Effective Response to an Active Shooter in Healthcare Facilities

'Secure, Preserve, Fight' has been proposed as an alternative way to respond to active shooters in healthcare settings when 'Run, Hide, Fight' is not possible. Here are the specific details.

Active shooter incidents have been **on the rise** throughout the United States. The most recent FBI data has identified 250 healthcare active shooter incidents between 2000 and 2017, in which 799 people were killed and an additional 1,418 were wounded. In the first half of that period, there was an average of 6.7 incidents per year. That number has tripled to over 20 incidents per year in the second half of that period.

Additionally, the *Annals of Emergency Medicine* published a 2012 study that examined all U.S. hospital shootings between 2000 and 2011 in which there was at least one injured victim. It identified 154 incidents in 40 states causing death or injury to a staggering 235 people. Active shooter events at healthcare facilities are different from schools, shopping malls and commercial businesses for several important reasons:

1. The active shooter's motives usually are much more personal, targeted and focused.
2. Necessary security measures are often harder to undertake.
3. Healthcare providers feel compelled to stay with their patients.
4. Certain patients will die without continued life support in ICUs and operating rooms.
5. Certain areas of hospitals are not easy to harden or evacuate.
6. Most hospitals are organized vertically and rely heavily on elevators.
7. Emergency departments may lockdown or shut down during an event.
8. The violence could end in less than 10 minutes, but the healthcare delivery disruption could be prolonged.
9. Many healthcare shootings occur at entrances or just outside buildings.
10. Healthcare facilities cannot easily shut down for training.

In last summer's excellent article by K.Inaba et.al in the New England Journal of Medicine (NEJM) titled "Active-Shooter Response at a Health Care Facility;' the authors framed a number of key issues that are summarized and updated below.

They say the "run, hide, fight" response to an active shooter may work in many venues and for certain areas of hospitals, but healthcare facilities should consider a different approach for areas where "run, hide, fight" is not possible. Certain caregivers who are caring for vulnerable patient populations such as children, the elderly and those relying on life support systems need an alternative approach. K.Inaba et. al's proposed alternative is for healthcare workers to "secure" the location, "preserve" the life of the patient and oneself and "fight" only if necessary.

HEALTHCARE MUST FOCUS ON PREVENTION AND PREPAREDNESS

The term "left of boom" comes from our military leaders who were dealing with the terrible damage and carnage caused by improvised explosive devices (IEDs) in recent battle campaigns. They realized that they had to move upstream from the events because investing in protective body armor was not enough to save our troops. They began focusing on prevention and preparedness in addition to protection. They also learned from each event using performance improvement strategies. Healthcare organizations must take a "left of boom" approach, no matter what strategic framework they use for active shooter events. Unfortunately, many hospitals and certain outpatient procedural centers are

challenged to disrupt their day-to-day operations for this needed education and training; vital services often cannot be fully interrupted. Some of our healthcare leaders describe that trying to work a "left of boom" strategy into operations while they are providing continuous care is like trying to change a tire while driving down the highway. The "secure, preserve, fight" approach does offer a good strategic framework to reduce potential harm if the work is planned carefully; designed thoughtfully and recurrent training is prioritized.

Some planning steps include:

• Getting entire leadership teams involved in planning.
• Generate accurate facility floor plans for response planning, training and execution. Develop checklists for necessary actions.
• Identify major ingress/ egress points; identify likely pathways for active shooter travel and provide options for visitor/staff/patient evacuation.
• Identify areas that cannot be evacuated and must be defended, such as operating rooms, intensive care units, labor and delivery, and the public procedural rooms where patients are most vulnerable.
• Undertake target hardening and resilience-building in non-evacuation areas to reduce harm to patients and caregivers.
• Integrate local police/fire/EMS with internal emergency personnel in planning/training.
• Identify internal and external rally points or locations where staff can meet for accounting and possible redeployment after the scene is safe.
• Develop advance communication procedures with local law enforcement and EMS assets; practice them periodically.
• Clarify public address announcement statements for when an event mobile units is occurring and when there is an "all clear" - use plain language; practice them periodically.
• Establish recurrent severe bleeding planning challenge that requires security control training across the organization.
• Create and utilize active shooter multimedia materials for on-boarding and recurrent staff training to maintain readiness.
• Develop early warning mechanisms to act on behaviors of concern.
• Consider de-escalation training for staff that interacts with patients

SECURE

The "secure" step would entail immediately securing essential life-sustaining treatment areas by barricading or securing all access points from the inside, turning off nonessential lights and equipment; and silencing phones and pagers.

Other important steps include:

• Train staff in situational awareness and decision-making during a crisis.
• Acquire and train with interior securing or locking devices for access points.
• Deploy electronic or mechanical locking devices.
• Silence device alarms and equipment that may draw attention.
• Place adequate emergency care supplies such as AEDs within non evacuation areas; practice with them regularly.
• Educate and train on evacuation and barricading skills; practice them regularly.
• Stage necessary emergency equipment - such as ballistic shields, evacuation equipment and Go Bags with essential supplies - in fixed locations, in portable packs and on mobile units.

The layout of floors, open spaces and storage areas make every hospital, outpatient surgery center and

clinic a unique planning challenge that requires security teams and caregivers to work together on the best solutions to secure a specific area.

PRESERVE

The "preserve" step includes strategies that reduce the risk for injury, such as staying away from windows and doors, moving patients to shelter if possible, and providing only the essential medical care required to preserve life. The reality of a hospital active shooter event is chaos. Responding law enforcement face a real dilemma: attacking the threat despite the presence of those who cannot evacuate and the challenge of defending those areas if the threat is only contained. Real events never fit the plan. That is why planning and training is so important.

- Educate and train on appropriate triage to optimize survival and care, especially when the ED is not available.
- Practice bystander medical care recurrent training is essential because certain skills decay rapidly.
- Establish protocols for any operative or imaging procedures using damage control principles and an approach to wean anesthetics.
- Truncate any nonessential procedures underway; halt non-emergent care.
- Move patients and caregivers to the most hardened, sheltered areas.
- Educate and train staff on appropriate communication and behavior when law enforcement assets arrive in their area.

Launched in 2015 by the White House, the American College of Surgeons (ACS) Stop the Bleed training program is excellent. All caregivers including clinical, administrative and support staff should receive this training. Non-clinical adults, youth and children are very effectively taught through the Stop the Bleed program to use pressure, tourniquets and wound packing for severe bleeding, which is the leading cause of preventable death from active shooter events.

Most active shooter and stabbing events are over in less than 10 minutes; however, it could take much longer for first responders to get to victims. Victims can bleed out in 3-5 minutes; the majority of victims with severe extremity bleeding can be saved. Staff should be trained in severe bleeding control of injuries they themselves sustain, and how they can care for the severe bleeding of someone else, even if they themselves are injured as well.

Bleeding control kits should be located so that they may be obtained and used within 3 minutes of a major bleeding event. Ideally located next to AEDs and/or stored with prepositioned emergency equipment, these kits are critical to life saving care.

The hospital's Code Team will likely not be able to respond to a call during a violent intruder or active shooter event. Learning and practicing bystander medical care is essential.

FIGHT

As most authors agree, fighting an active shooter is a last resort. Only when one's life or the lives of others is in immediate danger should one attempt to fight off an attacker. If one must fight, some of the important issues are:

- Consider education and training in de-escalation communication principles that can prevent the escalation of physical violence, especially when the active shooter is a spouse or has a personal relationship with the target. Once violence starts, de-escalation techniques are rarely effective.

• Provide education and training in mental and physical preparation for the choices they will have to make if direct contact with an active shooter occurs.
• Consider training staff regarding use of available medical devices and equipment as barriers and defensive weapons.
• Train on evasion skills, and caregivers should be taught how to work with security and law enforcement officers when injured patients, caregivers or police must be moved before the threat is neutralized. If elevators are shut down, narrow stairwells become dangerous choke-points, and staff needs to be aware that active shooters may exploit this issue.

TRAINING SHOULD BE A COMMUNITY AND FAMILY AFFAIR

The best way to be prepared is to have a robust training program for the care of patients in non-evacuation areas and care of injuries inflicted in an active shooter event. These efforts should extend into the community through the relationship networks that make up its fabric.
• The best way to maintain competency is to have your security and medical personnel become bystander care trainers of children, youth and adults in their communities.
• Active instructors who regularly train others have the lowest competency decay. Offering free training for the public affords ongoing readiness in your staff.
• Regular deliberate practice using immersive simulation is critical to maintaining competencies that will be required for the most common scenarios.
• Make sure the local community knows that if there is an active shooter or terrorism event at your clinic or hospital, they should go to the next nearest appropriate hospital for their emergency care.

Inaba, et.al remind us to make sure to have ‘transition of care’ plans to help relieve those staff who have provided care during an active shooter event, to plan for care diversion for those who might need hospital care, and plans for properly moving patients to another facility when needed. They also make the very important case for the psychological first aid of the patients, families and caregivers who were present during the event.

Today, we in healthcare intensely focus on preparedness for and protection during an active shooter event. However, new exciting areas in threat safety science are in primary and secondary prevention. Primary prevention is preventing an event from ever happening by identifying behaviors of concern, early warning signals and the likely high impact scenarios. Secondary prevention is reducing harm far beyond the immediate injuries of victims, such as the potential harm to patients who have had care disrupted by an event.

By leveraging the tools of performance improvement, studying prior events, employing immersive simulation and deliberate training, we can all move "left of boom:'

There are many innovations on the horizon that can save more caregivers and patients who are caught in the uniquely challenging environments of hospitals, outpatient care sites and clinics.

Campus Safety

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Preventing & Responding to Assisted Care Facility Violence:

The International Association for Healthcare Security and Safety (IAHSS) has issued new guidance to help employees in assisted care facilities respond to violence and security issues. Violence against staff members and between residents is common at many of these facilities as dementia and Alzheimer's can often manifest as verbally or physically aggressive behavior.

Nursing and residential care facilities have some of the highest prevalence of non-fatal occupational violence, with a rate of 6.8 per 100 fulltime workers, according to 2015 data from the U.S. Bureau of Labor Statistics. A 2010 study found that 35 percent of nurses who worked in nursing homes with Alzheimer units reported physical injuries resulting from aggression by residents and 12 percent reported a human bite within the previous 12 months.

A survey conducted by IAHSS asked security directors and managers of these types of facilities what their top safety concerns were as follows. The top four include:

1. Resident aggression/violence; -- 2. Public aggression/violence;
3. Theft from residents and staff; & - 4. Elopement/wandering.

Based on these findings, the IAHSS' new guidance outlines the different types of threats within long term care facilities, their security challenges and what can be done to mitigate these threats. There are several internal and external threats that the IAHSS says all assisted living employees should be aware of. Internal threats include assaults on staff, resident-on-resident violence and elopement/missing residents. Of all assisted living claim types, elopement has the second-highest average total of $388,048 per claim. External threats, such as those from visitors or trespassers, also include assault on staff and residents, theft/exploitation and armed intrusion. External assaults on nurses and residents often stem from domestic disturbances, such as a family member unsatisfied with the treatment of their loved one.

Residents with diminished mental capacity or cognitive impairment are also vulnerable to thieves. Many are not cognizant of protecting valuables and are more prone to financial exploitation by family, caregivers, fiduciaries, businesses and scammers. Armed intrusion should also be of concern to employees as many residents have limited mobility and nurses often feel ethically obligated to stay with their patients. As many assisted care facilities do not have a dedicated security department and often rely on untrained personnel, IAHSS says collaboration between security, facility administration and facility staff is crucial.

To mitigate violence, IAHSS recommends implementing a disruptive patient and visitor program. Patients or visitors who have repeatedly caused disturbances should be flagged. Staff should also be given training on de-escalation and how to recognize and remove potential weapons.

To mitigate public violence, customer service training is recommended to help prevent complaints and diffuse potentially hostile encounters. IAHSS also recommends an electronic access control platform, a visitor management system, campus wide video surveillance, panic buttons and a mass communication system. Visitor management, access control and cameras also mitigate thefts. It is recommended that residents and their family members be educated on the importance of protecting valuables. An area with lockers should also be provided for staff members to keep their valuables.

Lastly, IAHSS suggests efforts toward mitigating patient elopement should include:

1. Ensuring staffing levels are sufficient and reflect resident acuity.
2. Performing comprehensive elopement risk assessments.
3. Placing new residents in rooms closer to nursing stations and away from exits.
4. Conducting routine safety rounds, inspecting door locks, alarm systems and camera surveillance.
5. Conducting routine elopement drills and educating all staff about emergency response.

To review the complete guidelines, visit iahss.org.

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