DEVELOPMENT AND ASSESSMENT OF A CURRICULUM TO TRAIN MEDICAL STUDENTS TO RESPOND TO MOTOR VEHICLE COLLISIONS IN THE COMMUNITY
Rachel Schneider¹, Theodore Macnow².
¹ MPH, Fourth-year Medical Student. UMass Chan Medical School, Worcester, MA, USA.
² MD, Associate Professor of Pediatrics. UMass Chan Medical School and UMass Memorial Children’s Medical Center, Worcester, MA, USA.

BACKGROUND: Healthcare providers may encounter opportunities to aid victims of motor vehicle collisions (MVCs) in the community as a bridge to pre-hospital care. Little is known about providers’ experience, comfort, and knowledge in responding to community MVCs. Our objective was to describe the development of a novel curriculum for educating providers on responding to community MVCs as part of a 6-session medical student elective course on community emergencies. METHODS: We performed a needs assessment through a survey sent to a multi-center convenience sample of physicians, resident trainees, and mid-level providers. We measured the frequency in which providers encountered MVCs as well as used a 5-Point Likert scale to assess their comfort responding, barriers to helping, and interest in learning more about assisting in MVCs. Free text responses about topics of interest were solicited and categorized into common themes. An educational session for medical students on responding to MVCs in the community was informed by the survey of healthcare providers. A pre- and post-course survey using a 5-Point Likert Scale was administered one month before and after the course to assess medical students’ comfort assisting in an MVC.

RESULTS: There were 132 respondents to our needs assessment survey (122 MDs, 6 NPs, and 4 PAs). The most common specialties were general pediatrics (n=43, 33%), emergency medicine (n=25, 19%), and pediatric emergency medicine (n=24, 18%). Fifty-seven (43%) of the providers had the opportunity to assist in 1 or more MVCs, with 50 (89%) providing care at that time. Of providers with over 20 years in practice, 70% had the opportunity to aid in a community MVC (Figure 1). Forty-three (33%) of the providers stated they were “somewhat uncomfortable” or “very uncomfortable” assisting in an MVC. Eighty (62%) of the providers were “somewhat” or “very interested” in learning more about the topic. Provider respondents (n= 107, 81%) gave free text responses with most questions relating to preparedness, scene management, and sociolegal concerns such as liability. Eighty medical students participated in the elective course in community emergencies (53 first-years, 23 second-years, 3 third-years, and 1 fourth-year), which included a 75-minute session on responding to MVCs in the community comprised of a didactic, case presentations, and discussion. Based on the needs assessment, the session included content on Good Samaritan laws and liability, equipment preparedness, and specific aspects of on-scene management. Pre-course, medical students reported a median Likert Score of 2 (somewhat uncomfortable) for assisting in a community MVC, IQR (1,3). Post-course, the median Likert Score was 4 (somewhat comfortable), IQR (3,4).

CONCLUSION: Health care providers are likely to have an opportunity to assist in community MVCs. Survey results informed learning needs for a medical student course that improved their comfort in responding to community MVCs. Future work will use survey content to inform a literature review article.