Threat Assessment Strategies to Mitigate Violence in Healthcare

by Sarah J. Henkel
IAHSS Foundation

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INTRODUCTION

The healthcare profession has become one of the most dangerous environments with regard to workplace violence. According to 2014 data provided by the Bureau of Labor Statistics, workers in the healthcare sector experience workplace violence related injuries at an estimated incidence rate of 8.2 per 10,000 full time workers. That is more than four times higher than the rate of 1.7 per 10,000 workers in the private sector overall. For more than 30 years, this trend has been evaluated by researchers in an effort to determine why. More recently, however, much of the research has shifted focus from identifying the root causes of healthcare workplace violence toward identifying and evaluating meaningful strategies for prevention and mitigation. Possible strategies include verbal and physical de-escalation training, clinical huddles, patient flagging, disruptive visitor processes, Zero Tolerance policies and root cause analyses among many others. This article will focus on threat assessment (TA) as a tool for prevention and mitigation.

This article will explore:

- The present state of workplace violence in healthcare
- The regulatory environment that governs the ability of healthcare facilities to protect staff members from violence and respond when it occurs
- The background of TA and its applicability to healthcare
- The process for using TA as a violence management strategy

PRESENT STATE

According to the Bureau of Labor Statistics, 43 out of the 146 fatalities in the healthcare and social service settings that occurred in 2017 were due to assaults and violent acts. Also in 2017, 6,810 injuries occurred from workplace violence incidents in hospitals, 8,960 incidents in nursing or residential care facilities and 2,630 incidents in ambulatory care centers and offices. Up to 80% of nurses do not feel safe in their workplace and between 35% and 80% of hospital staff have been physically assaulted at least once during their careers.

Workplace violence clearly poses a large problem in the healthcare sector, though it may be even larger than it appears. This is due in part to the varied definitions of workplace violence that are used among agencies and researchers who analyze that data. For this article, we will use the National Institute for Occupational Safety and Health (NIOSH)’s definition: “violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty.”

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3 Ann Blouin, Emerging Healthcare Concern: Preventing Workplace Violence, (The Joint Commission, 2016) [online].
There are generally four recognized types of workplace violence, based on the perpetrator of the crime (see Table 1 below). All of these are present in healthcare with Type II – perpetrator is customer – being most prevalent in healthcare over all other sectors.

**Table 1 – Types of Workplace Violence**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Perpetrator has no association with the workplace or employees</td>
<td>Person with criminal intent commits armed robbery</td>
</tr>
<tr>
<td>II.</td>
<td>Perpetrator is a customer or patient of the workplace or employees</td>
<td>Intoxicated patient punches nursing assistant</td>
</tr>
<tr>
<td>III.</td>
<td>Perpetrator is a current or former employee of the workplace</td>
<td>Recently fired employee assaults former supervisor</td>
</tr>
<tr>
<td>IV.</td>
<td>Perpetrator has a personal relationship with employees, none with the organization</td>
<td>Ex-husband assaults ex-wife at her place of work</td>
</tr>
</tbody>
</table>

Several factors elevate the risk of workplace violence for healthcare workers including:

- Increasing use of hospitals by the criminal justice system for criminal holds and the care of acutely disturbed, violent individuals
- Increasing number of acute and chronic mentally ill patients for whom adequate inpatient and follow-up care is not available
- Availability of medication, particularly opioids amidst a national opioid crisis
- Increasing presence of substance abusers
- Distraught family members
- Isolated work with patients during examinations or treatment as well as in the home health setting
- Lack of staff training in recognizing and managing escalating, hostile and assaultive behavior
- A workforce that is predominantly female

Additionally, healthcare is essentially a high stress atmosphere. “Pain, devastating prognoses, unfamiliar surroundings, mind- and mood-altering medications, drugs and disease progression can all cause agitation and violent behaviors.”

Mitigation and prevention strategies generally focus on these risk factors and typically include strong polices, enhanced environmental controls, management support and increased training. One of the pervasive recommendations is adopting a Zero Tolerance policy, meaning that abusive behavior in any manner is not permitted and that severe

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5 Blouin, Emerging Healthcare Concern
consequences will follow all instances including possible dismissal of patients from care. The Zero Tolerance strategy is included in guidance materials from The Joint Commission, the Occupational Safety and Health Administration (OSHA), the National Safety Council and the American Nurses Association.⁸,⁹,¹⁰

There is mounting evidence, however, that Zero Tolerance policies may not work as intended. Such policies may discourage nursing staff from using other available resources to problem solve and may limit how nurses listen to patients.¹¹ In the education field, where the policy is prominent, the results are mixed. The information available suggests the results gleaned from Zero Tolerance policies tend to contradict the goals of reducing violence.¹² Great Britain tried a Zero Tolerance initiative for violence in healthcare in 1999 that was replaced by a different program in 2003. Overall assessment of the program is difficult for a variety of reasons, including a likely increase of incident reporting due to the initiative; however, the overall result appeared to be a 70% increase in violent incidents against healthcare workers over the four year period.¹³ Adhering to Zero Tolerance policies is generally not advised by threat management experts who avoid such language because it implies harsh justice without thorough investigation.”¹⁴

Another commonly recommended strategy – implementing a comprehensive workplace violence program (WVP) – does not appear to have had consistent, positive results on violence incidents either.¹⁵,¹⁶,¹⁷ While these programs can be very successful, they are dependent on commitment from all levels of the organization, especially the top leadership, organizational culture and politics, training components and overall structure of the program. This creates significant variation in program implementation and success across organizations.

TA is one of the less commonly applied strategies for managing violence in healthcare, though it is more common in other at-risk sectors including retail, hospitality and especially education. There is minimal research regarding the use of TA in healthcare specifically, so comparisons must be drawn to similarities with other industries to discuss its applicability. Education is the most similar sector with which to draw comparisons because it also involves vulnerable populations as well as a potentially on-going relationship with the institution.

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⁸ https://www.jcrinc.com/assets/1/7/August_2015.pdf
⁹ https://www.safetyandhealthmagazine.com/articles/zero-tolerance-2
¹¹ Do zero tolerance policies deskill nurses, (Nursing Times, 2014).
¹⁴ Sheridan Ryan, Healthcare Threat Management, 2.
¹⁶ Linda Anderson et. al., An integrative literature review of interventions to reduce violence against emergency department nurses, (Journal of Clinical Nursing, 2010), 2528.
¹⁷ Corinne Peek-Asa, et. al., Workplace Violence Prevention Programs in Hospital Emergency Departments, (Journal of Occupational and Environmental Medicine, 2007), 761.
REGULATORY ENVIRONMENT

Before continuing to evaluate TA as a potential violence mitigation strategy, it is necessary to review the complicated regulatory environment that addresses workplace violence overall. Federal and state agencies, accrediting organizations and international bodies all view and manage workplace violence in differing ways.

Federal

OSHA

The Department of Labor regulates the safety of workers in the United States under the Occupational Safety and Health Act of 1970. OSHA has an online resource center dedicated to prevention and management of workplace violence and an additional website focused solely on the healthcare sector. However, even with the heavy focus, there is no federal workplace violence standard in the OSHA regulations. Violence is currently regulated under the General Duty Clause, Section 5(a)(1) of the Act, which states employers are required to provide a place of employment that is “free from recognized hazards that are causing or are likely to cause death or serious harm.”

OSHA provided initial guidance on how to apply the general duty clause when investigating violence incidents in 2011. During the subsequent years, the agency has leveraged fines against organizations who they found to be in violation.

A recent example of OSHA fines is UHS of Westwood Pembroke, one of the nation's largest healthcare management companies. It operates 350 behavioral health facilities, acute care hospitals, ambulatory centers and freestanding emergency departments in multiple countries. In Boston, Massachusetts, one of its facilities does business as the Lowell Treatment Center, a 41-bed psychiatric hospital that offers inpatient hospitalization and partial hospitalization for adolescents and adults. In May 2015, Lowell was cited for failure to provide a workplace violence program (WVP). As part of a settlement, Lowell agreed to implement a WVP. In January 2017, during a re-inspection, it was determined that Lowell had not implemented the agreed upon WVP and that “employees throughout the Lowell Treatment Center continued to be exposed to incidents of workplace violence that could have been greatly reduced had the employer fully implemented the settlement agreement.”

Lowell was cited for a general duty clause violation for workplace violence with a proposed penalty of $207,690. UHS of Westwood Pembroke is appealing the citation; however, if it is upheld, it will be the largest citation in the U.S. for workplace violence to date.

OSHA has considered whether to develop a new standard specific to violence in healthcare and social assistance workplaces perpetrated by patients and clients. As

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18 https://www.osha.gov/SLTC/workplaceviolence/
20 Occupational Safety and Health Administration, Preventing Workplace Violence in Healthcare, https://www.osha.gov/dsg/hospitals/workplace_violence.html
21 Occupational Safety and Health Administration, Enforcement Procedures for Investigating or Inspecting Workplace Violence Incidents, (OSHA Instruction, directive number: CPL 02-01-052, 2011).
22 Occupational Safety and Health Administration, OSHA Investigation Finds Psychiatric Hospital Workers Remain Exposed to Serious Hazards, (OSHA News Release – Region 1, 2017).
recently as 2016 it was up for consideration, however, no further action has been taken by OSHA to develop the standard.23

**Centers for Medicare and Medicaid (CMS)*/The Joint Commission**

In order for healthcare facilities to receive payment for services from CMS for Medicare and Medicaid patients, they must be accredited. There are several accrediting agencies that work on behalf of CMS, the most prevalent of which is The Joint Commission. Because Medicare and Medicaid make up a large proportion of healthcare payments, complying with standards is a primary focus for healthcare facilities. CMS’s focus is the safety and health of patients. Their regulations say little about worker safety, sometimes putting healthcare workers at risk. In June 2010, The Joint Commission issued its first Sentinel Event Alert related to workplace violence. While the alert has some useful strategies to mitigate the overall risk of violence in a healthcare facility, the focus of the alert is to address assault, rape or homicide of patients perpetrated by staff, visitors, other patients and intruders to the institution.24 In August 2018, *Sentinel Event Alert 59* was issued. This alert acknowledges that healthcare workers are at high risk for workplace violence and provides substantive guidance on how to implement a program and mitigate issues in the workplace. It does not, however, address the conflicting issue of prioritizing the protection of patients over the protection of employees.25

**Legislation**

The U.S. Senate Health Appropriations Subcommittee has recognized the disconnect between OSHA and CMS regulations and is trying to rectify the discrepancy. In a provision in the June 2018 health appropriations bill, CMS and OSHA were asked to issue a joint report to lay clear groundwork for the agencies to collaborate on regulatory guidance for hospital employees.26 Missouri Health Association President Herb Kuhn, who has taken a lead on pushing for federal action, says, “The disconnect between CMS’ and OSHA’s responsibilities make it more complicated for hospital employees to try to de-escalate situations or to manage them without getting penalized. The CMS conditions of participation and certification rules make sure hospitals are taking care of patients and keeping them safe, but they don’t have jurisdiction over hospital employees. That falls to OSHA, under the Labor Department. The point is to at least ask HHS and the Department of Labor to get together…on regulations, so that if employees are accosted there are better ways they can protect themselves.”27 The report was due in April 2019, but it had yet to be released upon publication of this article.

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23 Occupational Safety and Health Administration, *Prevention of Workplace Violence in Healthcare and Social Assistance.* (Federal Register, 2016).
26 Kelly Gooch, Senator, *hospitals seek federal plan to address workplace violence,* (Becker’s Hospital Review, 2019).
The U.S. House of Representatives proposed the Healthcare Workplace Violence Prevention Act in March 2018. This bill, titled H.R. 5223, would have directed OSHA to create a standard that required healthcare facilities to develop and implement specific workplace violence prevention plans. That bill did not move forward, but was reintroduced in February 2019 as H.R. 1309. The current bill “requires the Department of Labor to address workplace violence in the healthcare and social service sectors. Specifically, Labor must promulgate an occupational safety and health standard that requires certain employers in the health care and social service sectors, as well as employers in sectors that conduct activities similar to the activities in the health care and social service sectors, to develop and implement a comprehensive plan for protecting health care workers, social service workers, and other personnel from workplace violence.”

In addition, employers must investigate workplace violence incidents, risks, or hazards; provide training and education to employees; and, meet record keeping requirements. The bill also prohibits acts of discrimination or retaliation against employees for reporting workplace violence incidents, threats or concerns.

As of the publication of this article, H.R. 1309 remains in committee and has not been brought to a vote.

State

Several states have enacted specific legislation to address workplace violence in healthcare in the absence of federal regulations. The focus of state legislation is in one of two areas – either to mandate that employers develop a workplace violence program and/or to include healthcare workers in statutes previously designated for first responders that carry an increased penalty for assault.

California, Connecticut, Illinois, Maryland, Minnesota, New Jersey, Oregon and Washington each require employer run workplace violence programs. New York requires a program for public employers only. There are several states that have established heightened penalties for assaults on nurses, sometimes including other healthcare workers. A few of these states (notated with an asterisk) apply only to specific settings such as the emergency department or a behavioral health unit. States include Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida*, Georgia*, Hawaii*, Idaho, Illinois, Iowa, Kansas*, Kentucky*, Louisiana, Mississippi*, Missouri, Montana, Nebraska, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma*, Oregon, Rhode Island, South Dakota*, Tennessee, Texas, Utah, Vermont, Virginia and West Virginia.

California has the most comprehensive legislation pertaining to healthcare. Effective in April 2017, S.B. 1299 required hospitals to develop, adopt and train employees on comprehensive workplace violence prevention plans. Some of the many requirements include maintaining a violent incident log, making records available to Cal/OSHA and

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29 All efforts to accurately capture state laws have been made, but due to a constantly changing environment, exclusions and/or errors are possible.
employees upon request and reporting violent incidents to Cal/OSHA. Organizations must also develop and implement procedures to identify environmental and patient-specific risk-factors; correct workplace violence hazards, including engineering and work practice controls; and, conduct post-incident response and investigation, including providing trauma counseling to employees.\(^{31}\)

**International Considerations**

Workplace violence is not just a problem in the United States. It affects workplaces all over the world with issues like bullying and harassment in addition to assault. Healthcare workers are at heightened risk in other countries as well;\(^{32}\) however, there appears to be little legislation globally addressing the healthcare sector specifically. Table 2 (on the following page) provides some information about the protections from violence for workers in Canada and Great Britain as an example of international laws.

Perhaps the greatest progress addressing workplace violence globally was a new convention by the International Labor Organization to combat workplace violence and harassment. The convention, adopted in June 2019, acknowledges that violence and harassment at work constitute human rights violations and threaten equal opportunities.\(^{33}\) Governments that ratify the treaty must develop national laws prohibiting workplace violence and implement preventive measures, such as educational campaigns and require companies to have workplace policies addressing violence. Governments must also monitor the issue and provide complaint mechanisms, witness protection measures and victim services.\(^{34}\)

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Table 2 – International Workplace Violence Regulations

<table>
<thead>
<tr>
<th>Law &amp; Regulation Reference(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada</strong>³⁵,³⁶</td>
<td>Most Canadian jurisdictions have a “general duty provision” in their Occupational Health &amp; Safety legislation which requires employers to take all reasonable precautions to protect the health and safety of employees. This includes protecting employees from a known risk of workplace violence. In jurisdictions that do not have explicit legislation dealing with violence in the workplace, the general duties of an employer under the Canadian Labour Code would apply. There are more specific laws in the all territories and provinces except Yukon.</td>
</tr>
<tr>
<td>Canada Labour Code, Part II R.S.C. 1985, c. L-2 Part II, “Occupational Health and Safety” “Duties of Employers” Section 124, “General duty of employer” Section 125, “Specific duties of employer”; Subsection 125(z.16) Canada Occupational Health and Safety Regulations, SOR/86-304 Part XX, “Violence Prevention in the Workplace” Proposed: Workplace Harassment and Violence Prevention Regulations</td>
<td>There is also a proposed new stand-alone Workplace Harassment and Violence Prevention Regulations that would apply to all federal workplaces covered under Part II of the Canada Labour Code. The new regulations would replace Part XX (the violence prevention section) of the Canada Occupational Health and Safety Regulations, as well as portions of two other regulations that include violence prevention provisions. The proposed regulations would include provisions to prevent harassment and violence through comprehensive policies, training, and improved data collection; respond to occurrences through a resolution process that requires communication and provides options for resolution; and make support service information available to employees.</td>
</tr>
<tr>
<td><strong>Great Britain</strong>³⁷</td>
<td>Employers have a legal duty under this Act to ensure, so far as is reasonably practicable, the health, safety and welfare of their workers when at work. Under this Act, employers must consider the risks to workers (including the risk of reasonably foreseeable violence); decide how significant these risks are; decide what to do to prevent or control the risks; and develop a clear management plan to achieve this. Introduced a new offence, so that companies and organizations can be found guilty of corporate manslaughter as a result of serious management failures resulting in a gross breach of a duty of care, i.e. where serious failures in the management of health and safety result in a fatality.</td>
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</tbody>
</table>

**BACKGROUND OF THREAT ASSESSMENT**

It is clear that workplace violence, specifically in healthcare, is an issue that governments and regulatory bodies are struggling to address. Even with guidance, recommendations and legislation, much of the onus falls on the individual organization to create a strategy to manage workplace violence. One such strategy is to develop a thorough TA team and process.

³⁵ Malini Vijaykumar & Jason Hanson, Impending federal regulations on workplace violence and harassment, (Osler, 2019).
³⁶ http://ccinfoweb2.ccohs.ca/legislation/documents/notes/oshleg/leg_viol.htm
³⁷ Preventing Workplace Harassment and Violence: Joint guidance implementing a European social partner agreement, (Health and Safety Executive, et. al.).
There are significant differences between risk assessment (RA) and TA, although the terms are sometimes used interchangeably. According to Randazzo and Cameron, “violence risk assessment – also referred to as clinical assessment of dangerousness – is a process used by trained professionals to evaluate the likelihood that a particular person will engage in general violence. Risk assessment is based upon empirical research on the prevalence of general/impulsive violence in particular populations, as well as on individual factors that are statistically correlated with violent behaviors.” Beginning with a base rate and then adjusting based on associated risk factors, the assessor arrives at an estimate of risk, typically expressed as low, medium or high.\(^{38}\)

TA, on the other hand, is a behavioral-based, deductive process. Randazzo and Cameron write that it is typically conducted by a team and comprised of four components: learning of a person who may pose a threat, investigating that person, evaluating whether the person poses a threat to others and developing and implementing a plan to reduce the threat.

The concept of TA was developed by the U.S. Secret Service as a means to evaluate potential threats against the President. The process was based on the Exceptional Case Study Project (ECSP), which analyzed the characteristics, actions and behaviors of people who had carried out attacks on public figures. The analysis of these individuals showed that risk factors for general violence, such as a history of violence, were often not present; however, other indicators such as plans for harm and communications to others indicating a desire to attack were.\(^{39}\) The primary premise of TA is that targeted violence is the result of an understandable and often discernible process of thinking and behavior. Acts of targeted violence are rarely impulsive or spontaneous; therefore, there are opportunities to recognize, investigate and mitigate the threat before violent action occurs.\(^{40}\)

The information gleaned from the ECSP allowed the Secret Service to develop the TA process and produce a guide to behavioral-based TA for targeted attacks in the late 1990’s. Following its publication, there was enormous demand from law enforcement agencies to apply the guidelines. This led to the development of the National Threat Assessment Center.\(^{41}\) Businesses and private entities then began to adapt the model to their environments.

TA continued to develop following the Columbine shooting in the United States in 1999 and a major school shooting in Taber, Alberta, Canada the subsequent week. The Secret Service collaborated with the U.S. Department of Education on the Safe School Initiative (SSI), creating further research and bringing an amended TA model to the K-12 school system.\(^{42}\) Following the Virginia Tech shooting in 2007, TA was brought into colleges


\(^{39}\) Ibid., 280-281.


\(^{41}\) https://www.secretservice.gov/protection/ntac/

\(^{42}\) Randazzo & Cameron, *From Presidential Protection to Campus Security*, 282.
and other post-secondary education settings. The state of Virginia went as far as to enact a law requiring all colleges and universities to have TA teams.

There are several key principles in TA that were derived from the ECSP and SSI. These include:

- Targeted attacks are rarely sudden, impulsive acts
- Prior to the attacks, others often knew about the attacker's idea/plan
- Most attackers did not threaten their targets directly prior to the attack
- There is no accurate or useful “profile” of a targeted shooter
- Most attackers had difficulty coping with significant losses or failures
- Most attackers had behaved in a way that concerned others in their lives
- Prior to the attack, many attackers felt bullied, persecuted or injured
- Most attackers had access to and had used weapons prior to the attack

### APPLICABILITY TO HEALTHCARE

There is an abundance of research and a variety of tools for conducting and applying violence RA in healthcare, but that is not the case for TA. In fact, no research was identified specifically applying TA to the healthcare field. In general, there is minimal research on using TA in private industry aside from education, and the research that has been conducted is difficult to find. Mitchell and Palk conducted a comprehensive literature review on TA published in 2016 finding that only about half of the 66 relevant articles were found via literature review. The other half were found by analyzing recommended readings from the websites of chapters of the Association of Threat Assessment Professionals.

Even without specific research, TA is a recommended tool for healthcare by the Office of Quality and Patient Safety at The Joint Commission, but the difficulty in accessing information and the lack of healthcare specific research leads to limited application. While TA is not applicable to unintended or reactive violence often seen in the Emergency Department, there are several other situations in healthcare where TA may prove to be a valuable tool as part of a comprehensive violence management program. These situations include stated or implied threats from patients or families, patients who have been violent during a previous visit or admission, intimate partner situations and terminated/disgruntled employees. The significant results that have been achieved in the field of education, which uses the model regularly, warrant additional investigation for application to healthcare.

The following list includes recent examples of targeted violence incidents in healthcare. As this article continues to outline the TA process, consider how it may have assisted in

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43 Vossekuil et. al., Threat Assessment: Assessing the Risk of Targeted Violence, 249.
the management and/or mitigation of the incidents. It is not known if TA was used in any of these cases, which were gleaned from a variety of news sources.

- On June 30, 2017, a disgruntled physician concealing a rifle beneath his lab coat walked into Bronx-Lebanon Hospital Center in Bronx, New York. He killed a physician and wounded six other people before setting himself on fire and shooting himself. The gunman had worked at the hospital for about six months before quitting after being accused of sexual harassment. Years earlier, he was arrested and charged with sexual abuse after assaulting a woman in Manhattan.  

- On March 15, 2018, an employee of UAB Highlands, an affiliate of the University of Alabama at Birmingham, shot and killed a nursing supervisor, wounded a contractor and then committed suicide. The employee was described as “disgruntled” and police determined an “employee relations issue” led to the incident.

- On July 20, 2018, a prominent surgeon was killed while riding his bike to work at Texas Medical Center in Houston, Texas. The gunman appears to have had a grudge over the death of his mother during surgery by the physician 20 years prior.

- On October 15, 2018 an employee of Kadlec Regional Medical Center in Richland, Washington, walked into the facility with a gun. He was verbally suicidal and threatened to kill multiple people before fleeing the area. He was later peacefully arrested.

- On November 19, 2018, a shooting took place at the Mercy Hospital and Medical Center in Chicago, Illinois. An attending physician at the hospital, a police officer, a pharmacy resident, and the perpetrator were killed. The incident began in the parking lot of the hospital when the gunman, who was the ex-fiancé of the physician, demanded she return an engagement ring. The doctor was killed in the parking lot, then the gunman continued into the hospital and shot others. It was later determined that five years prior to the incident, the gunman had threatened a shooting at the Chicago Fire Academy after he had been terminated as a trainee for aggressive and improper conduct toward women. In 2014, the gunman’s wife at the time filed a petition for an order of protection against him, alleging threats and harassment.

- In April, 2019, a 54-year-old patient in the inpatient behavioral health unit at Baton Rouge General Medical Center began attacking a nurse. A second nurse intervened to assist and the patient attacked her as well, causing her to injure her right leg and strike her head on a desk. The injured nurse was treated and

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47 Alabama hospital gunman identified as disgruntled employee, authorities say, (CBS, 2018) [online].  
48 Doug Stanglin, *Suspect in murder of former George H.W. Bush’s doctor was patient’s son who held grudge over mother’s death, police say*, (USA Today, 2018) [online].  
49 Elaine Sheriff, *Man who threatened to shoot Kadlec employees works at hospital*, (KEPR TV, 2018) [online].  
50 https://en.wikipedia.org/wiki/Mercy_Hospital_shooting
released from the ER but died the following week from blood clots resulting from the attack. The patient has been charged with manslaughter.  

- On June 19, 2019, a recently terminated employee made threats to open fire at Methodist Specialty & Transplant Hospital in San Antonio, Texas. He told a co-worker he was going to “shoot everyone inside for firing him.” On June 20, someone threw a liquor bottle through the entrance window of the hospital and a man matching the description of the terminated employee was seen in the area. The man was arrested and charged with making a terroristic threat.

COMPONENTS OF THREAT ASSESSMENT

Creating the Team

The first step in creating a TA process is developing a team. The after action reports following many targeted violence incidents have shown that there was scattered information among many people and agencies over months and even years prior to the incident. Coordinating that information would have led to a better overall picture of the threat and may have prevented the incident from occurring. The TA team must be multi-disciplinary to ensure communication across all relevant departments in the organization and should include, at a minimum, representatives from security, human resources, legal, risk, front line supervisors from areas with the highest risk and mental health professionals. Additional internal team members to consider include labor union representatives, if applicable, patient advocates and employee educators/trainers. The most essential external team members are local law enforcement.

The healthcare sector has a clear advantage in team development in that various mental health personnel are often employed within the healthcare organization. Individuals who are the subject of a TA may have history with the mental health services of the organization. This relationship could give mental health professionals valuable insight into the potential threat an individual may pose and his/her previous behaviors. Local law enforcement is also a critical component of the team. Law enforcement will be able to bring information about an individual’s behavior in the community, previous dealings with law enforcement and outstanding legal actions, if applicable. They may also have information about ownership or access to weapons.

No specific guidance was found on how often the TA team should meet. This decision should be based on the needs and size of the organization and the volume of potential threats requiring attention. Some organizations schedule TA teams to meet on a quarterly, monthly or even weekly basis while others convene only when a potential threat is identified.

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51 Steven Porter, Patient Faces Arrest for Attack That Killed Louisiana Nurse, (Health Leaders Media, 2017) [online].
52 Maritza Salazar, Man accused of threatening to open fire at San Antonio hospital after he was fired, (News4SA, 2019) [online].
53 Rick Shaw, Workplace Violence Threat Assessment Teams & Dangerous Disconnects, (Awareity.com, 2016)
55 Ron Wyatt et. al., Workplace Violence in Health Care, 1038.
Identification

Probably the most crucial step in TA is identifying that a potential threat exists. Proactive identification of threats provides the organization the opportunity to intervene before there is a crisis. To ensure that reporting happens, organizations must have a clear process for how to report behaviors of concern and what types of behavior should be reported. Employees cannot be afraid to make a report. Managers must not feel threatened that their effectiveness may be questioned. Those who are victims of stalking, harassment or intimate partner violence cannot fear co-worker retaliation or potential job loss.56

Most importantly, organizations must create a culture of reporting in order to best detect threats. Employees must not be afraid to report threatening behavior and know where and what to report. To achieve a culture of reporting, The Joint Commission recommends:

- Leadership must commit to and visibly support an environment with a goal of zero harm from violence to patients and staff
- Emphasize the importance of reporting all events involving physical and verbal aggression, no matter how small they may seem
- Encourage conversations about workplace violence during daily unit huddles, including team leaders asking if any team members have been victims of physical or verbal abuse or if any patients or family situations may pose a heightened risk for violence
- Provide a protocol for how to report threats and concerning behavior and to whom
- Create simple, trusted and secure reporting systems57

Employees may be reluctant, unwilling, or unsure about reporting potential violence, threats or abnormal behavior. Anonymous surveys or an anonymous reporting tool should also be provided to give employees a means to identify situations that they are uncomfortable reporting directly to management.58

Investigation & Assessment

When a threat has been made, identified or reported, the TA team must determine whether an actual threat is posed. J. Reid Meloy et. al state that “in the workplace context, communicated threats per se, although they should always be taken seriously, are not very accurate predictors of violent outcomes. Threats may indicate actual intent—a crucial risk factor—but statistically they more commonly have other purposes or meanings; for example, to ventilate frustration (“I could just kill my boss!”), to manipulate others (“You’ll be sorry if I’m ever demoted”), or to get attention (“I would never do it, but I can understand a guy coming in and shooting up his workplace”).59

57 The Joint Commission, Sentinel Event Alert:59.
58 Kenny, Risk Assessment and Management Teams, 163.
When investigating a potential threat, there are several key questions that the team should consider:\textsuperscript{60,61}

1. **What motivated the subject to make the statement or take the action which caused him or her to come to the teams’ attention?**

2. **Has the subject communicated with anyone concerning his or her intentions?**
   
   Many attackers do not write or communicate a specific threat to the target. Often, though, they let someone know about their intentions or write their intentions in a diary or journal before they act on violent ideations. This was a significant finding in the ECSP. Scrutiny of a subject’s social media communications and posts may provide important information about the subject’s thinking, planning and intentions. As mentioned previously, many attackers think about an attack in the months and even years before they formulate plans for such an attack.

3. **Has the subject shown inappropriate interest in assassins, weapons, militant ideas or mass murders?**

4. **Is there evidence that the subject has engaged in attack-related behavior targeting someone in the organization?**
   
   Attack-related behaviors may include having a plan, making efforts to acquire or practice with weapons, casing possible sites for an attack and rehearsing.

5. **Does the subject have a history of mental illness involving command hallucinations, delusional ideas, feelings of persecution, etc.?**
   
   Mental illness alone is not a key factor in predicting attacks; however, there are particular mental issues that should raise flags for the TA team. There does appear to be an increased probability of violence related to substance abuse, particularly alcohol.\textsuperscript{62,63} Additionally, subjects who have command hallucinations with a history of taking action on commands as well as individuals who suffer from paranoid delusions may pose a greater risk.\textsuperscript{64}

6. **Does the subject have the ability to plan and execute a violent action?**

7. **Is there evidence that the subject is experiencing hopelessness, desperation and/or despair?**
   
   Has the subject experienced a recent loss or loss of status? Is the subject now, or has the subject ever been, suicidal? A person who feels hopeless and/or desperate should

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\textsuperscript{60} Doherty, *From protective intelligence to threat assessment*, 12
\textsuperscript{64} Ibid.
be viewed with high concern. Major life losses and traumas such as the ending of a relationship, losing a job, failing in an activity of importance, loss of a family member and other life changes may have caused distress or humiliation for the subject. Subjects may come to believe that an attack will bring an end to their suffering. A subject who appears to be currently suicidal should be assessed with particular care.

8. Is what the subject says consistent with his or her actions?

9. Is there concern among those who know the subject that he or she might take action based on inappropriate ideas?

10. Are there factors in the subject’s life or environment which might increase or decrease the likelihood of the subject attempting an attack?

A TA investigation is designed to answer two fundamental questions: does the subject currently pose a threat and are there foreseeable circumstances under which the subject might pose a threat? The process must be dynamic in that new information may become available and lead to different conclusions.

There are a variety of commercially-available tools to aid in the TA process, though many are designed for K-12 schools and college campuses specifically. The National Behavioral Intervention Team (NaBITA) has created several including the Extremist Risk Intervention Scale (ERIS) and the Structured Interview for Violence Risk Assessment (SIVRA-35). While similarities can be drawn between college campuses and healthcare campuses, there are enough differences that adapting one of these tools to healthcare or workplace violence would be challenging.

There are no tools available specific to workplace violence in the healthcare setting; however, there is one that is specific to the workplace – The Workplace Assessment for Violence Risk (WAVR-21). This validated tool is a structured professional judgment guide for the assessment of workplace targeted violence. The instrument, which was developed beginning in 2004, contains 21 risk factors, both static and dynamic. The first five risk factors (noted 1 thru 5 in Table 3 on the following page) are considered “red flag indicators due to their proximal, if not causal relationship to targeted violence.”

The instrument is accompanied by a manual with key assessment questions, behavioral risk indicators and additional references for further research.

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65 Meloy et. al, The Development and Reliability of the WAVR-21*, 1355.
66 https://www.wavr21.com/
Table 3 – WAVR-21 Risk Factors

| 2. Homicidal ideas, violent fantasies or preoccupations | 13. Depression and suicidality |
| 3. Violent intentions and expressed threats   | 14. Paranoia and other psychotic symptoms |
| 4. Weapons skill and access                   | 15. Substance abuse                 |
| 5. Pre-attack planning and preparation        | 16. Isolation                       |
| 6. Stalking or menacing behavior              | 17. History of violence, criminality and conflict |
| 7. Current job problems                       | 18. Domestic/intimate partner violence |
| 8. Extreme job attachment                     | 19. Situational and organizational contributors to violence |
| 9. Loss, personal stressors and negative coping | 20. Stabilizers and buffers against violence |
| 10. Entitlement and other negative traits     | 21. Organizational impact of real or perceived threats |
| 11. Lack of conscience and irresponsibility  |                                      |

There are also tools specific to evaluating intimate partner violence threats which can affect any workplace, though this may be especially true in healthcare. According to the Bureau of Justice Statistics, 85% of intimate partner violence is directed toward women and healthcare is a female dominated industry. In a study that surveyed 1,981 nurses and nursing personnel, just over 25% reported experiencing intimate partner violence. Intimate partner violence often spills over into the workplace when a victim is harassed, receives threatening phone calls or experiences violence while at work. According to Workplaces Respond, a national resource center for intimate partner and sexual violence, approximately 24% of workplace violence is related to personal relationships, typically perpetrated by a current or former intimate partner. According to the U.S. Department of Justice, between four and five women on average are murdered each day by their husbands or boyfriends and nearly 33% of women killed in U.S. workplaces between 2003-2008 were killed by a current or former intimate partner.

One tool for evaluating the intimate partner violence threats is the Spousal Assault Risk Assessment Guide (SARA). The SARA is a structured approach to guide and enhance professional judgments about risk. It is composed of 20 items that were selected based on a review of empirical research and relevant legal and clinical issues. Like the WAVR-21, items evaluated are both static and dynamic in nature. Each of the 20 items is coded on a 3-point scale (0 = absent, 1 = subthreshold, 2 = present), according to detailed criteria. The assessor then determines whether any items are considered critical in that they are sufficient on their own to indicate that the individual poses an imminent risk of harm. Once complete, the situation is rated as low, moderate or high risk. There is a limited amount of research on the tool itself, but that which is available indicates it has adequate reliability and validity.

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67 Michelle Irene Bracken, et. al., Intimate Partner Violence and Abuse among Female Nurses and Nursing Personnel: Prevalence and Risk Factors, (Issues with Mental Health Nursing, 2010), 137, 141.
70 Ibid.
Another tool for assessing intimate partner risk is the Danger Assessment (DA) originally developed in 1985. The DA is an instrument that helps to determine the level of danger an abused woman has of being killed by her intimate partner. There are two parts to the tool: a calendar and a 20-item scoring instrument. The calendar helps to assess severity and frequency of battering during the past year. The woman is asked to mark the approximate days when physically abusive incidents occurred, and to rank the severity of the incident on a 1 to 5. The 20-item instrument uses a weighted system to score yes/no responses to risk factors associated with intimate partner homicide. Some of the risk factors include past death threats, partner’s employment status, and partner’s access to a firearm. A 2005 grant based research project funded through the Department of Justice determined that the DA had the highest correlations with subsequent intimate partner abuse compared with the three other tools that were evaluated.

Mitigation & Management

Once a threat has been identified, investigated and assessed, the final component of TA is management and mitigation. These strategies are broken down in different ways but usually involve approaches for low, moderate and high risk threats; approaches related to the perpetrator of the violence such as intimate partner or disgruntled employee; or a combination of the two. This article will group mitigation strategies by the types of violence that were described in Table 1.

General Strategies (applicable to all types)

- Coach employees who may be confronted by potentially aggressive individuals. The employees should be encouraged to remain calm, show respect and use active listening skills. In addition, they should not use challenging or apathetic communication that can further agitate the aggressor and contribute to the escalation of violence. Consider providing de-escalation training for staff.

- Incidents involving a clear law violation should be referred to law enforcement for investigation and possible legal action. The TA team should carefully weigh the potential risks and benefits of requesting law enforcement consultation for issues that do not presently involve violation of the law because involving law enforcement may escalate a situation.

- Some unusual, inappropriate, but not immediately dangerous behaviors can often be addressed by securing the assistance from family, friends, neighbors or co-workers.

- Organizations must sensitize all employees to recognize warning signs and how to assist employees and customers who are stressed, suicidal, burned out, or experiencing severe personal problems before they reach the breaking point. Have

71 https://www.dangerassessment.org/DA.aspx
materials available to provide referrals to employee assistance programs, rape crisis centers, intimate partner violence counselors and mental health agencies.\textsuperscript{73}

**Type 1 (someone unassociated with the organization)**

TA would not be applicable to this type of violence. This type is best managed through RA and engineering controls.

**Type 2 (client/customer)**

- Implement a patient flagging process. Patient flagging is quickly becoming a best practice to mitigate patient/family violence. A patient safety flag is an alert, typically within the electronic health record, that notifies staff that the patient is potentially a safety risk due to a history of violent/threatening behavior. The International Association for Healthcare Security and Safety (IAHSS) guidelines recommend three levels: awareness, immediate threat and termination from care.\textsuperscript{74} An acute care plan should accompany any flag placed. The plan should describe steps staff can take to maintain safety specific to the patient, such as entering the room slowly, avoiding loud noises, specific gender preference for care, triggers for aggression, etc. The flag itself is only an alert for staff of a potential history of threats or violence but will not, by itself, make staff safer. Working together to proactively plan for each patient situation for optimal staff protection is the best way to maintain safety.\textsuperscript{75}

- Take angry complaints about the care of family members seriously, especially if there is a bad outcome. These complaints should be thoroughly investigated and referred to Patient Advocacy or Case Management as appropriate.\textsuperscript{76}

- Develop a Rapid Response Team. If a patient has had previous violent encounters with staff or is flagged for violence in the electronic health record, a team should be quickly convened the next time the patient presents for treatment to establish a care management plan. Some hospitals are using this multi-disciplinary team approach with unanticipated violence in addition to targeted violence with excellent results. Though further research is needed in this area, a 240-bed community hospital that implemented a violence rapid response protocol saw a reduction in restraint and seclusion for behavioral health patients from 30\% to 1\%. Fewer instances of restraint and seclusion meant fewer hands-on altercations and fewer staff injuries.\textsuperscript{77}

- Carefully consider whether it is the best course of action to dismiss a patient from a practice. While this might seem like the right approach, it could also further escalate the situation. According to Sheridan Ryan, Associate Director of Risk

\textsuperscript{73} Kenny, *Risk Assessment and Management Teams*, 168

\textsuperscript{74} IAHSS *Violence Management Recommendations Standard*, IAHSS.org

\textsuperscript{75} https://www.brighamandwomensfaulkner.org/about-bwfh/news/patient-safety-flagging-faq


Management at the Medical College of Wisconsin, “A thorough TA investigation may reveal the threatening behavior to be indicative of a new or undertreated medical or psychiatric problem that the provider or other providers in the organization are capable of addressing. Maintaining a treating relationship with the patient can offer the ability to monitor for safety and intervene as warranted.”

- Management plans “may include noninvasive interventions (e.g., conversation with the individual or individuals; written letters expressing behavioral expectations) to more restrictive approaches (e.g., limiting the time, place or manner in which safe and effective health care may be delivered).” Some other mitigation options recommended by IAHSS to include in the management plan are:

  o Environmental changes to the treatment room including removal of all unnecessary equipment and furniture
  o Implement patient search protocols to eliminate any items that might be used as a weapon
  o Thoroughly search and secure any personal property brought into the treatment area
  o Maximize observation and response capabilities by assigning additional staff to the area
  o Create visible or auditory methods to alert non-clinical staff such as dietary or environmental services to the potential for violence
  o Introduce and reinforce behavioral expectations
  o Medically approved patient restraints

Type 3 (terminated or disgruntled employee)

- Terminations are a leading violence trigger. Security should be in the room during termination actions determined to be moderate to high risk to provide a deterrent to violent acting out. Consider supplementing with armed security or law enforcement to bolster this deterrent if not typically available at the organization. Consider a termination policy that allows for terminations to be conducted some place away from the workplace and/or performing high risk terminations by phone and shipping personal belongings.

- Voluntary separation over involuntary termination is an essential risk mitigation strategy. The natural reaction in the face of threats or acts of workplace violence is to immediately fire the offending employee before a complete TA investigation is performed. Firing the offender ensures there is a loss of contact and loss of rapport. Conversely, offering the offender the opportunity to voluntarily resign

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78 Ryan, Healthcare Threat Management, 2.
79 Wyatt et. al., Workplace Violence in Health Care, 1038.
80 Violence Management Recommendations Standard, IAHSS.org
allows the employee to leave with dignity. It also creates a mindset of compassion and being treated with fairness, which may diminish the desire to strike out violently against the organization.\textsuperscript{82}

- Pre-employment and periodic employee background checks should be industry standards. The majority of healthcare workers are subject to a background check when initially joining an organization, but it is not common to repeat those checks throughout their career. An updated background check should be conducted and evaluated by the TA team whenever concerning behavior is being investigated.\textsuperscript{83}

- Disgruntled employees, whether they continue with the organization or separate, should have a formal case file opened and their behavior monitored if they have the potential to be a threat.

- Angry employees are typically knowledgeable of organizational policies and procedures. Keep all non-public entrances locked. Consider door alarms; consider altering procedures if a disgruntled employee is determined to be a high risk for violence.

**Type 4 (intimate partner)**

- Foster a culture that is supportive, respectful, non-judgmental and open. Manage the situation with empathy and respect with a focus on preserving dignity. If the employee feels compassion from the organization, he/she is more likely to share critical information and seek assistance if the situation escalates.

- Establish a confidential helpline (different from compliance hotlines) to which issues can be raised without requiring face-to-face contact with management.

- Meet with threatened employee to offer guidance and support such as moving his/her work location or parking spot, providing portable duress alarms and changing his/her work schedule. Provide information on local and national support resources for intimate partner violence victims and recommendations for enhanced personal safety such as the power in numbers, being alert to the environment, trusting intuition and not establishing patterns. Provide guidance on the legal protections available such as obtaining a restraining order/order of protection; however, be cautious about recommending a particular legal course of action.\textsuperscript{84}

**Ongoing Case Management**

If the TA team determines that a person under review poses a threat of violence to others or suicide, the team should then develop, implement, monitor and document a plan to intervene and reduce the threat. Nolan, Randazzo and Deisinger provided the following advice to the University Risk Management and Insurance Association in 2011. Though

this information was designed for the education sector, it can easily be translated to healthcare.\textsuperscript{85} “The plan should be customized to best address the person of concern and situation with the resources that the team and institution have available or could access or coordinate. The goal of a threat management plan is to help move the person of concern away from thoughts and plans of violence or suicide and get assistance to address problems.”

Threat management/case management plans can include any of the following as the situation and resources dictate:

- Monitor the situation for further developments
- Engage with the person of concern to de-escalate the situation
- Involve an ally or trusted person to monitor the person of concern
- Law enforcement intervention
- Voluntary referral for mental health evaluation and/or treatment
- Involuntary hospitalization for evaluation and/or treatment
- Modification of the environment to mitigate impact of contributory factors
- Collaborate with identified target/victim to decrease vulnerability
- Monitor and prepare for impact of likely precipitating events

The goal of monitoring is to ensure the plan is having the intended effect and not inadvertently making the situation worse. The plan should be monitored and modified as needed for as long as the person/situation may pose a threat. It may be necessary for the TA team to revisit cases in anticipation of future precipitating events such as key dates, personal or career setbacks or the occurrence of violent attacks elsewhere that could prompt the person to become an increased threat. The team should develop contingency plans and take necessary steps to reduce or mitigate the anticipated threats each time this occurs.\textsuperscript{86}

CONCLUSION

Workplace violence in healthcare is a complicated issue and the situation is continuing to worsen. Between 2013 and 2017 there was a 10% increase in the number of injuries in healthcare and social service workplaces stemming from violence. There was a 59% increase in fatalities related to workplace violence in the healthcare sector within that same time frame.\textsuperscript{87} Until there is a deconfliction between OSHA and CMS regulations or a stronger stance taken to develop a workplace violence standard for the healthcare industry, organizations must take it upon themselves to identify and implement viable, evidence-based solutions to manage this trend.

\textsuperscript{86} Ibid., 112.
TA should absolutely be considered as a component of a comprehensive workplace violence management program. Though not applicable to all types of violence, TA is a promising tool for managing targeted threats in the healthcare setting. The multi-disciplinary team approach encourages information sharing and provides a set process to work through what may be a frightening or unusual situation. It addresses the issue of when to involve law enforcement or a mental health professional. It also fosters an environment of support for employees who are in difficult personal situations, which may lead to increased reporting of potentially dangerous behavior.

While TA is prevalent in other industries, especially education, the minimal amount of research and literature dedicated to its use in healthcare limits its application. More research is key to evaluating this technique as a standard component for healthcare workplace violence programs in the future. It is also essential to determining whether a healthcare-specific assessment tool is needed. Until then, the TA process can be easily adapted to provide benefit to healthcare organizations, particularly in using the WAVR-21, SARA and DA tools, which can be used across industries.

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