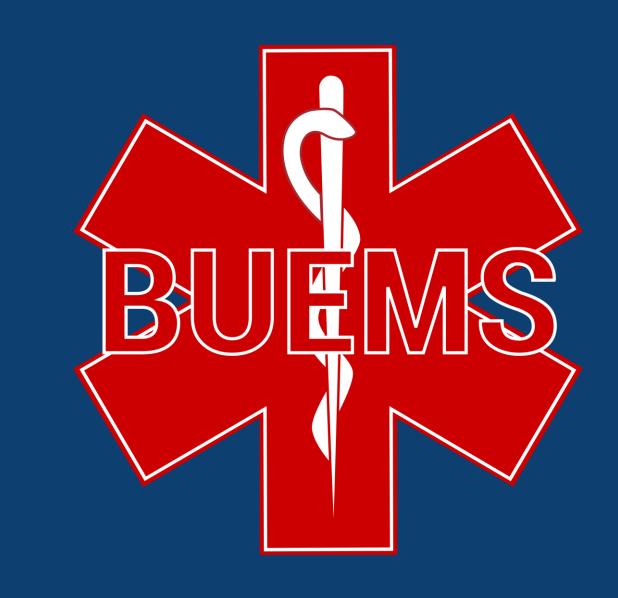


Development of a Mass Gathering Medicine Training Program for Novice Collegiate EMS Providers



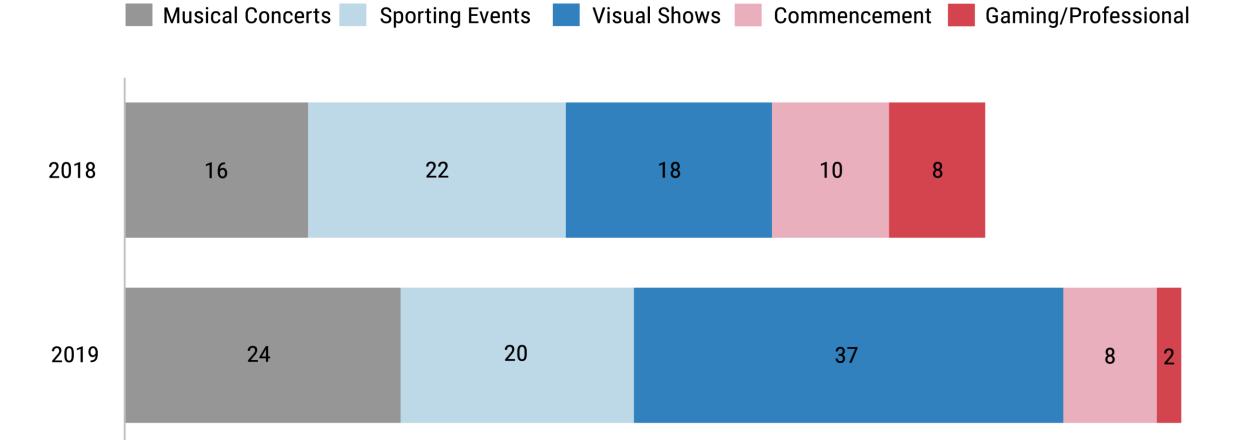
Enzo Plaitano, EMT^{1,2}; Elana Everett, EMT-I/C^{1,2}; Sarah Golden, EMT¹

*Boston University Emergency Medical Services, *Boston University Emergency Response Education

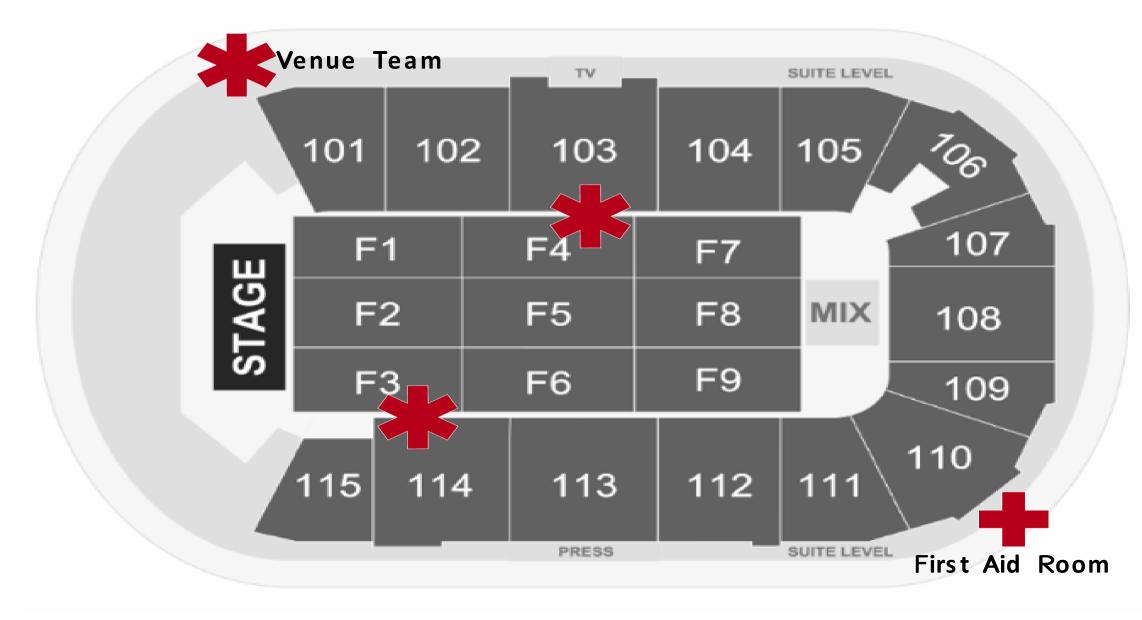
Introduction & Background

Agganis Arena Venue Overview

- Agganis Arena is located on Boston University's (BU) West Campus, along the busy street of Commonwealth Avenue.
- Holds large gatherings, including sporting events for BU's acclaimed men's ice hockey team and concerts with top indie-rock, pop, and rap artists.
- 290,000 square-feet of space, holding up 8,000 guests and creating the possibility for numerous patient encounters.
- Agganis has hosted more overall events, including large musical concerts and visual shows, in 2019 as opposed to 2018, increasing our need for more organized operations and a well-trained team.



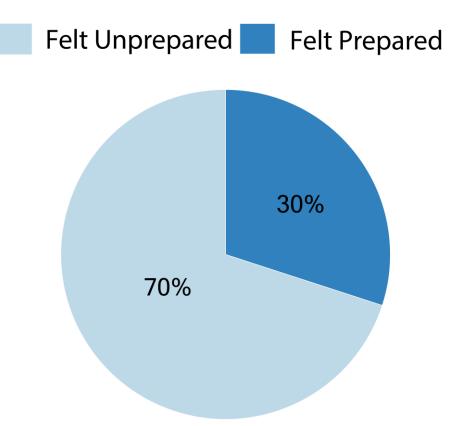
Increase in Arena Events from 2018 to 2019



Arena Layout and EMS Positions; Venue Capacity = 8,000 Guests

BUEMS Overview

- Massachusetts licensed EMTs, all of whom are full-time degree-seeking students at BU.
- BLS medical coverage for all events, staffing between one to seven EMTs.
- Most sporting events staff two EMTs, while large rap concerts can staff up to seven.
- Some EMTs have years of experience working ambulance or other large special event operations, while others completed their training just weeks before working their first shift.
- New hires reported feeling only 30% prepared to work at the arena, as conventional EMS education focuses mainly on single-patient ambulance transfers.



The staff that was present did not appear to have adequate clinical experience to deal with the number and severity of patients.

-AE-EMT Review

-AE-EMT Review

Development & Implementation

New Agganis EMTs (NA-EMTs) are now required to complete an Agganis specific orientation as well as receive mentorship and additional training from Agganis Experienced EMTs (AE-EMTs). All BUEMS staff participated in a large-venue in-service to improve skills across all experience levels.

Large-Venue In-service

- Massachusetts Office of EMS approved continuing education course on Large Venue Patient Care Emergencies in late April 2019 (Spring 2019 academic semester).
- All BUEMS EMTs required to attend in-service.
- Simulated patient care scenarios in the large venue environment, performing complete patient assessments and treatments in small teams.
- Performed skills such as long-board and scoop stretcher immobilization/extrication and oropharyngeal airway suctioning, as well as radio reports.

NA-EMT Selection and Orientation

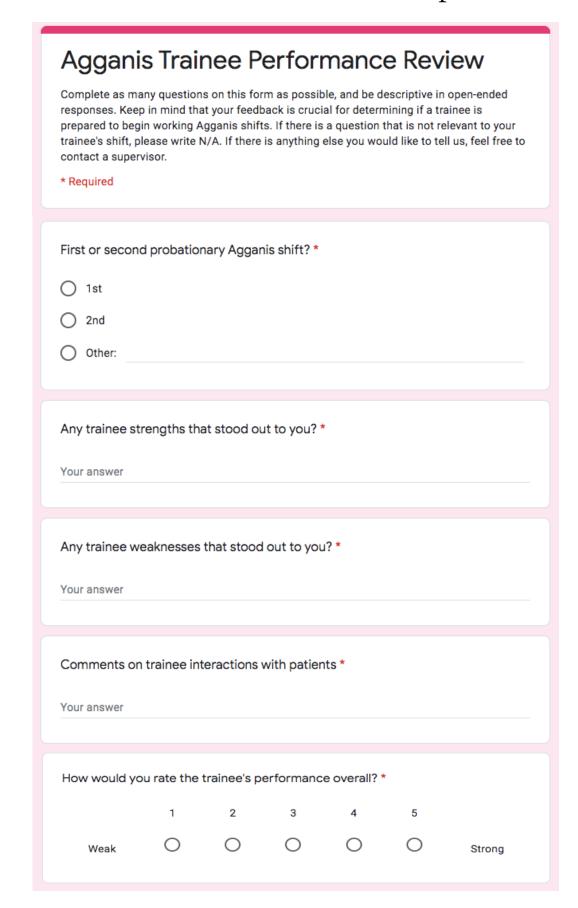
- Complete online application to be considered for the NA-EMT position.
- Application considers self reported strengths, teaching experience, and length on the BUEMS team.
- Attend training session at Agganis each semester to remain familiar with skills such as stair chair, scoop stretcher, and team dynamics.
- AE-EMTs can also attend these training sessions for practice, if desired.

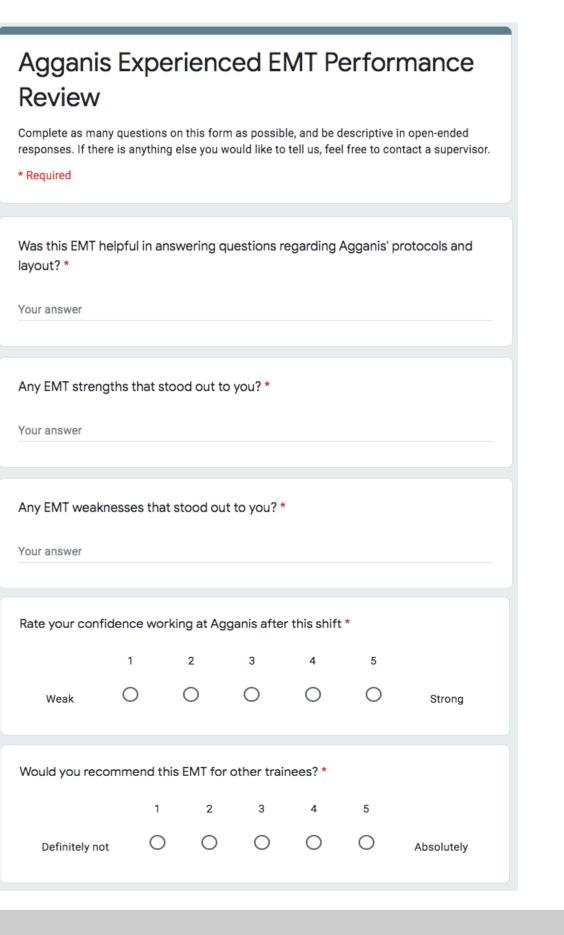
Mentorship Program

- AE-EMTs have a thorough familiarity with the layout and protocols of Agganis Arena, as well as strong leadership skills while on duty.
- AE-EMTs take the lead during calls and are responsible for training and evaluating new NA-EMTs.
- AE-EMTs complete online evaluations of their trainees, which are evaluated for promotional or remediation purposes.
- Reciprocally, NA-EMTs also complete evaluations of the AE-EMTs to promote quality in training and leadership.

NA-EMT Promotion to AE-EMT

- Worked at least 8 Agganis shifts.
- Familiar with layout/procedures at Agganis Arena.
- Written at least 5 PCRs, generally of good quality.
- Recommendations from supervisors and AE-EMTs.

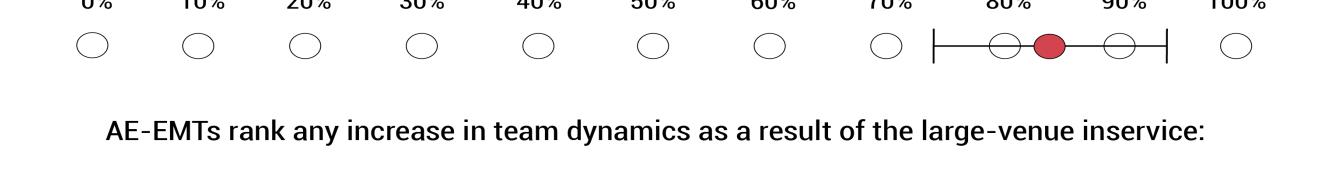




Evaluation

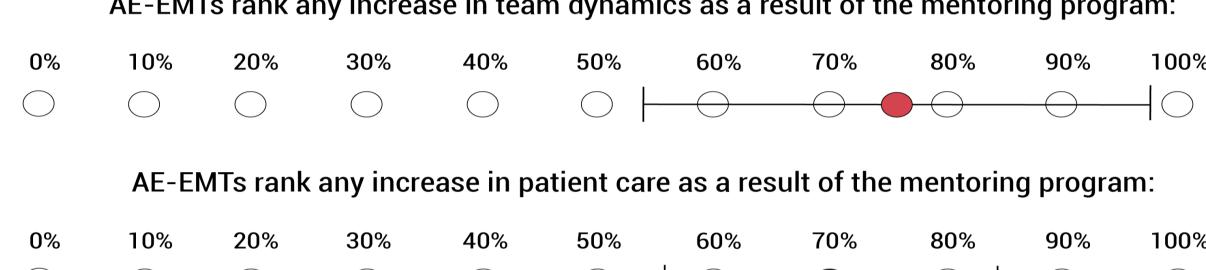
Large-Venue Inservice

BUEMS staff rank overall benefit of the large-venue inservice:

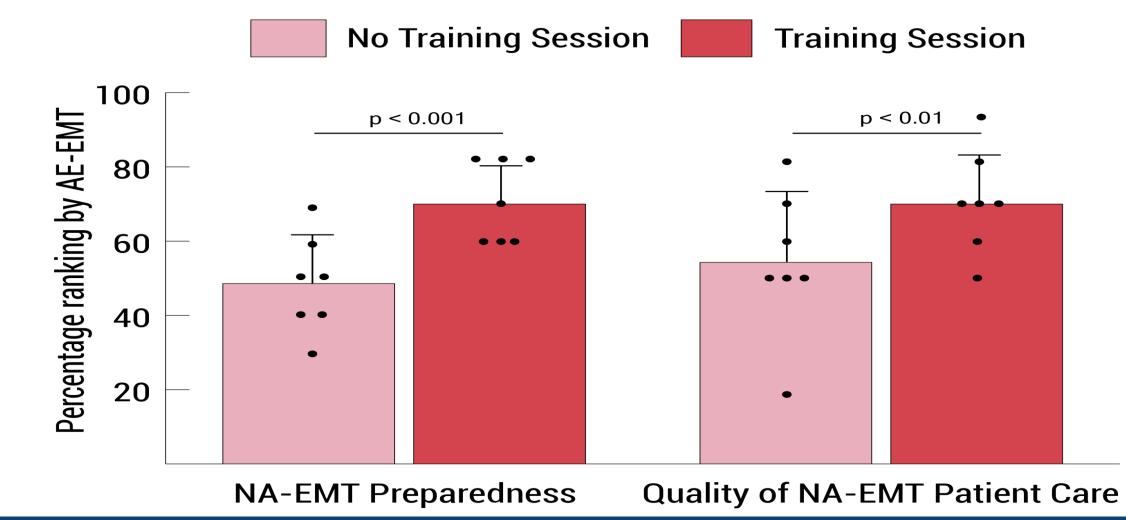


Mentorship Program

AE-EMTs rank any increase in team dynamics as a result of the mentoring program:



Orientation & Training



Discussion & Conclusions

- New protocols have promoted better team dynamics, higher staff confidence, and more efficient patient care.
- Large-venue specific NA-EMT orientation training component significantly improved new NA-EMT preparedness and quality of patient care compared to prior operations.
- This program has enhanced the preparation of all staff in managing the difficulties of large-venue logistics through the large-venue in-service, a mandatory component for all staff.
- Our program filled a gap in BUEMS provider training, as conventional EMS education focuses mainly on single-patient ambulance transfers.
- Since many other collegiate EMS organizations cover large events, this program schema can be implemented into other school's systems to improve their own large-venue operations as well

Acknowledgment & Contact

The authors would like to thank Boston University EMS management for designing and implementing this program. Our updated training program could not be possible without our dedicated NA-EMTs and AE-EMTs.

Corresponding Contact: Enzo Plaitano, enzop@bu.edu

NA-EMT Self Evaluation for Agganis Preparedness