



Deployed Exercise Using T6 Health Systems Mobile Application Electronic Trauma Resuscitation Documentation and Decision Support



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OBJECTIVES

- Current trauma resuscitation are recorded/documentated on handwritten 5-page form in real time in ED at all roles of care
- Document later scanned and uploaded into EHR
- Often results in lost records or delayed availability
- Scanned documents not searchable/downloadable into dataset
- To improve accessibility, implemented software application which mirrors handwritten process in electronic format
- Documentation was conducted on a hand-held device:
 - assisted with data visualization and real time tracking
 - prompted clinical practice guideline compliance
 - provided coding/grading of injuries and patient scoring relevant to the trauma registry
 - ability to export this record in a searchable PDF document that can be uploaded to the patient EHR

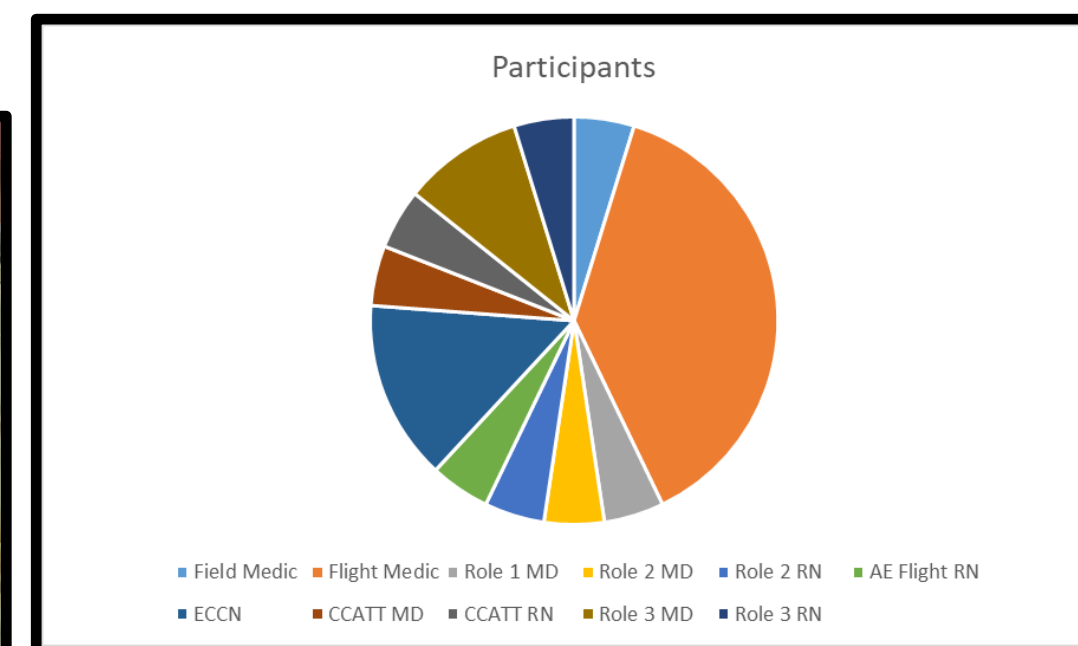
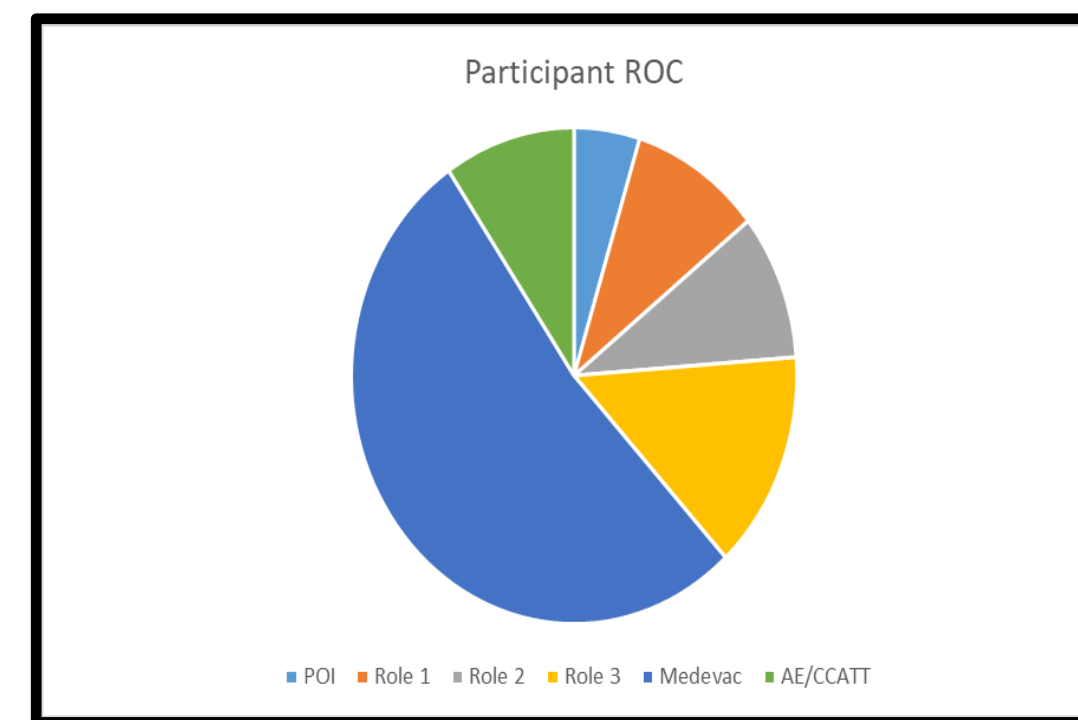
METHODS

- Set up hardware/ software at Role III hospital in Afghanistan
- Conducted orientation and table-top exercise with participants from various roles of care
- Assess the feasibility/ usability of application across the theater continuum of care



RESULTS

Table top exercise at CJTH Role 3 hospital, BAF, Afghanistan



| Participant | Key Point |
|---------------------|--|
| Medic (POI/Medevac) | Current operational environment and capabilities |
| Medic (POI) | Connectivity/pt hand-off ("WiFi-like", bluetooth, plug/download, secure WiFi) |
| Medic (POI/Medevac) | Need to incorporate application into formal training courses |
| Medevac/ AE/ CCATT | Audio recording would be useful |
| Medevac/AE | Ability to scan documents and take photos important |
| Medic (POI) | Need to be easy to use by non-medical POI prsnl entering information |
| Medic | TCCC & MIST at POI should use smaller device (iPad mini/ iPhone) |
| AE | Minimal documentation, have iPads, if synchronizes with EHR then useful |
| CCATT | All handwritten, difficult to track/maintain; ability to document MIST, VS, Tx |
| All | Sections based on skill level; not all alerts needed for each; medic/RN/MD |
| All | Protocols and algorithms ties to roles of care (configuration) |
| RN/MD | Info forward populate, ability to sign off each section, defined editing capes |
| Medics, Role I | Integration of PFC guidelines after set time |
| Medevac/ AE/ CCATT | Integration of various monitors to feed info (vital signs) into application |

CONCLUSION

- Revealed the following:
 - areas of potential integration of POI devices and applications
 - configuration modifications to accommodate the combat environment
 - technological aspects that require mitigation for the application to function in the deployed environment.
- Helped define the requirements of a mobile application that can consolidate continuum of combat casualty care of patients into one record.
- Next phase is to determine if the application effectively captures all patient data, conducts digital electronic health record upload, provides real-time clinical decision support tools, and allows trauma registry data import by trialing on the network

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