lessons learned for enterprise wide action.”

Messages
1. Near Miss ("MEDCOM Patient Safety Communication")
2. Sentinel Event (CCIR Notice)
3. RCA Findings and Recommendations
4. “TSG Sends”
• **Mission:** DCS-QS deploys a Root Cause Analysis Event Support and Engagement Team (RESET) in the continental United States (CONUS) or outside CONUS (OCONUS) to provide short duration assistance to study an adverse medical, dental, veterinary event
  – Non-punitive
  – 10 USC 1102 protections apply
  – Non-competitive

• **Purpose:** To assist Regional Health Commands and Medical Treatment Facilities identify root cause of adverse clinical events at their facilities and spread knowledge across Army Medicine
  – Wrong Site Surgery
  – Unintentionally Retained Foreign Object
  – Unanticipated Death

• **Deployment conditions**
  – Request for Action from a Commander (Regional Health Command, Mission Command, Garrison Command)
  – CCIR leads to a validated tasking from The US Army Surgeon General (TSG)/Commanding General MEDCOM
  – On order by TSG/Deputy Commanding General – Operations (DCG-O)
  – Response time and length of deployment are situation dependent
• The aviation and occupational health industries provide a suitable model of centralized safety oversight with regard to data collection & analysis, safety investigation, and messaging

• Safety reflects both human performance and systems properties
  – Understanding unsafe acts requires examination of human factors that underlie performance and systems that set people up to fail

• Safety is a leadership function
  – Improving human performance requires changes in human behavior
  – Leaders change behavior, not administrators
  – RESET is in a supporting role, not a decision-making role
Developmental Approach

• Respect “Mission Command”
• Collaborative model where RESET engages with MTF to study event
  – Achieves Command and staff buy-in
  – Develops MTF Quality Services & Patient Safety staff
• Deliver on stakeholders’ expectations for added value in time allotted
  – Trust that investigation is thorough, accurate, and fair-minded
  – Satisfaction that process respects mission command, is reasonably non-intrusive, and flexible enough to meet local needs
  – Agreement that recommendations are feasible, achievable, and suitable for intended purpose
• Focus on getting to lessons-learned rather than exhaustive granularity
• Ignore standard of care considerations
- Product lines to expand capacity and adapt to local interests
  - Full RESET
  - Partial RESET
  - Tele-RESET

<table>
<thead>
<tr>
<th>Function</th>
<th>Grade</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚪ OIC</td>
<td>O6</td>
<td>Post MTF Command, AOC Immaterial</td>
</tr>
<tr>
<td>⚫ NCOIC</td>
<td>E8/9</td>
<td>CMF68 – MEDCOM CSM Selected</td>
</tr>
<tr>
<td>⚫ Patient Safety Nurse Consultant</td>
<td>O4-O6/CIV Equivalent</td>
<td>Clinical AOC/MOS/CP-53</td>
</tr>
<tr>
<td>⚫ Safety Management Officer</td>
<td>GS12-15</td>
<td>CP-12</td>
</tr>
<tr>
<td>⚫ Human Systems Integration/Human Factors (HFAC) Consultant</td>
<td>GS12-15</td>
<td></td>
</tr>
<tr>
<td>⚫ Health Risk Communication Specialist</td>
<td>GS12-15</td>
<td>As applicable to adverse event situation</td>
</tr>
<tr>
<td>⚫ Clinical SME(s)</td>
<td>O5/O6; NCO equivalent</td>
<td>As applicable to adverse event situation</td>
</tr>
<tr>
<td>⚬ RHC Representative</td>
<td>GS12-15</td>
<td>Patient Safety*</td>
</tr>
<tr>
<td>⚬ Recorder/Local Support Coordinator</td>
<td>E6/E7 or O1-O3 or CIV</td>
<td>AOC/MOS/CP Immaterial</td>
</tr>
<tr>
<td>MEDCOM Service Line Representative</td>
<td>O4-O6</td>
<td>As applicable to adverse event situation</td>
</tr>
<tr>
<td>Process Improvement Specialist</td>
<td>GS09-15</td>
<td>As applicable to adverse event situation</td>
</tr>
</tbody>
</table>
Reset Process

1. Patient Safety Event Occurs
2. MTF Analyzes Event to determine if it’s a Sentinel Event
3. MTF conducts Internal Review
4. ASG/DCS-QS Notifies DCG-O w/COAs
5. DCG-O approves RESET COA
6. Team assembles and launches
7. Team in-briefs RHC/MTF Cdrs
8. Team conducts Formal investigation (RCA)
9. Team out-briefs RHC/MTF Cdrs
10. Team redeploy to Home Station(s)
11. Report adjudicated, reviewed by ASG/DCS-QS, routed to DCG-O
12. Final Report
13. CPAD monitors MTF Action Plans (4-months); Center monitors TMT
14. RCA Action Plan reviewed by TJC
15. Action Plan approved by TJC
16. TJC provides HRP guidance to meet requirements
18. ASG/DCS-QS Notifies as per ASG/DCS-QS and DCG-O
19. TSG Strategic Messaging
20. Dir, QSC Notifies ASG/DCS-QS w/COAs
21. Dir, QSC Notifies DCG-O w/COAs
22. DCG-O approves RESET COA
23. Preliminary Report of Findings and Recommendations
24. Final Report
25. What Happened? (mistakes/error/failure)
26. Why it happened? (system inadequacy/root cause)
27. What to do about it? (recommendations)
RESET Checklist

Prior to the RESET Team’s Arrival, Send the Following Information:

☐ The charter of the RCA team and coordinate with RESET OIC as to final team composition. The team will consist of external SMEs, internal administrative support and the facility’s Patient Safety Manager.

☐ The preliminary snap chart (RESET Team will review/validate on Day One) and please send the TX5 file so the RESET Team can upload it to their computers.

☐ All written statements of facts from all significantly involved individuals (Use Attached RESET Questionnaire).

☐ List of significantly involved personnel

☐ All pertinent local SOPs or policies relevant to the event

☐ All documentation relevant to the patient’s episode of care which begins when patient enters the healthcare system and ends with the discovery of the event

☐ Send the records via AMRDEC to

***Only the portions of the medical record that need to be sent via AMRDEC are those that have been screened and deemed relevant to the event***

Hardcopy Information Binders:

Prepare hardcopy binders for all RESET Team members to include the following:

☐ Table of contents

☐ List of significantly involved personnel

☐ Copies of clinical policies, protocols, and SOPs—relevant to the event

☐ All documentation relevant to the patient’s episode of care which begins when patient enters the and ends with the discovery of the event (inpatient/ outpatient, pre-operative/procedure, medical nursing records, procedure/operative reports, laboratory values, radiology reports, medication records, physiological monitoring test results, blood bank, pathology reports, M&M records, and any other pertinent records relevant to the patient safety event).

☐ Copies of any temporary or unofficial documents used by staff and maintained to facilitate care, but not considered part of the patient record, such as hand-off communication work sheets, procedure logs, emails (if known), etc.

☐ Any photographs of the relevant clinical environment and any evidence— if available

☐ Work schedules for all significantly involved staff, list of their roles, and appropriate/approved staffing model(s)

☐ Copies of written statements from significantly involved staff

If Medical Equipment or Retained Foreign Object (URFO) Involved:

☐ Sequester any medical equipment involved

a. Medical equipment includes expendable, durable, and non-expendable equipment used in the patient’s actual care

b. If unable to sequester equipment, then notify the Director, MEDCOM Quality & Safety Center, as soon as possible to receive further instructions.

☐ Gather maintenance records for any medical equipment involved in the event

☐ Provide a copy of filed Product Quality Deficiency Report (Use Attached SF368)

☐ Retrieve and secure any unintended retained foreign objects (URFOs)
MEDCOM Quality & Safety Cover Letter Form

This Statement and Questionnaire is for use by the MEDCOM Quality & Safety Cover RESET Team, which is held responsible for conducting a non-biased review of facts related to a patient safety event, analyze and determine a root cause, and finally provide recommendations to help mitigate the event from happening again across MEDCOM. Information obtained is protected under United States Code 1092, Confidentiality of Medical Quality Assurance Records.

Information on this statement will not be used or shared on any other type of investigation for purpose of Management or Quality of Care.

Last Name: ___________________________________________ First Name: ___________________________________________ Middle Initial: ____________________________

Occupation: ___________________________________________ Work Area: ___________________________________________ Date Employed: ____________________________

For the following questions please answer Yes or No.

1. Describe your work hours (8, 12 hr. shift), assignment, role, and responsibilities in regard to patient care, etc.
   - Shiftwork: [ ] 8 hours [ ] 12 hours [ ] 16 hours or more
   - Assignment:
     [ ] Staff [ ] Nurse
   - Role: ____________________________
   - Responsibility: ____________________________

2. At the time of the event, were you excessively fatigued, impaired, upset, bored, distracted or overwhelmed?
   - [ ] Yes [ ] No

3. Were there adequate number and mix of staffing levels during all parts of the patient encounter?
   - [ ] Yes [ ] No

4. Were SOPs, policies, procedures, administrative controls (e.g., obtaining an authorization, or second verification), not used, missing, or in need of improvement?
   - [ ] Yes [ ] No

5. Were locally developed checklists used to help mitigate any issues related to this event?
   - [ ] Yes [ ] No

6. Was patient information (written, electronic, and/or verbal) readily and easily available obtainable, with a clear and accurate action plan to care for the patient?
   - [ ] Yes [ ] No

7. Did healthcare team interact, coordinate line of efforts and communicate amongst team members, to include specialty consultants and support personnel in other clinical areas, during the time of the event?
   - [ ] Yes [ ] No

8. Is the process of turnover-handoff consistent and occur between incoming and outgoing staff in your area? Please check which communication tools are used to accomplish this?
   - [ ] Yes [ ] No

9. Do you or do you think other personnel need more skill/knowledge, level of experience to perform patient care/traitment, in regards to the event?
   - [ ] Yes [ ] No

10. Were blood products, medications, medical equipment/devices and/or software, etc. used during the patient care treatment a factor before, during, or after the event? Were items missing?
    - [ ] Yes [ ] No

11. Do you or do you think other personnel need more skill/knowledge on use of blood products, medications, medical equipment/devices and/or software used during the patient care treatment to perform the job or to respond to conditions and/or understand system response?
    - [ ] Yes [ ] No

12. During the time of the event, did the work conditions (such as hot, humid, dark, cramped or hazardous) contribute to the adverse event?
    - [ ] Yes [ ] No

13. Did patient care involve repetitive motion, uncomfortable positions, vibrations, and/or heavy lifting by the team providing the care?
    - [ ] Yes [ ] No

14. Are there known patient safety risks in your area that you and other staff have previously identified?
    - [ ] Yes [ ] No

15. Was communication forwarded across the organization and/or with other medical facilities to avoid/mitigate the event?
    - [ ] Yes [ ] No

At this time, you have the opportunity to explain in your own words what you believe caused the adverse patient safety event to occur. Include in your response what you believe happen leading up to, during, and after the event. Provide any relevant information you feel should be considered. Finally, what would you recommend to improve the process to prevent similar patient safety events?

______________________________
Signature

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12 DEC 2017
Questions/Comments