

### Abstract

Increased prevalence of healthcare-related trauma in students at McMaster University indicated a need for specialized approaches by the campus Emergency First Response Team (EFRT). Challenges arose regarding the structuring and approach to these calls, uniquely complicating the role of an Emergency Medical Responder (EMR).

In January of 2024, 40 participants completed a 10-question online survey to assess preparedness and effective responding techniques for patients with healthcare trauma. Nearly all participants reported having responded to patients with known or suspected healthcare trauma, while less than half expressed confidence in their ability to do so. Continued reassurance and recognizing "red flags" of distrust were considered most beneficial by the participants. Results were compared to current literature on trauma-informed healthcare to develop a framework for prehospital healthcare.

The framework included both an administrative and curriculum-based approach. EFRT increased cultural and racial sensitivity awareness, integrated trauma-informed values within the team, and had Responders completed mental health training to better understand major trauma indicators. The curriculum included three tenets: recognition, reassurance, and resisting re-traumatization<sup>1</sup>. A series of phrases, actions, and positive indicators were included, promoting adaptation for individual response styles. The curriculum was implemented through an online platform and added to the EFRT protocol manual.

## Introduction

Patients with a history of healthcare-related trauma pose a significant challenge for EMRs within academic institutions, and significantly influence call dynamics. The nature of healthcare-related trauma incidents demand a specialized skill set and nuanced approach from healthcare providers. Unlike physical trauma or musculoskeletal emergencies, healthcare-related trauma involves psychological and emotional complexities, and necessitates a thorough understanding of patient sensitivities, potential mistrust, and emotional states.

The motivation for this study involved an increased prevalence of healthcare trauma-related incidents at McMaster University, where a lack of preparedness and confidence in responding to these patients was proposed. To determine the need for a trauma-informed framework, a survey was administered to collegiate EMRs in January 2024. The survey highlighted notable gaps between the frequency of such encounters and responder confidence in managing them.

A trauma-informed framework was adapted from the Substance Abuse and Mental Health Services Administration (SAMHSA), and specifically formed to help pre-hospital healthcare professionals interact with patients in accordance with trauma-informed guidelines. The focus was centered around recognition, reassurance, and resisting re-traumatization, with focus on most at-risk populations and indicators of successful patient care<sup>1</sup>. The implementation of this curriculum involved an accessible online website, available to all collegiate Emergency First Response teams.

# Trauma-Informed Prehospital Healthcare: Actionables for Improving Patient Outcomes

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# Methods

40 EMR-certified participants aged 18-25 were selected to complete a 10question online questionnaire on experience, confidence and effective responding techniques for patients with healthcare trauma. Responses were collected over a 2-week period in January of 2024.

The survey involved short answers, multiple-choice questions, and a Likert Scale. The scale was scored as: fully unconfident (1), slightly unconfident (2), neither confident nor unconfident (3), slightly confident (4), and fully confident (5). All questions were listed as optional, and all metrics were self-reported. Results were compared to literature on trauma-informed healthcare from the past decade.

### Results

Of the 39 participants who responded to the question inquiring about experience with health-care traumatized patients, 85% reported experience with responding to patients with known/suspected healthcare trauma, while 41% felt slightly or fully confident in their ability to do so.

The average Likert response fell between "neither confident nor unconfident" and "slightly confident".

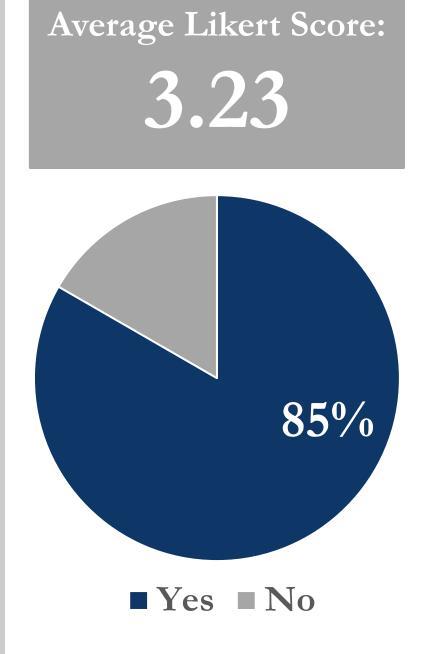
Participants reported trauma recognition and continued reassurance to be most beneficial for patients with previous healthcare trauma, with response rates of 90% and 92%, respectively.

# Development/Implementation

Systematic reviews examining trauma-informed prehospital healthcare have noted that very rarely do healthcare administrators take responsibility when creating a trauma-informed environment. More commonly, they look to clinicians to change the game. Administration should take action by:

. Allocating resources for ongoing training and professional development opportunities, such as the Red Cross Psychological First Aid (PFA) program, which provides contextual information about mental health disorders. Training specific to a region's most frequent chief call complaints is also important.

2. Supporting staff wellness. This can be achieved by conducting regular checkins with staff to assess well-being, identify issues, and provide support as needed. Such actions work to create a culture that values and prioritizes wellbeing. Team building exercises and recognition of staff efforts are also pertinent. These administrative actions ensure that providers are well equipped to manage their own emotional and psychological health and can in turn provide more grounded and empathetic patient care.



The framework focused on recognition, reassurance, and resisting retraumatization. Recognizing patients' healthcare trauma included emphasis on empathetic language, patient history review, and behavioral observation. The ability to recognize most at-risk populations such as visible minorities, LGBTQ+ individuals, and those with chronic disabilities is also important. The reassurance aspect involved building trust, acknowledging concerns, and continuous monitoring. Resisting re-traumatization emphasized patient control, open communication, personalized care, and shared goals.

An online platform was created for this curriculum, made accessible to all collegiate First Response Teams by scanning the following QR code:

## Discussion/Conclusion

Administrative integration of program recommendations was simple and effective. New recruits were trained in Mental Health First Aid and reported a more contextual understanding of mental illnesses. Team building exercises were incorporated by advocating for an increased appreciation budget and were met with positivity from the team.

Recommendations for the future include scheduling keynote speakers and patient care advocates during team training. The curriculum was presented to the EFRT team. Responders noted the "signs you are on the right track" and "signs to shift your approach" aspects to be particularly helpful. Future program improvements may include enlisting certified simulated patients to demonstrate potential interactions. An asynchronous module including such scenarios may more effectively teach responders key recognition skills.

The researchers would like to thank the members of the Guelph First Response Team, Odyssey Medical Team and McMaster Emergency First Response Team for their participation in this study.

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# Acknowledgments

### Contact