



AMERICAN COLLEGE OF SURGEONS

SURGERY NEWS

Opinions Vary About Training for New Brain Procedure

BY MICHELE G. SULLIVAN
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Experts agree that the use of deep brain stimulation is set to explode, as researchers identify more and more indications for the brain pacemaker. But there seems to be no similar consensus on which surgeons should be implanting the device, or what training should qualify one to undertake the delicate procedure.

Some insist that nothing less than a dedicated deep brain stimulation (DBS) fellowship should be the standard for training. Others argue that certification should be awarded to centers with expert teams dedicated to the procedure, rather than simply focusing on the training of the neurosurgeon. Even two major neurosurgery associations—the American Society for Stereotactic and Functional Neurosurgery and the Society of Neurological Surgeons—appear to hold very different opinions of appropriate training.

Dr. Michael Schulder, president of the American Society for Stereotactic and Functional Neurosurgery, said the group encourages specialized training, but would never support a requisite DBS fellowship. That would add unnecessary years to the training of neurosurgeons, and could marginalize stereotactic surgery at a time when the field needs to expand, Dr. Schulder said in an interview.

“Limiting DBS to fellowship trainees will make it even more of a niche field. We want DBS to become a concept that’s increasingly in the mainstream, and embraced by a majority of neurosurgeons.”

Instead, he said, any graduate of a neurosurgical fellowship should receive enough hands-on experience with DBS to competently perform the surgery. “Certain aspects of DBS have become reasonably routine. If you’re talking about thalamic stimulation for tremor, or placing the electrodes into the subthalamic nucleus for Parkinson’s, someone who has had a reasonable exposure to that during training should be able to do it, as long as there is the right intraoperative support.”

But academic societies aren’t turning a blind eye to the issue of DBS training, Dr. Schulder said. The Society of Neurological Surgeons—the senior-most group involved in certifying neurologic education standards—recently created a curriculum for subspecialty fellowship training in stereotactic and functional neurosurgery. The study program includes the technical aspects and basic mechanism of DBS. It also covers diagnosis and surgical selection for patients with move-

ment disorders—an approved indication for DBS—and the investigational indications for pain and epilepsy. However, accreditation is in its early stages, and most programs haven’t yet completed it, said Dr. Kim Burchiel, an ACS Fellow and SNS secretary.



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DR. BURCHIEL

The curriculum and accreditation process plainly show that SNS has a different take on the DBS training issue, said Dr. Burchiel, the John Raaf Professor and chairman of the neurological surgery department at Oregon Health and Science University, Portland. “In my opinion, which is also the position of SNS, DBS implants should not be done by just anyone; special training is required. That can take the form of a ‘fellowship’ experience, either during or after neurosurgery residency training.” Training should be a minimum of 6 months, Dr. Burchiel said.

Dr. Joshua Rosenow, an ACS Fellow and director of functional neurosurgery at Northwestern Memorial Hospital, Chicago, agrees—to an extent. His own fellowship included performing DBS for various approved and investigational indications.

“Fellowship training in a subspecialty field is beneficial, but shouldn’t be an ab-

solute requirement. Someone who has done a substantial number of cases during residency might not need a fellowship. If you dedicate yourself and focus your clinical experience on DBS during residency, that should be sufficient training,” he said.

In addition to extra training, some neurosurgeons endorse the idea of certifying individual centers that show a proven outcomes record.

Dr. Lawrence Elmer, director of the Parkinson’s disease and movement disorders clinic at the University of Toledo (Ohio), voiced concern that the “lone cowboy” syndrome could kick in as the demand for DBS treatment grows. “I’m afraid we’ll have hospitals hiring a neurosurgeon and a neurologist and saying, ‘This is our functional neurosurgery team.’ And if these teams do only one or two procedures a month, their outcomes are just not going to be as good [as those at higher-volume centers]. I don’t think this should be allowed.”

“The feeling among neurologists is that we would be far better off if we had designated ‘centers of excellence,’ which would have to do a certain number of surgeries each year and have some kind of accountability records of patient outcome, not unlike what is done for transplants and cardiac bypass,” Dr. Elmer said.

The trick is figuring out who would oversee the process, Dr. Rosenow said. ■

Aetna Physician Rating Program Meets Standards

BY MARY ELLEN SCHNEIDER
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Aetna Inc.’s physician-rating program recently received a passing grade from the National Committee for Quality Assurance.

The evaluation, conducted under a 2007 agreement between Aetna and New York Attorney General Andrew Cuomo, was aimed at addressing allegations that health plans were using physician-rating programs to steer members to less expensive providers.

To date, seven state, regional, and national insurers have signed on to the agreement, pledging not to base physician rankings entirely on cost, to involve physicians in measure development, and to allow them to review their performance data and request changes.

In the most recent evaluation,

NCQA reviewed the compliance efforts of Aetna Health Inc., an HMO—point of service plan, and Aetna Life Insurance Co., a preferred-provider organization, both operating in New York. The plans were found to be in full compliance with the eight requirements reviewed by NCQA.

Aetna officials said they were pleased with the results. “We will continue to base our programs on available evidence-based and externally validated measures to help ensure our programs are credible and useful to consumers,” Dr. James Coates, senior medical director for Aetna Informatics, said in a statement.

NCQA has published reviews of CIGNA Healthcare of New York, an HMO, and Connecticut General Life Insurance Company, a PPO, and is reviewing United Healthcare’s physician-rating program. ■

AHRQ Finds Medical Error Studies Tend to Underestimate Costs

BY JANE ANDERSON
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Medical error studies that focus only on inpatient stays—not taking into account hospital readmissions and other patient care—may underestimate costs by up to 30%, according to an analysis of millions of health insurance claims.

William E. Encinosa, Ph.D., and Fred J. Hellinger, Ph.D., researchers at the Agency for Healthcare Research and Quality, examined a database of 5.6 million insurance claims for 14 potentially preventable adverse medical errors defined by the agency’s Patient Safety Indicators (PSIs).

These indicators included technical problems, infections, pulmonary and vascular problems, acute respiratory failure, metabolic problems, wound problems, and nursing-sensitive events such as postoperative hip fracture and decubitus ulcer.

“Many hospitals are struggling to survive financially,” Dr. Encinosa said in a statement. “The point of our paper is that the cost savings

from reducing medical errors are much larger than previously thought.”

A total of 2.6% of the 161,004 claims for major surgery in an adult included at least one of the 14 potentially preventable adverse medical errors; almost 6% of those claims had more than one error (Health Services Research 2008 July 25 [doi:10.1111/j.1475-6773.2008.00882.x]).

Total 90-day cost for surgery claims with one or more errors was \$66,879 on average, compared with \$18,284 for surgery claims without an error. In addition, surgeries with one or more errors averaged 21.5 inpatient days, with 5.3 of those days occurring on readmission, the researchers found. In contrast, surgeries without an error averaged 5.1 inpatient days, with just 1 day of readmission.

Errors associated with the postoperative acute respiratory failure PSI were the most expensive of the seven patient-safety event classes, costing an average of \$106,370 over the 90-day period, along with the highest 90-day death rate (12%), according to the researchers. Readmission costs for the postoperative acute respiratory failure PSI averaged \$12,274. ■

Data Validate Hospital Infection Control Strategies

BY MIRIAM E. TUCKER
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WASHINGTON — To address the problem of antimicrobial resistance, hospitals need to adopt a culture of strict overall infection control, Dr. Robert A. Weinstein said at a press briefing sponsored by the National Foundation for Infectious Diseases.

Antimicrobial resistance has increased dramatically in hospitals in recent years, and will continue to do so if left unchecked. For every infection caused by a resistant organism, hospital length of stay and hospital charges are increased by 1.0- to 1.7-fold and mortality by 1.3- to 5.0-fold, compared with infections caused by

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susceptible bacteria, translating to a cost differential of \$6,000-\$30,000. Not surprisingly, the difference in cost is even greater when patients infected with antimicrobial-resistant organisms are compared with patients without infection (Clin. Infect. Dis. 2006;42[suppl. 2]:S82-9).

Available data suggest that efforts targeting overall infection rates would virtually eliminate the problem of antimicrobial resistance as well. "Resistance will disappear if there are no infections," said Dr. Weinstein, professor of medicine at Rush University, Chicago.

In 2002, the Centers for Disease Control and Prevention issued two sets of guidelines, one that recommended the use of alcohol-based gel hand sanitizers among health care workers (MMWR 2002;51[RR16]:1-44) and one on prevention of intravascular catheter-related infection. The latter advocated five principles: educating and training health care providers who insert and maintain catheters; using maximal sterile barrier

precautions during central venous catheter insertion; using a 2% chlorhexidine preparation for skin antisepsis; avoiding routine replacement of central venous catheters; and using antiseptic/antibiotic-impregnated short-term central venous catheters if the rate of infection remains high despite adherence to the first four strategies (MMWR 2002;51[RR10]:1-26).

Data support the efficacy of both guidelines. In an analysis of CDC data reported at the 2008 meeting of the Society for Healthcare Epidemiology of America (SHEA), the overall rate of central line-associated methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infections among ICU patients increased from 1997 to 2001 but then declined steadily from 2002 to 2004, resulting in an overall 44.4% reduction in incidence during the period from 1997 to 2004.

But such infections from methicillin-susceptible *S. aureus* (MSSA) strains also declined during those 7 years, by 72.4%. Thus, although the proportion of infections caused by MRSA rose relative to susceptible strains, the infection rate dropped overall.

Among 103 Michigan ICUs that adopted strategies based on CDC recommendations for preventing intravascular catheter-associated infections, the median rate of such infections per 1,000 catheter-days decreased from 2.7 infections at baseline to 0 at 3 months after implementation of the study intervention, and the mean rate per 1,000 catheter-days decreased from 7.7 at baseline to 1.4 at 16-18 months of follow-up (N. Engl. J. Med. 2006;355:2725-32).

In one study, routine daily bathing of medical ICU patients with cloths impregnated with chlorhexidine gluconate during November 2005–October 2006 reduced the rates of central venous catheter-associated bloodstream infections, compared with the baseline time period of September 2004–October 2005, from 5.31 to 0.69 per 1,000 catheter-days.

In the surgical ICU, the number of positive blood cultures decreased from 10.05 to 6.04 per 1,000 patient-days. Those data were also reported at this year's SHEA meeting.

A more controversial method for reducing hospital rates of MRSA and vancomycin-resistant enterococci (VRE) is the "search and destroy" system, which involves active surveillance and isolation of infected patients. Widely used in the Netherlands, the system is also now mandated in four states and at all Veterans Affairs hospitals.

Although the practice does identify asymptomatic individuals and some studies suggest it is beneficial, Dr. Weinstein believes there are several drawbacks. For one, nearly all the studies are "quasi-experimental," while those that have used concurrent controls have been negative, he said in an interview.

Focusing solely on antimicrobial-resistant organisms will not necessarily affect overall infection rates, particularly in hospitals where resistance rates are not excessively high. The "search and destroy" system "assumes one size fits all," said Dr. Weinstein, adding that he believes that the state laws mandating the system are "ill-advised."

But he said he supports recent legislation such as Medicare's policy to stop paying for eight health care-acquired infections as part of the U.S. Federal Deficit

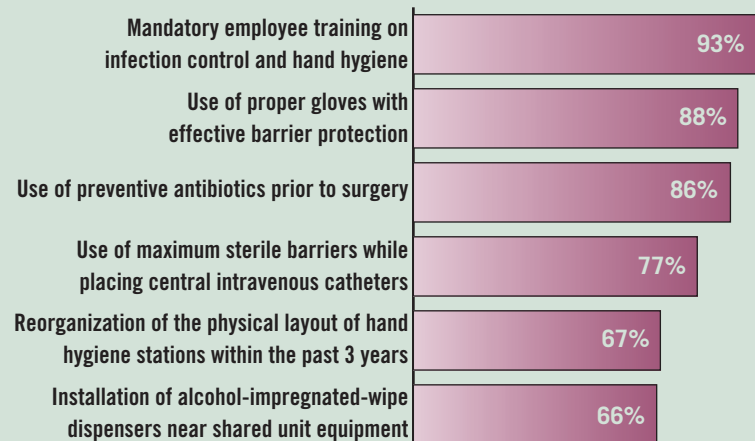
Reduction Act of 2005 that was implemented on October 1, 2008. Included are intravenous catheter infections, mediastinitis after heart surgery, and catheter-associated urinary tract infections. "Medicare perceives these as preventable. ... People will learn how to game the system, but eventually it will have an impact," Dr. Weinstein predicted.

Mandated public reporting of hospital infection rates—coupled with payment for "good" performance and penalties for "bad"—will also make a difference, he said. Now adopted by a majority of states, public reporting is widely becoming viewed as a universal goal, despite a current dearth of outcome data. Although Dr. Weinstein is unconvinced that reporting hospitals are necessarily safer or that informed patients will obtain safer care, he does think that hospitals that are required to report infection rates will work to lower them.

Dr. Weinstein disclosed that he has received grant funding from the Centers for Disease Control and Prevention and from Sage Products Inc., the company that manufactures the disposable chlorhexidine gluconate-impregnated cloths studied by his group.

DATA WATCH

Steps Taken in Hospital to Prevent Hospital-Acquired Infections



Note: Based on a 2008 survey of 539 members of the Association for Healthcare Resource and Materials Management.
Source: Perception Solutions Inc.

ELSEVIER GLOBAL MEDICAL NEWS

National Quality Forum Endorses Perioperative Standards

BY MARK S. LESNEY
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National consensus standards regarding appropriate perioperative care and record-keeping have been endorsed by the National Quality Forum, a nonprofit public-private partnership that includes representatives from all areas of the U.S. health care system.

Among the key standards endorsed by the NQF of particular relevance to the thoracic surgery community are:

- ▶ Recording of clinical stage prior to lung cancer surgery and esophageal cancer resection.

- ▶ Participation in a systematic national database for general thoracic surgery.

- ▶ Recording of pulmonary status prior to lung or esophageal resection.

- ▶ Pulmonary function tests before major anatomic lung resection.

- ▶ Risk adjusted morbidity: length of stay greater than 14 days after elective lobectomy for lung cancer.

- ▶ Postoperative deep vein thrombosis or pulmonary embolism control.

- ▶ Protocol for glycemic control with intravenous insulin implementation.

Other measures endorsed relate to use and selection of prophylactic antibiotics, temperature management, and treatment of infectious diseases, as well as standards dealing with other cancers, stroke, carotid endarterectomy, and anesthesia.

These standards are all intended to pro-

mote accountability and public reporting.

The Society of Thoracic Surgeons, the American College of Cardiology, the American College of Surgeons, the American College of Chest Physicians, the American College of Gastroenterology, the American Society of Clinical Oncology, and the American Medical Association are among the many professional associations that are National Quality Forum members.

The forum's recommendations have already been important in the movement toward pay-for-performance in the public and private sectors. In particular, the Centers for Medicare and Medicaid Services is working with the NQF among other organizations to develop standards for im-

plementing pay-for-performance programs.

"NQF-endorsed voluntary standards are widely viewed as the 'gold standard' for the measurement of health care quality," according to the Aug. 5 statement by the organization, which outlines the new national standards.

"This important set of measures can help us track progress toward improved safety and coordination of care across clinicians and settings," Dr. Janet Corrigan, NQF president and CEO, added in the statement.

For more information or to see the NQF statement, visit the forum's Web site at www.qualityforum.org/news/releases/080508-endorsed-measures.asp.