Survey of Emergency Department Practices in Pennsylvania Hospitals to Protect Patients and Staff

Denise Martindell, RN, JD
Senior Patient Safety Analyst
Pennsylvania Patient Safety Authority

ABSTRACT

The incidence of workplace violence experienced by emergency department (ED) staff is well documented. Protecting ED staff from violent individuals will enable staff to provide safe and optimal care to patients. Equally important are the safeguards that protect patients and visitors from violent acts from any source in the ED. In June 2011, the Pennsylvania Patient Safety Authority conducted a survey to study violence protection practices in Pennsylvania acute care hospitals. The survey also examined potential barriers to compliance. Survey findings showed potential gaps in violence protection practices. For example, mandatory violence prevention training for ED staff was reported by only 36% of respondents. Eighty-seven percent of respondents indicated that the ED did not have a designated area for holding prisoners. Thirty-four percent of respondents reported that hands-free personal communication devices and other communication equipment, such as walkie-talkies, were used in the ED. Ninety-three percent of respondents reported that ED staff did not wear a personal alarm. Gaps in violence protection practices identified through the survey suggest opportunities for improving violence protection practices to increase the safety of both ED staff and patients. At the facility level, awareness of knowledge gaps and/or compliance gaps as compared to best practices will also facilitate targeted allocation of resources. (Pa Patient Saf Advis 2011 Dec;8[4]:126-130.)

INTRODUCTION

The incidence of workplace violence experienced by emergency department (ED) staff is well documented. Reports indicate that nurses experience work-related crime at least twice as often as any other healthcare provider.[1] An Emergency Nurses Association 2009 ED violence surveillance study showed that of 2,907 emergency nurses who reported a violent experience, 54.8% reported having experienced physical violence or verbal abuse from a patient or visitor during a seven-day calendar period. More than half of those reported experiencing more than one incident of patient or visitor violence during this period.[2] Physicians also experience a high rate of violence in the ED. Behnam et al. estimated the rate of violence against ED physicians and residents by surveying residents and faculty ED physicians of 65 randomly selected residency programs nationwide.[3] More than 75% of respondents experienced a violent act while working in the ED. The most common violent acts were verbal threats (75%) followed by physical assaults (21%), confrontations outside the workplace (5%), and stalking (2%). One in 10 was threatened with a weapon (knives or guns). Full-time security was available in most settings (98%), but was least likely to be physically present in patient care areas. The majority of respondent EDs did not screen for weapons (60%) or have metal detectors (62%). Only 16% of programs provided violence workshops, and fewer than 10% offered self-defense training.

A considerable variability in ED security programs has been demonstrated in the literature. A cross-sectional survey of security programs conducted among New Jersey hospitals from 2003 through 2005 examined ED security programs and employee assault rates in EDs with different financial resources, sizes, and background community crime rates.[4] Small hospitals in towns with low community crime rates implemented the fewest security program elements and provided less funding for security programs, despite having the second highest rate of assault-related Occupation Safety and Health Administration (OSHA) recordable injures among ED staff. Large hospitals had lower employee assault rates irrespective of where they were located. The authors conclude that due to the highly stressful workplace characteristics of EDs, the risk of employee assault is likely to be universal among all hospital sizes in all types of communities; therefore, a comprehensive security program is needed in all hospital EDs.[4]

Not only is ED staff exposed to violence, but patients are at risk. A 2010 Joint Commission Sentinel Event Alert advises that patients are at risk from violence entering from outside the hospital.[5] According to security consultant Russell Colling, MS, CHPA, "The most important factor in protecting patients from harm is the caregiver . . . "[5] Accordingly, ED staff must be educated and enabled to protect themselves in order to help ensure a safe environment for patients.

REPORTS TO THE AUTHORITY

A search of the Pennsylvania Patient Safety Authority reporting system database for reports from the ED using words related to violence showed that from 2006 through 2010, Pennsylvania healthcare facilities reported 384 events of violent acts or verbal abuse. This is no doubt an underestimate of the number of relevant reports actually submitted by Pennsylvania hospitals, because most assaults and other potentially criminal events are reported as Infrastructure Failures and are accessible only to the Pennsylvania Department of Health. The 384 events reported as Serious Events and Incidents include 266 (69%) cases of verbal abuse or threats. The remaining 188 events were cases of physical violence in the ED. Of the total events, 3% were reported as a Serious Event. In 85% of the reported Serious Events, the patient sustained an injury.

©2011 Pennsylvania Patient Safety Authority

Both patient and staff were reported injured in three events. Respondents reported that the ED staff responded to these violent events in a number of ways, including summoning security staff or the police department to the ED or using methods to help subdue a violent patient to protect the patient, the staff, and other patients. The Table shows those reported responses to violent events in the ED.

The following are examples of reports submitted to the Authority related to ED violence.

> *A safety security officer responded to the ED for a disorderly patient. Upon arrival, contact was made with ED doctor and nurse practitioner, who reported the patient was at the ED seeking medications for his illness and was threatening staff verbally and yelling and screaming. The doctor reported that there was nothing else the doctor could do for the patient and requested that man be removed from the ED. The man was noted to be yelling, screaming, and using profanity while sitting in the treatment area. The man was asked several times by the undersigned to calm down; however, he refused to do so. The man refused any and all offers of assistance from ED staff and doctors. The man was then escorted from the ED as well as from hospital property.*

> *A patient became belligerent and loud with foul language after an offer of prescription for a non-steroidal medication. Security was called, and the patient demanded to leave with narcotics, while acting violent and swinging his arms at staff. [The patient was] escorted out of the ED by security while maintaining loud verbal abusive language toward staff in the waiting room.*

> *A patient kicked and punched an ED nurse while the patient was being restrained. The patient ripped off the four-point restraints on one side and also pulled out the [intravenous line] in an arm. Security, the nursing supervisor, and the police were called. Per the nurse, "I was kicked in the side and punched on side of the face by patient."*

> *Police officers brought a violent and aggressive patient to the ED. The patient was placed in the observation room of the ED. The patient became violent and punched the seclusion room door. Following this, there was a scuffle between police officers, security, and the patient. The patient was Tasered once. . .*

Table. Response to Violent Events in the Emergency Department (N = 384), Reported to the Pennsylvania Patient Safety Authority, 2006 through 2010

POLICE OFFICERS CALLED TO ED	SECURITY OFFICERS CALLED TO THE ED	USE OF RESTRAINTS	USE OF PEPPER SPRAY	USE OF A TASER®
34 (9%)	84 (22%)	32 (8%)	4 (1%)	2 (<1%)

AUTHORITY SURVEY OF ED VIOLENCE PROTECTION PRACTICES

After analysis of events reported to the Authority, the high incidence of violence against ED staff, and the potential variability of security programs and resources as reported in the literature, the Authority elected to study the implementation of ED violence protection best practices in Pennsylvania acute care hospitals. The Authority developed a survey based on the International Association for Healthcare Security and Safety (IAHSS) safety program in healthcare, OSHA guidelines, and other current literature.[3,4,6-8] Survey content was also developed and reviewed in collaboration with expert ED practitioners and security officers. To increase response rates, the survey was distributed online, accompanied by a letter of endorsement by the Pennsylvania Chapter of the American College of Emergency Physicians. All results are published anonymously in the aggregate.

Methods and Limitations

The Authority distributed online surveys to acute care hospital patient safety officers (PSOs) in June 2011. Of 157 surveys sent to Pennsylvania acute care hospitals, 94 (60%) surveys were returned; of these, 71 (76%) of respondents were identified by a facility-specific numeric code for purposes of analysis. The 71 identifiable individual respondents represent 65 hospitals, or 41% of all hospitals that received a survey. Not all respondents answered each survey question. Response rates are based on actual responses for each individual question.

RESULTS

ED Volume

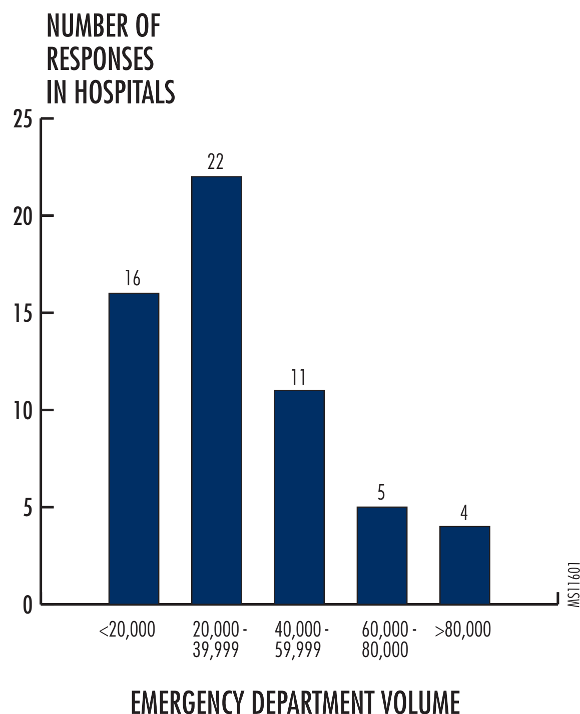
Survey participants were asked about the annual volume of patients treated in the ED. Of the 65 hospitals represented in the survey, representatives of 58 responded to this question. The results are shown in Figure 1.

Individual Participants

Survey participants were asked to identify their job designation (e.g., title). Thirty-nine percent of respondents identified themselves as an ED physician director and 31% as the ED security director. The remaining 30% of respondents represented diverse job titles, such as ED nurse manager, director of nursing, PSO, risk manager, director of support services, or director of clinical operations.

©2011 Pennsylvania Patient Safety Authority

Figure 1. Average Annual Emergency Department Volume, According to Pennsylvania Patient Safety Authority Survey of Violence Prevention Practices, June 2011



ED Security

To ensure security of patients and visitors, hospitals employ security personnel or hire outside security services. Survey respondents were asked about the type, availability, and training of security services available in the ED. Sixty (71%) respondents have security officers that are hospital employees; of those, 31% have security officers that are hospital employees who are available in the ED 24 hours per day, 7 days per week, and more than half (59%) have security officer employees who are not stationed in the ED full time but are available to the ED full time. Fifty-one percent of all respondents reported that ED security officers were required to complete a national training program, such as Management of Aggressive Behavior or Crisis Prevention Institute programs. Survey participants were asked about the use of protective equipment by ED security officers. Ninety-three percent of respondents reported that security officers did not carry firearms. Protective devices used by security officers were pepper foam/spray (22%), batons (10%), conducted energy weapons (e.g., Taser®) (9%), and handcuffs (1%). The remainder of respondents (58%) reported either "unknown" or "none of the above," suggesting that more than half of security officers may not use protective equipment in the ED.

Survey participants were asked about screening practices in the ED for weapons or other potentially dangerous items. The majority of respondents reported that metal detectors (86%) or x-ray scanners (100%) were not used to screen patients, visitors, or belongings. However, 79% of respondents reported that the ED had a written policy and procedure to follow if a weapon or other potentially dangerous item was found in the possession of a patient or visitor. Almost half (48%) of respondents reported that the ED had a policy and procedure to follow if a weapon was fired in the ED.

ED Monitoring and Access

Survey participants were asked questions about monitoring of the ED, including identification of visitors, access to the ED, and the presence of security cameras. More than half of respondents reported that visitors were required to check into the ED (61%), and 23% required visitors to wear a visitor badge for identification. The majority of respondents indicated that access was restricted to the ED; 87% reported restricted access to the ED treatment area from the waiting room, and 74% reported restricted access from the hospital into the ED (e.g., badge required for entrance to the ED from the hospital). Of the respondents that reported the use of security cameras in the ED waiting room (87%), more than half (53%) reported the cameras were monitored 24 hours a day, 7 days a week. When security cameras are used in the ED treatment areas (31%), 40% of respondents reported that the cameras were monitored 24 hours a day, 7 days a week. The lower percentage of respondents that reported the presence and monitoring of security cameras in the ED treatment area compared to monitoring of the ED waiting room may be related to patient privacy concerns.

ED Designated Areas

EDs may have a designated area or separate room for certain patient populations to help ensure the safety of the patient, visitors, and staff. Of note, a majority of respondents (87%) indicated that the ED did not have a designated area for prisoners. The 2010 IAHSS survey describes the increasing number of forensic and psychiatric patients as a growing concern among security professionals because these patients are considered high risk in terms of potential violence and danger to staff.[8] Figure 2 depicts the availability

©2011 Pennsylvania Patient Safety Authority

of a designated area or separate room for categories of patients that may pose a risk to themselves or others.

ED Staff Communication Devices

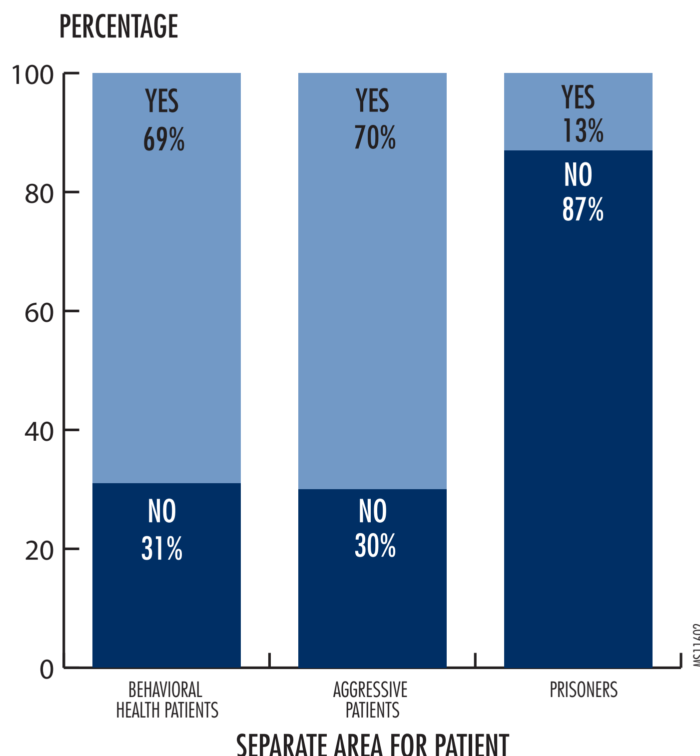
The survey included questions about the availability of personnel protection devices and alarms in the ED. Almost three-quarters of respondents (71%) reported that the ED had panic buttons placed throughout the ED. These devices may be used by ED staff to summon assistance in a situation in which violence is threatened or occurring. Personal communication devices and alarms were generally not available. Only 34% reported that hands-free personal communication devices and other communication equipment, such as walkie-talkies, were used in the ED. Ninety-three percent reported ED staff did not wear a personal alarm.

Self-Defense Training and ED Violence Prevention Programs

According to Blando et al., a significant degree of variability among hospital ED security programs is thought to be due in part to absence of federal legislation requiring baseline security features. Moreover, nationally, OSHA guidelines for the protection of healthcare workers are voluntary.[4] Similarly, results of a survey of workplace violence across 65 U.S. EDs showed that fewer than half the EDs had violence training programs for staff, although little data is available to prove that these programs actually reduce the number of events. The authors conclude that the efficacy of violence prevention programs needs further study.[9]

Authority survey participants were asked about self-defense and violence prevention training for hospital employees and ED staff. Similar to the aforementioned studies, fewer than half of respondents (32%) reported that their hospital offers self-defense training for employees, and 68% responded that their hospital offers violence prevention training to hospital employees. Violence prevention training was reported to be mandatory for ED staff by 36% of respondents.

Figure 2. Emergency Department Designated Patient Areas, According to Pennsylvania Patient Safety Authority Survey of Violence Prevention Practices, June 2011



Participants were asked to choose all barriers to compliance with a violence protection plan that applied. The respondents could choose more than one answer and identified insufficient staff training (70%) and that the time required to comply with the program was prohibitive (70%) as the major barriers, followed by cost factors (65%) and lack of a perceived need to comply due to low volume of violent acts in the ED (48%). Other barriers entered in free-text fields by participants included failure to identify acts of violence, high turnover of ED staff, and lack of approval for the use of metal detectors. More than half of respondents (64%) reported that their hospital has a zero tolerance policy for violence in the ED workplace (e.g., a defined approach to violent patient or visitor behavior, including steps to stop unacceptable behavior and removal of the individual from the ED if required). Fifty-five percent of participants reported that the ED performed a safety assessment within the past year.

RISK REDUCTION STRATEGIES

Survey findings show a number of potential areas for improvement:

- Sixty-nine percent of respondents do not have a security officer available in the ED 24 hours per day, 7 days per week.
- The majority of respondents reported that metal detectors (86%) or x-ray scanners (100%) were not used to screen patients, visitors, or belongings for weapons or other potentially dangerous items.

- Personal communication devices and alarms are generally not available to ED staff. Sixty-six percent of respondents reported that hands-free personal communication devices and other communication equipment, such as walkie-talkies, were not used in the ED. Ninety-three percent reported ED staff did not wear a personal alarm.
- Eighty-seven percent of respondents indicated that the ED did not have a designated area for holding prisoners.
- Thirty-nine percent of respondents reported that violence prevention training was mandatory for ED staff.

The following resources can provide guidance and information on the development of policies and procedures to prevent violence in the ED:

- Emergency Nurses Association Institute for Emergency Nursing Research. Emergency department violence surveillance study [online]. 2010 Aug [cited 2011 Aug 18]. Available from Internet: http://www.ena.org/IENR/Documents/ENAEDVSReportAugust2010.pdf.
- Joint Commission. Preventing violence in the health care setting [online]. Sentinel Event Alert 2010 Jun 3 [cited 2010 Nov 15]. Available from Internet: http://www.jointcommission.org/sentinel_event_alert_issue_45_preventing_violence_in_the_health_care_setting_/.
- Occupational Safety and Health Administration (OSHA). Guidelines for preventing workplace violence for health care & social service workers [online]. [cited 2011 Aug 15]. Available from Internet: http://www.osha.gov/Publications/OSHA3148/osha3148.html .
- Occupational Safety and Health Administration (OSHA). Healthcare wide hazards: workplace violence [Hospital eTool online]. 2008 Mar 6 [cited 2011 Aug 18]. Available from Internet: http://www.osha.gov/SLTC/etools/hospital/hazards/workplaceviolence/viol.html.
- International Association for Healthcare Security and Safety. Healthcare security: basic industry guidelines [online]. [cited 2011 Aug 20]. Available from Internet: http://www.iahss.org/About/Guidelines-Preview.asp.

CONCLUSION

Analysis of events reported to the Authority reporting system database showed that from 2006 through 2010, Pennsylvania healthcare facilities reported 384 events of violent acts or verbal abuse. Although they represent an underestimated number of relevant events actually reported by Pennsylvania hospitals for reasons cited above, the event reports show that staff and patients have been harmed. The Authority's survey was intended to study violence protection practices in Pennsylvania acute care hospitals and has demonstrated a number of potential gaps in those practices that suggest opportunities for improving violence protection practices to increase the safety of both ED staff and patients. Identification of these gaps can also facilitate the development of training programs on a statewide level. The Authority will be publishing additional guidance on gaps in ED violence prevention practices identified by the survey in a future issue of the *Pennsylvania Patient Safety Advisory*.

ACKNOWLEDGMENTS

John J. Kelly, DO, FACEP, FAAEM, FCPP, Albert Einstein Medical Center, and AnnMarie Papa, DNP, RN, CEN, NE-BC, FAEN, Emergency Nurses Association, contributed to the survey design for the data discussed in this article.

NOTES

1. Gallant-Roman MA. Strategies and tools to reduce workplace violence. *AAOHN J.* 2008 Nov;56(11):449-454.
2. Emergency Nurses Association. Emergency department violence surveillance study [online]. 2010 Aug [cited 2011 March 28]. Available from Internet: http://www.ena.org/IENR/Documents/ENAEDVSReportAugust2010.pdf.
3. Behnam M, Tillotson RD, Davis SM, et al. Violence in the emergency department: a national survey of emergency medicine residents and attending physicians. *J Emerg Med* 2011 May;40(5):565-79.
4. Blando JD, McGreevy K, O'Hagan E. Emergency department security programs, community crime, and employee assaults. *J Emerg Med* 2009 Jan 2.
5. Joint Commission. Sentinel Event Alert. Issue 45. Preventing violence in the health care setting [online]. 2010 Jun 3 [cited 2011 Mar 29]. Available from Internet: http://www.jointcommission.org/assets/1/18/SEA_45.PDF.
6. International Association for Healthcare Security and Safety. IAHSS Guideline 02.07 Program Management. Security and Deployment [online]. 2010 Oct [cited 2011 Aug 16]. Available from Internet: http://www.iahss.org/About/Guidelines-Preview.asp.
7. Occupational Safety and Health Administration. Guidelines for preventing workplace violence for health care & social service workers [online]. [cited 2011 Aug 15]. Available from Internet: http://www.osha.gov/Publications/OSHA3148/osha3148.html.
8. Mikow Porto VA, Smith T. The IAHSS 2010 crime and security trends survey. *J Healthc Prot Manage* 2010;26(2):1-23.
9. Kansagra SM, Rao SR, Sullivan AF, et al. A survey of workplace violence across 65 U.S. emergency departments. *Acad Emerg Med* 2008 Dec;15(12):1268-74.

©2011 Pennsylvania Patient Safety Authority

PENNSYLVANIA PATIENT SAFETY ADVISORY

This article is reprinted from the Pennsylvania Patient Safety Advisory, Vol. 8, No. 4—December 2011. The Advisory is a publication of the Pennsylvania Patient Safety Authority, produced by ECRI Institute and ISMP under contract to the Authority. Copyright 2011 by the Pennsylvania Patient Safety Authority. This publication may be reprinted and distributed without restriction, provided it is printed or distributed in its entirety and without alteration. Individual articles may be reprinted in their entirety and without alteration provided the source is clearly attributed.

This publication is disseminated via e-mail. To subscribe, go to http://visitor.constantcontact.com/d.jsp?m=1103390819542&p=oi.

To see other articles or issues of the Advisory, visit our website at http://www.patientsafetyauthority.org. Click on "Patient Safety Advisories" in the left-hand menu bar.

THE PENNSYLVANIA PATIENT SAFETY AUTHORITY AND ITS CONTRACTORS

The Pennsylvania Patient Safety Authority is an independent state agency created by Act 13 of 2002, the Medical Care Availability and Reduction of Error ("Mcare") Act. Consistent with Act 13, ECRI Institute, as contractor for the Authority, is issuing this publication to advise medical facilities of immediate changes that can be instituted to reduce Serious Events and Incidents. For more information about the Pennsylvania Patient Safety Authority, see the Authority's website at http://www.patientsafetyauthority.org.

ECRI Institute, a nonprofit organization, dedicates itself to bringing the discipline of applied scientific research in healthcare to uncover the best approaches to improving patient care. As pioneers in this science for more than 40 years, ECRI Institute marries experience and independence with the objectivity of evidence-based research. More than 5,000 healthcare organizations worldwide rely on ECRI Institute's expertise in patient safety improvement, risk and quality management, and healthcare processes, devices, procedures and drug technology.

The Institute for Safe Medication Practices (ISMP) is an independent, nonprofit organization dedicated solely to medication error prevention and safe medication use. ISMP provides recommendations for the safe use of medications to the healthcare community including healthcare professionals, government agencies, accrediting organizations, and consumers. ISMP's efforts are built on a nonpunitive approach and systems-based solutions.

Scan this code with your mobile device's QR reader to subscribe to receive the Advisory for free.