Body: As part of its comprehensive outreach program, Stony Brook Trauma Center has been training the public in the Bleeding Control Basic (B-Con) course since October 20, 2016. B-Con was developed in response to the Department of Homeland Security’s Stop the Bleed campaign. Its objective is to teach laypeople to recognize and treat life-threatening bleeding, a public awareness priority outlined by the Hartford Consensus.

The focus of our training has been in schools, municipal transportation hubs, and other high-traffic areas vulnerable to accidents or active shooter incidents. Based on the findings of the Hartford Consensus, which listed educational institutions as the second-most likely environments to experience an active shooter event, the Trauma Center decided to make schools and colleges our primary focus to begin trainings. We had become aware of the importance of this training at a Department of Homeland Security-sponsored trauma forum, which had several public school superintendents as invited guests. Some of whom approached us and expressed the desire for the trauma center to begin training in their districts. Since October, the Trauma Center has trained over 700 school personnel, including superintendents, teachers, custodians, security guards, and nurses in twelve districts. Several of them have committed to training all faculty and staff and have taken the steps to properly equip their schools with commercial bleeding control kits. It is important to note that the Trauma Center has also held numerous B-Con courses in the non-school community, with over 200 people trained in areas of commerce (most likely environment for an active shooter event as per the Hartford Consensus) such as shopping malls, and areas heavy in pedestrian traffic. We have recently begun training staff of the Long Island Railroad and Long Island MacArthur Airport, our nearest major transportation hubs.

B-Con requires resources in order to effectively train participants. Students must demonstrate proper use of commercial tourniquets and hemostatic gauze. Since Stony Brook does not charge for this training, we have relied heavily on equipment donations like CATs (Combat Application Tourniquets) and Quikclot hemostatic gauze are used to supplement equipment supplied by Stony Brook University Hospital.

In order to demonstrate the proper use of hemostatic gauze and procedure for wound-packing, we use trainers with a packable penetrating wound to the upper leg. The trainer uses a blood simulant, which actually clots when packing is performed appropriately. Lastly, we demonstrate how to improvise tourniquets or wound-packing material out of everyday items.

B-Con involves a PowerPoint presentation interspersed with skills training of tourniquets and wound-packing. Our unique team consists of paramedics, trauma surgeons, trauma nurses, and very often a police officer with tactical background. We have found this inter-disciplinary approach very beneficial as questions arise regarding clinical as well as tactical concerns. Course sponsors allot 2 hours for the course, usually on a scheduled meeting or professional development day.

While the curriculum and educational supporting materials are provided free of charge by the American College of Surgeons Committee on Trauma, there are specific costs related to coordinating a quality B-Con course. No grants have been obtained by our Trauma Center intended to utilize for the program, however, some equipment costs were absorbed by the Stony Brook Dept. of Surgery as well as the Stony Brook University Police Department’s Office of Emergency Management. Both departments purchased two task trainers for use in all courses and are
members of our partnership in propagating the training, even assisting with clinical and law enforcement personnel as instructors. Due to the nature of the program, and the DHS being designated as the agency responsible for the Stop the Bleed campaign, it was logical to utilize emergency management funds to support some resources of the program. Local vendors of tourniquets and hemostatic gauze routinely provide products for use in the courses, with the knowledge that the Trauma Center is free of commercial bias and unable to recommend their products specifically. The remaining supplies (roller gauze, gloves, and surgical gowns) are supplied by the hospital.

Stony Brook Trauma Center has achieved nearly 100% feedback using written surveys. Surveys assess participant’s confidence, willingness and likelihood to use the skills if called upon to do so. Many comments refer to the training as being among the best they have experienced professionally. We have learned that laypeople in or community are very willing to help and realize the skills learned are easier to perform than they thought prior to the training. However, challenges remain, including convincing administrators of the value of the training and that it is not only about response to mass casualty incidents.

The Hartford Consensus described institutions with ample resources, such as simulation centers, are optimal to coordinate B-Con. We agree and recommend trauma centers seeking to maximize use of resources and outreach personnel institute B-Con in their communities. In limited resource areas, extend the invitation to local paramedics with Prehospital Trauma Life Support certification to participate. This expands it into a very comprehensive outreach program for both organizations, bringing more of the community together. This is a significant factor for trauma centers seeking American College of Surgeons Verification.