



Effect of Hosting a State-Sponsored EMT Course on Retention and Staffing

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Abstract

Background: Collegiate EMS new member training programs commonly blend protocol education, hands-on skills practice, and agency-specific onboarding. Completion of internal standards, such as skills check-offs, is typically a prerequisite for the department's subsequent sponsorship of a formal EMT-B course for uncertified members. However, the high provider turnover rates and inconsistent staffing often inherent to volunteer student-centered departments underscores the necessity for efficient training programs that ensure early operational readiness without compromising clinical competence. **Objectives:** We sought to identify the impact of implementing an in-house state-sponsored EMT-B certification course on department retention and staffing. **Methods:** We developed a New York State (NYS) EMT-Basic certification program at the Stony Brook Volunteer Ambulance Corps (SBVAC) with sponsorship from the Stony Brook University Paramedic Program. Per semester, all new non-certificate bearing members were enrolled in a 13-week program implemented with a predefined capacity, instructional staff, and dates approved by NYS. **Results:** We found an increased rate of retention among new members enrolled in a first-semester NYS EMT-B certification course. We also found a shortened time to field training among new members with an expedited certification. **Conclusions:** Further investigation is necessary to assess long-term retention rate and time to full department clearance.

Introduction

New member training is the foundation of EMS operational sustainability and longevity, and for collegiate-based emergency medical services (CBEMS), such educational programs are complicated by high provider turnover rates. CBEMS groups must train new members who often enter without prior clinical certification or healthcare experience, combining both internal benchmarks with subsequent state EMT-B certification. Students, however, often report experiencing strain with EMS education due to ongoing requirements and delays in hands-on field training¹. Such delays in certification and field training can reduce staffing capacity and strain department operations to a heightened level in CBEMS groups. Successful EMT-B education programs tend to incorporate practical and field instruction with immediate feedback². Given the need for expedited training, an in-house EMT-B certification program may accelerate new member readiness for field training and improve retention rates. However, evidence on the impact of these programs on staffing and time to field training in CBEMS systems is limited. This study evaluates the implementation of a New York State (NYS) Emergency Medical Technician Basic (EMT-B) certification course at the Stony Brook Volunteer Ambulance Corps and its effects on new member retention and time to field training.

Development/Implementation

A NYS EMT-B certification course was developed at the Stony Brook Volunteer Ambulance Corps (SBVAC), a NYS-certified 501c(3) non-profit emergency ALS ambulance agency serving Stony Brook University and the surrounding area, operating 24/7 with an annual call volume of approximately 1000 alarms. SBVAC received course sponsorship from the Stony Brook University (SBU) Paramedic Program. SBVAC submitted for reimbursement from the NYS Bureau of EMS and remitted full-cost tuition payment to the SBU Paramedic Program. Certified instructors were provided post-internship in the SBU Paramedic Program, including members of SBVAC's internal instructional staff. Each course spanned a 13-week duration, comprised weekly eight-hour lecture and 4-hour skills practice sessions, and was trialed for two consecutive semesters strictly open to first-semester members of SBVAC.

Evaluation

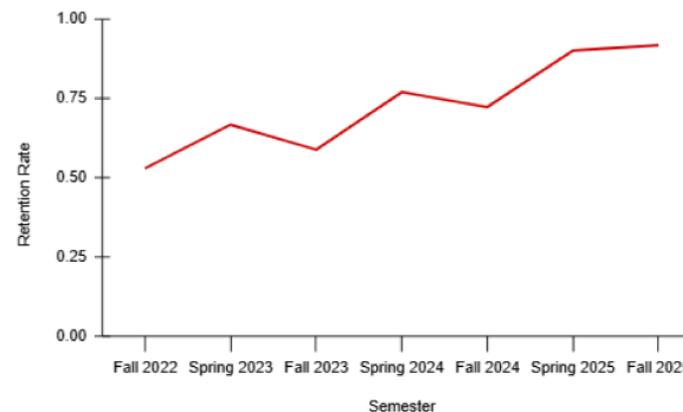


Figure 1. Retention rate of first-semester members per semester. Spring 2025 and Fall 2025 mark implementation of the in-house EMT-B course.

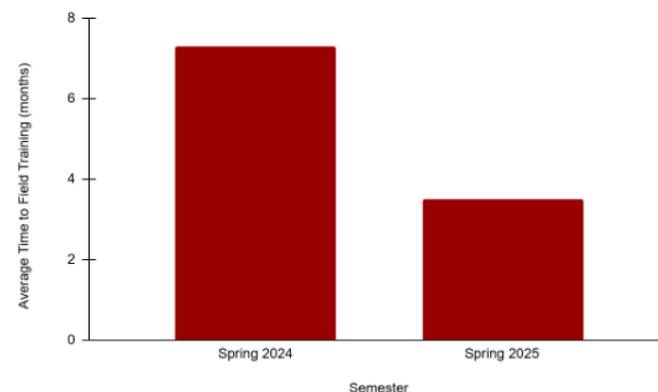


Figure 2. Average time to field training of first-semester members per semester. Spring 2024 includes no in-house EMT-B course and Spring 2025 includes an in-house EMT-B course.

Discussion/Conclusion

Outcomes:

- Increased rate of retention among new members enrolled in a first-semester NYS EMT-B certification course, increasing from a range of 50–75% per semester up to 90%+ consistently.
- Shortened time to field training among new members with an expedited certification, decreasing by over 50%.

Challenges: Receiving course sponsorship for certification of both students and instructors was the largest hurdle and will likely serve as a limiting factor in the development of in-house EMT-B courses. Such continual ability to educate new instructors.

Limitations: This evaluation is limited by the observational nature of the data and the relatively small sample size. Retention and time to field training outcomes may further be influenced by external factors such as prior clinical exposure, academic workload, or individual motivation, which were not formally controlled for. In fact, recruitment to EMS is often marked by a desire to learn about and pursue healthcare career opportunities³. Thus, retention may have been influenced by members' intention for a short-term "stepping stone" within a broader professional pathway.

Future Research: Future evaluation of the program should evaluate long-term retention rate and time to full department clearance in order to gauge the impact of an in-house EMT-B course on operations.

References

1. Chapman SA, Crowe RP, Bentley MA. Recruitment and Retention of New Emergency Medical Technician (EMT)-Basics and Paramedics. *Prehosp Disaster Med.* 2016;31(S1):S70-S86. doi:10.1017/S1049023X16001084
2. Margolis GS, Studnek JR, Fernandez AR, Mistovich J. Strategies of high-performing EMT-basic educational programs. *Prehosp Emerg Care.* 2008;12(2):206-211. doi:10.1080/10903120801906911
3. Patterson D, Probst J, Leith K, Corwin S. Recruitment and Retention of Emergency Medical Technicians: A Qualitative Study. *Scholar Commons.* 2005;12:206-211. doi:10.1080/10903120801906911

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