



Piloting an Online New Member Orientation Program

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Abstract

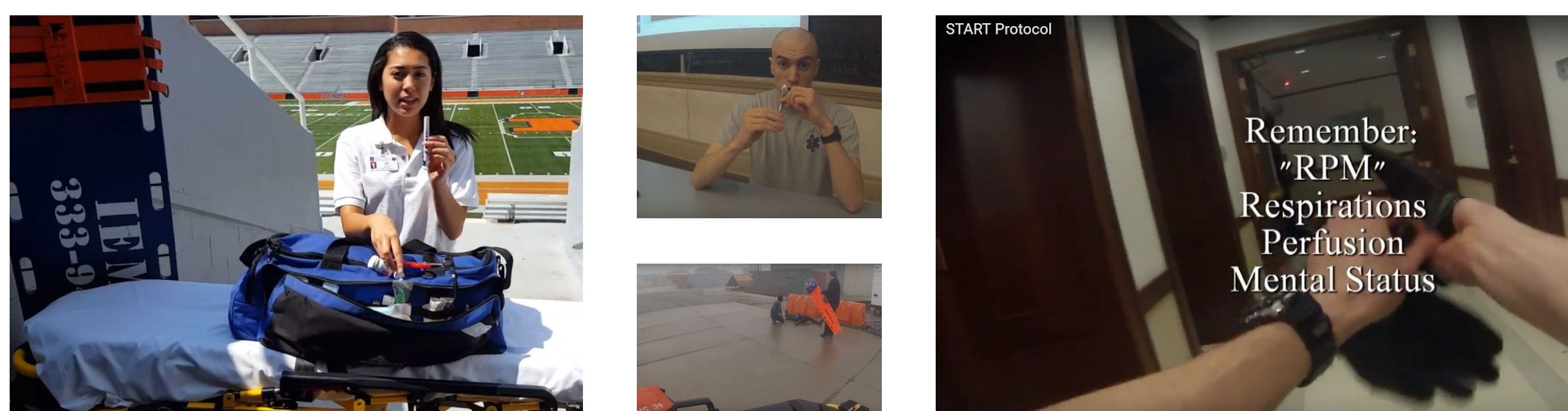
Within Illini Emergency Medical Services (IEMS), entry-level membership as an EMS Aide requires only BLS certification. After identifying a need for formalized free training to prepare Aides to function within their team in a more comprehensive role, an online Orientation course was created and implemented. Using a combination of original and adapted videos followed by a knowledge-based quiz and perception-based survey, this self-paced program teaches and assesses the basics of topics including bleeding control, organizational structure, team dynamics, and First Responder mental health in under an hour. Survey data confirms that, while not certifying them in any new skills, Orientation prepares Aides to integrate more effectively into the organization and understand the actions of their EMT teammates.

As a collegiate EMS agency that sets its own membership requirements, this program allows us to forgo the formality and expense of relying on first aid certification for Aide training while streamlining our year-round onboarding of over 150 annual new members. Though hands-on training will continue to be an important part of onboarding, this tool will increase the quality of care that IEMS is able to provide without significantly raising the barrier to organizational entry.

Introduction

In spite of significant gains in the number of EMT members made in recent year, IEMS remains committed to sustaining entry-level provider roles in order to provide a greater number of students with the opportunity to explore volunteering in the EMS field. Out of 198 active members in Fall 2017, 132 were non-EMTs. Currently referred to as “EMS Aides”, these members are paired with a licensed EMT during operational events, but have historically arrived for their first volunteer shift knowing little more than BLS CPR. Originally referred to as “First Aiders,” the title was previously changed to “CPR Members” after first aid certification was eliminated from membership requirements in the late 1990s.

Free member-created training resources are available, such as videos and hands-on training nights to teach radio traffic and cot mechanics, but there is no requirement for Aides to utilize them. Efforts to provide additional formal certifications for those not able or willing to obtain EMT training were met with little interest; thus, first aid and Emergency Medical Responder classes are no longer offered to members.



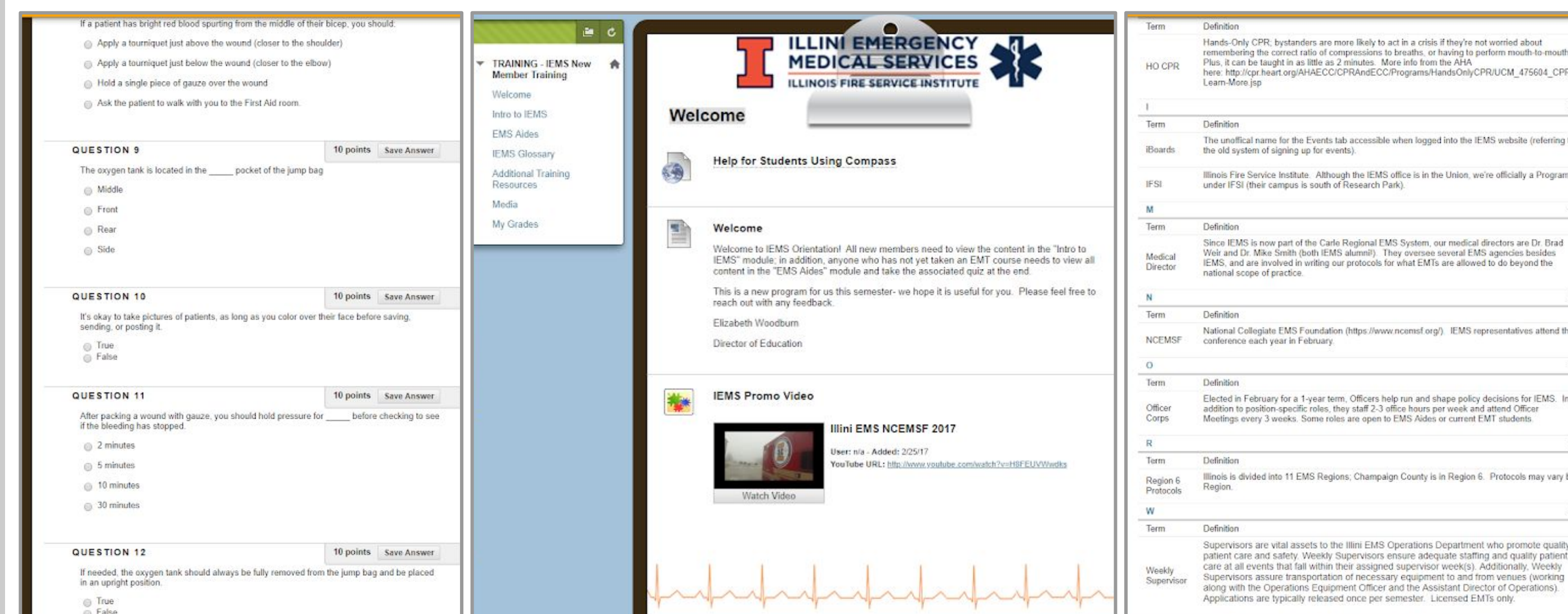
Previous member training & orientation videos incorporated into the online curriculum. While IEMS often has members interested in both training and filmmaking, it has lacked a framework with which to consistently and effectively distribute the end products.

Development/Implementation

Using a combination of original and adapted videos followed by a quiz, this self-paced program teaches and assesses the basics of the following in under an hour:

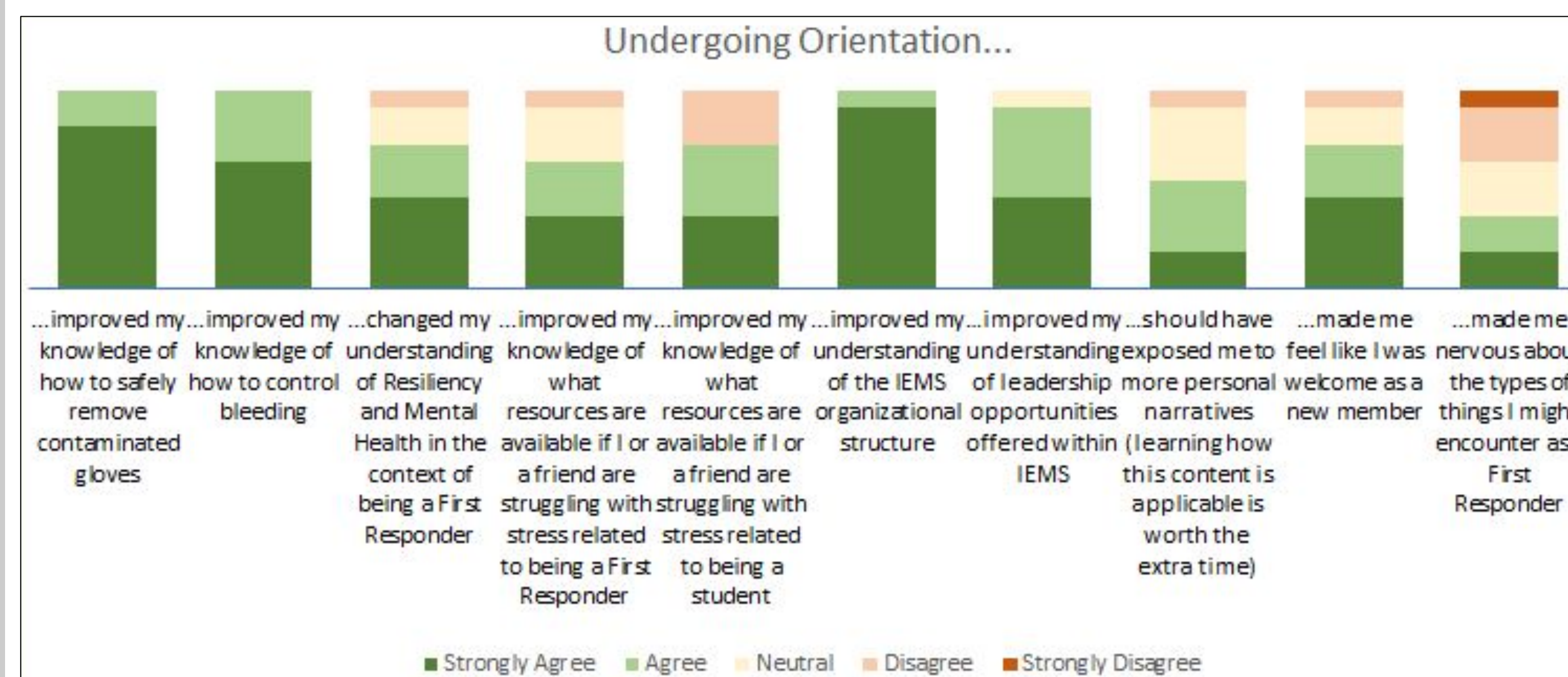
- Resiliency & Mental Health
- Organizational Structure, Roles, and Operational Duties
- Scene Mechanics
- Vital Signs
- Bloodborne & Airborne Pathogens
- Glove Removal
- Bleeding Control, Bandaging, and Tourniquet Application

Bonus content is also available on topics such as leadership opportunities, the PulsePoint AED and Respond apps, START triage, and common IEMS terms.



Evaluation

After completing Orientation, Aides are required to complete a knowledge-based quiz and perception-based survey. Data was collected on all respondents, though only reported on Aides who were new to IEMS (n=11).



All respondents thought the content was of reasonable length, and 82% explored the bonus resource section. Learning about pathogens prompted 100% of Aides not currently up-to-date on Hepatitis B, MMR, Varicella, and seasonal influenza vaccines to seek or consider seeking additional vaccinations. Despite heavy internal promotion in the past semester, 91% had never previously heard of PulsePoint; 45% reported downloading the app after learning about it through Orientation.

Discussion/Conclusion

The addition of topics such as tourniquet application is not intended to prepare Aides to perform those skills on patients without practicing first; rather, much like understanding the units in which vitals are reported for assisting with documentation, we hope that exposure to this content will better prepare Aides to support their EMT during calls. Shifts provide many opportunities for further teaching, but Aides now have the benefit of walking onto their first shift with standardized knowledge of how to assist their EMT with more than just CPR should a call occur.

Successful completion required a quiz score of 17/18, which took an average of two attempts per Aide to achieve. This suggests that either some content isn't being delivered in a fully effective manner, requiring Aides to go back and review it, or that Aides are marking modules as completed without viewing their full contents. The quiz allows for unlimited attempts, as the goal of Orientation is to educate rather than bar new members. While the learning platform isn't able to track time that students spend viewing individual content modules, questions missed by >25% of Aides involved proper sharps disposal, patient care after tourniquet application, scene safety, and oxygen tank usage. These topics can now be revised for greater clarity.

Of the 250 US NCEMSF member agencies, 180 work at or above the BLS level; additionally, 24 are listed as New/Forming [1]. While online training is a useful tool for all providers, this program may be of particular interest to groups who wish to increase their membership volume and strengthen response teams by training providers below the certification level of First Responder. Organization-specific content can also be delivered, allowing for standardized new member integration throughout the year.

This also represents an important step towards our goal of delivering Resiliency training to all members before they have the chance to encounter a difficult call. Even a brief narrated powerpoint improved more than half of respondents' knowledge of resources available to them for dealing with EMS or student-related stress, and we hope to further develop this content to increase its effectiveness.

After this initial pilot of Aide-specific content, we hope to expand with separate modules to familiarize new EMTs with regional and organizational protocols. Future evaluations have been proposed to determine how well Aides retain this knowledge over time, and whether it translates to improved on-scene performance.

References

1. "United States EMS Organizations." *NCEMSF.org*.

Acknowledgments

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