

Approach to a Standardized Injury Prevention Coordinator Training Curriculum

Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T ■ Ian Weston, MPP ■ Glen Tinkoff, MD, FACS, FCCM

ABSTRACT

The effectiveness of trauma center-based injury prevention programs is constrained by a number of variables. These include the wide range of injury types, the variety of possible interventions, institutional support and funding, and the knowledge and experience of the persons responsible for these programs. As the field of injury prevention has increased in complexity, so must the role and professional development of these injury prevention professionals responsible for these programs. Trauma center-based injury prevention coordinators are a diverse group with variable education and professional background especially related to public health, advocacy, epidemiology, biostatistics, and research. Furthermore, inconsistencies exist with their

job titles, responsibilities, accountability, and authority, as well as the associated professional resources available to them. The American Trauma Society, with facilitation by the member organizations of the Trauma Prevention Coalition, has addressed the need to standardize the educational foundation for injury prevention coordinators by providing the basis of core competencies that are necessary to successfully oversee an American College of Surgeon's Committee on Trauma-verified trauma center's injury prevention program. This inaugural Injury Prevention Coordinators Course was launched in conjunction with the Society of Trauma Nurses 2015 annual conference in Jacksonville, FL, with 7 additional courses having been held through March 2016, comprising 150 participants. The goal of this 2-day, formal trauma center-based, course is to address and standardize key educational segments, including impact of trauma, program development, program evaluation, public health models, injury and data analysis, epidemiology, advocacy, building partnerships and coalitions, and the use of media promotion to ensure consistency throughout the industry.

Key Words

Coordinator, Curriculum, Hospital-based, Injury Prevention, Prevention programs

Intentional and unintentional injury has plagued the United States and its trauma centers and systems for decades. As a leading cause of death, injury causes life-altering disabilities and lasting impact on the individual patient and their family. According to the American College of Surgeons, cost due to trauma is nearing half a trillion dollars a year and account for 12% of national health care expenditures (Committee on Trauma American College of Surgeons, 2014).

The care of the injured patient remains a public health priority with the explicit goal of reducing injury-related disability and death. Yet despite regularly documented

Author Affiliations: Injury Prevention, Community Outreach & Research, Yale-New Haven Hospital, Injury Free Coalition for Kids of New Haven, CT Emergency Medical Services for Children, Yale-New Haven Children's Hospital, New Haven, Connecticut (Dr Violano); American Trauma Society, Falls Church, Virginia (Mr Weston); and Trauma Prevention Committee, Department of Surgery, Christiana Care Health System, Newark, Delaware, and Surgery, Sidney Kimmel Medical College, Philadelphia, Pennsylvania (Dr Tinkoff).

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Correspondence: Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T, Yale New Haven Hospital, 20 York Street (300 George Street 4th floor Room 449), New Haven, CT 06510 (pina.violano@ynhh.org)

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medical and scientific evidence demonstrating that injuries are largely preventable, the United States continues to provide care to a growing number of injured patients in our emergency medical facilities (Sleet et al., 2011). Fundamentally, access to a trauma system providing prehospital care to rehabilitation is among the most important strategies to reduce the burden of injuries (Centers for Disease Control and Prevention, 2011, Committee on Trauma American College of Surgeons, 2014) and has been credited with a significant reduction in trauma-related mortality and morbidity rate. In addition to this clinical impact, the development of a scientific framework to address injury prevention and surveillance systems to capture injury mechanisms and intent have provided trauma systems exemplary models of coordinated strategies that can alter the social and physical environments, thus fostering the health and safety of communities. Growing evidence demonstrates the effectiveness of these approaches to injury prevention especially when integrated into a

well-functioning trauma system (Committee on Trauma American College of Surgeons, 2014). Successful, trauma center-based injury prevention programs are tailored to the needs of the community they serve, use local injury surveillance data, promote multiagency collaboration, and coordinate existing or develop new local networks (Committee on Trauma American College of Surgeons, 2014).

However, the overall effectiveness of trauma center-based injury prevention program activities is constrained by a number of variables including the wide range of injury types, the variety of possible interventions, the institutional support and funding, and the knowledge and experience of those responsible for the programs—injury prevention coordinators. Injury prevention coordinators are a diverse group of professionals with varied educational and professional backgrounds especially related to public health, advocacy, epidemiology, biostatistics, and research. Furthermore, inconsistencies exist with their job responsibilities, accountability, and authority, and the scope of their responsibilities is often not aligned with the resources available to them to effectively manage their programs (Nilsen, 2004).

While these challenges do not necessarily require the establishment of uniform standards for all trauma center-based injury prevention programs, the development of best practices and sample program elements are essential in establishing validated, high-quality prevention efforts coordinated by trauma center injury prevention programs. Therefore, to provide this educational and professional foundation for injury prevention coordinators, the American Trauma Society, with facilitation by the member organizations of the Trauma Prevention Coalition (TPC), sponsored the development of a core curriculum and introductory course for trauma center-based injury prevention coordinators.

THE “TRAUMA PREVENTION COALITION”

In 2010, during the annual meeting of the American Association for the Surgery of Trauma (AAST), “CAPS on Injury” (Coalition of Associations for Prevention by Surgeons) was conceived by members of the AAST Prevention Committee (later renamed to the Trauma Prevention Coalition). The concept was to establish a coalition of national organizations involved in trauma and injury prevention. These major organizations represent health care professionals involved in acute care of the hospitalized injured patient and have assembled to combine their resources related to the prevention and control of trauma. Through this environment, providers would have access to adequate resources, a forum for collaborative interaction, and models and strategies for effective programmatic development in injury and violence prevention.

Twelve national, trauma prevention-focused organizations comprise the TPC. They include the following:

- **American Trauma Society (ATS):** Professional organization serving as an advocate for the trauma care system, trauma prevention programs, and the victims of trauma and their families throughout the United States.
- **American Association for the Surgery of Trauma (AAST):** Scholarly organization for surgeons dedicated to the field of trauma and the care of critically ill surgical patients.
- **American College of Surgeons—Committee on Trauma (ACS-COT):** Scientific and educational organization of surgeons working to develop and implement education, advocacy, professional development, standards of care, and assessment of outcomes for trauma care in local, regional, national, and international arenas.
- **Eastern Association for the Surgery of Trauma (EAST):** Professional organization focusing on interdisciplinary collaboration, scholarship, fellowship, and developing leadership among young surgeons active in the care of the injured patient.
- **Society of Trauma Nurses (STN):** Professional organization working to ensure optimal trauma care to all people locally, regionally, nationally, and globally through initiatives focused on trauma nurses related to prevention, education, and collaboration with other health care disciplines.
- **Pediatric Trauma Society (PTS):** Professional organization for all health care providers interested in improving outcomes for injured children through development of optimal care guidelines, education, research, and advocacy.
- **Injury Free Coalition for Kids:** Hospital-based, community-oriented programs, whose efforts are anchored in research, education, and advocacy. Currently, the coalition includes 42 sites located in 40 cities, each housed in the trauma centers of their participating institutions.
- **American Academy of Orthopaedic Surgeons/Orthopaedic Trauma Association (AAOS/OTA):** Professional organization of orthopaedists, the medical doctors who specialize in bones, muscles, and joints.
- **ThinkFirst:** Foundation that develops evidence-based programs that assist people in learning to reduce their risk for injury.
- **Trauma Center Association of America (TCAA):** Trade association dedicated to securing the economic viability of trauma centers and systems across the country.
- **Safe States Alliance:** Professional association working to strengthen the practice of injury and violence prevention.
- **Pan-American Trauma Society (PTS):** Professional organization dedicated toward improving

the management of trauma patients among Latin American countries.

Through the collaborative and collective efforts of the coalition's membership, the coalition facilitated and continues to work toward the following priorities:

- Addressing trauma center injury prevention programs based on each organization's unique missions
- Collaborating in injury prevention/control education, research, and advocacy efforts
- Recognizing, promoting, and facilitating the professional development of injury prevention coordinators
- Surveying of injury prevention coordinators to assess their demographics and their educational and professional needs
- Planning for the development of a registry and catalog of the various prevention, as well as intervention programs being supported by trauma center injury prevention programs and their coordinators
- Providing education and guidance regarding the implementation of new criteria associated with the recently released ACS-COT "Resources for Optimal Care of the Injured Patient–2014"
- Providing an annual meeting for academic presentations, networking, and professional development by and for injury prevention professionals

METHODOLOGY

The TPC held a variety of meetings and summits that carefully evaluated the injury prevention coordinator position and demographics of the profession. This process assisted the ATS in the identification and matching of common profession responsibilities with future course objectives to ensure that core competencies were in line with the professional needs of trauma center-based injury prevention coordinators.

In 2014, the Coalition began collaborating on the development and implementation of an injury prevention coordinators course and related curriculum. The Injury Prevention Coordinator's Course (IPCC) was geared toward establishing and developing a formal trauma center-based, multifaceted injury prevention program. Developed by experienced injury prevention professionals from throughout the United States, the program was designed to address key educational segments, including injury and data analysis, education, program development, advocacy, promotion, and adhering to trauma verification guidelines, among others (Table 1). The course and many of these segments include the following objectives:

- Connecting mechanism of injury and injuries with safety interventions for a full understanding of how interventions impact injuries

- Evaluating how injury prevention initiatives are public and population health initiatives and impact communities
- Developing evaluation measures for programs
- Exploring and identifying key sources of injury data (primary and secondary)
- Establishing advocacy efforts to support injury prevention efforts
- Utilizing Logic and Conceptual Models in program planning and identifying interventions
- Understanding the role of published research to inform injury prevention practice and interventions
- Exploring the development of strategic plans to advance injury prevention programs
- Developing explorative and foundational funding plans to support injury prevention programs
- Learning how to initiate, develop, and advance community partnerships

The IPCC was designed to provide a comprehensive educational platform for injury prevention coordinators. The course established and educates on the core competencies coordinators need as foundational knowledge for their profession. It incorporates these competencies over a 2-day period to facilitate an efficient and cost-effective method for educational delivery. (Historically, coordinators relied on a variety of shorter/single session educational programs and/or conferences to obtain this extensive knowledge.) Importantly, the course also sets a national effort to centralize and standardize the education of these professionals to ensure consistency throughout the industry.

| TABLE 1 Two-Day Injury Prevention Course Modules | |
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| Module 1 | Impact of Trauma |
| Module 2 | A Public Health Approach to Injury Prevention |
| Module 3 | Getting Started: Program Evaluation 1st |
| Module 4 | Using Data to Prioritize Prevention Efforts |
| Module 5 | Epidemiology |
| Module 6 | Propelling Your Program Forward: Strategic, Business Planning & Marketing |
| Module 7 | Optimizing Injury Prevention Through Media Partnership |
| Module 8 | Designing Injury Prevention Programs & Interventions |
| Module 9 | Research |
| Module 10 | Funding Your Injury Prevention Programs |
| Module 11 | Building Community Relationships, Partnerships & Coalitions |
| Module 12 | Advocacy |
| Module 13 | Putting It All Together! |

DISCUSSION

The TPC membership requested that the American Trauma Society oversee the development, management, and execution of the course due to ATS's longstanding focus on and commitment to injury-prevention and trauma-related education with nearly 50 years of experience in developing injury prevention programs, resources, and materials to enhance the work of trauma professionals in prevention activities. On March 28, 2015, the dream of a standardized Injury Prevention Coordinator course became a reality, with the first course launched at the Society of Trauma Nurses annual conference in Jacksonville, FL. There were 37 individuals from all over the country in attendance. Since the inaugural course, the ATS has offered an additional seven courses with more than 150 individuals receiving the standardized education with further offerings for the remainder of the year and for the coming years. In addition to the courses, there has been the development of mission-vision statements, sample job descriptions, core competencies as well as the development of a repository that will house resources for injury prevention coordinators to have at their fingertips as they begin or further develop their roles. The ATS's injury prevention coordinator course serves as a baseline credentialing course to meet the needs of the varying levels of experience with injury prevention professionals. Recognizing the ATS's IPC course as the foundation of basic knowledge for professionals who lead trauma center-based injury prevention programs in the same manner that advance trauma life support (ATLS) does for physicians and trauma outcomes and performance improvement course (TOPIC) does for "acute trauma care providers" by providing a common language and approach to injury prevention.

CONCLUSION

As unintentional injury continues to be a leading cause of death and disability for all age groups, a standardized approach to injury prevention coordinator's roles and educational preparation is imperative. The ATS's IPCC provides the basis for core competencies that are necessary to be successful in executing the role. The positive impact on the health and well-being of our trauma patients and the burden on our trauma systems can only benefit from this formal hospital-based, multifaceted injury prevention program approach aligned with the regions and communities they serve.

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KEY POINTS

- Trauma center-based injury prevention professionals are a diverse group with variable education and professional background especially related to public health, advocacy, epidemiology, biostatistics, and research.
- Inconsistencies exist with their job titles, responsibilities, accountability, and authority, as well as the associated professional resources available to them.
- The American Trauma Society's injury prevention coordinator course sets a national effort to centralize and standardize the education of these professionals to ensure consistency throughout the industry.
- The positive impact on the health and well-being of our trauma patients and the burden on our trauma systems can only benefit from this formal hospital-based, multifaceted injury prevention program approach aligned with the regions and communities they serve.

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