

Gregory Kantor, EMT-B

Muhlenberg College

Abstract

Muhlenberg College is a small liberal arts school with a campus population of approximately 3,000. Muhlenberg College EMS (MCEMS) is a similarly small quick response service, with about 30 student volunteers and approximate call volumes of 200 for an academic year. For 10 years, MCEMS was in service 24 hours a day; however, in 2009, MCEMS began only responding to calls from 5 p.m. until 8 a.m. during the week and 24 hours throughout the weekend, leaving the daytime unaddressed. In 2016, MCEMS reinstated daytime response, incorporating Active 911 and an all-call, scramble crew model. In daytime response during the week, MCEMS is dispatched by Muhlenberg's Department of Campus Safety through Active 911. Since the new response plan began in March of 2016, MCEMS has responded to 47 calls that may have otherwise been ignored, at a response time shorter than that of normal duty crew response. Combining this approach with regular duty crews has both provided MCEMS' members with flexibility and, more importantly, reassured the Muhlenberg community that emergency medical services are always available on campus. MCEMS believes that this model, while not necessarily novel, can be beneficial to all collegiate EMS agencies who wish to provide or improve daytime coverage.

Introduction

History of MCEMS Daytime Response:

- From MCEMS' founding in 1999 until 2009, the organization was in service 24 hours a day. However, MCEMS abandoned daytime response during the day on Monday-Friday for two reasons:
 - College administration concerns about members missing or leaving class
 - Inadequate staffing combined with unreliable daytime availability

Objectives:

- In 2015, internal conversations began regarding reinstating daytime response, with the expectation that new technology and a hybrid response model would address prior concerns as well as:
 - Increase availability for response to medical emergencies on campus
 - Reduce the burden that daytime calls place on the College's Campus Safety Department and Health Center, as well as Allentown EMS

Development/Implementation

Timeline:

- Spring 2015 – Proposal Completed & Presented to College
- Fall 2015 – Response Plan Reviewed & Revisions Made
- Spring 2016 – Plan Approved & Training Completed
- March 14th, 2016 – Plan Went Into Effect
- March 22nd, 2016 – First Active 911 Daytime Call



Active911

Important Aspects of MCEMS Daytime Response:

- Active911 was identified as an affordable option to integrate an all-call, scramble crew response as part of MCEMS' larger response plan
- Funding was secured through regular Student Government budget that MCEMS receives each semester
- Members are across campus and often respond directly to the scene on-foot
- Campus Safety officers bring a medical supply bag to the scene in the event that all drivers are unable to respond
- Senior member, if available, retrieves EMS vehicle
- A user-friendly dispatching console was developed to improve the quality of information sent to members through Active911

Evaluation

Response Time & Call Volume Comparison since March 2016:

- Daytime – 3.9 minutes, 47 calls
- Duty – 4.1 minutes, 276 calls



Daytime Response Data:

- 8 refusals of care
- 19 law enforcement transports
- 12 transfers of care
- 8 other outcomes
- To assess effectiveness and address technology-related issues, QA/QI and call reviews with crew chiefs were incorporated into the response plan

Discussion/Conclusion

Positive Outcomes:

- The all-call, scramble crew response has been successful in allowing MCEMS to respond during the day while reducing the burden on community partners.
- Response times are faster during daytime response, likely because members are spread throughout campus
- The technology-side has allowed MCEMS to engage with alumni and to encourage students with non-EMS backgrounds to contribute to the organization

Challenges & Limitations:

- The model relies on the availability of MCEMS' members: 4 calls have gone unanswered
- Retraining of Campus Safety staff is required for any new hires

Future Directions:

- With an eye towards improvement, finding research studies or EMS agencies that utilize similar response plans was challenging; MCEMS will look to use NCEMSF and JCEMS more effectively to enhance daytime response methods moving forward
- MCEMS is also looking at other uses for Active 911, including all-callouts for a potential MCI during duty crew response

Acknowledgments

- Largely through the efforts of Eli Russ '17, the restoration and initial rollout of daytime response was successful
- Ben Burwell '15 and Jalal Khan '17 also played an integral role in designing, implementing, and testing the dispatching technology
- Special thanks to the Muhlenberg College Department of Campus Safety, Health Center, and Student Government Association for their continued support of MCEMS' life-saving mission

Contact

Gregory Kantor can be reached by email at: gk249480@muhlenberg.edu