

March (1) 2008
Volume 12, Issue 3:1

1. **Beyond Negligence: Avoidability and Medical Injury Compensation.**
2. **Can We Really Save 5 Million Lives?**
3. **Counting Difficulties: Retained Instruments, Sponges, and Needles.**
4. **Determinants of Adverse Events in Hospitals—The Potential Role of Patient Safety Culture.**
5. **Effects of Health Care Provider Work Hours and Sleep Deprivation on Safety and Performance.**
6. **Emergency Care Center Turnaround Time—An Improvement Story.**
7. **Evaluation of a Simplified Therapeutic Intervention Scoring System (TISS-28) and the Modified Early Warning Score (MEWS) in Predicting Physiological Deterioration During Inter-facility Transport.**
8. **Getting Connected for Patient Safety: How Medical Device “Plug-and-Play” Interoperability Can Make a Difference.**
9. **Harming through Protection?**
10. **Medication Report Reduces Number of Medication Errors When Elderly Patients Are Discharged from Hospital.**
11. **Nurse Staffing in Acute Care Settings: Research Perspectives and Practice Implications.**
12. **Patient Safety and Error Reduction in Surgical Pathology.**
13. **Quality-Improvement Research and Informed Consent.**
14. **Rates of Medication Errors among Depressed and Burnt Out Residents: Prospective Cohort Study.**
15. **Survival From In-Hospital Cardiac Arrest During Nights and Weekends.**
16. **Teamwork and Communication in Surgical Teams: Implications for Patient Safety.**
17. **The Meaning of Justice in Safety Incident Reporting.**
18. **The Nature and Occurrence of Registration Errors in the Emergency Department.**
19. **Trauma: When There’s No Time to Count.**
20. **Using Technology to Establish Clinical Context.**

- 1. Beyond Negligence: Avoidability and Medical Injury Compensation.**
Kachalia A.B., Mello M.M., Brennan T.A., Studdert D.M.
Soc Sci Med. 2008(Jan); 66(2):387–402.
This article discusses the use of an “avoidability” standard as an alternative to the “negligence” standard in medical injury litigation. The authors examine systems in three countries—Sweden, Denmark, and New Zealand—that use such an avoidability standard as a criterion in determining compensation. The authors describe the rationale for and development and operation of each of the three international systems and, on the basis of this analysis, offer insights that might inform the application of an avoidability standard within the U.S. system. The authors also note that all three of the countries discussed currently use their systems toward patient safety improvement efforts.
- 2. Can We Really Save 5 Million Lives?**
Sandrick K.
Hospitals & Health Networks. 2008(Feb); 82(2):60–62.
This article highlights the Institute for Healthcare Improvement’s (IHI) recently launched “5 Million Lives Campaign,” which builds upon the institution’s previous 100,000 Lives Campaign with 6 additional safety and quality improvement interventions to be adopted by participating hospitals. Profiles of two participating organizations—Cincinnati Children’s Hospital and Cambridge Health Alliance—illustrate how organizational governance boards have incorporated participation in the campaign with their hospitals’ quality improvement activities.
- 3. Counting Difficulties: Retained Instruments, Sponges, and Needles.**
Jackson S., Brady S.
AORN Journal. 2008(Feb); 87(2):315–321.
This article discusses the issue of retained surgical items, surgical count procedures, and challenges that may occur with this process. The authors review patient- and system-related causes of retained surgical items; possible legal and disciplinary consequences for practitioners; and recommended practices and policies for counting to most effectively guard against these occurrences. Two figures are included.
- 4. Determinants of Adverse Events in Hospitals—The Potential Role of Patient Safety Culture.**
Kline T.J.B., Willness C., Ghali W.A.
J Healthc Qual. 2008(Jan/Feb); 30(1):11–17.
This study examined the relationship among various individual-level and unit-level factors as well as the influence of patient safety culture as predictors of the frequency and severity of adverse events. Researchers conducted statistical analysis of data from incident reports and admissions records for a one-year period as well as safety culture survey responses for three acute-care hospitals in western Canada. Results showed a positive correlation between the resource intensity of the presenting case and the severity of incidents; the presence of a stronger culture of safety was associated with decreased severity of incidents. Two tables and one figure are included.

- 5. Effects of Health Care Provider Work Hours and Sleep Deprivation on Safety and Performance.**
Lockley S.W., Barger L.K., Ayas N.T., Rothschild J.M., Czeisler C.A., Landrigan C.P., for the Harvard Work Hours, Health and Safety Group.
Jt Comm J Qual Pat Saf. 2007(Nov); 33(11 Suppl):7–18.
This article examines the impact of extended work shifts and sleep deprivation on healthcare providers' performance and patient and provider safety. The authors summarize current knowledge on the effects of sleep deprivation/fatigue on human performance and wellbeing. They then review several recent studies dealing with the effects of work hours on alertness, performance, and patient and provider safety. The authors argue that, taken together, results of these studies clearly indicate that extended work shifts and consequent fatigue have a negative impact on performance and patient safety. Multiple figures are included.
- 6. Emergency Care Center Turnaround Time—An Improvement Story.**
Gelrud J., Burroughs H., Koterwas J.
J Healthc Qual. 2008(Jan/Feb); 30(1):31–37.
This article describes the development and implementation of an initiative to improve emergency care center (ECC) turnaround time at a Maryland community hospital. A multipart approach was used to streamline a variety of EEC processes, including those related to registration, triage, treatment, and admissions. Results showed a significant reduction in overall EEC turnaround times as well as increased patient satisfaction. Multiple figures are included.
- 7. Evaluation of a Simplified Therapeutic Intervention Scoring System (TISS-28) and the Modified Early Warning Score (MEWS) in Predicting Physiological Deterioration During Inter-facility Transport.**
Lee L.L.Y., Yeung K.Y., Lo W.Y.L., Lau Y.S.C., Tang S.Y.H., Chan J.T.S.
Resuscitation. 2008(Jan); 76(1):47–51.
This prospective study compared the efficacy of two monitoring systems—the therapeutic intervention scoring system (TISS-28) and the modified early warning score (MEWS) in gauging the risk for a patient to undergo transport between facilities. Researchers analyzed TISS-28 and MEWS scores along with data on clinical deterioration during transport for a total of 102 patients who underwent transport from a Hong Kong hospital. Results showed that among the study sample, MEWS was more effective, though not optimal, in identifying patients at risk for deterioration during transport; TISS-28 was not found to be effective as a risk-stratification tool. One figure, two tables, and an appendix are included.

- 8. Getting Connected for Patient Safety: How Medical Device “Plug-and-Play” Interoperability Can Make a Difference.**
Whitehead S.F., Goldman J.M.
Pat Saf Qual Healthcare. 2008(Jan/Feb); 5(1):20–26.
The use of better-integrated healthcare technology systems and system interoperability holds promise for the creation of systems that are more efficient and less susceptible to error; however, such interoperability is not yet widely available. The authors discuss the benefits of medical device interoperability and highlight current efforts to advance the cause, specifically the work of the Medical Device “Plug-and-Play” (MD PnP) Interoperability Program based at the Center for Integration of Medicine and Innovative Technology (CIMIT) at Massachusetts General Hospital/Partners Healthcare System.
- 9. Harming through Protection?**
Baily M.A.
N Engl J Med. 2008(Feb 21); 358(8):768–769.
This editorial comments on the implications of recent actions by the Office for Human Research Protections (OHRP) with respect to Johns Hopkins-conducted research at hospitals in Michigan. The author argues that, contrary to the OHRP’s initial determination (since modified), the Johns Hopkins project did not constitute human subjects research and as such should have been exempt from the requirement of IRB review. She contends that changes to the current regulatory system are needed to clarify how such regulations apply to quality-improvement research and to avoid unnecessary encumbrance to would-be researchers. [See also item 13.]
- 10. Medication Report Reduces Number of Medication Errors When Elderly Patients Are Discharged from Hospital.**
Midlöv P., Holmdahl L., Eriksson T., et al.
Pharm World Sci. 2008(Jan); 30(1):92–98.
This study evaluated the impact of a medication report intervention on frequency of medication errors among elderly patients discharged from a hospital in Sweden. In the intervention group, a structured, updated medication report was issued at discharge and provided to the patient’s other care providers and to the patient; pre- and post-discharge medication lists were then compared to identify any discrepancies. Results showed a statistically significant reduction in medication errors for the intervention group as compared with a retrospective control group. The authors suggest that a structured medication report can be an effective tool to reduce medication errors associated with discharge transitions.

11. Nurse Staffing in Acute Care Settings: Research Perspectives and Practice Implications.

Clarke S.P.

Jt Comm J Qual Pat Saf. 2007(Nov); 33(11 Suppl):30–44.

This article examines current knowledge on the impact of nurse staffing on patient outcomes in the acute care setting. The author first briefly discusses the current and predicted future nursing shortages. He then gives a comprehensive review of the staffing-outcomes literature, highlighting prominent trends and important findings. Finally, he discusses approaches that healthcare managers and policy makers may take to address staffing shortages and mitigate their impact on patient safety. A hypothetical case study depicting effective staffing management practices is included; one table is included.

12. Patient Safety and Error Reduction in Surgical Pathology.

Nakhleh R.E.

Arch Pathol Lab Med. 2008(Feb); 132:181–185.

This article gives an overview of patient safety issues in the context of surgical pathology and outlines an approach to reducing errors as an integral part of a laboratory's quality assurance (QA) activities. The authors review the relevant literature concerning general causes of errors, as well as errors that may occur during each phase of the test process: preanalytic, analytic, and postanalytic; finally, they discuss important factors in error reduction and systems-based patient safety improvement. Two tables are included.

13. Quality-Improvement Research and Informed Consent.

Miller F.G., Emanuel E.J.

N Engl J Med. 2008(Feb 21); 358(8):765–767.

This editorial discusses ethical questions associated with quality-improvement research—apropos of the Office for Human Research Protections' (OHRP) recent intervention in ongoing Johns Hopkins University research at hospitals in Michigan. The authors review the details of the Johns Hopkins case and discuss the ways in which the OHRP regulations may or may not have applied. They critique the regulatory handling of the project by the institutional IRB and subsequently by the OHRP; finally, they comment on the broader implications for quality-improvement research. [See also item 9.]

14. Rates of Medication Errors among Depressed and Burnt Out Residents: Prospective Cohort Study.

Fahrenkopf A.M., Sectish T.C., Barger L.K., et al.

BMJ. 2008(Mar 1); 336(7642):488–491.

This study investigated the incidence of depression and burnout among pediatric residents and the impact of these conditions on frequency of medication errors. Researchers analyzed depression and burnout screening scale data along with error data for a total of 123 pediatric residents at three urban U.S. children's hospitals. Results showed that depression and burnout occurred frequently, with a 20% incidence of depression and a 74% incidence of burnout among the residents examined; depression was associated with a significantly higher rate of medication errors, while burnout did not appear to have an appreciable impact on error rate. Multiple tables and figures are included.

- 15. Survival From In-Hospital Cardiac Arrest During Nights and Weekends.**
Peberdy M.A., Ornato J.P., Larkin G.L., et al., for the National Registry of Cardiopulmonary Resuscitation Investigators.
JAMA. 2008(Feb 20); 299(7):785–792.
This study sought to determine whether rates of patient survival following in-hospital cardiac arrest differed according to time of day or day of the week during which the cardiac arrest occurred. Researchers analyzed data on patient outcomes after cardiac arrest from the National Registry of Cardiopulmonary Resuscitation for a total of 86,748 occurrences over a 7-year period. Results, discussed in detail in the article, showed that cardiac arrests during nights and weekends were associated with significantly lower rates of survival to discharge than those that occurred during day/evening hours and weekdays. Multiple tables and figures are included.
- 16. Teamwork and Communication in Surgical Teams: Implications for Patient Safety.**
Mills P., Neily J., Dunn E.
J Am Coll Surg. 2008(Jan); 206(1):107–112.
This article describes the development and preliminary testing of the Medical Team Training questionnaire, a tool created by the Veterans Affairs (VA) National Center for Patient Safety for use with the VA’s Medical Team Training (MTT) program. The MTT questionnaire probes staff members’ perceptions and attitudes concerning an organization’s safety culture and pinpoints differences in perception among the different professions or disciplines within an organization. In this study, the final version of the questionnaire was administered to a total of 384 operating room personnel at six VA facilities. Results showed that among those surveyed, surgeons consistently had more favorable impressions of the culture of safety, communication, and teamwork at their facility than did nurses or anesthesiologists. Several figures and tables are included.
- 17. The Meaning of Justice in Safety Incident Reporting.**
Weiner B.J., Hobgood C., Lewis M.A.
Soc Sci Med. 2008(Jan); 66(2):403–413.
A “just culture” is widely regarded as a necessary condition for effective incident reporting, but uncertainty remains among healthcare providers and organizations as to what exactly a just culture entails. In this article, the authors seek to identify and synthesize collective beliefs about the nature of a just culture to better articulate a definition of the term. They then employ concepts from organizational justice theory to formulate a theoretical model of perceived justice in the incident reporting process—which, they propose, may be of use in guiding an organization’s progress toward a culture of safety. One figure is included.

- 18. The Nature and Occurrence of Registration Errors in the Emergency Department.**
Hakimzada A.F., Green R.A., Sayan O.R., Zhang J., Patel V.L.
Int J Med Inform. 2008(Mar); 77(3):169–175.
This descriptive study sought to characterize patient identification errors associated with the registration process in the emergency department setting. On the basis of observational and interview data, the authors identified four main categories of identification errors that could be ascribed to aspects of the registration process. The four types of errors, their implications, and potential solutions to address these issues are discussed. One figure is included.
- 19. Trauma: When There’s No Time to Count.**
Murdock D.B.
AORN Journal. 2008(Feb); 87(2):322–328.
The demands of the trauma-care environment can pose challenges to the systematic performance of surgical counts, potentially increasing the risk for retained foreign objects and compromising patient safety. This article gives an overview of the issue of retained surgical objects and discusses considerations and preventive strategies specific to the trauma setting. A case scenario illustrates the observance of recommended counting practices during a trauma-care procedure.
- 20. Using Technology to Establish Clinical Context.**
Dempsey M., Niemeier S.
Pat Saf Qual Healthcare. 2008(Jan/Feb); 5(1):28–31.
This article introduces the notion of clinical context—a summation of pertinent information that creates an integrated picture of a particular patient, situation, or event of care. The authors illustrate how existing and developing technologies, such as autoID and real-time location systems (RTLS) can facilitate apprehension of clinical context; they discuss the ways in which such technology may increase efficiency of care, improve patient flow, and enhance the practice of evidence-based medicine.

NPSF Current Awareness Literature Alert Archives can be accessed at:

<http://www.npsf.org/rc/pubs/ca/>

Anita Spielman, Editor

aspelman@npsf.org