



## **PATIENT SAFETY JANUARY 2004**

1: Adv Neonatal Care. 2003 Dec;3(6):257.

Working conditions and patient safety.

[No authors listed]

PMID: 14695497 [PubMed - as supplied by publisher]

2: Am J Cardiol. 2003 Dec 15;92(12):1384-8.

Feasibility and safety of transeophageal atrial pacing stress echocardiography in patients with known or suspected coronary artery disease.

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To investigate the feasibility and safety of the transesophageal atrial pacing stress test combined with echocardiography (TAPSE) 1,727 TAPSE tests were performed on 1,641 patients consecutively referred to our echocardiographic laboratory for nonexercise stress testing (1,319 men; mean age 60 +/- 9 years; 34% of whom were outpatients). Wall motion abnormalities were present at baseline echocardiography in 975 cases (56%). TAPSE was feasible in 1,648 cases (95.4%). It was not feasible in 79 patients due to failure of positioning the transnasal catheter (n=11), the patient's intolerance of esophageal stimulation (n=24), failure to obtain any or stable atrial capture (n=36), or because the echocardiogram could not be evaluated at the peak of the test (n=8). TAPSE was diagnostic in 1,584 cases (96% of the feasible tests, 92% of all attempts).

TAPSE was nondiagnostic in 64 cases (4% of the feasible tests) due to second-degree atrioventricular type I block resistance to atropine administration with failure to achieve 85% of the age-predicted maximum heart rate (n=59) or due to side effects, such as arrhythmias (n=3) or hypertension (n=2), which required premature interruption of the test. There were no major complications (death, myocardial infarction, or life-threatening arrhythmias).

There were 28 instances of minor complications that comprised transient arrhythmias, including atrial fibrillation (n=8), paroxysmal supraventricular tachycardia (n=6), automatic atrial tachycardia (n=1), sinus arrest (n=1), atrioventricular junctional rhythm (n=2), ectopic atrial rhythm (n=2), nonsustained ventricular tachycardia (maximum 6 beats, n=3), hypotension (n=1), and hypertension (n=4) leading to interruption of the test. Only 5 complications hampered a diagnostic result, whereas 18 occurred during or after a positive test and 5 during a negative, but diagnostic, test. Thus, TAPSE is a highly feasible and very safe stress test. It gives high percentage of diagnostic tests and may represent a valid alternative to pharmacologic stressors.

PMID: 14675570 [PubMed - indexed for MEDLINE]

3: Am J Clin Nutr. 2003 Dec;78(6):1226; author reply 1226-7.

Comment on:

Am J Clin Nutr. 2003 Apr;77(4):883-90.

Conflicting evidence of iron and zinc interactions in humans: does iron affect zinc absorption?

Sreedhar B.

Publication Types:

Comment

Letter

PMID: 14668289 [PubMed - indexed for MEDLINE]

4: Am J Ophthalmol. 2003 Dec;136(6):989-93.

Management of post-vitrectomy persistent vitreous hemorrhage in pseudophakic eyes.

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PURPOSE: To prospectively assess the effect of neodymium:yttrium-aluminum-garnet

peripheral capsulotomy on postvitrectomy hemorrhage in diabetic patients with a posterior chamber intraocular lens (IOL) implant and an intact posterior capsule. DESIGN: Interventional case series. METHODS: This is a prospective case series, clinical practice. PATIENTS: Five vitrectomized, diabetic, pseudophakic patients with persistent vitreous cavity hemorrhage remaining after vitrectomy were selected. They all had a posterior chamber IOL implant with an intact posterior capsule. Additionally, they had all undergone laser panretinal photocoagulation in the involved eye in the past for diabetic retinopathy. Neodymium:yttrium-aluminum-garnet laser capsulotomy outside the optic of the IOL was performed in vitrectomized diabetic patients to treat the remaining vitreous cavity hemorrhage. Visual acuity, intraocular pressure (IOP), and fundus examination were measured and done immediately after the laser procedure, in 7 days and in approximately 3 months. RESULTS: The visual acuity was improved at the time of the first follow-up. However, a mild elevation of IOP was noticed in some patients, which was treated with topical dorzolamide. The final visual acuity was dramatically improved, to 20/30 or better, and the IOP was normalized without medication within a few weeks in all five cases. No neovascularization of the iris or elsewhere was noticed in any case. CONCLUSIONS:

Neodymium:yttrium-aluminum-garnet laser peripheral capsulotomy appears to be a safe and effective management procedure in treating postvitrectomy hemorrhage in diabetic patients who have previously undergone cataract surgery with posterior chamber lens implant, intact posterior capsule, and extensive panretinal photocoagulation. The vitreous hemorrhage cleared completely in all five cases.

Publication Types:

Case Reports

Clinical Trial

PMID: 14644207 [PubMed - indexed for MEDLINE]

5: Ann Emerg Med. 2003 Dec;42(6):815-23.

A framework for classifying factors that contribute to error in the emergency department.

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The Institute of Medicine report in 1999 spurred a national movement in patient safety and focused attention on medical error as a significant cause of preventable injury and death. Throughout the past decade, the medical community has gradually acknowledged the fallibility of medical science and imperfections of our health care organizations. Before significant progress can be made to improve safety in health care, we must better understand the sources of error. This article is presented as one step in the process of change. A framework for classifying factors that contributed to errors identified in the emergency department (ED) is presented. The framework is, in its most basic form, a comprehensive checklist of all the sources of error uncovered in the course of investigating hundreds of cases referred to Stroger Hospital's emergency medicine quality assurance committee throughout the past decade. It begins with a look at error in the ED and then looks beyond the ED to examine error in the context of the wider health care system. It incorporates ideas found in safety engineering, transportation safety, human factors engineering, and our own experience in an urban, public, teaching hospital ED.  
PMID: 14634609 [PubMed - in process]

6: Ann Intern Med. 2004 Jan 6;140(1):33-6.

Patient safety is not enough: targeting quality improvements to optimize the health of the population.

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Ensuring patient safety is essential for better health care, but preoccupation with niches of medicine, such as patient safety, can inadvertently compromise outcomes if it distracts from other problems that pose a greater threat to health. The greatest benefit for the population comes from a comprehensive view of population needs and making improvements in proportion with their potential effect on public health; anything less subjects an excess of people to morbidity and death. Patient safety, in context, is a subset of health problems affecting Americans. Safety is a subcategory of medical errors, which also includes mistakes in health promotion and chronic disease management that cost lives but do not affect "safety." These errors are a subset of lapses in quality, which result not only from errors but also from systemic problems, such as lack of access, inequity, and flawed system designs. Lapses in quality are a subset of deficient caring, which encompasses gaps in therapeutics, respect, and compassion that are undetected by normative quality indicators. These larger problems arguably cost hundreds of thousands more lives than do lapses in safety, and the system redesigns to correct them should receive proportionately greater emphasis. Ensuring such rational prioritization requires policy and medical leaders to eschew parochialism and take a global perspective in gauging health problems. The public's well-being requires policymakers to view the system as a whole and consider the potential effect on overall population health when prioritizing care improvements and system redesigns.

PMID: 14706970 [PubMed - in process]

7: Ann Intern Med. 2004 Jan 6;140(1):51-3.

Malpractice reform must include steps to prevent medical injury.

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In the current malpractice insurance crisis, physicians have focused their advocacy and energy primarily on rapidly increasing liability premiums; problems in access to care; and demands for legal reform, especially caps on damages. An even more important focus, however, is prevention of injury and improvement of

patient safety. Physicians largely control patient care and can play a critical role in systematically reducing injury. Reforms should go beyond liability issues; they should also harness and enhance physicians' ability to act. More visible efforts by physicians to reduce harm, better communication with patients and others, and true evidence of improved patient safety should reduce patient anger and litigiousness. Individually and collectively, physicians can and should ensure that "doing no harm" comes first in the malpractice debate. PMID: 14706972 [PubMed - in process]

8: Circulation. 2003 Dec 9;108(23):2941-8.

Thiazolidinedione use, fluid retention, and congestive heart failure: a consensus statement from the American Heart Association and American Diabetes Association. October 7, 2003.

Nesto RW, Bell D, Bonow RO, Fonseca V, Grundy SM, Horton ES, Le Winter M, Porte D, Semenkovich CF, Smith S, Young LH, Kahn R; American Heart Association; American Diabetes Association.

Publication Types:

Consensus Development Conference

Guideline

Practice Guideline

Review

PMID: 14662691 [PubMed - indexed for MEDLINE]

9: Crit Care Med. 2004 Jan;32(1):256-62.

Guidelines for the inter- and intrahospital transport of critically ill patients.

Warren J, Fromm RE Jr, Orr RA, Rotello LC, Horst HM; American College of Critical Care Medicine.

**SUMMARY:** OBJECTIVE The development of practice guidelines for the conduct of intra- and interhospital transport of the critically ill patient. DATA SOURCE Expert opinion and a search of Index Medicus from January 1986 through October 2001 provided the basis for these guidelines. A task force of experts in the field of patient transport provided personal experience and expert opinion. STUDY SELECTION AND DATA EXTRACTION Several prospective and clinical outcome studies were found. However, much of the published data comes from retrospective reviews and anecdotal reports. Experience and consensus opinion form the basis of much of these guidelines. RESULTS OF DATA SYNTHESIS Each hospital should have a formalized plan for intra- and interhospital transport that addresses a) pretransport coordination and communication; b) transport personnel; c) transport equipment; d) monitoring during transport; and e) documentation. The transport plan should be developed by a multidisciplinary team and should be evaluated and refined regularly using a standard quality improvement process. CONCLUSION The transport of critically ill patients carries inherent risks. These guidelines promote measures to ensure safe patient transport. Although both intra- and interhospital transport must comply with regulations, we believe that patient safety is enhanced during transport by establishing an organized, efficient process supported by appropriate equipment and personnel. PMID: 14707589 [PubMed - in process]

10: Health Manag Technol. 2003 Dec;24(12):22-4, 28-30.

At the crossroads of change and constancy. While technology advances and IT improvements directed at patient safety dot the landscape, healthcare CIOs remain focused on objectives to improve their organizations' performance-- and their own rewards, too.

Blair R.

PMID: 14679728 [PubMed - in process]

11: Hosp Peer Rev. 2004 Jan;29(1):suppl 1-2.

Patient Safety Alert. Pediatrics program just the beginning of safety overhaul.

[No authors listed]

PMID: 14708493 [PubMed - in process]

58: Int J Qual Health Care. 2003 Dec;15 Suppl 1:i49-59.

Adverse drug events and medication errors in Australia.

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PURPOSE: To review information about adverse drug events (ADEs) and medication errors in Australia. DATA SOURCES: Systematic literature reviews and reports

from data collections of the Australian Bureau of Statistics, Institute of Health and Welfare, Council for Health Care Standards and Patient Safety Foundation. RESULTS: (medical record reviews): We have shown that 2-4% of all

hospital admissions, and up to 30% for patients > 75 years of age, are medication-related; up to three-quarters are potentially preventable. RESULTS

(routine data collections): Routine death certificate and hospital discharge data coded using the International Classification of Diseases capture less than

half as many ADEs as medical record reviews. Of coded adverse events that contributed to death, 27% involved an ADE, as did 20% of adverse events

identified at discharge and 43% at general practice encounters. There is a strong correlation between increases in medication use and rates of adverse drug

reactions (ADRs) associated with hospitalization. RESULTS (drugs implicated):

These were similar in all the above studies: anticoagulants, anti-inflammatory drugs, opioids, anti-neoplastics, antihypertensives, antibiotics, cardiac

glycosides, diuretics, hypoglycaemic agents, steroids, hypnotics, anticonvulsants, and antipsychotics. RESULTS (clinical indicators): An ADE is

reported in 1% of hospital admissions, while some hospitals do not report ADRs to the national collection. Only three-quarters of patients with acute

myocardial infarction receive thrombolytics within 1 hour of presentation. Five per cent of patients on warfarin record an international normalized ratio > 5,

and 1%, 0.05%, and 0.2% -suffer abnormal bleeding, cerebral haemorrhage, or death, respectively. RESULTS (the Australian Incident Monitoring System):

Twenty-six per cent of 27 000 hospital-related incidents were medication-related, as were 36% of 2000 anaesthesia-related incidents, and 50%

of 2500 general practice incidents. RESULTS (errors): Errors occur in 15-20% of drug administrations when ward stock systems are used and 5-8% when individual

patient systems are used. Previous allergic reactions to drugs may not be recorded more than 75% of the time. CONCLUSION: ADEs are common in the

Australian health system. Anticoagulant, anti-inflammatory, and cardiovascular drugs feature prominently as preventable, high impact problems, and collectively

make up over one-half of all ADEs. Methods for monitoring and preventing ADEs should be progressively improved.

PMID: 14660523 [PubMed - in process]

12: Int J Qual Health Care. 2003 Dec;15 Suppl 1:i31-40.

Improving patient safety across a large integrated health care delivery system.

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OBJECTIVE: Patient safety is moving up the list of priorities for hospitals and

health care delivery systems, but improving safety across a large organization is challenging. We sought to create a common patient safety strategy for the Partners HealthCare system, a large, integrated, non-profit health care delivery system in the United States. DESIGN: Partners identified a central Patient Safety Officer, who then formed a Patient Safety Advisory Group with local expert members, as well as a Patient Safety Leaders Group comprised of personnel responsible for patient safety at each member institution. The latter group meets monthly to help determine future projects and to share the results of piloting and implementation. There was broad consensus that interventions should include the areas of culture change, process change, and process measurement. SETTING: A large, integrated health care delivery system in the Boston, Massachusetts, area. RESULTS: Key milestones to date include implementation of Executive WalkRounds, development of accountability principles, agreement to create a common system-wide adverse event reporting system, and agreement to implement computerized physician order entry in all hospitals. These efforts have heightened awareness of patient safety considerably within the network. Most influenced to date have been the senior leaders of the hospitals, which has resulted in substantial support for patient safety initiatives. CONCLUSIONS: This loosely integrated delivery system represents a daunting landscape for the development and institution of patient safety concepts. Many projects aimed at different components of patient safety must occur at the same time for significant change, yet culture and care-related beliefs vary substantially within the system, and measurement is especially challenging. Moreover, with many potential interventions, and limited resources, prioritization and selection is difficult. Nonetheless, consensus about some issues has been reached, in particular because of a well delineated patient safety structure. We believe the net result will be substantial improvement in patient safety. PMID: 14660521 [PubMed - in process]

13: Int J Qual Health Care. 2003 Dec;15 Suppl 1:i25-30.

The US Agency for Healthcare Research and Quality's activities in patient safety research.

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PURPOSE: To update the international community on the US Agency for Healthcare Research and Quality's (AHRQ) recent and current activities in improving patient safety. DATA SOURCES: Review of the literature concerning the importance of patient safety as a health care quality issue, international perspectives on patient safety, a review of research solicitations, and early results of funded studies. STUDY SELECTION: A representative sample of patient safety studies from those currently being funded by AHRQ. RESULTS: In response to a growing interest in patient safety in general and a recent US Institute of Medicine report on patient safety in particular, the US Agency for Healthcare Research and Quality has refocused its quality research mission. In the fiscal year 2002, AHRQ spent US\$55 million on patient safety research. This investment was spread across six complementary research areas: (1) health systems error reporting, analysis, and safety improvement research demonstrations; (2) Clinical Informatics to Promote Patient Safety (CLIPS); (3) Centers of Excellence for patient safety research and practice (COE); (4) Developmental Centers for Evaluation and Research in Patient Safety (DCERPS); (5) The Effect of Health Care Working Conditions on Quality of Care; and (6) Partnerships for Quality: Patient Safety Research Dissemination and Education. Internal teams of researchers at AHRQ have published studies on patient safety, such as documenting the impact of medication errors. In addition to funding research on patient safety, AHRQ is an

integral partner in several national and international collaborations to form strategic synergies that build upon each member organization's strengths, reduce redundant efforts, and benefit from each other's successes. As evidence on patient safety is generated, AHRQ also serves the important mission of disseminating information to the public. CONCLUSION: The patient safety research field has undergone a period of rapid evolution. It is now incumbent upon the international health care quality improvement community to translate the future results of this research investment into improved safety for patients.  
PMID: 14660520 [PubMed - in process]

14: J Acquir Immune Defic Syndr. 2003 Dec 15;34(5):482-90.

Safety and trough concentrations of nevirapine prophylaxis given daily, twice weekly, or weekly in breast-feeding infants from birth to 6 months. Shetty AK, Coovadia HM, Mirochnick MM, Maldonado Y, Mofenson LM, Eshleman SH, Fleming T, Emel L, George K, Katzenstein DA, Wells J, Maponga CC, Mwatha A, Jones SA, Abdool Karim SS, Bassett MT; HIVNET 023 Study Team. Department of Pediatrics, Stanford University School of Medicine, Stanford, CA, USA. avishetty@pol.net

Despite the success of antiretroviral prophylaxis in reducing mother-to-child HIV-1 transmission, postpartum transmission through breast milk remains a problem. Antiretroviral administration to the infant during the period of breast-feeding could protect against postnatal transmission. An open-label phase 1/2 study was designed to assess the safety and trough concentrations of nevirapine (NVP) given once weekly (OW), twice weekly (TW), or once daily (OD) to HIV-exposed breast-feeding infants for 24 weeks. Following maternal dosing with 200 mg NVP orally at onset of labor, breast-feeding infants were randomized within 48 hours of birth to 1 of 3 regimens: arm 1, NVP given OW (4 mg/kg from birth to 14 days, upward arrow to 8 mg/kg from 15 days to 24 weeks), arm 2, NVP given TW (4 mg/kg from birth to 14 days, upward arrow to 8 mg/kg from 15 days to 24 weeks), and arm 3, NVP given OD (2 mg/kg from birth to 14 days, upward arrow to 4 mg/kg from 15 days to 24 weeks). Trough NVP concentrations and clinical and laboratory abnormalities were monitored. Of the 75 infants randomized (26 to OW, 25 to TW, and 24 to OD dosing), 63 completed the 32-week follow-up visit. No severe skin, hepatic, or renal toxicity related to NVP was observed. Neutropenia occurred in 8 infants. Trough NVP levels were lower than the therapeutic target (100 ng/mL) in 48 of 75 (64.0%) samples from infants in the OW arm, 3 of 65 (4.6%) samples in the TW arm, and 0 of 72 samples in the OD arm. Median (range) trough NVP concentrations were 64 ng/mL (range: <25-1519 ng/mL) with OW dosing;

459 (range: <25-1386 ng/mL) with TW dosing; and 1348 (range: 108-4843 ng/ml) with OD dosing. Our data indicate that NVP prophylaxis for 6 months was safe and well tolerated in infants. OD NVP dosing resulted in all infants with trough concentration greater than the therapeutic target and maintenance of high drug concentrations. A phase 3 study is planned to assess the efficacy of OD infant NVP regimen to prevent breast-feeding HIV-1 transmission.

Publication Types:

Clinical Trial

Multicenter Study

Randomized Controlled Trial

PMID: 14657758 [PubMed - indexed for MEDLINE]

15: J Am Coll Cardiol. 2003 Dec 17;42(12):2063-9.

Comment in:

J Am Coll Cardiol. 2003 Dec 17;42(12):2070-2.  
Catheter-based intramyocardial injection of autologous skeletal myoblasts as a primary treatment of ischemic heart failure: clinical experience with six-month follow-up.  
Smits PC, van Geuns RJ, Poldermans D, Bountiukos M, Onderwater EE, Lee CH, Maat AP, Serruys PW.  
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OBJECTIVES: We report on the procedural and six-month results of the first percutaneous and stand-alone study on myocardial repair with autologous skeletal myoblasts. BACKGROUND: Preclinical studies have shown that skeletal myoblast transplantation to injured myocardium can partially restore left ventricular (LV) function. METHODS: In a pilot safety and feasibility study of five patients with symptomatic heart failure (HF) after an anterior wall infarction, autologous skeletal myoblasts were obtained from the quadriceps muscle and cultured in vitro for cell expansion. After a culturing process, 296 +/- 199 million cells were harvested (positive desmin staining 55 +/- 30%). With a NOGA-guided catheter system (Biosense-Webster, Waterloo, Belgium), 196 +/- 105 million cells were transendocardially injected into the infarcted area. Electrocardiographic and LV function assessment was done by Holter monitoring, LV angiography, nuclear radiography, dobutamine stress echocardiography, and magnetic resonance imaging (MRI). RESULTS: All cell transplantation procedures were uneventful, and no serious adverse events occurred during follow-up. One patient received an implantable cardioverter-defibrillator after transplantation because of asymptomatic runs of nonsustained ventricular tachycardia. Compared with baseline, the LV ejection fraction increased from 36 +/- 11% to 41 +/- 9% (3 months, p = 0.009) and 45 +/- 8% (6 months, p = 0.23). Regional wall analysis by MRI showed significantly increased wall thickening at the target areas and less wall thickening in remote areas (wall thickening at target areas vs. 3 months follow-up: 0.9 +/- 2.3 mm vs. 1.8 +/- 2.4 mm, p = 0.008). CONCLUSIONS: This pilot study is the first to demonstrate the potential and feasibility of percutaneous skeletal myoblast delivery as a stand-alone procedure for myocardial repair in patients with post-infarction HF. More data are needed to confirm its safety.

PMID: 14680727 [PubMed - indexed for MEDLINE]

16: J Med Syst. 2003 Dec;27(6):499-501.

Patient safety and medication errors.

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PMID: 14626475 [PubMed - in process]

17: J Med Syst. 2003 Dec;27(6):543-51.

Systems factors in the reporting of serious medication errors in hospitals.

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Underreporting of medication errors poses a threat to quality improvement initiatives. Hospital risk management programs encourage medication error reporting for effective management of systems failures. This study involved a survey of 156 medical-surgical hospitals in the United States to evaluate systems factors associated with the reporting of serious medication errors.

Prior to controlling for bed size, a multivariate logistic regression model showed increased reporting of medication errors in hospitals with 24-h pharmacy services, presumably because of better error reporting systems. When number of occupied beds was included, the final model demonstrated bed size to be the only statistically significant factor. Increased reporting rates for serious medication errors warrant further evaluation, but higher error reporting may paradoxically indicate improved error surveillance. Results suggest that increased availability of pharmacist services results in opportunities for more diligent systematic efforts in detecting and reporting medication errors, which should lead to improved patient safety.  
PMID: 14626479 [PubMed - in process]

18: Jt Comm J Qual Saf. 2003 Dec;29(12):646-51.

John M. Eisenberg Patient Safety Awards. Safety, effectiveness, and efficiency: a Web-based virtual anticoagulation clinic.

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**BACKGROUND:** Information systems that include Web-based technology can provide clinical decision support in care processes that can be algorithmically described. Long-term oral anticoagulation with warfarin is one such care process. **THE VIRTUAL ANTICOAGULATION CLINIC:** A clinical decision support tool was developed using evidence-based guidelines from the extant medical literature on the indications for and management of therapy with warfarin. Training modules for physicians and support staff were implemented, and patients were prospectively enrolled in the "virtual anticoagulation clinic" when they began taking warfarin or when they returned for routine follow-up under the usual care model. Designated warfarin coordinators managed the virtual anticoagulation clinic under physician supervision. **RESULTS:** Following the adoption of the virtual anticoagulation clinic, uniform improvement in time in therapeutic range was observed in each participating practice, with those practices using it the longest equaling or exceeding results reported from formally organized warfarin clinics. Major adverse events were observed only in patients who were not managed in the manner suggested by the virtual anticoagulation clinic. **CONCLUSIONS:** A Web-based solution to chronic anticoagulation therapy offers an inexpensive, safe, and significantly more effective alternative to the usual care model.

PMID: 14679867 [PubMed - indexed for MEDLINE]

19: Jt Comm J Qual Saf. 2003 Dec;29(12):640-5.

John M. Eisenberg Patient Safety Awards. The LVHVN patient safety video: patients as partners in safe care delivery.

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**BACKGROUND:** In fall 2002, Lehigh Valley Hospital and Health Network (LVHVN), an 800-bed, three-site academic community hospital, embarked on an initiative to produce an educational patient safety video. **IMPLEMENTING THE INITIATIVE:** The video addresses six topics relevant to optimum patient safety: treatment plan, medication safety, falls, surgical site identification, hand washing, and discharge planning. Each segment outlines strategies that patients may employ or observations they should make to improve patient safety. **RESULTS:** Analysis of the patient survey data, which were based on 217 surveys, indicated that patients felt more comfortable talking with their health care workers about questions or concerns after viewing the video and that they rated their

knowledge of patient safety higher. Patients generally rated the six sections as helpful. **DISCUSSION:** The video was intended to become an important step in the preadmission process. Releasing the video to patients and staff helped to normalize some practices that initially were not comfortable for staff (repeatedly asking an inpatient for his or her name and date of birth before administering all medications) or patients (inquiring whether a staff member has washed his or her hands). Additional methods were in development to share the video with current and prospective patients and assess its impact. The LVHHN patient safety council plans to share the video with the community at large. PMID: 14679866 [PubMed - indexed for MEDLINE]

20: Jt Comm J Qual Saf. 2003 Dec;29(12):634-9.

John M. Eisenberg Patient Safety Awards. The Leapfrog Group for Patient Safety: rewarding higher standards.

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**BACKGROUND:** The Leapfrog Group is a consortium of more than 145 large health care purchasers committed to a common set of purchasing principles through which to leverage dramatic improvements in the safety, quality, and overall value of health care. Leapfrog purchasers mobilize consumers to seek out higher-quality providers, and they reward higher-quality providers. Leapfrog is primarily operationalized through Regional Roll-Outs--locally led purchaser efforts.

**PATIENT SAFETY RECOMMENDATIONS:** The Leapfrog Group purchasers first focused on

three patient safety practices, or "safety leaps," to reduce preventable medical errors--computer physician order entry, evidence-based hospital referral, and intensive care unit (ICU) physician staffing. Leapfrog's leaps are refined and updated annually on the basis of evidence and input from experts in the field.

**IMPACT ON PATIENT SAFETY:** On the basis of survey results from the first 22 Regional Roll-Outs, as of September 2003, 4% of 633 hospitals reporting from the 22 regions fully met the CPOE standard, and an additional 17% of the 633 said they would meet the standard by 2005. Survey results also showed that 22% of the 605 hospitals in the 22 regions with ICUs met Leapfrog's ICU staffing recommendations and that an additional 5% would meet the standard by 2004.

**NEXT**

**STEPS:** In 2004 Leapfrog will launch new Regional Roll-Outs, bringing Leapfrog consumer education, hospital-specific information, and purchasing strategies to more communities nationwide.

PMID: 14679865 [PubMed - indexed for MEDLINE]

21: Jt Comm Perspect. 2003 Dec;23(12):14-5.

National Patient Safety Goal on abbreviations clarified, implementation revised.

[No authors listed]

PMID: 14710563 [PubMed - in process]

Sim DS, Jeong MH, Kim W, Rhew JY, Yum JH, Kim JH, Cho JG, Ahn YK, Park JC, Ahn BH, Kim SH, Kang JC.

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**BACKGROUND:** High-risk percutaneous coronary interventions (PCIs) are associated with a high complication rate, a low procedural success rate and a high restenosis rate, especially in diabetics. We sought to determine whether abciximab (ReoPro) therapy affects long-term clinical outcomes of Korean patients with diabetes undergoing high-risk PCI. **METHODS:** One hundred and nineteen patients with 152 lesion sites were administered ReoPro among 2,231

patients who underwent PCI at Chonnam National University Hospital from March 1999 to Feb 2001. These 119 patients were divided into two groups, 30 were allocated to a diabetic group (Group I, 57.7 +/- 8.2 years, 22 male), and 89 to a non-diabetic group (Group II, 59.6 +/- 10.8 years, 68 male). Early and long-term clinical outcomes after PCI were analyzed. RESULTS: In terms of clinical diagnosis, the number of acute myocardial infarctions in Group I was 25 (83.3%) and 76 in Group II (85.4%). As for risk factors, target artery lesions, and ACC/AHA types, no differences were found between the two groups. The number of patients with total occlusion was 21 (55.3%) and 62 (53.9%), and the number with a thrombus-containing lesion was 28 (93.3%) and 88 (98.9%) in Groups I and II, respectively. The procedure was successful in 27 (90.0%) in Group I, and in 80 (89.9%) in Group II, and no differences were evident between the two groups in terms of bleeding complications. No major adverse cardiac events (MACE), including myocardial infarction, repeat revascularization or cardiac death, were observed in Group I, but 8 cases of MACE occurred in Group II during hospitalization. Clinical follow-up was performed in 116 patients (97.5%) over 18.5 +/- 6.7 (5-28) months. The number of overall MACEs was 10 (3.3%) in Group I and 14 (15.7%) in Group II (p = 0.038). CONCLUSION: ReoPro used in high-risk PCI in diabetics was effective in terms of early clinical outcomes, but its long-term clinical benefits were not proven.

Publication Types:

Clinical Trial

PMID: 14619381 [PubMed - indexed for MEDLINE]

22: Methods Inf Med. 2003;42(5):503-8.

Leveraging information technology towards enhancing patient care and a culture of safety in the US.

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OBJECTIVES: To heighten awareness about the critical issues currently affecting patient care and to propose solutions based on leveraging information technologies to enhance patient care and influence a culture of patient safety.

METHODS: Presentation and discussion of the issues affecting health care today, such as medical and medication-related errors and analysis of their root causes; proliferation of medical knowledge and medical technologies; initiatives to improve patient safety; steps necessary to develop a culture of safety; introduction of relevant enabling technologies; and evidence of results.

RESULTS AND CONCLUSION: Medical errors affect not only mortality and morbidity, but they also create secondary costs leading to dissatisfaction by both provider and patient. Health care has been slow to acknowledge the benefits of enabling technologies to affect the quality of care. Evaluation of recent applications, such as the computerized patient record, physician order entry, and computerized alerting systems show tremendous potential to enhance patient care and influence the development of a culture focused on safety. They will also bring about changes in other areas, such as workflow and the creation of new partnerships among providers, patients, and payers.

PMID: 14654884 [PubMed - in process]

23: Nurs Adm Q. 2003 Oct-Dec;27(4):344-54.

A magnet nursing service approach to nursing's role in quality improvement.

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The heightened focus on quality and the rise of health care consumerism are manifestations of numerous interrelated dynamics, especially including the aging

of the "baby boomers" and greater prevalence of chronic conditions, the explosion of biomedical scientific knowledge and technology, changes in prevailing methods of health care financing, a recent prolonged period of economic prosperity, widespread concerns about patient safety, return of disproportionate health care cost, and the democratization of medical knowledge consequent to widespread use of the Internet. Quality improvement in nursing was first introduced by Florence Nightingale during the Crimean War. Today, nursing quality continues to look at process, but has evolved to an emphasis on patient care outcomes. This article discusses nursing quality structure, processes, and outcomes at a large, teaching, tertiary medical center in Los Angeles, California. The medical center is one of two designated magnet nursing services in California. Nursing's role in achieving clinical and service quality for patients, communities, and staff are essential characteristics of magnet-designated nursing service organizations.  
PMID: 14649027 [PubMed - indexed for MEDLINE]

24: Nurs Manage. 2003 Dec;34(12):24-6.  
Evolving infection control standards challenge compliance.  
Gilmore GK.

Advances target JCAHO patient safety goal compliance, hand hygiene and antisepsis, intravenous site preparation, and West Nile Virus prevention.  
PMID: 14668681 [PubMed - in process]

25: Ophthalmology. 2003 Dec;110(12):2372-83; discussin 2384-5.  
Anecortave acetate as monotherapy for treatment of subfoveal neovascularization in age-related macular degeneration: twelve-month clinical outcomes.  
Slakter JS; Anecortave Acetate Clinical Study Group.  
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PURPOSE: To evaluate safety and efficacy of the angiostatic agent anecortave acetate, compared with a placebo, for treatment of subfoveal choroidal neovascularization (CNV). DESIGN: Ongoing masked, randomized, placebo-controlled, parallel evaluation of anecortave acetate (30 mg, 15 mg, and 3 mg) versus a placebo. PARTICIPANTS: There were 128 eyes of 128 patients with subfoveal CNV secondary to age-related macular degeneration who were enrolled and treated, with 80% (102/128) of eyes presenting with predominantly classic lesions at baseline. METHODS: All eyes received a posterior juxtascleral depot application of masked study medication or a placebo, with retreatment at 6-month intervals if the masked investigator believed the patient could benefit. Patients received periodic detailed ophthalmic examinations with both fluorescein and indocyanine green angiography, general physical examinations with electrocardiograms, and hematology/serum chemistry/urinalysis. All ophthalmic and systemic safety data were periodically reviewed by the Independent Safety Committee overseeing the study. MAIN OUTCOME MEASURES: Best-corrected logarithm of the minimum angle of resolution (logMAR) vision and fluorescein angiographic lesion characteristics were compared over time and among treatment groups. RESULTS: At month 12, anecortave acetate (15 mg) administered at 6-month intervals was statistically superior to the placebo for 3 measures of clinical efficacy: mean change from baseline vision ( $P = 0.0131$ ), stabilization of vision ( $<3$  logMAR line change;  $P = 0.0323$ ), and prevention of severe vision loss (decrease of  $>$  or  $= 6$  logMAR lines from baseline;  $P = 0.0224$ ). Subgroup analysis of predominantly classic lesions revealed that anecortave acetate (15 mg) was also superior to the placebo at 1 year for each of these 3 measures of visual outcome ( $P$ s = 0.0022, 0.0100, and 0.0299, respectively). Anecortave acetate (15 mg) trended toward significance over the placebo at month 12 for inhibition of total lesion growth and for inhibition of

both the total CNV component and the classic CNV component in both the overall and subgroup analyses. The Independent Safety Committee identified no clinically relevant treatment-related safety issues. CONCLUSIONS: Anecortave acetate (15 mg) is safe and clinically efficacious at 1 year for maintaining vision, preventing severe vision loss, and inhibiting subfoveal CNV lesion growth.

Publication Types:

Clinical Trial

Multicenter Study

Randomized Controlled Trial

PMID: 14644721 [PubMed - indexed for MEDLINE]

26: Psychiatr Serv. 2003 Dec;54(12):1599-603.

Patient safety forum: examining the evidence: do we know if psychiatric inpatients are being harmed by errors? What level of confidence should we have in data on the absence or presence of unintended harm?

Bates DW, Shore MF, Gibson R, Bosk C.

PMID: 14645798 [PubMed - in process]

27: Qual Saf Health Care. 2003 Dec;12 Suppl 2:ii33-8.

Assessing patient safety risk before the injury occurs: an introduction to sociotechnical probabilistic risk modelling in health care.

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Since 1 July 2001 the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has required each accredited hospital to conduct at least one proactive risk assessment annually. Failure modes and effects analysis (FMEA) was recommended as one tool for conducting this task. This paper examines the limitations of FMEA and introduces a second tool used by the aviation and nuclear industries to examine low frequency, high impact events in complex systems. The adapted tool, known as sociotechnical probabilistic risk assessment (ST-PRA), provides an alternative for proactively identifying, prioritizing, and mitigating patient safety risk. The uniqueness of ST-PRA is its ability to model combinations of equipment failures, human error, at risk behavioral norms, and recovery opportunities through the use of fault trees. While ST-PRA is a complex, high end risk modelling tool, it provides an opportunity to visualize system risk in a manner that is not possible through FMEA.

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135: Qual Saf Health Care. 2003 Dec;12 Suppl 1:i16-20.

Can we select health professionals who provide safer care.

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In order to improve patient safety, health services are looking to other industries' experiences and as a result are adopting a systems approach to learning from error, rather than simply focusing the blame on the individual. However, in health care the individual will remain an important contributor to safety and this paper looks at other literatures besides health to consider a number of individual characteristics and the role they might play in terms of work practices that affect patient safety. It considers the effects of a variety of personality profiles including sensation seeking, Type A, and those with high self esteem; looks at our ability to select for psychological wellbeing; and discusses the ways that psychometrics have been used in medicine to predict performance. It concludes that although rarely used, psychometrics has been shown to be useful in predicting some aspects of performance in medicine and suggests that this is an area well worth further study for the benefit of patient care. Nevertheless, we are a long way away from being able to select

safer staff and should instead be developing this knowledge to enable us to recognise and address potential difficulties.

PMID: 14645743 [PubMed - in process]

28: Qual Saf Health Care. 2003 Dec;12 Suppl 2:ii58-63.

Administrative data based patient safety research: a critical review.

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Administrative data are readily available, inexpensive, computer readable, and cover large populations. Despite coding irregularities and limited clinical details, administrative data supplemented by tools such as the Agency for Healthcare Research and Quality (AHRQ) patient safety indicators (PSIs) could serve as a screen for potential patient safety problems that merit further investigation, offer valuable insights into adverse impacts and risks of medical errors and, to some extent, provide benchmarks for tracking progress in patient safety efforts at local, state, or national levels.

PMID: 14645897 [PubMed - in process]

29: Qual Saf Health Care. 2003 Dec;12(6):405-10.

Evaluation of the culture of safety: survey of clinicians and managers in an academic medical center.

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**BACKGROUND:** Despite the emphasis on patient safety in health care, few organizations have evaluated the extent to which safety is a strategic priority or their culture supports patient safety. In response to the Institute of Medicine's report and to an organizational commitment to patient safety, we conducted a systematic assessment of safety at the Johns Hopkins Hospital (JHH) and, from this, developed a strategic plan to improve safety. The specific aims of this study were to evaluate the extent to which the culture supports patient safety at JHH and the extent to which safety is a strategic priority. **METHODS:** During July and August 2001 we implemented two surveys in disparate populations to assess patient safety. The Safety Climate Scale (SCS) was administered to a sample of physicians, nurses, pharmacists, and other ICU staff. SCS assesses perceptions of a strong and proactive organizational commitment to patient safety. The second survey instrument, called Strategies for Leadership (SLS), evaluated the extent to which safety was a strategic priority for the organization. This survey was administered to clinical and administrative leaders. **RESULTS:** We received 395 completed SCS surveys from 82% of the departments and 86% of the nursing units. Staff perceived that supervisors had a greater commitment to safety than senior leaders. Nurses had higher scores than physicians for perceptions of safety. Twenty three completed SLS surveys were received from 77% of the JHH Patient Safety Committee members and 50% of the JHH

Management Committee members. Management Committee responses were more positive

than Patient Safety Committee, indicating that management perceived safety efforts to be further developed. Strategic planning received the lowest scores from both committees. **CONCLUSIONS:** We believe this is one of the first large scale efforts to measure institutional culture of safety and then design improvements in health care. The survey results suggest that strategic planning of patient safety needs enhancement. Several efforts to improve our culture of

safety were initiated based on these results, which should lead to measurable improvements in patient safety.

PMID: 14645754 [PubMed - in process]

30: Qual Saf Health Care. 2003 Dec;12 Suppl 2:ii17-23.

Safety culture assessment: a tool for improving patient safety in healthcare organizations.

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Increasingly, healthcare organizations are becoming aware of the importance of transforming organizational culture in order to improve patient safety. Growing interest in safety culture has been accompanied by the need for assessment tools focused on the cultural aspects of patient safety improvement efforts. This paper discusses the use of safety culture assessment as a tool for improving patient safety. It describes the characteristics of culture assessment tools presently available and discusses their current and potential uses, including brief examples from healthcare organizations that have undertaken such assessments. The paper also highlights critical processes that healthcare organizations need to consider when deciding to use these tools.

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31: Qual Saf Health Care. 2003 Dec;12 Suppl 2:ii8-12.

The measurement of active errors: methodological issues.

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The value of research in any topic area turns on its validity. Patient safety research has revealed--or, at least, given renewed urgency to--a raft of methodological issues. The meaning and thus the value of empirical research in this field is contingent on getting the methodology right. The need for good methods for the measurement of error is necessary whenever an inference is intended and, since inferences lie at the heart of research and management, there is a huge need to understand better how to make measurements that are meaningful, precise, and accurate. In this paper we consider issues relating to the measurement of error and the need for more research.

PMID: 14645889 [PubMed - in process]

32: Qual Saf Health Care. 2003 Dec;12 Suppl 2:II1.

Patient safety: research methods for a new field.

Battles JB.

PMID: 14645887 [PubMed - in process]

33: Qual Saf Health Care. 2003 Dec;12 Suppl 2:ii2-7.

Organizing patient safety research to identify risks and hazards.

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Patient safety has become an international priority with major research programmes being carried out in the USA, UK, and elsewhere. The challenge is how to organize research efforts that will produce the greatest yield in making health care safer for patients. Patient safety research initiatives can be considered in three different stages: (1) identification of the risks and hazards; (2) design, implementation, and evaluation of patient safety practices; and (3) maintaining vigilance to ensure that a safe environment continues and

patient safety cultures remain in place. Clearly, different research methods and approaches are needed at each of the different stages of the continuum. A number of research approaches can be used at stage 1 to identify risks and hazards including the use of medical records and administrative record review, event reporting, direct observation, process mapping, focus groups, probabilistic risk assessment, and safety culture assessment. No single method can be universally applied to identify risks and hazards in patient safety. Rather, multiple approaches using combinations of these methods should be used to increase identification of risks and hazards of health care associated injury or harm to patients.

PMID: 14645888 [PubMed - in process]