November 2011 Vol 20, No 11

# **Reports**

Occupational bazards

## Personal consequences of malpractice lawsuits on surgeons

Though malpractice lawsuits are often filed against surgeons, the personal consequences such as burnout, depression, and career satisfaction are poorly understood.

The objective of this study from the American College of Surgeons was to identify the prevalence of malpractice litigation against surgeons and evaluate associations with personal well-being. More than 25,000 members of the American College of Surgeons were surveyed, and 7,164 (29%) responded.

Of the respondents, 1,764 (24.6%) had experienced a malpractice lawsuit within 24 months prior to the survey.

Surgical specialties reporting the highest rates of malpractice lawsuits were neurosurgery (31%), cardiothoracic surgery (29%), general surgery (28%), colorectal surgery (28%), and obstetric and gynecologic surgery (28%).

Those involved in lawsuits were more likely to be younger, male, work more hours per week, have frequent night call, and be in private practice.

Malpractice lawsuits were strongly related to burnout, depression, and recent thoughts of suicide. Multivariate analysis showed depression and burnout to be independently associated with a lawsuit. Surgeons who had experienced a recent lawsuit also reported less career satisfaction and were less likely to recommend a surgical career to their children or others.

The researchers concluded that malpractice lawsuits against surgeons occur often and take a profound personal toll, resulting in emotional exhaustion, stress, and professional dissatisfaction.

Balch C M, Oreskovich M R, Dyrbye L, et al. Personal consequences of malpractice lawsuits on American surgeons. J Am Coll Surg. November 2011;213:657-667.

Perioperative care

# Nursing home residents have greater surgery risks

Though studies suggest that surgery can be performed safely in the elderly, surgical risk in nursing home residents is poorly understood.

To determine risk in nursing home residents undergoing major abdominal surgery, researchers from the University of California, San Francisco, compared operative mortality and use of invasive interventions in more than 70,000 Medicare enrolled nursing home residents to rates in more than 1 million noninstitutionalized Medicare enrollees undergoing the same procedures.

Operative mortality in the nursing home residents was substantially higher than in nonresidents for all procedures:

- surgery for bleeding duodenal ulcer—42% vs 26%
- colectomy—32% vs 13%
- appendectomy—12% vs 2%
- cholecystectomy—11% vs 3%.

Overall, postoperative invasive interventions were more common in nursing home residents than nonresidents. These findings remained the same after age, gender, and other comorbidities were taken into account.

The researchers concluded that nursing home residents experience substantially higher rates of mortality and invasive interventions after major surgery. This information should be used for decision making by physicians, patients, and their families.

Finlayson E, Wang L, Landefeld C S, et al. Major abdominal surgery in nursing home residents: A national study. Ann Surg. Published online Oct 20, 2011, abead of print.



# Postdischarge care leading cause for surgery cost variations

Surgery is a large component of health care spending for Medicare patients. Large variations in payments suggest there may be opportunities for reducing costs through bundled payments.

Researchers from the University of Michigan Medical School, Ann Arbor, analyzed data for Medicare enrollees between January 2005 and November 2007.

They found that Medicare paid hospitals very different amounts for the same surgeries, even after factoring in higher costs in some areas and the severity of patient illness.

Postdischarge care accounted for large cost variations for 4 kinds of surgery: 85% of the difference between highest-cost and lowest-cost hospitals for hip replacement, 44% for colectomy, 41% for back surgery, and 31% for coronary bypass patients.

The findings show that postdischarge care is the main source of large cost variations, lending credence to the suggestion that costs could be reduced through bundled payments, the researchers concluded. The data also suggest that many hospitals have considerable room to improve their cost efficiency for surgery and should look for patterns of excess utilization.

Miller D C, Gust C, Dimick J B, et al. Large variations in Medicare payments for surgery highlight savings potential from bundled payment programs. Health Affairs. November 2011;30:2107-2115.

http://content.healthaffairs.org/

## Surgical site infections

# Effect of forced-air warming on air quality in laminar flow ORs

Laminar air flow is designed to reduce airborne bacteria that may cause surgical site infections (SSIs) by dispensing highly filtered air over the surgical field. Warm air released by forced-air covers could theoretically disturb laminar airflow. Researchers from the Cleveland Clinic evaluated the effect of forced-air warming on laminar air flow performance in ORs at 2 hospitals in the Netherlands.

The effect of two 3M Bair Hugger forced-air warming blankets (model 522 upper-body blanket and 635 underbody blanket) were tested. At the same time, the concentration of particles at the surgical site was assessed.

There was no statistically significant difference in particle counts, regardless of whether the forced-air warming unit was set to off, ambient air, or high heat settings. In all cases, the particle concentration at the test point was reduced 3-log to 5-log compared to background particulate levels in the room. This surpassed the 2-log reduction required by the European performance standard.

The researchers also assessed the airflow patterns above the patient with the forced-air blower set to high and the laminar flow system activated. Neither the forced-air warming blanket or forced-air blower created an upward draft or interfered with the normal unidirectional stream of the laminar air flow system.

The researchers concluded that the use of



Publisher Elinor S. Schrader Executive Editor Patricia Patterson Editor Judith M. Mathias, RN, MA

Summaries in OR Reports are intended to give readers an overview of literature pertaining to the OR environment.

OR Reports (ISSN 1065-8173) is published monthly by Access Intelligence LLC, 4 Choke Cherry Rd, Second Floor, Rockville, MD 20850.

Copyright © 2011 OR Manager, Inc. All rights reserved, No part of this publication may be reproduced without written permission. Subscription rates: \$88 per year Canadian: \$98 per year Foreign: \$108 per year

Address subscription requests to Client Services, clientservices@ accessintel.com, Tel: 888-707-5814.

Web sites: www.ormanager.com; www.orbenchmarks.com.





forced-air warming to maintain patient normothermia and help prevent SSIs does not disturb laminar air flow or compromise the protection of the surgical site.

Sessler D I, Olmsted R N, Kuelpmann R. Forced-air warming does not worsen air quality in laminar flow operating rooms. Anesth Analg. Published online Sept 29, 2011, ahead of print.

www.anesthesia-analgesia.org

## Surgical trends

## **Extracranial-intracranial arterial bypass** surgery to prevent strokes too risky

Atherosclerotic internal carotid artery occlusion causes 10% of transient ischemic attacks and 15% to 25% of ischemic strokes. Extracranial-intracranial arterial (EC-IC) bypass surgery was developed to prevent subsequent strokes by improving blood flow distal to the occluded artery.

This multi-center study examined whether EC-IC bypass plus medical therapy reduced subsequent strokes better than medical therapy alone. Of 195 patients included in the study, 97 were randomized to receive surgery, and 98 were randomized to no surgery.

Patients treated with EC-IC bypass surgery plus medical therapy had a 14% risk of having a stroke

30 days postoperatively, compared with a 2% risk in patients treated with medical therapy alone.

The EC-IC surgical procedure, which consists of bypassing the carotid artery by anastomosing a superficial temporal artery branch to a cortical branch of the middle cerebral artery, was expected to reduce subsequent strokes. The trial was stopped early because of the findings.

Powers W J, Clarke W R, Grubb Jr R L, et al. Extracranial-intracranial bypass surgery for stroke prevention in hemodynamic cerebral ischemia: The carotid occlusion surgery study randomized trial. JAMA. Nov 9, 2011;306:1983-1992.

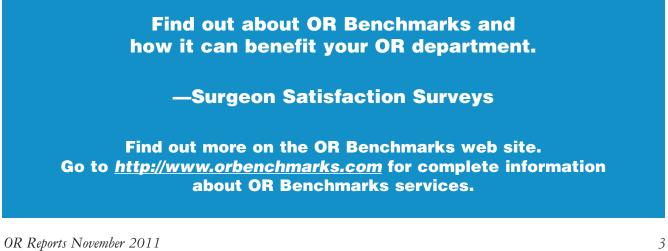
www.jama.com

## New technique helps spine surgeons avoid wrong-level surgery

Accurate intraoperative localization of the correct thoracic vertebral level to be operated on remains a challenge in both open and minimally invasive spine surgery.

In this study, researchers from the University of California, San Francisco, and National Yang-Ming University, Taipei, Taiwan, describe a technique of preoperatively placing percutaneous 5-mm fiducial screws to mark the correct thoracic spine level before surgery.

A group of 26 patients who underwent preoperative fiducial screw placement were compared to a group of 26 patients who had intraoperative localization with fluoroscopy alone.



## **OR** Reports

No complications related to the fiducial screw placement occurred, and there was no incidence of wrong-level surgery.

Placing the marker screw on an outpatient basis using CT guidance reduced intraoperative localization fluoroscopy from 15 minutes to 3 minutes. Shortened operative time offsets the added costs of preoperative implantation, making the screw cost neutral.

The researchers concluded that preoperative percutaneous fiducial screw placement in the thoracic spine helps surgeons avoid wrong-level surgery and is safe, efficient, and accurate.

Upadhyaya C D, Wu J C, Chin C T, et al. Avoidance of wrong-level thoracic spine surgery: Intraoperative localization with preoperative percutaneous fiducial screw placement. J Neurosurg: Spine. Published online Nov 4, 2011, ahead of print.

http://thejns.org/

# Cost-effectiveness of spinal surgery vs nonoperative care

Rates of spinal surgery continue to rise, but the safety and economic value of spine procedures remains uncertain.

Researchers from Dartmouth Medical School, Lebanon, New Hampshire, analyzed data from the Spine Outcomes Research Trial for cost-effectiveness over 4 years, comparing surgery with nonoperative care for spinal stenosis, degenerative spondylolisthesis, and intervertebral disc herniation.

After 2 years, surgery led to significant improvements in health for patients with all 3 conditions. The benefits persisted through 4 years' followup, although the gains were somewhat greater for degenerative spondylolisthesis and intervertebral disc herniation than for spinal stenosis patients.

> Recordings of OR Manager webinars are now available at

www.ormanager.com

Longer follow-up also saw an increase in value of each procedure, as reflected by lower costs per additional quality-adjusted life-years gained. Improvement was greatest for patients with degenerative spondylolisthesis, who also had the highest initial costs for surgery. Surgery also became more cost-effective for patients with spinal stenosis and intervertebral disc herniation with longer follow-up

The researchers concluded that for specific causes of back pain, spinal surgery provides a good value over long-term follow-up compared to nonsurgical treatment over 4 years.

Tosteson A N, Tosteson T D, Lurie J D, et al. Comparative effectiveness evidence from the spine patient outcomes research trial: Surgical versus nonoperative care for spinal stenosis, degenerative spondylolisthesis, and intervertebral disc herniation. Spine. Nov 15, 2011;36:2061-2068.

http://journals.lww.com/spinejournal/

## Industry payments to orthopedic surgeons complex

There is ongoing concern over potential conflict of interest in physician relationships with industry. However, there is limited data detailing the prevalence and magnitude of these relationships.

This study led by researchers from the University of Iowa and Iowa City Veterans Affairs Medical System, Iowa City, used data made available by the 2007 Department of Justice lawsuit with 5 joint implant manufacturers to examine the extent of orthopedic surgeons' financial relationships with implant manufacturers.

Among their findings:

- In 2007, 5 major implant makers made 1,041 payments to 939 orthopedic surgeons, totaling more than \$198 million.
- In 2008, following the DOJ settlement, manufacturers made 568 payments to 526 surgeons, totaling more than \$228 million, which included \$109 million in one-time royalty buyouts from one company.
- The proportion of surgeons receiving payments who had academic affiliations increased from 39.4% in 2007 to 44.0% in 2008. Similar patterns were seen in 2009 and 2010 for 3 manu-



facturers that continued disclosing payment by choice.

The researchers concluded that analysis of financial payments made by device makers to orthopedic surgeons after the 2007 Department of Justice investigation finds a complex pattern of increased payments, decreased number of consultants, and increased proportion of consultants with academic affiliations. Specific requirements for disclosure are needed to allow for meaningful analyses to be performed.

Hockenberry J M, Weigel P, Auerback A, et al. Financial payments by orthopedic device makers to orthopedic surgeons. Arch Intern Med. Oct 24, 2011;171:1759-1765.

http://archinte.ama-assn.org/

#### Standards and regulations

## Centers for Medicare and Medicaid Services

Medicare and Medicaid Programs: Hospital Outpatient Prospective Payment; Ambulatory Surgical Center Payment; Hospital Value-Based Purchasing Program; Physician Self-Referral; and Patient Notification Requirements in Provider Agreements. On Nov 1, 2011, the Centers for Medicare & Medicaid Services (CMS) issued a final rule with comment period that will update payment policies and payment rates for services furnished to Medicare beneficiaries in hospital outpatient departments and ambulatory surgical centers (ASCs) beginning Jan. 1, 2012. Hospital outpatient departments. Under the rule, hospital outpatient departments will receive a 1.9% increase in their Medicare payments for 2012.

In changes to quality reporting, outpatient departments would need to report these additional surgery-related measures to receive their full 2014 payment update:

- use of a surgical safety checklist
- outpatient volume for selected surgical procedures.

CMS also made changes in the value-based purchasing program that will affect hospitals' Medicare payments starting in 2014:

- suspended effective dates for several measures as part of value-based purchasing: hospital acquired conditions, Agency for Healthcare Research and Quality, and Medicare-spending-per-beneficiary measures
- added 1 clinical measure: Postop urinary catheter removal on day 1 or day 2 after surgery
- changed weights for calculating hospitals' performance scores to: 45% clinical, 30% patient experience, 25% outcome measures.

Ambulatory surgery centers. Ambulatory surgery centers will receive a 1.6% Medicare payment update in 2012 under the final outpatient payment rule. CMS continues to base the update on the consumer price index for all urban consumers despite industry objections.

The rule also launches a new ASC quality reporting program. Starting Oct 1, 2012, ASCs will need to report on 5 quality measures to receive their full Medicare payment update in 2014:

- patient burn
- patient fall
- wrong site, side, patient, procedure, or implant

## **OR Manager Conference**

**Caesars Palace, Las Vegas, Nevada** 

Oct 24-26, 2012

To learn more, go to <u>www.ormanager.com</u>

OR Reports November 2011



- hospital transfer/admission
- prophylactic antibiotic timing. Measures were also added for future years:
- use of a safe surgery checklist as a quality measure for hospital outpatient departments and ambulatory surgery centers. Under the rule, outpatient departments and ASCs must be using a surgical checklist from January 1, 2012, through December 31, 2012, but don't have to report its use until a 6-week period of July 1, 2013, through August 15, 2013.

Reporting of checklist use is one quality measure that will affect Medicare payment updates for hospital outpatient departments in 2014 and ASCs in 2015.

• flu vaccination for health personnel to be reported starting Jan 1, 2014, for full payment update in 2016.

<u>http://www.ofr.gov/(X(1)</u> <u>S(ebjty5avgctlw0rdwcdb1hgv))/0FRUpload/</u> <u>0FRData/2011-28612\_PI.pdf</u>

## **Joint Commission**

Joint Commission changes term "disruptive behavior" in standards. The term "disruptive behavior" in Joint Commission standards (LD.03.01.01, EPs 4 and 5) has been revised to "behavior or behaviors that undermine a culture of safety."

The commission says it changed the term because its meaning can be ambiguous, and it is not viewed favorably by some. The new phrase better describes the problem the standard is trying to address. The change will be made in the update to accreditation manuals to be published in Spring 2012.

> http://www.jointcommission.org/assets/1/18/jconline Nov 9 11.pdf

## Joint Commission FAQ on texting orders.

In a new frequently asked question (FAQ) response, the Joint Commission says it's not acceptable for physicians and other advanced practitioners to text orders to the hospital or other health care settings. The FAQ applies to hospitals, critical access hospitals, and ambulatory care.

<u>http://www.jointcommission.org/standards\_informa-</u> tion/jcfaqdetails.aspx?StandardsFAQChapterId=79&Stan dardsFAQId=401

Make Your Thursdays More Productive Participate in an OR Manager webinar and invite your managers and staff to join you.

### 2 pm eastern

Regular webinars, 1 hour in length, explore topics of professional importance for OR directors and managers and OR business managers. Earn 1 contact hour,

The Management Development Program offers 1.5 hour webinars for new and aspiring managers. Earn 1.5 contact hours.

For a webinar calendar, go to <u>www.ormanager.com</u>

Join us for a productive Thursday.