



**The International Association for Healthcare Security and Safety
and
The International Healthcare Security and Safety Foundation
2012 Crime and Security Trends Survey**

Victoria A. Mikow-Porto, Ph.D., Research & Policy Analytics
Thomas Smith, CHPA, CPP, Director, Hospitals Police and Transportation
University of North Carolina Hospitals

Introduction

On a cold February day in Laurinburg, North Carolina in 2010, a lone gunman critically wounded a man in the emergency department of a local hospital. The gunman was apprehended and told police that he intended “to finish the job” after a fight in a bar several hours prior to the shooting. A more recent event was reported in the Tennessee Chattanooga Times Free Press (January, 2012). There a man entered the local hospital intensive care waiting room and shot two people to death. Royal Canadian Police reported that two people died in a murder-suicide shooting at a healthcare clinic in Newfoundland, Canada in March, 2012.

Examples of homicides and other brutal crimes in healthcare facilities (HCFs) are all too common in the media. In an article recently published by the *Annals of Emergency Medicine* (2012), Kelen, Catlett, Kubit and Hsieh reported that 154 shootings took place inside HCFs and outside on HCF grounds between 2000 and 2011. The 2011 IAHSS Prisoner Escape Study (Mikow-Porto and Smith, 2011), underwritten by the International Healthcare Security and Safety Foundation, used the same search procedures and methodologies to explore the incidence of violence and homicides associated with prisoner escapes from HCFs. In those findings, violence occurred primarily because of removal of restraints by law enforcement or corrections professionals. HCF security professionals were least likely to remove appropriately used restraints. Furthermore, an accumulating body of research evidence (e.g., Colling & York, 2010; Joint Commission on Healthcare Accreditation, 2010; Kavalier & Spiegel, 2003; Kuehn, 2011; MedLaw, 2009; Mikow-Porto & Smith, 2010, 2011; Privitera, Weisman, Cerulli, Tu, & Groman, 2009) shows that more than 98 percent of all HCFs now experience violence and criminal incidents.

Although the public’s view of HCFs is that they are inherently safe and secure, it is not an entirely accurate one. The President for Protective Services (Romagnoli, 2009) of the North Shore-Long Island Jewish Health System stated that “Hospitals have been viewed, generally, by the public, as a sanctuary, much like a church, but some of the violence that is on the streets does make its way to us.” Indeed, ask any director of security at an HCF and he/she will be able to provide ample examples of criminal incidents occurring on his/her campus. An article published by the *New York Times* in 2011 stated that “... administrators and staff members in New York hospitals are very aware that they could be vulnerable to an episode of violence at any time.” Today, crimes, including homicide, are an ever-present reality in HCFs.

Why are HCFs vulnerable to crime? The answers are complex. The healthcare industry has grown rapidly over the past three decades and is now the second largest growth industry in the United States according to the Bureau of Labor Statistics (Henderson, 2012). HCFs have developed complicated infrastructures and networks of services that often cover huge areas and generally maintain 24/7 unrestricted movement and open access to an ever expanding acutely ill patient population whose needs are often difficult and costly. At the same time, the population of patients, staff and visitors has also changed. It increasingly reflects societal issues that include:

rising sales of and access to weapons, gang warfare, deinstitutionalization of the mentally ill who may become unstable or violent, drug and alcohol addiction, the presence of controlled substances in healthcare facilities, and frightened and angry patients or their family members who experience long wait times in emergency departments and are often justifiably worried about their ability to pay for services (The United States Department of Justice, 2009).

Another phenomenon, not widely known by the general public, has contributed to rising rates of violence in HCFs: the provision of medical services to forensic/prisoner patients. The United States Supreme Court, in an interpretation of the Eight Amendment of the US constitution, ruled in 1976 (*Estelle v. Gamble*, 429 US 97) that correctional facilities *must provide necessary medical care* to all incarcerated individuals. As healthcare costs have escalated and state and local budgets tightened, medical treatment in prison- or jail-based healthcare care facilities has been greatly reduced or eliminated altogether. Public HCFs now have major responsibilities in treating forensics/prisoner patients. One of the findings from the 2011 IAHS Prisoner Escape Study, previously cited, showed that transporting and treating such patients involved a high risk for potential escape and violent assault or death perpetrated on healthcare staff, particularly security staff and law enforcement, but patients and visitors as well.

Finally, there are competing philosophies in how to deal with patients, especially unpredictable patients who may become aggressive, violent and/or assaultive. Clinicians, in particular, have been trained to deal with all patients in the “least restrictive” manner. Various regulating agencies such as the Centers for Medicare/Medicaid Services and the Joint Commission on Hospital Accreditation have supported this position in developing policy and procedural guidelines for HCFs, except under “extraordinary circumstances.” This philosophy has led to the consideration in several states, of legislation that will require removal of restraints for pregnant prisoners receiving medical services. As the IAHS Prisoner Escape Study concluded, pregnant female prisoners were likely to attempt escape if the opportunity arose and restraints had been removed.

The philosophical and practical stance of healthcare security professionals, on the other hand, views crime and violence from an institutional security and safety perspective. In general, healthcare security professionals view the use of restraints as a necessary adjunct to handling violent and assaultive patients, regardless of their psychiatric, physical or correctional status. This is important in light of findings from the 2011 IAHS Forensic/Prisoner Patient study that confirmed that forensic/prisoner escapes were most likely to occur when restraints were partially or wholly removed. Healthcare security professionals are concerned with and responsible for maintenance of security and safety for the whole campus, giving them, perhaps, a broader perspective on security issues in HCFs than clinicians.

It is no longer a question of *if* a criminal or violent incident will occur in a healthcare facility; it is a question of *when*. The increasing vulnerability of staff, patients and visitors has led to a mounting need for well-trained security professionals and well-staffed and appropriately designed

healthcare organizations. The questions now confronting security and administrative staff at HCFs are: 1) Where will it happen; 2) What is the responsibility of the security professionals and healthcare facility when it does happen; 3) What can be done to reduce the risk of criminal and violent incidents; and, 4) How does my facility compare to others?

Security and Safety Issues in Healthcare Facilities

Violent attacks in HCFs against staff, patients, or visitors are particularly disturbing. In 2011, the Journal of the American Medical Association (Kuehn, JAMA), released a bulletin voicing growing alarm among physicians who have seen, heard about or personally experienced violent occurrences, including homicides, in HCFs and in private practices. JAMA editors were so concerned, in fact, that they have devoted an entire upcoming 2012 Journal of the American Medical Association to the issue of violence in HCFs. Furthermore, the Occupational Safety and Health Administration (OSHA, 2011) issued its first ever directive instructing its field officers in procedures for conducting inspections in response to workplace violence and deaths, particularly in hospitals. According to that directive, HCFs that do not have a workplace violence prevention program in place may be held fiscally liable for violent incidents.

The frequently cited Sentinel Event Alert, issued in 2010 from the Joint Commission on Accreditation of Health Care Organizations, confirmed that hospitals and healthcare facilities face a significant increase in crimes and violent aggression. In addition, the United States Bureau of Labor Statistics (2008, 2012), the National Institute of Occupational Safety and Health [NIOSH] (2003, 2011); the Journal of the American Medical Association, (2011); Slenko, 2006) studied and reported on findings that also confirm the growing rates of crime and violence in HCFs. This dramatically contrasts to findings that crimes, violence and homicides declined between 1993 and 2010. However, a report just released by the Department of Justice (2012) found that violent crimes rose 18 percent in 2011.

Violence in the healthcare setting is a significant occupational hazard (Hahn, Muller, Needham, Dassen, Kok, & Halfens, 2010). “Compared with all other occupational groups (Hahn, et.al., 2010, p. 3536), healthcare professionals are at higher risk for experiencing workplace violence.” The Bureau of Labor Statistics’ (BLS, 2011) data show that in 2010, 3.63 million workers experienced an injury on the job and 4,690 workers died. Separately, the Occupational Health and Safety Administration (OSHA, 2011) reported similar numbers of worker fatalities. While injuries and deaths declined steadily since the 1990s in the general population, they have steadily increased in the healthcare sector. According to Worker Compensation (2012), sixty-one percent of all assaults are committed by healthcare patients. Workplace homicides from assaults and other violent acts are the third leading cause of death on the job (BLS, 2012). In 2008, a BLS report examining workplace safety from 2003 to 2007 found that nearly 60 percent of all nonfatal assaults and violent acts in U.S. workplace settings occurred in the health care and social

assistance industries. While homicides and shootings in health care settings are rare, there were 73 murders in HFCs, including 20 in hospitals from 1997 through 2009, according to US government figures. A newly released study cited previously (Kelen, et al., 2012) identified 154 shootings that occurred in hospitals only between 2000 and 2011.

The BLS also reported that 48 percent of all non-fatal injuries from occupational assaults and violent acts occurred in healthcare settings. Nurses, nurses' aides, orderlies and attendants suffered the most non-fatal assaults resulting in injury. The rate of injuries by violent assault in 2008 was 11.9 per 1000 in hospitals and 12.5 among nurses compared to 14.8 for firemen and 14.5 for police officers (Bureau of Labor Statistics, 2009). BLS data reported 16 homicides in hospitals and healthcare settings in 2008. Eleven of the healthcare related homicides were by shooting. In comparison, 41 police officers were killed in 2008 (US Department of Justice, FBI Uniform Crime Index, 2009). The BLS also reported a total of 69 homicides in healthcare facilities from 1996-2000. Injuries that occur in HCFs are more frequent, serious, and deadly (OSHA, 2011, ACIS, 2011).

The Department of Justice's National Crime Victimization Survey for 1993 to 1999 lists average annual rates of non-fatal violent crime by occupation. The average annual rate for non-fatal violent crime for all occupations was 12.6 per 1,000 workers. The average annual rate for physicians was 16.2; for nurses, 21.9; for mental health professionals, 68.2; and for mental health custodial workers, 69. Both sources, the Bureau of Labor Statistics and the Department of Justice, reveal similar high risks for healthcare workers.

It is now widely accepted that criminal, violent, and aggressive incidents in HCFs are vastly underreported (the Joint Commission on Accreditation of Healthcare Organizations (2010); Bureau of Labor Statistics (2009, 2010, 2012); the Department of Justice, (2006); the National Institute of Occupational Safety and Health, (2003, 2011). Some researchers (Gates, Gillespie, & Succop, 2011) have speculated the underreporting rate to be fifty to eighty percent whereas the US Department of Justice (2012) suggests that underreporting of violent crimes is 50 percent. As a result, the actual prevalence of violent assaults and criminal incidents is not known. "In general hospitals worldwide (Hahn, et.al. 2010), there is a lack of research-based knowledge regarding patient-visitor violence, its precursors and causes."

Studies have shown that HCF staff (Gillespie, Gates, Miller, & Howard, 2010; Gates, et. al., 2011), particularly nurses in emergency departments are *unlikely* to report all but the most serious violent events. There are a number of reasons for under-reporting. HCFs fear that reporting even a minor crime will result in a poor public image in the highly competitive contest for patients, driving away patients who may have used that particular facility. Under-reporting criminal violence may reflect a lack of institutional awareness, support or reporting policies, employee beliefs that reporting will not benefit them or employee fears that employers may deem assaults the

result of employee negligence or poor job performance.

Administrators are also concerned when a serious incident results in assessment of the HCFS response to the incident by regulating agencies such as the Joint Commission and Medicare, Medicaid Services. Existing policies and procedures may limit the efficacy of security and safety prevention or intervention tactics. Finally, there is widespread evidence that costly and lengthy lawsuits may arise directly from serious criminal violence that result in injuries or death.

A number of studies (Anderson, Fitzgerald, & Luck, 2010; Fernandes, C., Bouthillette, F., Raboud, J., Bullock, L., Moore, C., Christenson, J., Grafstein, E., Rae, S., Ouellet, L., Gillrie, C. & Way, M.; Gacki-Smith, Juarez, Boyett, Homeyer, Robinson, and MacLean, 2010; Kennedy, 2005; McPhaul & Lipscomb, 2004) have been conducted on workplace violence in Emergency Departments. Fernandes, et al., (1999) studied an Emergency Department in a Canadian hospital and its one-hundred sixty three employees using a retrospective survey. Seventy percent of ED employees reported an increased frequency and severity of assaults. Nearly sixty percent of employees had personally been attacked. Few, if any studies have been conducted on crime and violence in multiple HCFs as a whole. Most studies focus on single clinical treatment areas, such as emergency departments. According to Privitera, 2010, “while studies are ... in their infancy in this regard [violence in HCFs], there is increasing attention being paid to the phenomenon of patient, family and visitor violence on staff.

Violence perpetrated on healthcare staff has been shown to have an adverse effect on the quality of patient care (p. 92), psychological and physical well-being among healthcare staff, and job motivation. In healthcare settings where significant crime and violence has occurred, there appears to be a much greater turn-over in staff (Needham, Abderhalden, Halfens, Fischer & Dassen, 2005).

Gacki-Smith, et al. (2010) reported that one-quarter of the 811 nurses in their study reported experiencing physical abuse more than 20 times in the past three years and nearly twenty percent said that they had been verbally abused more than two hundred times during the same period. Those who experienced physical violence were predominantly females working the night and weekend shifts. Nursing staff in emergency departments (ED), intensive care units and psychiatric units are at a particularly high risk of becoming victims of violence. More than 1 in 10 ED nurses surveyed last year said they had been attacked in the previous week, according to the Emergency Nurses Association (2010). A reduced risk of violence in Emergency Departments was associated with policies for reporting violent incidents and having a hospital administration committed to elimination of workplace violence against staff in the Emergency Department.

A review of the literature on workplace violence in Australia (Kennedy, 2005) also found increasing violence in healthcare. In particular, Kennedy discussed findings from two Australian studies that found over sixty percent of nurses in hospitals and other healthcare settings had

experienced violence and aggression. Kennedy stated that violence was ‘nearly universal’ in Emergency Departments with almost ninety percent of nurses reporting physical intimidation or assault and one hundred percent experiencing verbal abuse.

McPhaul and Lipscomb (2004) found that the majority of threats and assaults to nurses in Emergency Departments came from patients or families of patients. Nurses described frustration at being largely unable to prevent incidents from occurring. Lavioe, Carter, Danzi, and Berg (2009) surveyed the Directors of 170 public teaching hospital Emergency Departments. One hundred twenty-seven hospitals (75%) participated in the study. Forty-one hospitals (one-third) reported at least one verbal assault per day and at least one threat that involved the use of a weapon each month in Emergency Departments. Ninety-eight percent of Emergency Departments reported using physical restraints in unruly patients. Of significant interest to security professionals was the finding that only 40 percent of emergency department personnel had any formal training in recognition and management of violence and aggression.

Anderson, et al., (2010) conducted a literature review of all intervention programs used to prevent violence in emergency departments and concluded that there was no strong evidence of efficacy of such programs to reduce violence. They went on to suggest that HCFs should be attending to solutions to violence prevention that are already well-established rather than using non-validated prevention programs.

While most research on patient-visitor violence against healthcare staff has focused on the emergency department, a study of patient and visitor violence in general hospitals in Switzerland (Hahn, et. Al., 2010), showed clinical treatment had little impact on the occurrence of patient and visitor violence. The authors concluded that violence appeared to be influenced more by factors associated with the types of interactions and situations the patients and visitors experienced in the healthcare setting.

An additional problem inheres in crime and violence in HCFs: there is no single standard definition of violence in the healthcare setting. As the authors of the Parliament of Victoria Canada’s inquires into violence noted: “One of the difficulties in addressing violence and aggression particularly in the hospital or healthcare setting is that they are not easy to define” (Parliament of Victoria, December, 2011). The lack of standardization of definitions has consequences for reporting such incidents. The IAHS crime studies used the US Federal Bureau of Investigation’s definitions for crimes and violence to measure such events, but it is not known whether the definitions are used by HCFs in their own reporting systems. An example cited in the 2011 Parliament of Victoria’s report suggested that a verbal insult or verbal threat may be counted as an act of violence by one hospital, but not by another.

All of the factors cited above may hamper incident reporting. But in the absence of reliable comparative information about violent crimes, it is difficult for hospitals/healthcare facility

administrators to gauge the extent to which their particular hospitals or facilities are safer or less safe and secure than competing organizations. Moreover, the lack of data also impacts resource allocations and may leave HCFs vulnerable to more violent and criminal events.

Fiduciary Issues Associated with Violent or Deadly Incidents in Healthcare Facilities

According to a report released by the National Institute for Prevention of Workplace Violence (2011), non-fatal workplace assaults resulted in more than 876,000 lost workdays and over \$16 million in lost wages. HCFs face significant financial loss as a result of violent crimes and lost wages of HCF workers who have been injured in such events. Lawsuits against HCFs and physicians frequently involve large payouts to injured victims. For example, in March, 2010, an Allentown, Pennsylvania jury awarded \$95 million dollars in punitive damages to families of eight victims of a nurse convicted of murder. The Hospital Security Reporter noted that 2009 was the “year of security driven lawsuits.” The author of that article (Carter, 2009) stated that assistance was provided to hospital security departments in fifteen lawsuits where significant awards were made to victims of violent sexual and other assaults. When a complaint is made or a lawsuit is filed, according to Carter, the security department is immediately subjected to scrutiny through internal and external review by organizations such as the Joint Commission and/or the Centers for Medicare/Medicaid Services.

Another area in which significant costs accrue to HCFs is when HCF staff and security personnel are required to assist patients in a one-on-one supervision in which a patient must be observed and/or restrained for any reason. Jonathan Blum, Deputy Administrator, the Centers for Medicare/Medicaid Services reported in 2009 that the average cost for patients under observation for 48 or more hours was \$83,183. Moreover, when security personnel assist with patient observation or restrain a violent or assaultive patient, the risk to other patients and visitors increases due to their lack of availability (The Fiscal Times, 2010).

Security and Safety Professionals

Providing security and safety in HCFs is a responsibility of professional security staff. At the same time, it has become an increasingly high risk occupation (Bureau of Labor Statistics, 2011; Security, 2012). For all security staff, including HCF security, the risk of homicide while working is twice as high as the rate of homicide in correctional facilities (Bureau of Labor Statistics, 2011). This disturbing trend is one reason that the International Association for Healthcare Security and Safety and the International Healthcare Security and Safety Foundation has consistently collected information about crimes and acts of violence in healthcare settings.

As previously noted, there is no national or international reporting system for the collection of information specific to HCFs concerning on-site crime and violence. Various national US

agencies (OSHA, NIOSH, CDC, the Department of Justice and the FBI) all collect and report on various aspects of crime and violence, such as types of crimes and victim characteristics, but nowhere has a data repository been created that is specific to crime and violence in HCFs. And while some required reporting exists for US HCFs that received Medicare/Medicaid money, it does not capture the full range of events critical to healthcare security and safety. More recently, data has been collected by several security and safety businesses, but it is not known whether the sampling procedures and data analysis conform to standard methodologies. Nevertheless, the reported findings do provide tantalizing information about HCF security and safety and comparisons can be made across those studies.

Purpose of the 2012 International Healthcare Security and Safety Foundation Crime Survey

There are approximately 30,000 hospitals and healthcare facilities (including long-term, nursing home, psychiatric and dialysis care, for example) in the United States and Canada (American Hospital Association, 2012; Canadian Department of Health Statistics, 2012). The enormous increase in the growth of the healthcare industry to meet the various and difficult healthcare needs of an aging and a growing population along with the escalating rates of crime and violence in HCFs, has resulted in a greater demand for highly trained security professionals to meet safety and security needs in HCFs. However, because the speed with which both the escalating demands for complex and costly healthcare and the increase in violent crimes were occurring simultaneously, of necessity, many HCFs responded in an ad hoc manner with relatively little forethought to facility design, placement of security professionals, and updated or new policies and procedures aimed at improving security and safety as well as incident reporting. All of these factors combined to create increasing pressure by members of the International Association for Healthcare Safety and Security (IAHSS) to provide reliable and factual information about violence and crime in the healthcare setting. In response, the International Healthcare Safety and Security Foundation, an arm of IAHSS, in 2009 committed resources and energy to re-institute its original crime survey, first administered in 1994.

The International Association for Healthcare Security and Safety (IAHSS) is a non-profit organization whose mission is to educate, certify and provide professional development to security professionals. Its current membership represents over 900 hospitals and healthcare facilities in the US, Canada and abroad. IAHSS and its Foundation are committed to bringing the most up-to-date resources and information about healthcare security and safety issues to its members. In the early 1990s, IAHSS made a commitment to members that it would annually collect, analyze and provide results about crimes and violence on HCF campuses. It has provided that information since 1994, making it the only data repository for longitudinal data about crime and violence in the healthcare setting. Initially, data were collected annually over a ten year period, until 2004. Members expressed a concern about being overburdened in responding each year to IAHSS's request for crime data. At that point, the survey was discontinued.

In 2009, after a hiatus of five years, pressure from IAHSS members for new crime data resulted in the redesign of the crime survey which was then re-administered in 2010 to collect data about crimes and violence. The re-developed survey, described in more detail in following sections, included additional questions about information identified by IAHSS members as critical to their needs in the rapidly changing healthcare environment. These data have been shown to be critical to the development of reasonable and appropriate preventive programs to help mitigate crime and violence in HCFs.

The new survey provides information for use by not only to security professional, but to

healthcare administrators and others that can inform and assist in resource allocation and identification of areas vulnerable to crime and violence. In addition, the data collected can help provide accurate and timely facts to the media and the public in response to violent incidents that may occur in on HCF campuses.

The purpose of the IAHSS Crime Survey is to provide factual information about crimes and violence that occur in HCFs and on their campuses. The IAHSS crime survey is underwritten and supported by the IHSS Foundation. Both the IAHSS and the IHSS Foundation, in their commitment to IAHSS members, made the collection and delivery of information a part of their missions.

The 2012 Crime Survey is the second biennial administration of the after a six year hiatus between 2004 and 2010. The 2010 and 2012 contain the basic core questions on crime that all IAHSS surveys have used. Identical questions and definitions of crime, taken from the US Department of Justice's Uniform Crime Index, were used in collecting longitudinal trend data on crimes in HCFs. New questions were added, however, to the 2010 and 2012 Crime Surveys to establish baseline data on emerging trends in security and safety issues that currently confront healthcare security professionals. Specifically, the Crime Survey was developed to:

- Assess trends in crimes on hospital campuses in the United States, Canada and other member countries from 1994 - 2012
- Collect new information to assess current issues and concerns in healthcare safety/security
- Provide information to members of the International Association for Healthcare Security and Safety that can help inform their HCFs and public
- Assist IAHSS in developing professional training, education, policy and procedures strategies to address current and future needs
- Disseminate results of the survey to the public at large

Methods

The 2012 IAHSS Crime Survey is a cross-sectional study of 2013 IAHSS members representing more than 900 national and international healthcare facilities. It was conducted under the auspices of the International Healthcare Security and Safety Foundation. The study is largely identical to the 2010 IAHSS Crime Survey, with the exception of items that were eliminated based on respondent input. The survey instrument was designed by the lead researcher with advice and input from the leadership of the IHSS Foundation, its Board and IAHSS members themselves. It is assumed that the 900 plus hospitals and healthcare facilities are relatively representative of a cross-section of all healthcare facilities. However, since this assumption has not been tested, the researchers have used analytic methods that account for non-representativeness.

A purposive sampling strategy was used for general respondents. Solicitation for participation was made on-line in IAHSN newsletters and in E-alerts as well as in individual email requests from the 2013 members of IAHSN. A survey was created to be taken on-line. However, respondents could also print off a hard copy, fill it in and return it by fax.

An attempt was made in the 2012 Crime Survey to create a control group from the member list. Using a random number generation procedure in Excel, 200 members were selected and a solicitation was made to participate as a control group member for the 2012 and 2014 surveys. The purpose in creating the control group was to test for group differences among the randomly assigned control group HCFs and HCFs represented by the general membership. The researchers wanted to know if group differences existed and if so, what they were. If group differences existed, methodological procedure could be employed to control for any differences. Moreover, it was hoped that by assigning respondents to a control group and testing for group differences, the research results could be said to be generally representative of all HCFs. It was expected that by individually requesting survey participation of 200 randomly selected IAHSN members would generate a sufficiently large group (at least 100 respondents) for group comparisons. Unfortunately, too few respondents (49) participated as control group members to be able to test for group differences. As a result, information is presented as combined data from both the control and general groups.

The 29-item on-line survey gathered information on the number and types of crimes committed in HCFs and on their campuses to facilitate comparison with data previously captured on crimes in IAHSN surveys. To avoid duplication of information collected from multiple members of the same organization, it was requested that a single senior security member representing each healthcare organization under his/her responsibility provide survey responses. The survey was conducted over a period of about seven months in 2012.

To facilitate ease of reporting and increase member response rates, the survey was developed to be taken on-line. It included functions to start the survey, pause it, and go back to it later, if necessary, to add more information or correct data already loaded. Standard crime definitions, taken from the US Federal Bureau of Investigation's Uniform Crime Statistics, were used to standardize reporting on crimes. However, it is not known how many HCFs use the same definitions of crime as are defined by the Uniform Crime Statistic's definitions. The literature on crimes and violence in HCFs suggest that definitions vary from institution to institution. In addition, new information was requested, some of which was captured in text format, about emerging issues and trends seen in hospital security, making the survey both longer and more time consuming than previous IAHSN surveys that collected only crime data.

The on-line survey was developed in Qualtrics, a survey development application used

mainly in universities. Data were collected on-line using summary and analytic functions available in Qualtrics. The data were then exported to Excel files for statistical management. The data were assumed to be non-normal distributions, but since the number of HCFs represented by IAHS is so high, it is possible that the data may be representative. There are no longitudinal data available from other sources to test either assumption.

A number of methods were employed in cleaning and analyzing the data. Adjustments were made to reconcile data disparities prior to analysis through examination of each line of data, by row and column. After cleaning the data and eliminating the number of cases in which little or no data were reported, a total of 176 usable cases (out of 208) were identified and used in the analysis of the 2012 IAHS Crime Survey. The 176 cases included in the analysis were either nearly or totally complete with reported data. A total of 32 cases were eliminated because too few data points were filled in to make any meaningful interpretation of the information provided.

Consistent with the 2010 IAHS Crime Survey, a number of data entries in the 2012 IAHS were non-numeric where numeric data was called for (e.g., the use of Xs which researchers assumed meant that there were numeric data available but not recorded). For these entries, an average of all data entered for that category was used to replace the X.

In addition to data cleaning, one serious issue emerged. It involved cases where the total number of crimes reported did not match the number of crimes entered in sub-categories (e.g., number of homicides in which HCF staff were killed and the annual count of total homicides was inconsistent) did not accord, the highest number of homicides reported was used. These data were reconciled prior to analysis.

Data Limitations

The nature of purposive sampling that has been used for this and all previous IAHS crime surveys prevents the use of statistical methods associated with random sampling procedures. Therefore, the results reported are loosely comparative from year to year, but it cannot be said with precision that the data are strictly comparable and representative of all hospital and healthcare facilities. As a result, the comparisons must be viewed with caution due to the voluntary nature of participation. Even so, the reliability of the interpretations made should be considered well-founded, but not definitive. It should be noted, however, that the data and findings in this study are consistent with other studies cited previously, including the recent release of information by the US Department of Justice (2012).

Further research is needed to determine whether the findings hold for a randomized sample of all member and non-member healthcare organizations across the United States and Canada as well as participating international countries and comparisons are needed with national and

international healthcare data. Nevertheless, the authors of this study feel confident that the data portray significant findings for healthcare security providers and other research and regulatory agencies.

Another caution regarding the survey results is that many IAHS members who represent specific healthcare facilities did not participate in the survey. Of those who did participate, many respondents left some portions of the survey blank or entered non-numeric data where questions called for numeric information. More study is required to determine why this occurred in both the 2010 and the 2012 IAHS Crime Surveys. As a result, simple estimation techniques were used whenever possible.

The survey was administered to ensure anonymity of HCFs and confidentiality of data. Although the survey requested that respondents identify the North American state, the Canadian province, or international country they represented, the data were aggregated so that individual countries, provinces or states were not identified nor linked with the specific information they provided.

Results

Two hundred eight respondents from 39 US states, seven Canadian provinces and one European country, participated in the 2012 IAHS Crime survey, representing over 900 healthcare organizations. In 2010, 212 members participated in the Crime Survey during the open-response period, compared to 208 in the 2012 Crime Survey, a decline of four HCFs. It should be noted that after the data collection period was closed in 2010, an additional 67 cases were added to the survey. To account for that finding, in 2012, the data collection period was extended. Even so, another two cases completed the 2012 survey after the data collection period was closed. The overall response rate for 2012 is 23 percent, consistent with all previous IAHS Crime Surveys.

The total number of facilities represented in surveys since 1994 when IAHS started collecting crime and violence information ranges from a high of 295 in 2001 to 208 in the 2012 IAHS Crime Survey. The lowest number of responding HCFs occurred in 2004 when data from 192 HCFs was collected. The average number of facilities represented for all years is 232 organizations. Table 1. lists the number of HCFs represented in each survey since 1995 when the survey data were first reported. It should be noted that the 1994 data that were collected were reported first in 1995.

While the total number of crimes varied from year to year, it clearly supported the general findings that crime was declining until 2010. The 2010 crime survey showed a fairly substantial increase in most crimes and violence in HCFs. The 2012 data also indicate an increase in the number of crimes and is consistent with the upward trends shown in 2010. A newly released report from the US Department of Justice (2012) indicated that in 2011, the rate of violent crimes rose 18 percent, thus the IAHS findings from 2010 and 2012 are consistent with those findings.

Table 1. Number of HCFs represented in IAHS Crime Surveys 1995-2012

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2010	2012	Average Number HCFs reporting all years
Number Facilities Reporting	221	221	251	222	285	227	295	226	219	192	212	208	232

Crime

Prior to 2010, a single table for reporting crimes was filled out by hand and returned to the researchers leading the studies. The data were reported in a large matrix table that included an annual count in sub-categories of crimes as well as a total count of all crimes for each year.

In 2010, the exact depiction of the original crime matrix table was duplicated for on-line collection of data and reporting of crimes statistics. It looked identical to the original table used in the past except that the data were posted on-line. The 2012 crime survey was similarly structured to be taken on-online with a matrix table for reporting crime data, but the matrix table was moved closer to the beginning of the survey to facilitate greater response rates and prevent response fatigue with the most critical data. Nevertheless, not all respondents completed the crime reporting and, as with the 2010 survey, there were several non-numerical data entered such as question marks and Xs, despite the instruction sheet requesting that only numeric data be reported. In cases where the HCF did not collect data associated with a particular category of crime, respondents were asked to leave it blank or fill it in with zero. As noted previously, a hard copy of the survey could also be printed off and filled in by hand and faxed to the researchers. Only one survey was returned in this fashion. The lead researcher then entered the data on-line.

As noted previously, crime is defined according to the US Federal Bureau of Investigation's (FBI) official definitions. All IAHSS surveys have used the FBI definitions to identify the incidence rates of crimes and acts of violence. As a result, the 2010 and the 2012 IAHSS Crime surveys subsume sexual assault within the category of rape.

In January, 2012, the FBI announced and circulated a new definition of rape (previously unchanged since 1929) which is far more inclusive; men are now included in the definition. It is not known whether the new definition for rape was used by informants in the 2012 IAHSS Crime Survey, but it is not likely since the new definition appeared while the 2012 Survey was being administered and the instruction sheet included the old FBI definition of rape. The new definition is as follows:

The penetration, no matter how slight, of the vagina or anus, with any body part or object, or oral penetration by the sex organ of another person, without the consent of the victim.

Several supplementary categories were collected in the general 2012 Crime Survey: demographic, security leadership information, and hospital and patient characteristics. To further inform healthcare security professionals and the public in general, both the 2010 and the 2012 surveys collected new information about issues and trends in hospital and healthcare security and safety that members had indicated, through a variety of venues, an interest in and need for more data. A final category of data was collected about what IAHSS members would like more

information about in future IAHS surveys and/or through IAHS sponsored professional development, training, and educational presentations.

In 2012, the total number of crimes reported by healthcare facilities in the eleven categories of crime was 20,515 crimes. As noted earlier, this research uses the FBI's crime definitions to provide a standard in reporting across all HCFs because definitions and reporting of incidents vary widely across the industry. Table 2 presents the data for all years of data collection – 1995 – 2012. Compared to all previous eleven periods of information gathering, 2012 represents the highest total number of crimes recorded in the history of the IAHS survey. The lowest number of total crimes, 7584, was recorded in 2003. Previously, 1995, the first year in which data were collected on crimes, listed a total high of 19,648 crimes. More importantly, the 2012 data show a jump of 5524 additional crimes over 2010. Three categories of criminal incidents – simple assault, larceny and theft, and vandalism - accounted for 87 percent of all reported crime in 2012. A simple rate of crimes per hospital was calculated by averaging the total number of crimes reported by the total number of useable cases represented in the survey.

Eight homicides were reported in 2012, compared to three in 2010. This results in a rate of approximately .045 homicides for all facilities represented in the survey, or a homicide rate of more than four in a hundred healthcare facilities. The most homicides previously reported were six in 1995. The rate represents a fairly substantial increase in homicides between 2004 and 2010. The number of homicides reported for 2012, is higher than all earlier years of homicide reporting in the IAHS Crime Surveys. Previously, a high of six homicides was reported in 1995 and five were reported 1997. In 2012, three of the homicides reported were of healthcare professional staff and five were listed as “other” which is most likely to be members of the general public or members of gangs or other violent individuals.

The 2012 report of eight homicides may reflect the climbing rate of homicides due to gang warfare or access to weapons and increasing violence in general. Indeed, near the end of the 2012 Survey, a question asked respondents to identify what they would like more information about and the predominant issue was “gang warfare and violence.” The increase in the number of homicides in 2012 firmly supports other findings showing a dramatic increase in violence and crimes in healthcare facilities and on their campuses. While there are no national data available on the actual number of homicides that have occurred in healthcare facilities, it is likely that there are far greater numbers than reported here.

In 2004, forcible rape and sexual assault were reported separately. These categories were combined in 2010 in response to IAHS member input. There were 79 reported incidents of rape and/or sexual assault in 2012 compared to a total of 55 rapes and sexual assaults in 2010. This represents an increase of 24 rapes and/or sexual assaults in 2012 compared to 2010 and an increase of 45 rapes and sexual assaults in 2004.

The number of robberies (193) reported in 2012 were higher than the 186 reported in 2010 and the highest in the fifteen years of recorded data in the IAHSS Crime Surveys. In 2010, 660 incidents of aggravated assault were reported, compared to 706 in 2012; a rise of 46 cases of aggravated assault. The reported number of aggravated assaults have varied from year to year, but significantly increased in 2010 and 2012. It should be noted that aggravated assault is far more serious than simple assault. The precise FBI definition of this crime includes the following:

Unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm.

The total number of larcenies and thefts increased in 2012 as well, reaching nearly the level of those reported in 1995 after years of declining trends. There was a sizable increase in larceny and theft reflecting perhaps the economic downturn evident in the US, Canada and Europe. Both 2010 and 2012 crime and violence data from the IAHSS Crime Survey show a significant increase when compared to 2004.

Similarly, the number of motor vehicle thefts has varied from year to year, but the 697 cases reported in 2012 nearly doubled from 2010 and were closer to the level reported in 1995. Prior to 2010, data were not collected on kidnappings and abductions, but in 2012, three kidnappings/abductions were reported, compared to five in 2010.

Table 2. Total Number of Crimes committed on HCF Campuses since 1995

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2010	2012	Total Crimes All Years
Crime													
Homicide	6	2	5	3	2	2	3	0	2	2	3	8	38
Rape/ Sexual Assault	67	38	13	12	54	48	31	54	30	34	55	79	515
Robbery	165	127	108	53	88	84	245	51	42	25	186	193	1,367
Aggravated Assault	0	0	0	273	213	145	228	157	191	123	660	706	2,696
Simple Assault	1463	1259	604	1410	1595	1444	1389	1486	1418	904	2720	2772	18,464
Burglary	667	488	551	700	501	647	683	612	577	369	1661	851	8,307
Larceny & Theft	13974	10997	12180	10243	10929	6965	9300	8401	6398	4412	7333	12543	113,675
Motor Vehicle Theft	778	587	601	398	559	404	410	458	429	361	345	697	6,022
Arson	17	27	68	36	20	23	48	12	6	7	132	51	447
Vandalism	2475	2779	2646	2841	2343	1840	2045	1874	1627	1317	1886	2612	26,285
Kidnapping											5	3	8
Total	19648	16290	16712	15922	16534	11458	14396	13184	10794	7584	14991	20515	178,377

Healthcare Security Professionals

A wide body of evidence has firmly established that the healthcare security and safety field is expanding (e.g., Colling & Clark, 2009, 2012), largely in response to changing population dynamics, but also in response to the changing workplace environment that is more violent and deadly. The 2010 IAHS Crime Survey gathered information about healthcare security professionals for the first time. This was repeated again in the 2012 IAHS Crime Survey. It was observed then and remains true now that there are gaps in what is known about the healthcare security profession as a whole, particularly as it relates to the growing need for more security professionals to staff HCFs. In order to build upon the knowledge obtained in 2010, the 2012 IAHS Crime Survey included the same questions about healthcare security professionals. That information is recorded below.

Safety and Security Professional Titular Designation

The vast majority of security leaders (68%) of hospital and healthcare facilities who responded to the 2012 IAHS Crime Survey are designated as Directors of Hospital Police, Directors of Security, Safety Director, Directors of Facilities and other variations on the title of Director. Four individuals were designated Vice President of Security or Safety (2%). The remaining 30 percent were identified as Managers, Supervisors or Chiefs of Security and Safety Departments.

The 2012 IAHS Crime Survey showed some marked differences when compared to the 2010 IAHS Crime Survey in who Security Directors and their departments report to. In 2010, only fifteen percent of security leaders reported to the CEO/COO or other designated head of the healthcare organization; in 2012, that figure had changed to jumped to twenty-nine percent. This may reflect both the increasing importance of healthcare safety and security and the increase in violence in HCFs. In 2012, thirty-six percent reported to a senior HCF administrator such as the Vice President, while thirty-five percent reported to an HCF administrator such as Director of Operations.

Table 3. HCFs Security Professionals Supervision

Reports to	2010	2012
CEO/COO/CFO	15%	29%
Senior Vice President/Vice President	46%	36%
Hospital Administrator	20%	35%
Other	19%	<1%
Total	164	175

Number of Security Department Staff

In 2010, the IAHS Crime Survey collected information about the number of individuals employed in HCF security departments. At that time, the survey requested information in terms of full-time staff equivalents (FTEs). A number of respondents reported that they did not keep employment information as FTEs, so the 2012 IAHS Crime Survey requested information about the total number of employees, regardless of part-time or full-time status, working in HCF security departments. Table 4 depicts the number of security staff employed in 2012, which is notably higher than in 2010. For example, in 2012, the percentage of HCFs reporting that they had more than sixty employees was 14 percent, compared to 10 percent in 2010. Additionally, in 2012, 12 percent of reporting HCFs listed one to ten employees while it was 23 percent in 2010. Clearly, HCFs are employing more security and safety personnel in the two year period between 2010 and 2012.

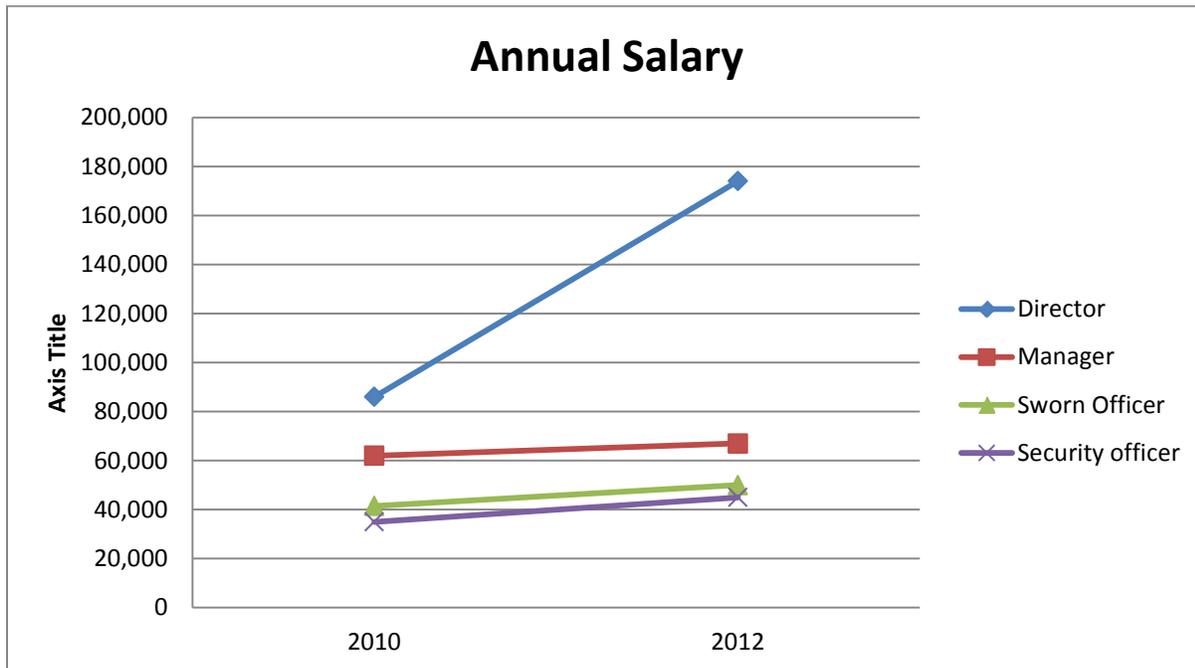
Table 4. Number Employed in Security Services (N=176)

Number of Employees	Healthcare Facilities 2010	Healthcare Facilities 2012
	Number (Percent)	Number (Percent)
1-10	39 (23%)	21 (12%)
11-30	82 (48%)	63 (36%)
31-60	33 (19%)	53 (30%)
61-100	10 (6%)	25 (14%)
>100	6 (4%)	14 (8%)

Annual Salary

In order to provide baseline information to the healthcare security profession, for the first time the 2010 IAHSS Crime Survey requested average annual income data on healthcare security leaders and staff. The information is intended to help inform the profession about the range of salaries associated with the healthcare security profession. In 2012, the same question was asked about average salary. A comparative graph presents the information side-by-side for both the 2010 and the 2012 IAHSS Crime Surveys. It appears that while modest gains have been made in the annual average salaries of security professionals over the past two years, there was a large gain in the salaries of Security Directors. *Since a single individual may represent several HCFs and have a higher than usual salary, it is possible that the information presented in Graph 1 is an anomaly of these particular data, but future surveys should be able to tease that out.* Indeed, the IAHSS Salary Survey found that only 1.2 percent of respondents (N=83) had an average salary of \$150,000 to \$200,000. Nevertheless, the 2012 IAHSS Crime Survey indicated that there have been salary gains, contrary to the overall decline in all salaries in the general economies of the United States, Canada and Europe. Therefore, it is speculated that concomitant to rising rates of violence and crime found among HCFs is the rise of both numbers of security professionals employed in HCFs and the increase in average salaries.

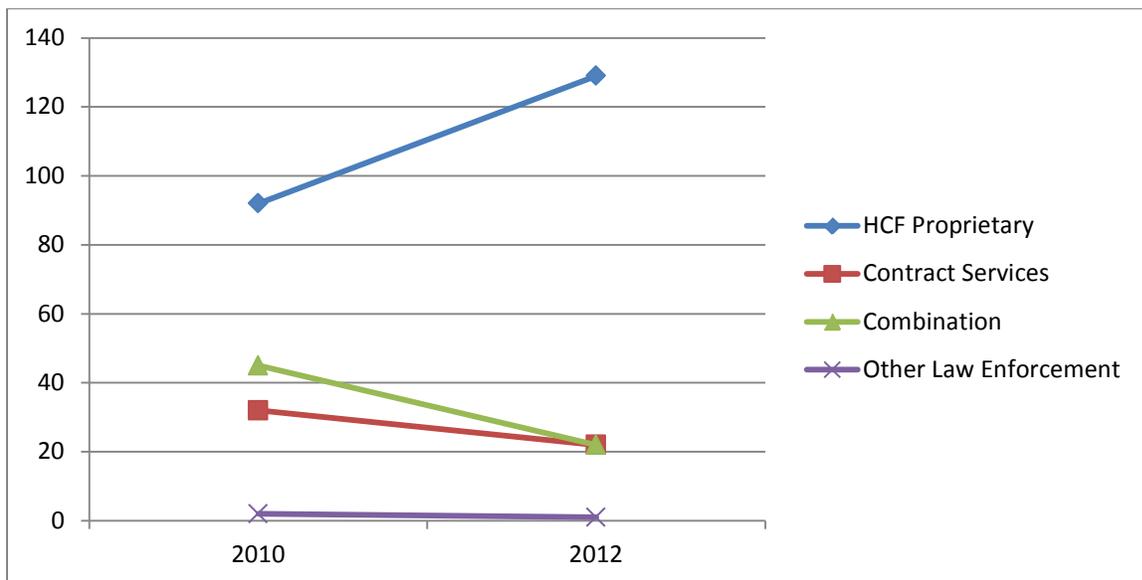
Graph 1. Average Annual Income, 2010 and 2012



Types of Security Services Used by Healthcare Facilities

Healthcare facilities must have secure environments. To provide safety and security at a reasonable level, healthcare facilities employ security personnel through their own proprietary departments, by hiring outside security services, a combination of the two, or by solely using outside law enforcement. The 2010 and the 2012 IAHS Crime Survey sought information about the types of security services used by HCFs. It is clear from Graph 2 that healthcare facilities have increased the use of proprietary services between 2010 and 2012. Either new security departments have been established or their departments have expanded. It appears that as security departments in healthcare facilities have expanded, the staffing models have shifted from contract to more proprietary services. It is also possible that fewer departments are using contract security officers responded to the survey. It is likely that small HCFs without contract or proprietary security officers rely on outside law enforcement to provide security services when needed.

Graph 2. Types of Security Services

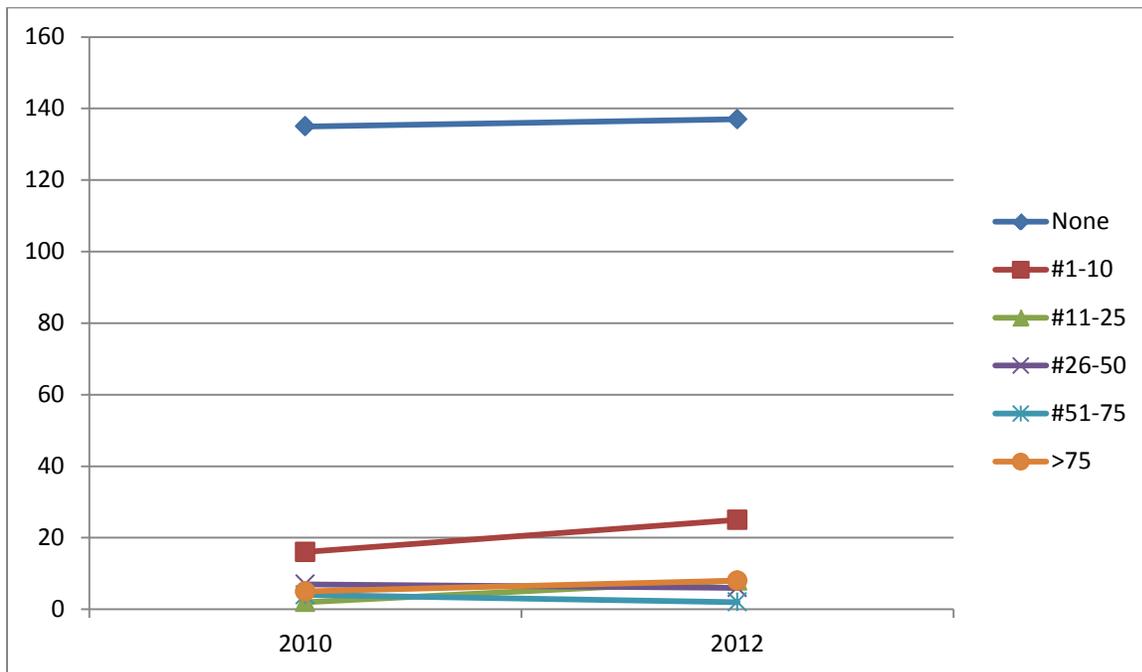


Sworn Police Power

In the past, many hospitals and other healthcare providers did not have security staff with sworn police power. This impacts the ways in which violent and aggressive patients, staff, visitors, and others are handled and/or detained when security violations occur. It is clear that as violent

crime has escalated, the need for armed, sworn police officers has simultaneously mounted. Graph 3 shows that while a similar number of HCFs continue to operate without sworn security officers, the number of HCFs who employ one to ten, eleven to twenty-five or more than seventy-five sworn security officers have risen.

Graph 3. Number of Security Officers with Sworn Police Power



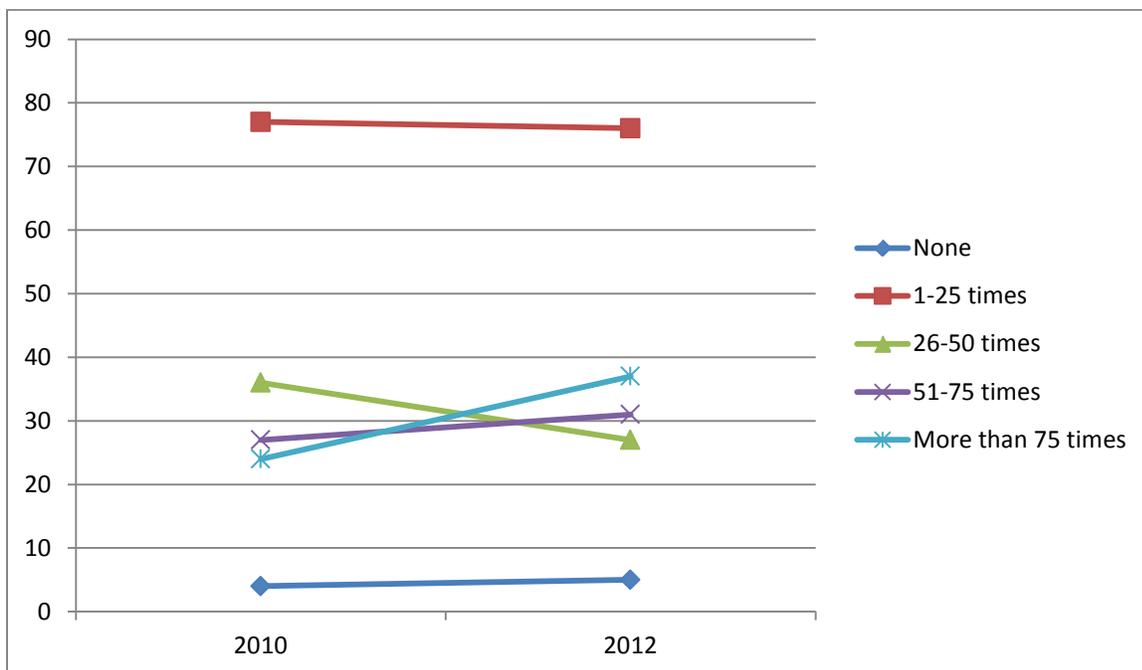
Calls to Outside Police

There is limited information and research available on criminal and/or violent incidents in HCFs that require outside assistance by local or corrections law enforcement. Many HCFs do not record the information and/or do not make the information publically available. IAHS members reported a need for such information and the 2010 and 2012 IAHS Crime Surveys included a question that stated: "How many times did you call outside police or law enforcement to assist you in the past Year?" As Graph 3 (above) showed, most HCFs reported in both 2010 and in 2012 that they do not have security staff with sworn police power. Nevertheless, the need for outside assistance from local police is likely to be associated with the capability of on-site security staff to handle difficult or dangerous events and without sworn police power, limitations are imposed on security staff.

Graph 4 depicts the frequency with which outside law enforcement (local law enforcement,

sheriff’s deputies, and state police) are called in to assist in volatile circumstances. The actual question asked in the 2010 and 2012 IAHS Crime Surveys was “How many times did you call outside police to assist you in the past year?” As can be seen, the number of calls made for outside law enforcement assistance increased modestly between 2010 and 2012. It is of special concern that the greatest rise in calls for outside law enforcement assistance was in the category of more than 75 times in the past year.

Graph 4. Number of Times outside Law Enforcement Assistance Requested

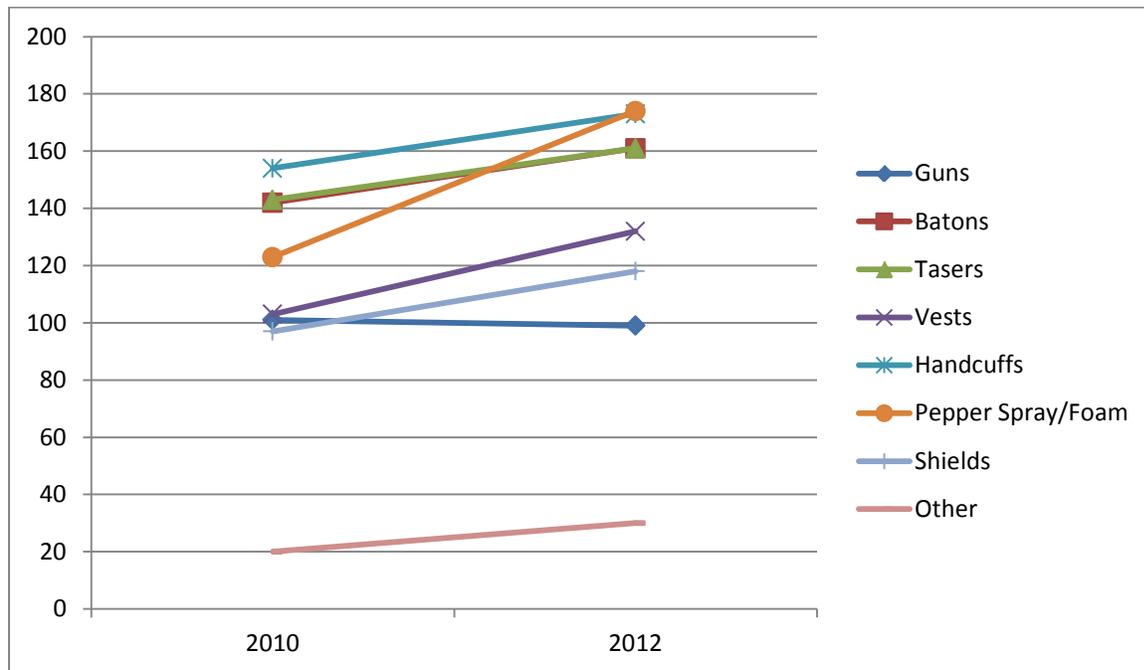


Equipment Used by Healthcare Facility Security Staff

The escalating levels of violence and aggression in healthcare settings has resulted in increased demand for security equipment that can be used when patients, staff, visitors or others become dangerous and assaultive. Heretofore, little or no information has been collected on the types of safety equipment used by HCF security staff. It is interesting to note that in the category of ‘other’, which respondents defined as specialized hands-on techniques to subdue individuals when needed, metal detecting wands, 2-way radios and search gloves. One respondent wrote that “our security is [local] police officers.” Graph 5 depicts the types of equipment used by HCF staff as

shown in the 2010 and 2012 IAHS Crime Surveys.

Graph 5. Equipment Used by Healthcare Facility Security Staff



Patient Elopements

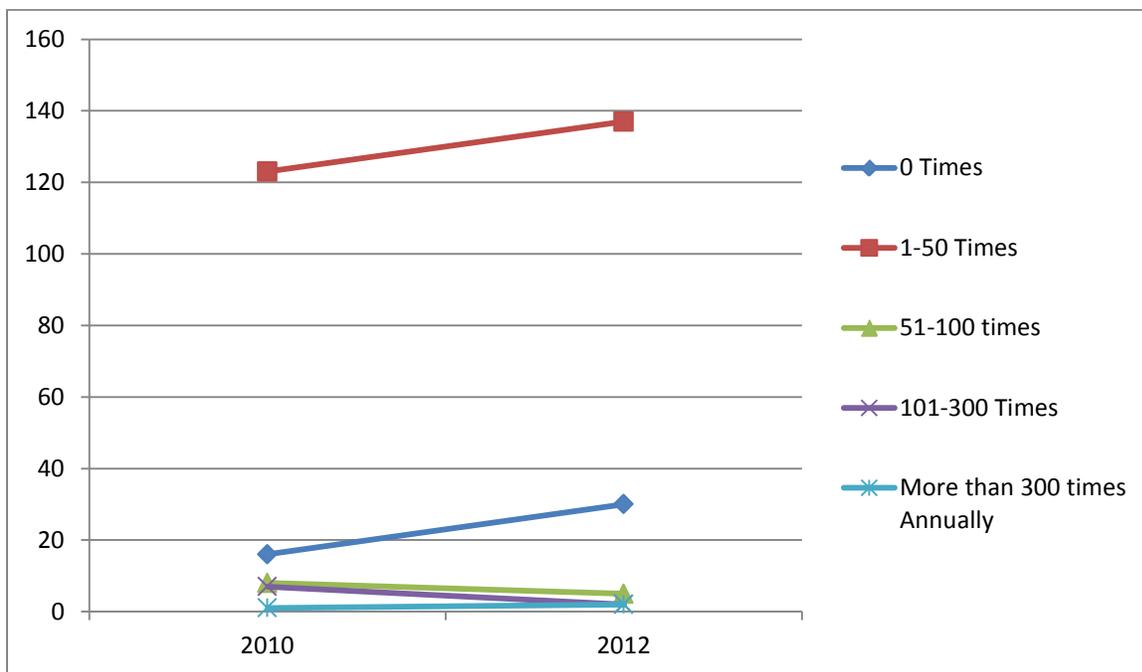
Patient elopements (The IAHS definition used in the 2010 and 2012 IAHS Crime Survey is “a patient who is incapable of adequately protecting him/herself and who departs the healthcare facility unsupervised and unprotected”) pose a serious risk to patients who may be injured or die. Furthermore, patient elopement incidents represent difficult challenges for HCF security personnel who assist in locating such patients. Patient elopements are potentially costly to HCFs in terms of lawsuits and legal costs. When news of patient elopements hit the public media, healthcare facilities may lose standing among potential patients who decide to seek care elsewhere, thus adding possible loss of income to HCFs.

Because patient elopements are of major concern to the healthcare industry, the 2010 IAHS Crime Survey included a question on the number of patient elopements for the first time. It was again included in the 2012 IAHS Crime Survey. In the following graph (Graph 6), information is presented about the number of patient elopements that were reported in the 2010

and 2012 IAHS Crime Surveys.

Graph 6 indicates that compared to the 2010 data, more HCFs in 2012 had no patient elopements. However, Graph 6 also shows that when compared to 2010 data, there was a substantial increase in the number of HCFs reporting patient elopements 1 to 50 times annually in 2012. The data also indicate that the number of times that patients eloped 51 to more than one hundred times annually stayed about the same or decreased slightly. This is a serious and time/resource consuming issue for security personnel.

Graph 6. Number of Times Patients Eloped Annually



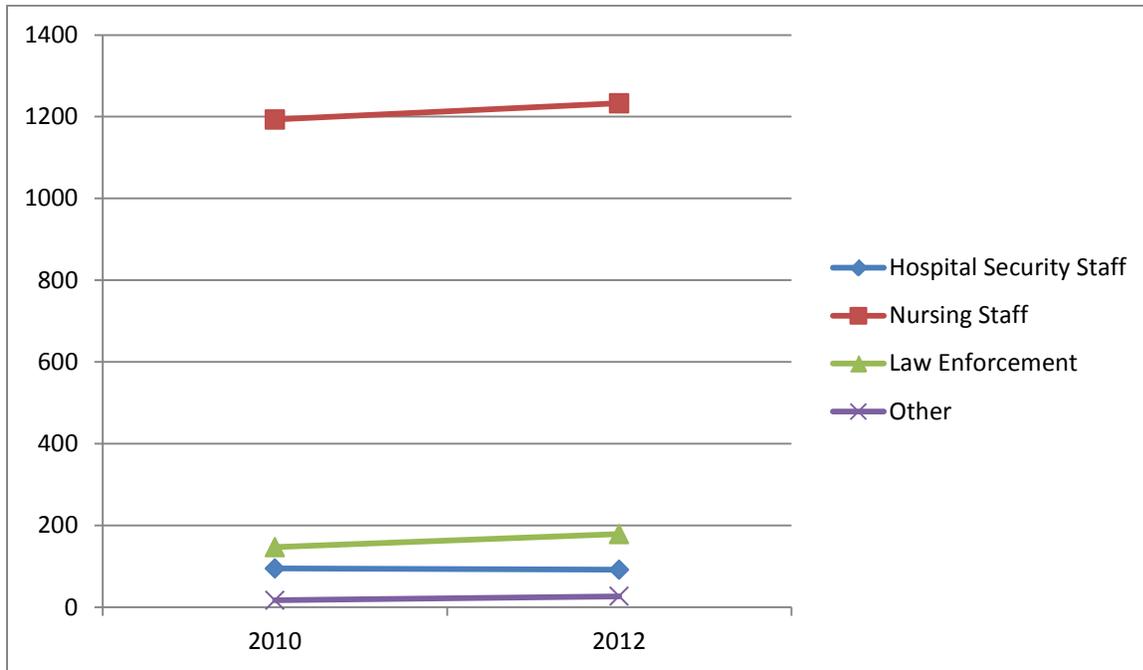
Custody of Eloped Patients

When patients elope, it is responsibility of security staff to find and return patients to the healthcare facility. Since there is little information about the use of HCF security staff in handling patient elopement incidents, a question was developed to determine who had custody of patients when elopements occurred. Graph 7 provides information about patient custody and patient elopement from the 2010 and 2012 IAHS Crime Surveys.

As Graph 7 shows, by far, the largest numbers of patients who eloped were in the custody

of nursing staff when elopements occurred. The second largest number of patients who eloped was in the custody of law enforcement. This suggests that both HCF nursing staff and law enforcement professionals may need additional assistance and training to prevent patient elopements. HCF security staff had far fewer patients in custody when elopements occurred. In addition, the rate of patient elopements stayed the same between 2010 and 2012 for HCF security personnel.

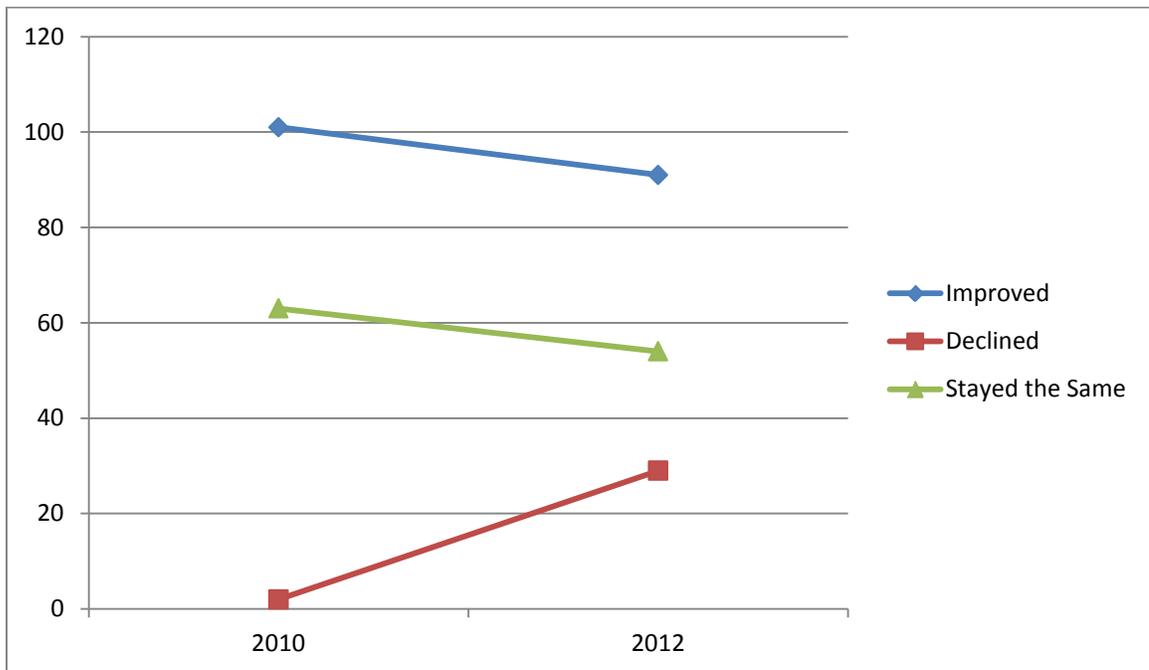
Graph 7. Custody and Number of Eloped Patients



Improvement in Security in HCFs

Participants in both the 2010 and 2012 IAHSS Crime Surveys were asked whether security has improved, declined or stayed the same in the past year. As Graph 8 shows that for the two time periods, more respondents indicated that security services had declined in 2012 when compared to 2010. Likewise, fewer respondents indicated that security services had improved or stayed the same between 2010 and 2012.

Graph 8. In the Past Year, Security has Improved, Declined, or Stayed the Same



For both the 2010 and the 2012 IAHSS Crime Surveys, a drop-down text box was provided requesting information about why HCF security had declined. Reviewing and summarizing the text data showed that respondents cited the following primary reasons for declines in security services:

- Personnel reductions
- Constrained or reduced budgets
- Staff overload on patient assists
- Increased responsibilities when no additional staff added

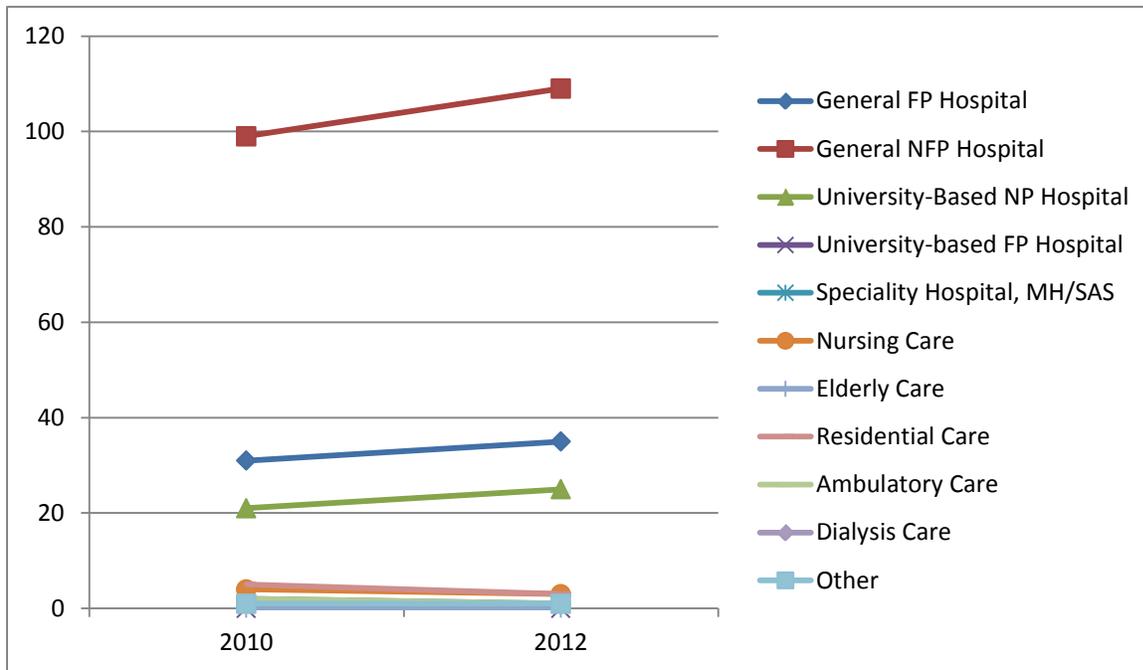
The number of respondents reporting declines in security increased in 2012 compared to 2010. Additionally, the number of respondents reporting no improvements in security increased and the number of respondents who reported that security stayed the same declined between 2010 and 2012. This may suggest that regardless of growth in the healthcare security industry, tight economic times have impacted the perceived quality of security services.

Healthcare Facility Characteristics

General demographic questions about healthcare facilities were added to the 2010 IAHSS Crime Survey and repeated in 2012. The information provides a good baseline for comparing the types of HCFs represented in the surveys and whether they are representative of the proportion of these types of HCFs in the US and Canada, primarily. Prior to 2010, this information was not collected. Graph 9 illustrates the types of facilities represented in the sample.

In both 2010 and 2012, the majority of healthcare facilities represented in the surveys were general public not-for-profit hospitals followed by general for-profit hospitals and ambulatory healthcare facilities. The HCFs listed under “other” included Children’s and Veterans Hospitals.

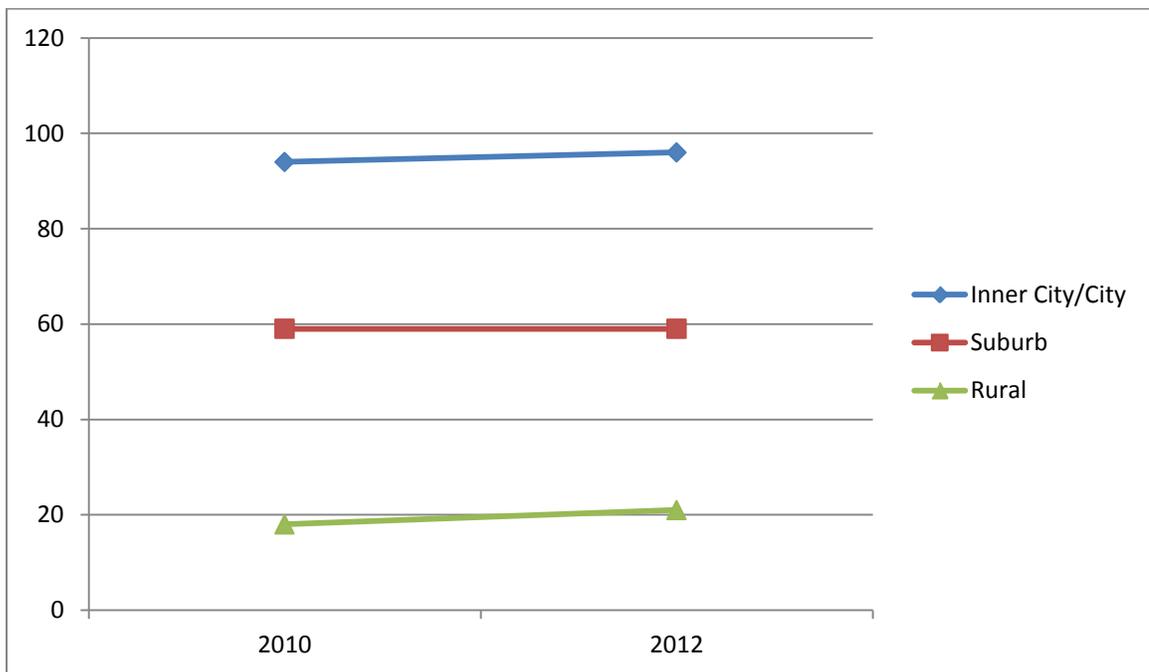
Graph 9. Types of Healthcare Facilities



Location

Where healthcare facilities are located often contributes to security challenges. Healthcare facilities that are located in the inner city or city are generally more likely to have a higher incidence of all types of crimes. As can be seen from Graph 10, in both 2010 and 2012, the majority of HCFs were located in the inner city or city, followed by suburban healthcare facilities, and rural hospitals. It is interesting to note that nearly the exact distribution of HCF locations was identified in both the 2010 and 2012 IAHS Crime Surveys.

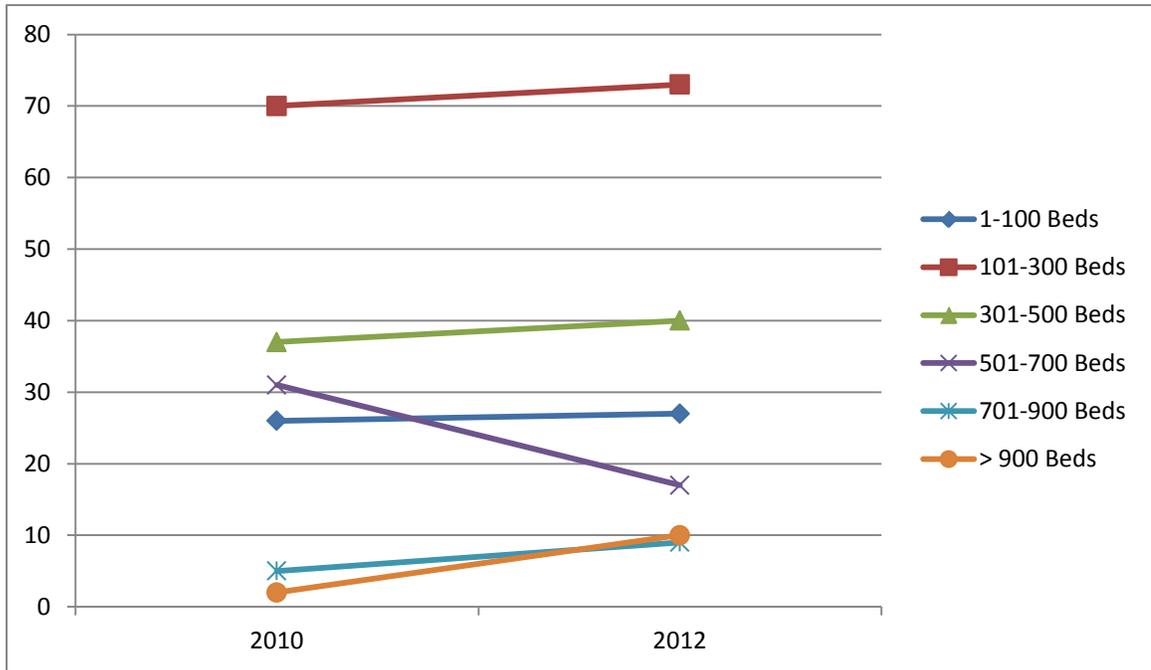
Graph10. HCF Located in Inner City/City, Suburb, or Rural Area



Number of Healthcare Facility Beds

The number of hospital beds is an indicator of the size of the healthcare facility. Graph 11 indicates that that sixty-eight percent of hospitals/healthcare facilities were medium-sized with 101-300 beds. Only 15 percent were small with 1-100 beds. In addition, 20 percent of the sample reported the number of beds at 501- to over 901, clearly demonstrating that these were very large healthcare facilities. There was a fairly substantial decline in HCFs with 501-700 beds while the number of HCFs with 701 to more than 900 beds increased slightly.

Graph 11. Number of Beds



Number of Forensic/Prisoner and Psychiatric Patients seen in HCFs

As the 2011 IAHSF Forensic/Prisoner Patient Escape Study concluded, the number of prisoners who receive healthcare services outside of prison or local jail facilities is large and expected to grow due to the downsizing or elimination of prison-based healthcare. These prisoner patients tend to carry a far higher risk for potential and actual violence and crime than the general population. Emergency departments are increasingly the scenes of violence and aggression by prisoner patients against staff, visitors and other patients. For HCFs located in inner cities, there has also been a rising incidence of gang warfare that is often concluded in the local ER or in-patient wards of HCFs.

At the same time, the deinstitutionalization of psychiatric patients, once cared for in large, specialized residential HCFs, was taking place. Deinstitutionalization was based on flawed assumptions that mentally ill individuals released into community care would receive better care in less restrictive environments that supported personal autonomy. In reality, almost immediately wide gaps in care appeared and there was little monitoring of psychotropic medication needed by released psychiatric inpatients. Facilities intended to provide occupational training, housing and other beneficial aids were never put in place or were quickly eliminated. Torrey (2010) noted in an

article entitled “Documenting the failure of deinstitutionalization” published in *Psychiatry* that the majority of psychiatric inpatients released into never received appropriate care and most ended up in jails, prisons and short-term stays in HCFs to stabilize their conditions. A 2009 article published in the *British Medical Journal* (Suibhne) also cited similar findings with regard to British deinstitutionalization of psychiatric patients released into community care in Great Britain. Thus, deinstitutionalizing psychiatric patients has created many serious unintended consequences, including homelessness, inadequate care and lack of facilities to treat psychiatric patients in the community. State budget cuts, prominent during the economic recession, have exacerbated the problems facing psychiatric patients.

Among prisoner patients are a large proportion of psychiatric patients. This corresponds with findings by the Treatment Advocacy Center (2010) that show that three times more seriously ill psychiatric patients are confined to prisons or in custody of local law enforcement. As the 2010 report by the Treatment Advocacy stated: “We now returned to the conditions of the 1840s by putting large numbers of mentally ill persons back into jails and prisons” (p.1).

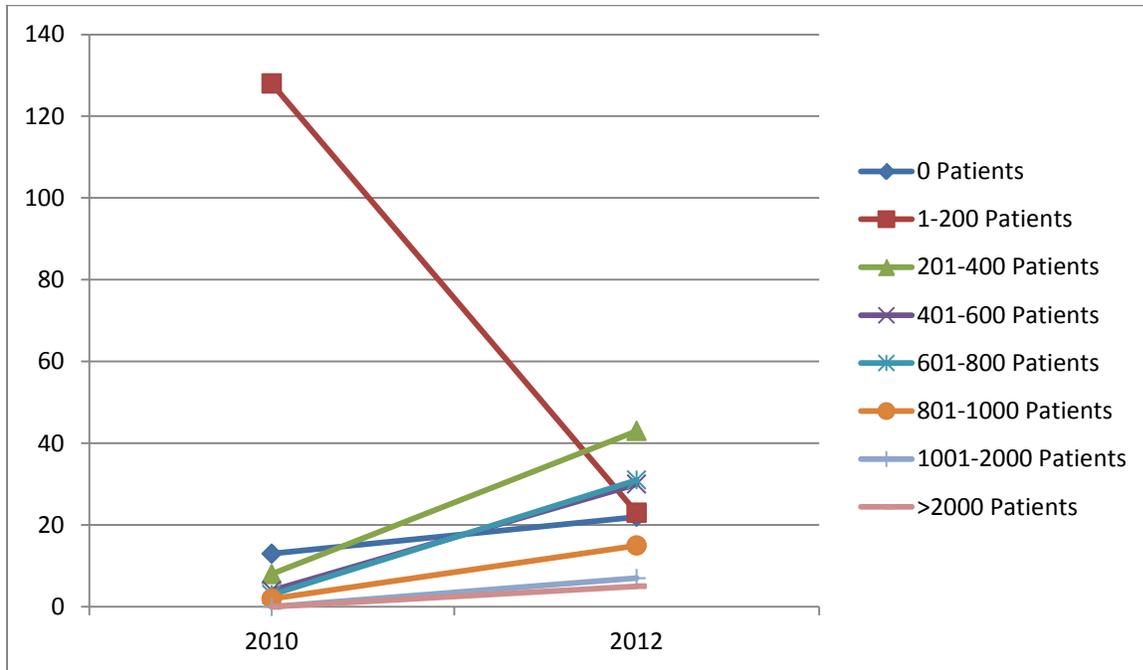
Facing the mounting problems of providing services to forensics/prisoner patients and the mentally ill, IAHS members requested more information about how many of these patients were treated annually in HCFs. Several questions were added to the 2010 and 2012 IAHS Crime Surveys to address these issues as presented below.

Forensics/Prisoner Patients

To clarify the interpretation of results, it is important to note that the actual number of patients seen is represented by categories listed from 0 patients to more than 2000 prisoners treated annually as in-or out-patients. Thus, the number of responses represent the number of single HCFs included in a particular category of patients represents single HCFs that had provided services. For example, in 2012 18 HCFs saw 601-800 prisoner patients annually or a total of 10,818 to 14,400 forensic patients were treated.

As can be seen from Graph 12, there were modest gains in the number of forensics/prisoner patients seen between 2010 and 2012. There was a large decline in the number of HCFs seeing 1-200 prisoner patients. However, this apparent decline was replaced by the rising numbers of prisoners seen in the categories of 201 or more prisoner patients. Thus, more forensics/prisoner patients were seen in 2012.

**Graph 12. Number of Forensics/Prisoner Patients treated in 2010 and 2012 IAHS
Crime Surveys**

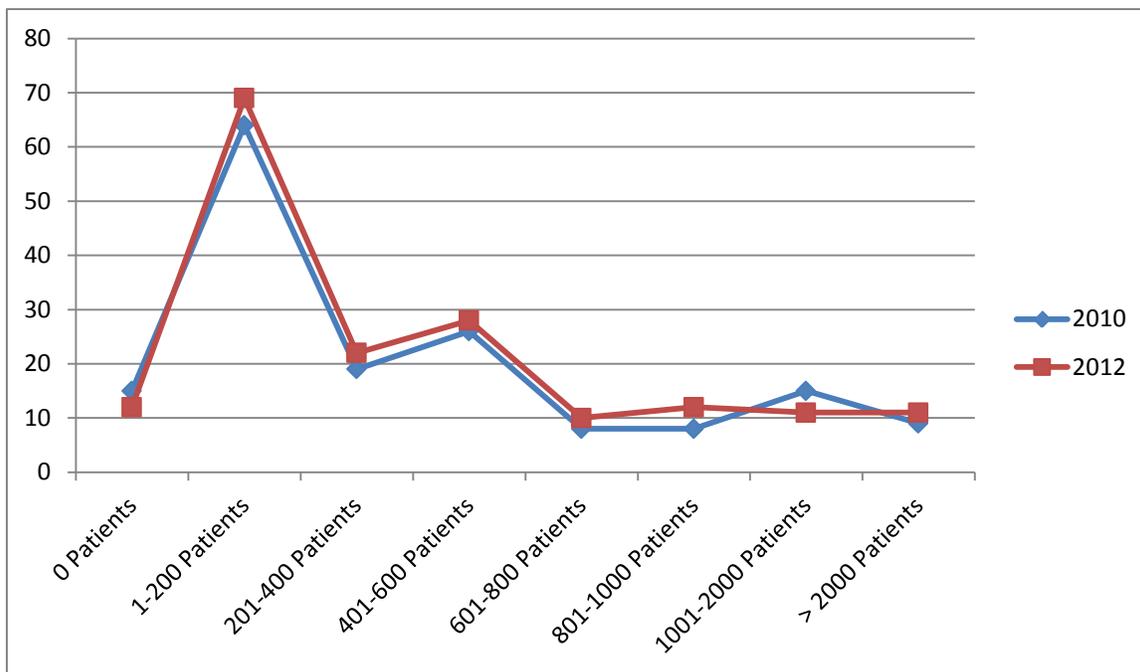


Number of Psychiatric Patients

The treatment of psychiatric patients, particularly in acute need, has received widespread attention as these patients often represent considerable risk of harm to HCF staff and security personnel. Respondents provided information about the number of psychiatric patients treated in their facilities on an in-and out-patient basis.

Graph 13 shows that the same pattern in data was shown, with a slight decline in the number of HCFs seeing no patients in 2012, but a concomitant modest increase in the number of HCFs seeing one to more than 2000 psychiatric patients annually.

Graph 13. Number of Psychiatric Patients 2010 and 2012 IAHS Crime Surveys



Types of Information Needed from IAHS

Because IAHS and the IHSS Foundation are committed to meeting the needs of its members, a number of questions were added to the 2010 IAHS Crime Survey that probed for details of what trends members were seeing in the HCFs and what their future needs were. These questions were repeated in the 2012 IAHS Crime Survey. The questions were asked as open-ended and allowed for lengthy text responses. These questions elicited rich information and varied responses. In the final question, input was solicited from respondents about what kinds of information they would like to see the IAHS Foundation collect to assist members in improving their healthcare security departments. The 2012 IAHS Association members' responses fell into two broad categories: more information about workplace violence; and, best practices and exemplary policies in healthcare security. Additional information is summarized below.

Workplace Violence and Related Issues

Most respondents indicated that they would like more data and general information on workplace violence including:

- Incidence rates and the number of security staff injured or killed in the line of duty
- Use of weapons by security staff
- The number of hospitals using metal detectors and their effectiveness in preventing crime
- How to better secure healthcare facilities to prevent or address violent incidents or events
- Ways to improve access control
- Managing aggressive or substance abusing patients
- Information about satellite facility security and vulnerability assessments
- Comparisons on the quality and effectiveness of training provided by private contract services versus proprietary security
- Ways to reduce violence and staff time/resources in Emergency Departments

Best Practices and Exemplary Policies

A great deal of interest was expressed in the area of exemplary policies and best practices. Respondents requested that studies be conducted and publications be disseminated about:

- Remediating and de-escalating violence
- Recommended competencies for all security staff
- Procedures used to prevent infant/child abductions or other kidnappings
- Ways to standardize report forms
- Standardized evaluations, policies and procedures so that all healthcare facilities are collecting the same information
- Information about exemplary practices, policies and procedures for dealing with local police
- Information about the best ways to use technology in security practices
- Publications detailing best practices for handling all major security problems
- Publications offering methods for obtaining additional resources and hiring new staff
- Collecting information about exemplary procedures for handling psychiatric patients

Several specific recommendations were made for the Association that included:

- Convening hospital administrators to educate them about security issues
- Changing IAHSS accreditation to include new and emerging trends in healthcare security issues to ensure that security professionals remain on the cutting edge
- Lobbying for CMS and/or the Joint Commission to require that HCF administrators receive certification/training in security-related issues

Discussion

Respondents to this survey predominantly represented general public, not-for-profit or non-profit hospitals. Although the specific reason for this finding is unknown, it may be that public hospitals are less reluctant to share information because they are often required to provide information to government agencies.

According to the findings of this study, the overall number crimes reported in 2012 was significantly higher than 2010 and higher overall, than previous findings from IAHSS Crime Surveys. This supports other recent research reporting higher rates of crime in healthcare settings and in the general public as the recent Department of Justice report found (an 18% increase in violent crimes). Specifically, the incidence of simple and aggravated assault reflects similar findings reported in the literature and the 2012 IAHSS Crime Survey showed higher rates than those reported in the 2010 IAHSS Crime Survey. The rate of homicides (8) in HCFs was greater in 2012 than at any other time since collection of IAHSS crime data commenced in 1995. These findings are particularly significant in light of national trends. Bearing in mind that most researchers believe that violent incidents and crime are seriously under-reported, these findings are alarming.

In addition, the findings indicate that there are areas of HCF security needs that merit deeper attention. For the first time, the 2010 and 2012 IAHSS Crime Surveys collected information about patient elopements. The actual number of patients who eloped was higher in 2012 than in 2010 with more than eighty percent of healthcare facilities in 2012 reporting that patients eloped one to fifty times. Since HCF security personnel are responsible for locating patients after an elopement, this represents a serious issue of concern. It suggests that more training of nurses and nurses' aides as well as law enforcement personnel is needed.

Another series of questions were asked for the first time in the 2010 IAHSS Crime Survey and continued in the 2012 IAHSS Crime Survey: how many forensic and psychiatric patients were treated in healthcare settings. These patients tend to carry the highest risks of violence and aggression when compared to the general patient population. There is now widespread evidence that HCFs will continue to treat greater numbers of these patients, especially in emergency departments. Complementary to this is a recognition that HCF security personnel made need to examine resource allocations for this purpose. The 2010 IAHSS Crime Survey

provided baseline data and findings from the 2012 IAHS Crime Survey showed that there was an increase in services provided to these patients. This represents a critical HCF security issue.

Recommendations for Future Research

In addition to reporting on the crime data, both the 2010 and the 2012 IAHS surveys revealed important information and provided new information intended to improve the body of knowledge about healthcare security professionals and critical healthcare security needs. The crime statistics are important in describing trends over time; both increases and declines in particular types of crimes. The new information collected broadens and anchors findings about crime in the context of demographic and patient population changes. The findings from the 2012 IAHS Crime Survey suggest that there are a number of areas that the IAHS Foundation should consider for next steps to improving the working environment of healthcare security professions. Moreover, there are a number of areas of research and practice that could be conducted to support and improve the profession.

For example, the Association may want to consider asking questions about the types of crimes associated with types of patients, especially forensic and psychiatric patients. Data appear to be gathered on an “incident” basis rather than by characteristics of individuals, patient or otherwise, committing the crimes. It is therefore recommended that further research be conducted on how incidents are reported across HCS and whether improvements in incident reporting could inform security professionals and allow for greater attention to resource allocation in terms of funding and personnel assignments.

Furthermore, it is important to understand why particular respondents were more or less likely to participate in the survey. For example, public not-for-profit hospitals were more likely to participate in the survey than all other types of healthcare facilities. This may be due to current national and state requirements for reporting. What is unknown is why other types of HCFs are not participating. It is advisable to encourage all types of HCFs to participate so that an even more complete picture of rates of violence and crime may be shown. It is not known, for example, if rates of crime and violence in private, for-profit HCFs are comparable to public HCFs. In particular, it is recommended that further study be conducted to determine ways in which private HCFs might be enticed to participate more fully in the IAHS Crime Surveys and in other IHSS Foundation studies.

An attempt was made to gather information about reluctance to participate in the crime surveys at the national conference in May, 2012, but very little information was volunteered. A brief examination of the membership list indicated that the majority of members represent

private non- or for-profit HCFs. Therefore, it is recommended that the IAHSS Foundation consider conducting focus group studies or on-line surveys of all IAHSS members, in particular those who represent private healthcare facilities, to determine why some choose to participate, but most do not choose to participate in the biennial surveys. As a part of that study, it is recommended that the Foundation specifically identify how improvement in participation might be accomplished. For example, would particular types of guarantees for anonymity and confidentiality, such as encrypting data, lead such organizations to participate in future surveys and research? Would a nationally sponsored study, funded by the National Institutes of Health or the US Department of Justice produce more voluntary participation?

The Foundation graciously accepted a recommendation from the 2010 IAHSS Crime Survey report that improvement in the overall quality of data could result from developing a random sample of members to produce a sufficiently large control group to be able to make comparison between groups of member HCFs on dimensions, such as size of HCF, regional location or other factors could identify group differences, if any. It was attempted with the 2102 Crime Survey, but was unsuccessful in reaching the critical mass needed to use more sophisticated analytic research methods without violating assumptions needed to conduct such research. Therefore, it is recommended that contained within additional studies about non-participation, the Foundation collect additional information about participation in a control group. As previously described, random sampling allows for greater precision and reliability of findings. It will also allow researchers to use more sophisticated research and analytic methodologies in examining data collected.

In addition, it is recommended that the Foundation conduct smaller, more frequent surveys on particular areas of crime and violence as well as other areas of interest to members such as those defined by respondents in the open-ended questions soliciting what members want to know more about. For example, in the 2012 IAHSS Crime Survey, participants were especially interested in the impact of gang warfare on HCF security. They were also interested in further study of patient elopement and treatment of psychiatric patients.

Finally, it is also strongly recommended that the security industry consider pushing for standardization of definitions in types of information regularly collected at HCFs and mandatory reporting requirements that hold harmless the institutions making such reports. This may allow for greater influence in identifying resource needs and areas that need improvement such as the design or change of infrastructural components of healthcare facilities.

The authors of this study wish to thank the IAHSS Foundation for the opportunity to conduct this fascinating and critically important work.

Citations

American Academy of Orthopaedic Surgeons. (2010). “*Violence in Healthcare Settings.*” www.aaos.org/news/aasosnow.

American Association of Hospitals. (2009). *Fast Facts on US Hospitals*.

Arrowsmith, R. (2010). “Preventing Workplace Violence in the health care setting.” *Workplace Violence*. National Center for Workplace Violence.

Baker, A. (2011) “Ofetne at Center of Mayhem, Emergency Rooms ...” *The New York Times*

Campus Safety Magazine. (2010). Woman Attempts Infant Abduction at North Carolina Hospital. April, 2010.

Canadian Department of Health Statistics. (2009). www.Statcan.gc.ca.

Carter, P.(2009).A Year of Security Driving Lawsuits. *The Hospital Security Reporter*. Security Management Services International, Inc.

Chattanooga Times Free Press, January 6, 2012

Colling, R. & York, T. (2009). *Hospital and Healthcare Security*. Elsevier Publications, Inc.

Colling, R. & York, T. (2010). *Hospital and Healthcare Security*. 5th Edition. Elsevier Publications, Inc.

Collin, M. & Davies, S. (2005). “The Security Needs Assessment Profile: A Multidimensional Approach to Measuring Security Needs.” *International Journal of Forensic Mental Health*. Vol. 4, No.1, pp: 39-52.

Department of Health and Human Services, Nevada State Health Division. (2011). “2010 Annual Sentinel Event Summary Report.” Office of Epidemiology. Nevada State Printing Office.

Encyclopedia of Mental Disorders. (2012). “Deinstitutionalization.” Washington, DC.

Fay, J. (Ed.) *Encyclopedia of Security Management* (2007). Elsevier B.V.

Fernandes, C., Bouthillette, F., Raboud, J., Bullock, L., Moore, C., Christenson, J. Grafstein, E., Rae, S. Ouellet, L., Gillrie, C. & Way, M. (1999). Violence in the Emergency Department: a

Survey of Healthcare Workers. *Canadian Medical Association Journal*. 161 (10).

The Fiscal Times (2009). "High Costs for Patients admitted for Observation."
(<http://www.thefiscaltimes.com/Articles/2010/09/09/>)

Frew, S. Medlaw.com. (2009). *Hospital Security Incident Emphasizes Risks*.
<http://www.medlaw.com/healthlaw>.

Gates, D., Gillespie, G. & Succop, P. (2011). "Violence against Nurses and its Impact on Stress and Productivity." *Nursing Economics*. Vol. 29, No. 2, pp: 5966.

Gates, D. (2012). The Epidemic of Violence against Healthcare Workers." *Occupational Environmental Medicine*. Vol. 72. Pp: 649-650.

Gillespie, G., Gates, D., Miller, M. & Howard, P. (2010). "Workplace Violence in Healthcare Settings: Risk Factors and Protective Strategies. *Rehabilitation Nursing*. Vol. 35, No 5, PP: 177-184.

Glaki-Smith, J., Juarez, A., Boyett, L. Homeyer, C., Robinson, L., & MacLean, S. (2010). Violence against nurses working in US Emergency Departments. *Journal of Healthcare Protection Management*: 26 (1).

Hahn, S., Muller, M., Needham, I. Dassen, T., Gerjo, K., & Halfens, R. (2010). "Factors associated with Patient and Visitor Violence experienced by nurses in general hospitals in Switzerland. *Journal of Clinical Nursing*. 19, pp: 3535-3546

Henderson, R. (2012). "Employment Outlook: 2010-2020. Industry Employment and outpOut Projections to 2020." *Monthly Labor Review*, January, 2012.

Hospital Security Reporter. 2009). "A Year of Security Driven Lawsuits." *SMSI*. www.thehospitalsecurityreporter.com.

Joint Commission on Accreditation of Healthcare Organizations. (2009). "Leadership Committed to Safety." *Sentinel Event Alert*, Issue 43.

Joint Commission on Accreditation of Healthcare Organizations. (2010). "Preventing Violence in the Health Care Setting." *Sentinel Event Alert*, Issue 45.

Kansagra,S., Rao, S., Sullivan, A., Gordon, J., Magid, D., Kaushal, R., Camargo, C., & Blumenthal, D. (2008). "A Survey of Workplace Violence Across 65 US Emergency

Departments.” *Society for Academic Emergency Medicine*. Vol. 10, pp: 1553-2712.

Kennedy, M. (2005). Violence in Emergency Departments: Under-reported, unconstrained and unconscionable. *The Medical Journal of Australia*. 183 (7): 362-365.

Kuehn, B. (2011). “Violence in Healthcare Settings on Rise” *Journal of the American Medical Association*. 304(5): 511-512.

Lavoie, F., Cater, G., Danzi, D. & Berg, R. (2009). Emergency Department Violence in United States teaching Hospitals. *Annals of Emergency Medicine*: 17 (11), 1227-1233. Elsevier B.V.

Mac Shihbne, S. (2009). “Asylums: Essays on the social Situation Mental Patients as Inmates.” *British Medical Journal*. 339 (4): 1136- 1155.

McPhaul, K., & Ligpscomb, J. (2004). Workplace Violence in Health Care: Recognized but not regulated. *The Online Journal of Issues in Nursing*: 9 (3).

Mikow-Porto, V. & Smith, T. (2010). *The 2010 International Association for Healthcare Security and Safety Crime Survey*. International Healthcare Safety and Security Foundation. Chicago, IL.

Mikow-Porto, V. & Smith, T. (2011). *The 2011 International Healthcare Safety and Security Foundation Prisoner Escape Study*. International Healthcare Safety and Security Foundation. Chicago, IL.

Mohr, D., Warren, N., Hodgson, M., & Drummond, D. (2011). “Assault Rates and Implementation of a Workplace Violence Prevention Program in the Veteran’s Health Care Administration.” *The American College of Occupational and Environmental Medicine*. Vol. 53, Issue 5, pp: 511-516.

National Institute for Prevention of Workplace Violence (2011) “*New Violence in the Workplace Fact Sheet Calls for Improved Prevention Efforts.*”

National Institute of Occupational Safety and Health. (2003).

National Law Enforcement Officers Memorial Fund and Concerns of Police Survivors as reported to *CNN News*, December, 2008. www.securitymagazine.com

National Public Radio, (2011). “Violence Surges at Hospital for Mentally Ill Criminals.” www.npr.org.

Needham, I. Abderhalden, C., Dassen, T., Fischer, J., & Dassen. T. (2005). “Non-somatic Effects

of Patient Aggression on Nurses: A systematic Review. *Journal of Advanced Nursing* 49, 283-296.

Occupational Safety and Health Administration (2011).

Parliament of Victoria. (2011). "Inquiry into Violence and Security Arrangements in Victoria Hospitals and, in particular, Emergency Departments." Government Printing for the State of Victoria, Canada.

Privitera, M., Weisman, R., Cerulli, C., Tu, X., and Groman, A. (2009). "Violence toward mental health staff and safety in the work environment." *Occupation Medicine* 10: 1-7.

Romano, M. (2011). "Rubbing Out Violence: Critical to US Health." *Health Progress*. November-December 2011.

Slovenko, R. (2006). Violent Attacks in Psychiatric and other Hospitals. *Journal of Psychiatry & Law* 34: Summer. 239-249.

Torrey, E., Kennard, A., Eslinger, D., Lamb, R. & Pavle, J. (2010). "More mentally Ill persons are in Jails and Prisons than Hospitals: A Survey of the States." *Treatment Advocacy Publication for the State of Florida, FL*.

Torrey, E. (2010). "Documenting the Failure of Deinstitutionalization." *Psychiatry* 73 (2): 122-124.

US Department of Justice. (2006). "Workplace Violence and Victimization." *Statistical Overviews and Resources*. US Government Printing Office.

US Department of Justice, Federal Bureau of Investigation. (2010). "Crime in the United States." *Uniform Crime Reports*. US Government Printing Office.

US Department of Justice. (2011). "Criminal Victimization, 2010." *National Crime Victimization Survey*. US Government Printing Office.

US Department of Justice, Federal Bureau of Investigation. (2012). "Revision to the Uniform Crime Report's Definition of Rape." Office of Public Affairs. US Government Printing Office.

US Department of Labor Statistics. (2009). Table 1: *Workplace Injuries and Illnesses-2008*. US Printing Office. (www.bls.gov/opub/cwc/sh20100825ar01p1.htm).

US Bureau of Labor Statistics. (2012). “*Census of Fatal Occupational Injuries.*” www.bls.gov.

The Washington Post. (2011).

Wiatrowski, W. (2012). “On Guard against Workplace Hazards.” *Monthly Labor Review*. February, 2012.

Workers Compensation. (2012). “Reduce Your Workers’ Comp.” *Bulletin*. National Council on Compensation Insurance.

(<http://www.thefiscaltimes.com/Articles/2010/09/09/High> Costs for Patients Admitted for Observation.aspx#page1).