



A NOVEL DEBRIEFING TOOL: ONLINE FACILITATOR GUIDANCE PACKAGE FOR DEBRIEFING TEAM TRAINING USING SIMULATION



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ABSTRACT

A Novel Debriefing Tool: Online facilitator guidance package for debriefing team training using simulation

Crisis team training (a form of crisis resource management training) focuses on helping ad hoc teams function together to attain group goals. Our program focuses on predetermined roles and role-appropriate tasks, coupled with an objective set of performance measures within time limits. Consistency and quality of debriefing within a course is a difficult task when facilitators have to be experts in both debriefing techniques and the model of care. The need for highly trained, expert facilitators limits the ability to mass train. Creation of tools that enable a lower level trainer who can deliver the same quality of training would benefit quality, reliability, reproducibility and throughput of training centers. To overcome this hurdle, we have developed a web-based, interactive facilitator website that includes:

- 1) a checklist of open ended debriefing questions to prompt instructors while debriefing students;
- 2) navigation tools (to “toggle” between videos, scoring sheets, performance graphs, citations, and the teaching slide set);
- 3) a library of “teaching points” which focus on the goal of each debriefing;
- 4) a library of simulations with errors and appropriate behaviors highlighted to teach facilitators what to look for.

Our tool utilizes a checklist approach that allows competent (not expert) instructors to provide expert (not competent) debriefing by ensuring that they cover all teaching points, tasks, and ask questions during the debriefings. Each session debriefing has an overall goal (for example: role acquisition) and is subsequently divided into sections with central foci for each section. Instructors must check off each task and question acknowledging that they have been covered. The instructor cannot move onto the next section without having completed everything on the checklist. The web pages are designed in a way that they can be modified to be used with other courses taught at WISER.

INTRODUCTION

Crisis Team Training (CTT)¹ is a form of crisis resource management (CRM)². CTT is designed to train groups of individuals to be able to demonstrate coordinated function as they treat crises encountered in responding to Medical Emergency Team (MET)³, also known as Rapid Response Team (RRT), calls. CTT differs from CRM in several ways: first, the hierarchy is flat; second, there are assigned roles and each role has pre-assigned tasks; third, organizational and treatment tasks must be completed within a pre-determined time frame; fourth, there are objective measures of performance; and fifth, patient care skills are emphasized over professional background. Although we have endeavored to create a choreographed response that is objectively measured, debriefing has remained a difficult task, because the facilitator must be an expert in simulation, education, critical care and team performance. As a result, there are few qualified facilitators. To overcome this hurdle, we wanted to create a web based tool to enable competent facilitators to deliver training comparable to that of an expert facilitator. We describe our work to date.

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METHODS

The design team included experts in CTT (MD, NM), Medical Emergency Teams (MD, WG, NM) and an expert in simulation systems and computer engineering (JL).

We created nine standardized simulation scenarios, and utilize a random number generator to select the scenarios to be used in a CTT course. Each episode of simulation is called a training session.

We video recorded expert facilitators performing debriefing, had both expert and competent trainers observing delivered courses to determine debriefing content. Based on our review of the trainers, we created a different debriefing goal for each training session. Within each debriefing session, a number of foci are emphasized to support the debriefing goal. The group also identified tools that facilitators need for delivering the training.

We created a web based tool that has a total of 18 separate sequential debriefing screens. There are hyperlinks on each page to teaching resources: Lecture slides, Roles & Goals graphic, video recording, scoring sheet, performance graphs and the next debriefing page. We tested the ease of use with untrained personnel at WISER.

Methods

The web based tool:

- 1) Facilitates moving between the 5 educational tools;
- 2) Prompts the facilitator to complete all the educational objectives for each debriefing focus;
- 3) “Forces” completion of educational objectives prior to moving forward in the debriefing;
- 4) Fosters use of a pre-existing scoring tool to objectively analyze performance;
- 5) Offers the ability to refer to the educational slide set;
- 6) Enables the facilitator to show progression of performance through real time graphic representation of performance for organizational tasks, patient care tasks, communication tasks, and outcome.

The Four Debriefing Foci:

- 1) Roles
- 2) Roles & Tasks
- 3) Communication
- 4) Review: Organization effects outcome

CONCLUSION

Creating an easy to use, reliable, and effective tool to guide and ease debriefing could greatly improve the ability to deliver a standardized training. The tool could make possible greater inter-class training consistency, enable a less trained facilitator so mass training is possible, and enhance ability to perform controlled trials.

The described tool captures many of the qualities necessary for a team training debriefing.

REFERENCES

1. DeVita MA, Schaefer J, Lutz J, Dongilli T, Wang H: Improving medical crisis team performance. Crit Care Med 2004; 32: S61-5
2. Gaba DM, Howard SK, Flanagan B, Smith BE, Fish KJ, Botney R: Assessment of clinical performance during simulated crises using both technical and behavioral ratings. Anesthesiology 1998; 89: 8-18
3. Lee A, Bishop G, Hillman K, et al. The medical emergency team. Anaesth Intensive Care 1995; 23: 183–186.

Debrief 1: Roles
Section 2 Focus: Perception of Organizational Performance

Teaching Points

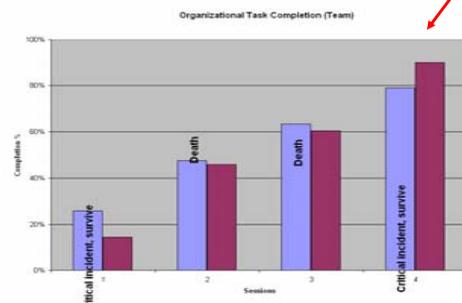
- To avoid chaos, devote time and effort to organization.
- Choosing roles aids in organization.
- Best team performance requires not just ABC (Airway, Breathing, Circulation) but OABC (Organization, Airway, Breathing, Circulation).

Questions for Participants

- Was the team response chaotic or organized? (If responses are chaotic)
- What would improve your organization? (If it is chaotic, "how many" checks, "thinks," "thinks," "communication")
- What roles should you make to improve team organization? (If it is chaotic, all tasks and priorities, speed of duration of labor)
- What tasks should be accomplished within the first 60 seconds of a crisis response? (If it is chaotic, all tasks)
- Which of those tasks are organizational tasks and which are patient care tasks? (If responses are chaotic, have checked on organization, "who participants and coordination, figure out organizational tasks should be done")
- Which is a higher priority during the first 60 seconds? (Explore reasons for prioritizing organizational tasks over treatment tasks, discuss OABC)

Navigation: Lecture, Roles & Goals, Video, ScoreSheet, Graphs, **Continue**

List of tasks that need to be completed



Debrief 2: Roles and Tasks
Section 2 Focus: Analysis of relationship between organization and task completion

Teaching Points

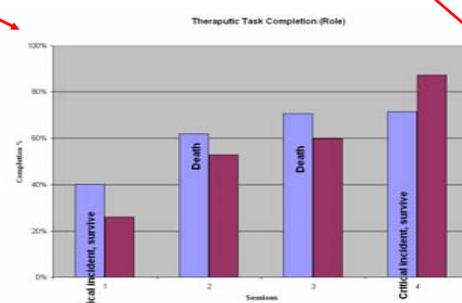
- Complete analysis of organization first is to state, "Let's get organized." This will foster OABC.
- Assuming the role rapidly focuses (organizers) your own performance, reach your own treatment tasks.
- First assume a role, then complete the tasks for that role.
- It is important to know the tasks associated with your role in order to complete all the goals of the role.
- Communication impacts survival. Determine what information you have and who it needs to be communicated to.

Questions for Participants

- Did everyone get the scenario faster or worse? (If responses are chaotic, "who participants and coordination, figure out organizational tasks should be done")
- Did everyone choose a role? (If responses are chaotic, "who participants and coordination, figure out organizational tasks should be done")
- Did completing organization tasks improve the team's ability to complete the treatment tasks? (If responses are chaotic, "who participants and coordination, figure out organizational tasks should be done")
- Were there communication barriers? (If responses are chaotic, "who participants and coordination, figure out organizational tasks should be done")
- Were there communication barriers? (If responses are chaotic, "who participants and coordination, figure out organizational tasks should be done")

Navigation: Lecture, Roles & Goals, Video, ScoreSheet, Graphs, **Continue**

All debriefing tasks are completed, the facilitator can continue



Roles	Responsibility
1 Airway Manager	Assess, assist ventilation, intubate
2 Airway Assistant	Assist airway manager, oxygen and suction setup, suction as needed
3 Bedside Assistant (usually Floor RN)	Assess enough patient IV's, push meds, and check pulse
4 Crash Cart Mgr (ICLRR)	Deploy equipment, prepare meds, run defibrillator
5 Treatment Leader	Assess team, responsibilities, data, direct treatment, set priorities, triage patient
6 Circulation	Check Pulse, place defib pads, perform chest compressions*
7 Procedure MD	Perform procedures IV, chest tubes, ABGs
8 Data Manager (ICLRR)	AMPLE, results, chart, record interventions, role tags

*Circles denote "mini-teams" that must cooperate closely on similar goals.

60 seconds Session 1 ORGANIZATION TASKS		THERAPEUTIC TASKS					
Station	Team Member	Items	CT	Save	TCT		
Airway Manager	Walter, Robert (walterr)	Identify self	N	N	N		
		Name tag	N	N	N		
		Move Bed from wall	N/A	N	N		
		Stand in appropriate position	Y	Y	Y		
		Count respiratory rate	N	N	N		
		Assess: is airway open	N	N	N		
		Open airway	N/A	N	N		
		Assist ventilation (Mouth to mask, or Bag-Mask)	N	N	N		
		Airway Assistant	Dobrowski, Bridget M (pr)	Identify self	N	N	N
				Name tag	N	N	N
Obtain Airway Bag	N			N	N		
Stand in appropriate position	Y			Y	Y		
Give mask/bag to airway manager	N			N	N		
Set up oxygen	N			N	N		