Evaluation of Virtually Delivered TEAMS 3.0 Tabletop Modules to Train a Canadian Emergency Medical Team: A Pilot Study

Anthony Fong[1] , *Luca Ragazzoni MD, PhD[2]* , *Jordan Penner BSc[1]*, *Karsten Nielsen–Roine BSc[1]* , *Taigan Radomske BSc[1]*, *Graham Hill BSc[1]*, *Awsan Bahattab MBChB, PhD[2]*

1. University of British Columbia, Vancouver, BC, Canada
2. Center for Research and Training in Disaster Medicine, Humanitarian Aid, and Global Health, Novara, NO, Italy

Background/Introduction: The World Health Organization established the Emergency Medical Team (EMT) initiative in 2013 to standardize disaster response, emphasizing robust education and training programs. The Canadian Medical Assistance Teams (CMAT), a volunteer-run NGO with over 1,000 members, struggles with logistical and financial constraints for in-person training.

Objectives: This study evaluates the effectiveness of virtually delivered TEAMS 3.0 tabletop modules for training CMAT's volunteers, hypothesizing that virtual training is effective and comparable to in-person training. Adapt TEAMS 3.0 tabletop exercises into a virtual format and assess their effectiveness. Compare the effectiveness of virtual and in-person training.

Method/Description: A quasi-experimental design with non-randomized groups was used. CMAT members were assigned to in-person or virtual training based on availability. Pre- and post-training surveys assessed self-efficacy, teamwork, and training quality. Statistical analysis using SPSS employed non-parametric tests to compare pre- and post-training scores and between-group differences. Qualitative feedback was collected via a post-training anonymous form.

Results/Outcomes: Four TEAMS 3.0 exercises were adapted for virtual delivery using Google Meet and Google collaborative tools. Among 26 participants (10 in-person, 16 virtual), both formats showed no significant changes in self-efficacy or teamwork scores from pre- to post-training. In-person training received significantly higher quality ratings from trainees compared to virtual training ($p=0.026$). Trainers' quality ratings also favored in-person training but were not statistically significant ($p=0.091$).

Conclusion: Virtual TEAMS 3.0 exercises yielded similar self-efficacy and teamwork results as in-person training, though in-person sessions were rated higher quality. This supports virtual training as a scalable, cost-effective alternative, though further research with larger samples is needed.

EMT Simulation-Based Team Training: Converting TEAMS 3.0 to a Virtual Format

Karsten Nielsen–Roine BSc[1,2], Jordan Penner BSc[1,2], Anthony Fong MD[1,2]

1. University of British Columbia, Vancouver, BC, Canada
2. Canadian Medical Assistance Teams, Toronto, Ontario, Canada

Background/Introduction: Effective disaster response requires standardized training of Emergency Medical Teams (EMTs). The TEAMS 3.0 training initiative, initially designed for in-person training, has been shown to significantly improve team efficacy. However, logistical challenges and the COVID-19 pandemic have prompted the need to develop and assess virtual training alternatives.

Objectives: This study compares EMT trainee experiences in TEAMS 3.0 virtual and in-person programs using qualitative thematic analysis.

Method/Description: Sixteen Canadian EMT volunteers participated in a condensed, one-day TEAMS 3.0 program. Sessions were held in-person (6 trainees, 4 trainers) and virtually (10 trainees, 6 trainers). Each session included four exercises with 30-minute debriefs, which were recorded and transcribed. Thematic analysis of transcripts was done in NVivo version 14.

Results/Outcomes: Thematic analysis revealed key components of effective training in both formats. Access to EMT-specific SOPs and documentation templates were identified as being crucial for learning and exercise success. However, the virtual format negatively impacted communication and team connection during training activities.

Conclusion: Both formats supported the development of team skills and sparked essential discussions for successful deployment. Despite challenges in virtual training, such as impaired communication and participant connection, converting TEAMS 3.0 to a virtual format is a viable method of EMT training.

Agile Aid: Developing Mobile Surgical Teams for Effective Humanitarian Response

Peter M Holz RN, John Troke BSN, Sasha R Thew MPH
Samaritan's Purse, Boone, North Carolina, United States

Background/Introduction: In the face of increasing global crises and conflict, responding immediately to a disaster with life-saving interventions is an identified gap. Rapidly deployable, highly mobile surgical teams with prepared logistics and equipment is an identified solution to meet this need.

Objectives: Develop a Mobile Surgical Theater (MST) that is adaptable to both sudden onset and conflict driven disasters. The MST should be immediately deployable on commercial aircraft. The team members will be trained not only on the clinical aspects but also the operational components of the MST. The MST should hold the ability to provide five major surgeries daily for the duration of response and be fully self-sufficient.

Method/Description: Subject Matter Experts (SME's) in Mobile Surgical and Golden Hour Surgical teams were consulted throughout development. Thorough research, testing, and development was performed on all components to ensure good function and reliability. While developing training and objectives, SMEs were also consulted to ensure optimal learning. All aspects of development and training used a collaborative, team driven approach.

Results/Outcomes: Samaritan's Purse currently maintains two MST units, prepositioned and ready to deploy. This includes four trained teams with future trainings planned. Samaritan's