



AMERICAN ASSOCIATION OF NEUROLOGICAL SURGEONS

# BULLETIN

The Socioeconomic and Professional Magazine for AANS Members • Volume 15 Number 2 • 2006

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Neurosurgical ER  
Coverage

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## AANS MISSION

The American Association of Neurological Surgeons (AANS) is the organization that speaks for all of neurosurgery. The AANS is dedicated to advancing the specialty of neurosurgery in order to promote the highest quality of patient care.

## AANS BULLETIN

The official publication of the American Association of Neurological Surgeons, the Bulletin features news about the AANS and the field of neurosurgery, with a special emphasis on socioeconomic topics.

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## LETTERS

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in a future issue edited for length, clarity and style. Correspondence is assumed to be for publication unless otherwise specified.

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American  
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# Professional Conduct: Witness Testimony

**M**embership in the AANS is voluntary and not a prerequisite to the practice of neurosurgery. Nevertheless there are obligations of membership, and one of these is adherence to the AANS Code of Ethics.

The AANS Code of Ethics addresses, in part, expert witness testimony. Such testimony as part of the practice of medicine is indeed an obligation of members of the medical profession. The AANS is joined in this view by many prominent medical societies, among them the American Medical Association and the American College of Surgeons. The AANS, the AMA and the ACS all provide their members with guidance on how to act professionally and ethically in the legal arena. While documentation of this guidance is readily available from each of these organizations, a brief review of salient points follows.

The ACS Statements of Principles, most recently updated in 2004, avers that “expert witnesses are expected to be impartial and should not adopt a position as an advocate or partisan in the legal proceedings.” The expert also should be “familiar with the standard of care provided at the time of the alleged occurrence and should be actively engaged in practice of the specialty or the subject matter of the case at the time the testimony or opinion is provided.” The ACS additionally asks its members to sign and abide by the Expert Witness Affirmation, which sets forth 10 principles for expert witness testimony that include conducting a thorough, fair, and impartial review of the facts, and providing testimony that is objective, scientifically based and helpful to a just resolution of the case.

The AMA offers guidance on medical testimony in its Code of Medical Ethics, which affirms that a physician’s participation in the legal system is “an ethical obligation.” In 2004 the AMA issued a report on medical testimony that addresses the physician’s ethical obligation to provide

evidence in court, the general qualifications necessary for those who testify, and the importance of honest testimony. This report states that “expert witnesses should avoid inflammatory accusations...and must not merely offer speculations but rather be able to substantiate claims on the basis of experience, published research, consensus statements or evidence-based guidelines...”

The AMA report also stresses that testimony is to be impartial and has a higher goal than that of supporting the claims of

*Donald O. Quest, MD,  
is the 2006–2007  
AANS president.*



either prosecution or defense: “Although the testifying physicians’ services may have been sought primarily by one party, [physicians] testify to educate the court as a whole.” The report further calls for impartial testimony that must not be false or misleading and for physicians providing expert testimony to have “recent and substantive experience or knowledge in the area in which they testify.”

The report’s conclusion reinforces the concept of professional conduct through adjudication of ethical infractions via a program that employs due process:

“Organized medicine...[has] important roles to play in promoting the ethical conduct of physician witness activities. With careful attention to due process...organizations can help maintain high standards for medical witnesses by assessing claims of false or misleading testimony and issuing disciplinary sanctions as appropriate.”

**When the Professional Conduct Program was initiated, guidelines for expert witness testimony were developed to ensure a standard of quality and impartiality on both sides of professional liability cases.**

The AANS Code of Ethics states in part that “expert testimony should reflect not only the opinions of the individual but also describe where such opinions vary from common practice; the expert should be engaged in active practice of surgery or be able to demonstrate enough familiarity with present practice to warrant designation as an expert, and should champion the truth [rather than] the cause of one party or other.”

The AANS also developed the Rules for Neurosurgical Medical/Legal Expert Opinion Services document, which calls upon the neurosurgeon “to be an impartial educator for attorneys, jurors, and the court...not to be evasive for the purpose of favoring one litigant over another ...and to review all pertinent available medical information prior to rendering an opinion.”

Complaints of ethics code violations are evaluated by the Professional Conduct Committee through the Professional Conduct Program. The program was initiated 25 years ago, and its procedures have undergone some modifications over time. The program’s premise is that membership in a professional organization requires conduct which meets a high professional standard.

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When the Professional Conduct Program was initiated, guidelines for expert witness testimony were developed to ensure a standard of quality and impartiality on both sides of professional liability cases. Violation of these guidelines could be a cause for a member to bring a charge of unprofessional conduct against another member.

The AANS bylaws detail the process that ensues when a charge of unprofessional conduct is brought by one AANS member against another. It is the duty of the AANS Professional Conduct Committee to address complaints on an impartial basis, to conduct hearings where appropriate with due process protection for all parties involved, and to make unbiased recommendations to the AANS Board of Directors. Members of the committee, experienced and well-respected senior neurosurgeons, are appointed by the AANS president with ratification by the Executive Committee. The PCC members devote considerable time to the program, spending hours reviewing each case and participating, usually for a full day, in hearings held twice yearly in conjunction with the AANS and CNS annual meetings.

The committee reviews the submissions of both the complainant and respondent

**The AANS Rules for Neurosurgical Medical/Legal Expert Opinion Services document calls upon the neurosurgeon “to be an impartial educator for attorneys, jurors, and the court....”**

and makes a decision as to whether or not unprofessional conduct is apparent. Either a hearing is scheduled or the case is dismissed (and 35 percent of the cases brought before the committee are dismissed). The complainant and respondent may each have counsel in attendance at the hearings, and the proceedings are recorded by a court reporter. After both sides have made presentations, cross-examination has occurred, and the committee's questions have been answered, the committee goes into executive session to determine whether unprofessional conduct has been established and, if so, what penalty is appropriate. If an adverse action (censure, suspension, or expulsion) is recommended, the respondent has the opportunity to appeal to the AANS Board of Directors and further to the general membership at the annual business meeting if necessary.

To date there have been 80 complaints filed and 65 of these have involved expert witness testimony. Sixty hearings have been held, resulting in nine letters of censure, 22 suspensions and five expulsions. There have been five repeat offenders.

Not surprisingly the AANS Professional Conduct Program has gained the attention of the plaintiff bar. Although the AANS program has been challenged in state and federal courts, thus far it has withstood all challenges. A federal appeals court judge praised the program, stating that “this kind

of professional self-regulation furthers, rather than impedes, the cause of justice” and acknowledging that “judges need the help of professional associations in screening experts.” A number of other medical societies have used the AANS Professional Conduct Program as a model for their own.

The goal of the AANS Professional Conduct Program in hearing these complaints is not to discourage members from testifying on behalf of either plaintiffs or defendants but rather to promote the integrity of testimony on both sides of the litigation process. Medical malpractice occurs, and when it results in litigation expert witnesses are necessary to plaintiffs and defendants so that justice can prevail.

It is essential that AANS members participate in the judicial process as expert witnesses, and it is incumbent on every member who testifies as an expert to be familiar with the AANS Code of Ethics and Rules for Neurosurgical Medical/Legal Expert Opinion Services. Expert testimony must be informed, objective, impartial, and medically sound. Litigants, juries, judges, and the public should be able to rely on that. ■

## For Further Information

- AANS Rules for Neurosurgical Medical/Legal Expert Opinion Services, page 37
- American College of Surgeons, [www.facs.org](http://www.facs.org)
- American Medical Association, [www.ama-assn.org](http://www.ama-assn.org)
- Blackett, WB: AANS testimony rules rewritten: New rules for neurosurgical medical/legal expert opinion services. *AANS Bulletin* 13(1):33, 2005. [www.AANS.org](http://www.AANS.org), Article ID 21843
- Pelton, RM: Professing professional conduct: AANS raises the bar for expert testimony. *AANS Bulletin* 11(1):7–13, 2002. [www.AANS.org](http://www.AANS.org), Article ID 9916

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# NEWSLINE

News Members Trends Legislation

## **Medical Liability Reform Legislation Falls Short in U.S. Senate**

On May 8 the U.S. Senate voted on two medical liability reform bills. Both bills failed to gain the necessary support to move forward in the legislative process. See Washington Update, page 26.

- **IOM Issues Three Reports on Emergency Medical Care** On June 14 the Institute of Medicine issued three reports related to the Future of Emergency Care in the U.S. project. The report of most relevance to neurosurgeons, Hospital-Based Emergency Care: At the Breaking Point, explores the changing role of the hospital emergency department and describes the national epidemic of overcrowded emergency departments and trauma centers. This report offers an assessment of the emergency care workforce, including specialists who provide on-call emergency and trauma care services. To help improve the availability of on-call physicians, the IOM recommends a number of remedies that include improved reimbursement for emergency services, medical liability reform, regionalization of certain emergency specialty services, and creation of a new specialty called acute care surgery. The AANS opposes the establishment of an acute care surgical specialty if these specialists are intended to perform neurosurgical procedures. The three IOM reports—Hospital-Based Emergency Care: At the Breaking Point, Emergency Medical Services at the Crossroads and Emergency Care for Children: Growing Pains—are available at [www.iom.edu](http://www.iom.edu). Neurosurgical involvement in the emergency medical system is the subject of this issue's cover section, beginning on page 8, and the editor's Personal Perspective, page 7.
- **AANS, CNS and ASTRO Define SRS** In April the AANS Board of Directors, the Executive Committee of the Congress of Neurological Surgeons and the Board of Directors of the American Society for Therapeutic Radiology and Oncology agreed on a contemporary definition of stereotactic radiosurgery. This position statement follows and also is published online at [www.AANS.org](http://www.AANS.org), article ID 38198.
  - Stereotactic radiosurgery is a distinct discipline that utilizes externally generated ionizing radiation in certain cases to inactivate or eradicate (a) defined target(s) in the head and spine without the need to make an incision. The target is defined by high-resolution stereotactic imaging. To assure quality of patient care the procedure involves a multidisciplinary team consisting of a neurosurgeon, radiation oncologist, and medical physicist.
  - Stereotactic radiosurgery typically is performed in a single session, using a rigidly attached stereotactic guiding device, other immobilization technology and/or a stereotactic image-guidance system, but can be performed in a limited number of sessions, up to a maximum of five.
  - Technologies that are used to perform stereotactic radiosurgery include linear accelerators, particle beam accelerators, and multisource Cobalt 60 units. In order to enhance precision, various devices may incorporate robotics and real time imaging.
- **AANS and CNS Seek Medicare Payment Policy Change for SRS of Multiple Lesions** Beginning with Medicare carrier Noridian Administrative Services, which had issued a proposed Medicare coverage policy related to stereotactic radiosurgery that would affect its coverage area of more than 10 states, the AANS and Congress of Neurological Surgeons are urging Medicare carriers to adopt the AANS, CNS and ASTRO definition of SRS and to ensure that additional payments for SRS are made when a neurosurgeon treats more than one lesion. The AANS and CNS comments to Noridian state that Current Procedural Terminology "code 61793 is valued for treating a single lesion, whether or not that treatment requires multiple isocenters or multiple sessions. Under CPT and Medicare policy for multiple procedures, code 61793 may be reported multiple times for multiple lesions, using 61793 alone for the first lesion and 61793 appended by modifier 59 or modifier 51. This code should not be reported more than five times for any session. Any additional sessions (up to five) for the same lesion(s) are inclusive of CPT 61793. If any lesion requires multiple isocenters and/or requires more complex targeting, then code 61793 should be reported appended by modifier 22."

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# The Case for Regionalization

## *IOM Report and AANS Survey Point to Proactive Strategy*

A good deal of media attention heralded the June 14 release of three reports that conclude the Institute of Medicine's two-year examination of the U.S. emergency medical system. The attendant headlines in newspapers across the country—"Crisis Seen in Nation's ER Care" (Washington Post), "Emergency Medical Care Listed in Critical Condition" (USA Today)—may sound hyperbolic, but the problems identified by the IOM are real and quite sobering.

The reports introduce the public to what neurosurgeons and others working within the healthcare system day in and day out know firsthand: Emergency departments are overcrowded, patients presenting in the nation's ERs often wait long periods of time before being seen, ambulance diversions are increasing, and the system as a whole is highly fragmented and variable.

These problems are at least partially rooted in the increasing number of ER visits (113.9 million in 2003, compared with 90.3 million a decade earlier) at a time when the number of facilities with emergency departments has been declining, said the IOM. Concurrently the uninsured population has been increasing, while there has been a decline in federal funding for emergency medical services since the early 1980s that has resulted in haphazard development of emergency medical systems across the United States.

Further, close to 70 percent of urban hospitals diverted patients at some point during 2004, resulting in transfer or rerouting from an ER that was full or lacked services to one farther away. Major reasons for diversion included shortages of available intensive care unit beds and on-call specialists.

At my own institution, an academic medical center, countless patients with emergent neurosurgical problems have

taken a circuitous route to reach our hospital, in part because the emergency system functions under the premise that optimal neurosurgical care will be provided by other institutions, when in actuality those facilities do not always have the resources—

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equipment or personnel—to provide such care. What this means is that my facility functions as a de facto regional care center for neurosurgery; what this means to patients is that they often experience delays in getting appropriate treatment.

Another perspective, that of a neurosurgeon practicing at a hospital in an Idaho community of about 175,000 people, was discussed in the pages of the Winter 2004 issue of the *Bulletin*. That scenario involved the neurosurgeon and his partner covering emergency call 24/7 with one of them on call every other night. When, citing unsustainable negative impact on personal life and elective practice, they stopped providing their hospital with emergency coverage, emergent neurosurgical cases from that area began to be transported to my facility.

Scenarios such as this one point to proactive regionalization of neurosurgical emergency care as an idea whose time has come. Such a plan should not necessarily mean that regional facilities would be academic medical centers, but certainly that they would be strategically located, well-equipped and appropriately staffed centers supported by adequate federal and state funding as well as by well-coordinated and

swift transport of patients in need of neurosurgical emergency care. From a neurosurgical perspective, the development of coordinated, regionalized care is the fundamental change which must occur.

Emergency access to on-call specialists in some regions was noted in the IOM report as a problem which, the authors admitted, stemmed from the disruptive lifestyle, poor compensation, and increased liability that is associated with providing emergency surgical care. As part of a multipronged strategy for improvement, the report recommended regionalization of specialty services.

To achieve regionalization, appropriate triage is necessary. The IOM called for effective communication and coordination among various components of the system, including 911 emergency call and dispatch, ambulances, EMS workers, and hospital emergency departments. In addition to increased state and federal funding for facilities that bear a disproportionate amount of the cost of care for the uninsured, the report called for methods to determine the performance of the different system components and for public reporting. It also included a recommendation that Congress establish a five-year demonstration program to fund individual states in developing a coordinated, regionalized and accountable system which will be used to identify "best practices" on which to base larger scale development.

Based on the AANS 2006 Workforce Survey of ER coverage and related issues, the results of which are reported in this issue's cover story, neurosurgeons have been providing emergency coverage, though more than three-quarters of them identified neurosurgical emergency call coverage as a problem in their practice areas. Clearly, we need to find ways to render the system manageable; the regionalization of neurosurgical care will be the best solution for both patient care and for neurosurgery as a specialty.

### For Further Information

■ See the cover section, beginning on page 8.

# COMPLETING THE

## AANS 2006 Workforce Survey Assesses Neurosurgical

MANDA J. SEAVER

Completing the picture of neurosurgical emergency coverage in the United States is the aim of a new survey conducted by the American Association of Neurological Surgeons. The AANS 2006 Workforce Survey shows that while the overall participation of neurosurgeons in the nation's emergency medical system remains strong, there is room for improvement in neurosurgical call coverage and, more broadly, in the emergency medical system itself.

The emergency medical system has been the subject of intense scrutiny, most recently by the Institute of Medicine which released three reports June 14 that conjure an image of an unraveling system. The three reports—Emergency Care for Children: Growing Pains, Emergency Medical Services at the Crossroads, and Hospital-Based Emergency Care: At the Breaking Point—depict what the IOM characterizes as an “overburdened, underfunded, and highly fragmented” U.S. emergency medical system.

The IOM reports are the product of the Committee on the Future of Emergency Care in the U.S. Health System, a group commissioned in September 2003 to perform extensive study of emergency care issues. In announcing the reports, committee chair Gail L. Warden observed that “the system’s capacity is not keeping pace with the increasing demands being placed on it” and called for “a comprehensive effort to shore up America’s emergency medical care resources and fix problems that can threaten the health and lives of people in the midst of a crisis.”

Inadequate reimbursement, increased liability, and unintended consequences of the Emergency Medical Treatment and Labor Act, all cited in the IOM report on hospital-based care as factors contributing to inadequate coverage by specialists in the ER, have been among organized neurosurgery’s premier concerns in recent years. These issues were also among the threads comprising the complex fabric that characterizes the delivery of emergency neurosurgical care, described by Alex Valadka, MD, in the cover story of the Winter 2004 *Bulletin*. Also in that issue, results of the 2004 AANS/CNS Neurosurgical ER and Trauma Services Survey were released.

The 2004 ER survey was clear in its finding that a solid majority, 83 percent, of neurosurgeons or their practices were providing full (24/7/365) emergency coverage. However, as summarized in the



“Portion of a Hanging Showing a Figure of a Warrior.” See page 1 for details.

*Bulletin* by AANS Executive Committee member James R. Bean, MD, the survey also showed that “some neurosurgeons [were] straining to provide emergency coverage, particularly those in private practice and in small group settings, and that some patients, particularly trauma victims and children distant from a level 1 trauma center, may be at risk for not receiving timely and appropriate neurosurgical emergency care.”

That neurosurgeons were interested in and concerned about neurosurgical emergency coverage was demonstrated by the 2004 survey’s robust response rate of 32 percent, coupled with the more than 350 comments offered and the more than half of respondents who volunteered themselves for follow-up discussion of neurosurgical emergency care in their areas.

# PICTURE

## ER Coverage

### Neurosurgeons Are Participating in the Emergency Care System

Rather than waning, neurosurgeons' concern regarding appropriate, quality neurosurgical emergency care has intensified. The AANS Task Force on Neurosurgical Care and Physician Workforce Issues commissioned the 2006 Workforce Survey to help AANS leadership identify and quantify problems in neurosurgical emergency coverage and in other areas of the workforce. Although this survey was broader in scope than the 2004 survey, results of a few key questions regarding emergency neurosurgical care could be compared, though some caveats apply.

The AANS 2006 Workforce Survey was conducted online by Perception Solutions, an independent market research company. E-mail invitations were delivered in January to 2,562 neurosurgeon members of the AANS. The demographics of survey respondents tracked closely with those of AANS members as well as participants in the 2004 survey, with the great majority of respondents ranging from 36 to 55 years of age, in private practice, and practicing in small groups of two to five neurosurgeons or medium groups of six to 20 neurosurgeons.

A total of 770 surveys were completed, resulting in a 30 percent return comparable to that of the 2004 survey. Results are accurate plus or minus 5 percent or better, meaning that the same survey conducted 100 times would yield the same results 95 times.

The 2006 Workforce Survey reaffirmed that the vast majority of neurosurgeons are taking emergency call. As shown in Figure 1 above, 94 percent responded affirmatively to the question, Do you take ER call? It is unclear whether the increase in neurosurgical emergency call coverage of 11 percentage points over the 2004 survey result is attributable to broader phrasing of the question in the 2006 survey or to some other factor or factors.

The 2006 survey also indicated a 17 percent increase in the number of neurosurgeons who receive a stipend for emergency call coverage: 50 percent in 2006 compared with 33 percent in 2004, as shown in Figure 2 on page 10. The distribution of stipend amount remained fairly constant, with the areas of greatest change reported in the \$1,001 to \$1,500 per diem range (8 percent reduction between 2004 and 2006) and in the number of neurosurgeons who have an arrangement for emergency call other than per diem payment (10 percent increase between 2004 and 2006). However, differences in question design between the 2006 and 2004 surveys may account for some variation in results.

As shown in Figure 4 on page 10, most on-call neurosurgeons, 59 percent, practiced in a community hospital setting, while 38 percent practiced in an academic medical center and 6 percent selected "other." As expected, the majority of on-call neurosurgeons practiced at level 1 or level 2 trauma centers, both of which are defined by the American College of Surgeons Committee on Trauma as requiring neurosurgical coverage. Most on-call neurosurgeons also covered call at two or more hospitals (57 percent) with another 43 percent covering call at only one facility, and almost all respondents, 95 percent, said that some or all of their hospitals require them to cover call. About 57 percent of on-call neurosurgeons took call two or three days per week, though nearly equal percentages took call more or less frequently: 22 percent took call four or more days per week, and 21 percent, one day per week or less.

On-call neurosurgeons worked an average of 70 hours per week, with 56 hours devoted to direct patient care. Administrative work absorbed eight hours per week, and 6 hours were spent on research or education, while four hours were allocated to unspecified "other" tasks.

The majority of survey respondents said they provided all types of neurosurgical services. Of the neurosurgeons who took emergency call, 61 percent covered all neurosurgical services in 2006, compared with 54 percent who did so in 2004. Additional results are shown in Figure 3 on page 10.

In the 2006 survey, the service coverage question also was put to all neurosurgeons participating in the survey, inclusive of those who took emergency call and those who did not. When asked, Have you limited the type of procedures performed by your practice, 62

percent affirmed that they had not. The 38 percent who had limited their practices were asked to identify any procedures they had completely eliminated. The greatest number, 57 percent, had eliminated pediatric cases, while 13 percent had eliminated trauma cases, and 11 percent had eliminated cranial cases. Only 5 percent had eliminated spinal cases, although research by Richard Wohns, MD, published in the *Bulletin*, indicated that elective spinal cases are the primary source of medical malpractice lawsuits. Another 55 percent selected "other" and offered a variety of explanations, frequently citing aneurysms, neurovascular cases (a lack of available interventionists was noted several times), subarachnoid hemorrhages, and complex cranial and spinal cases as the types of cases eliminated from practice.

2006

94%

Do you take ER call?

2004

83%

Do you or your practice provide full (24/7/365) emergency neurosurgical call coverage for a hospital?

**Figure 1. Percentage of Neurosurgeons Taking Emergency Call**

Percentages are rounded. Sources: 2006 Data, AANS 2006 Workforce Survey; 2004 Data, 2004 AANS/CNS Neurosurgical Emergency and Trauma Services Survey.

## Compensation

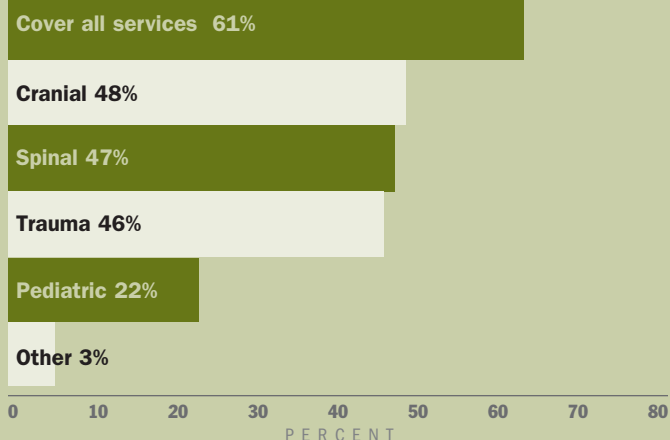
	2006	2004
Receive a Stipend	50%	33%
More than \$3,000 per diem	3%	2%
\$2,001–\$3,000 per diem	7%	6%
\$1,501–\$2,000 per diem	7%	8%
\$1,001–\$1,500 per diem	17%	25%
\$751–\$1,000 per diem	19%	17%
\$501–\$750 per diem	7%	11%
\$500 or less per diem	13%	17%
Not paid per diem; have another compensation arrangement	26%*	16%

\*Some respondents commented that they included their arrangements of employment (such as “employed by hospital”) and salary (such as “part of salary package”) in their responses. Percentages are rounded.

Sources: 2006 Data, AANS 2006 Workforce Survey; 2004 Data, 2004 AANS/CNS Neurosurgical Emergency and Trauma Services Survey

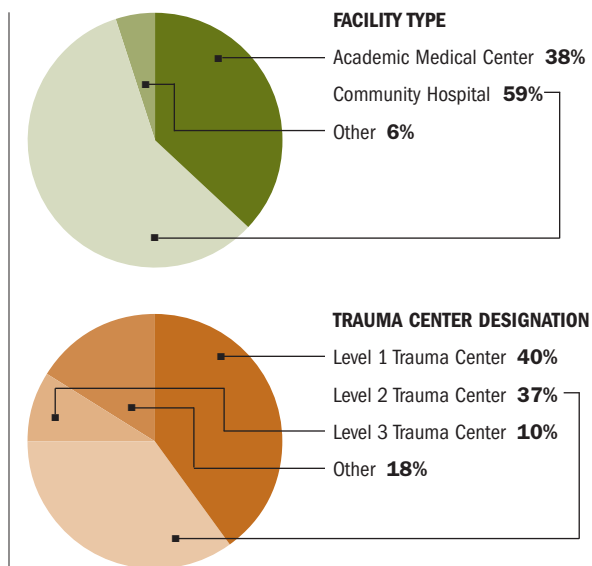
**Figure 2. Compensation for Neurosurgical On-Call Services**

## Services Covered



Percentages are rounded. Participants could select more than one response. Source: AANS 2006 Workforce Survey.

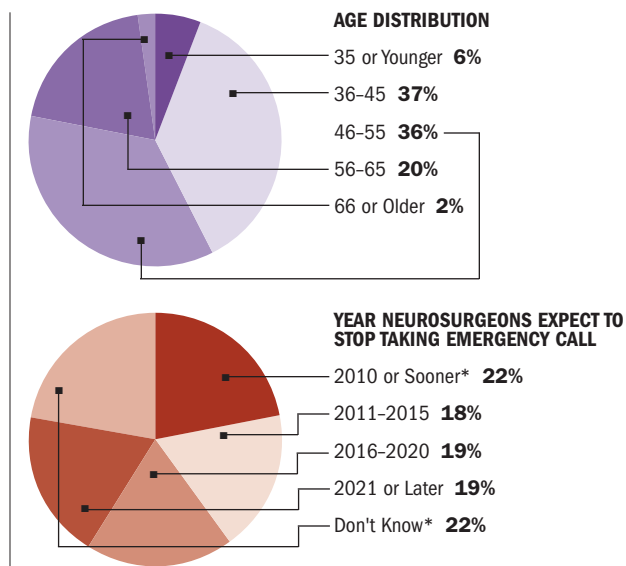
**Figure 3. Services Covered by On-Call Neurosurgeons**



**Figure 4. Where On-Call Neurosurgeons Are Practicing**

Percentages are rounded. Participants could select more than one response. Source: AANS 2006 Workforce Survey.

Of the scant six percent of neurosurgeons who did not take emergency call, 48 percent selected as their reason “other,” and the great majority of these respondents specified age-related exemptions such as recent retirement or senior partner status. Other reasons this group reported for not taking call included insufficient pay for emergency services (17 percent), disruption of routine practice schedule (15 percent), lifestyle interference (13 percent), malpractice insurer’s premium discount for eliminating trauma or other emergency services (6 percent), and malpractice insurer’s discontinuance of coverage for emergency services (2 percent).



**Figure 5. Age Distribution and Year Expected to Stop Taking Call**

\*Responses of those not currently taking call may have been included. Percentages are rounded. Source: AANS 2006 Workforce Survey.

For neurosurgeons who said they were planning to stop taking call, the most influential factor was retirement; the great majority of those planning to retire said they had intended to do so anyway, but other factors reported were excessive on-call demands and high malpractice insurance premiums. The second-ranked factor for those planning to discontinue call was lifestyle interference, followed by insufficient pay for emergency services, disruption of routine practice schedule, and “other” unspecified factors. All of these factors out-ranked the insurer’s elimination of malpractice insurance coverage for call services or insurance premium reduction in return for elim-

## KEY FINDINGS: AANS 2006 WORKFORCE SURVEY

### Neurosurgeons Do:

- 94%** Take Emergency Call
- 79%** Take Emergency Call at Least Twice a Week
- 61%** Cover All Services
- 50%** Receive a Stipend or Have Another Compensation Arrangement for Call Coverage

### Neurosurgeons Say:

- 76%** Emergency Call Coverage Is a Problem in Their Geographic Areas
- 52%** Emergency Call System Works in the Best Interest of Patients
- 52%** Emergency Call System Is Effective
- 65%** They Would Participate in Developing a Hospital's Plan for Transferring Patients or Going Offline

ination of trauma or other emergency services. Only 2 percent of all survey respondents reported receiving malpractice insurance premium reductions for not taking call, but of that small group 71 percent received a substantial premium discount of 11 percent or more.

All survey participants also were asked when they expected to stop taking call. As shown in Figure 5, response distribution among the selections was fairly equal. The two top-ranking selections, "2010 or sooner" and "don't know," may include responses of those not currently taking call.

### Call Coverage, ER System Concern Neurosurgeons

In addition to providing data that help to complete the picture of neurosurgeons' participation in the emergency medical system, the 2006 Workforce Survey offered insight into neurosurgeons' perceptions of how the system is working. The survey clearly shows that neurosurgeons think there is plenty of room for improvement in the emergency system and that they are willing to join in the effort.

Fully 76 percent of respondents identified call coverage as a problem in their geographic areas, and most neurosurgeons, 60 percent, disagreed with the statement that the emergency system allows them enough time off call. Of even greater concern are the data that only about half of respondents believe the call system either works in the best interest of patients (52 percent) or is effective (52 percent).

Less than one fifth of respondents (18 percent) reported that their practice group had been involved in development of a hospital's plan for going "offline," meaning that ambulances are diverted from a hospital's emergency department, and nearly one third (32 percent) reported that a plan for going offline doesn't exist at any of

the hospitals for which they cover call. When asked if their group had been involved in developing a hospital's plan for transfer of patients, less than half (43 percent) responded affirmatively, and 19 percent said there was no transfer plan at any of the hospitals they cover. Only 9 percent of neurosurgeons, a number roughly equivalent to the number of survey participants not taking call, said they would decline to participate in the planning process for handling offline events or patient transfers at their hospitals.

### What Is the Complete Picture?

What is an accurate depiction of neurosurgeons' participation in the emergency care system? The 2006 AANS Workforce Survey clearly shows that by far most neurosurgeons are answering when the nation's ERs call, attending to people in need of neurosurgical emergency care. But despite evidence that the vast majority of neurosurgeons are covering all types of emergency services and are doing so chiefly in community-based ERs at level 1 or level 2 trauma centers, it is just as apparent that neurosurgeons share many of the concerns articulated by the IOM and others regarding the functioning of the U.S. emergency medical system and the provision of their vital services within it.

Evidence that demonstrates exactly where the problems lie is less clear. While the survey's initial findings provide a broad outline of neurosurgeons' participation in the emergency medical system, additional analysis of survey data could fill in the detail and better complete the picture. For example, the responses of those who identified call coverage as a problem could be examined for demographic commonalities such as practice type or setting, or for geographic correlations such as practice within a state that lacks effective medical liability reforms or a coordinated emergency medical system. Conversely, similar additional data analysis for the 24 percent of respondents who reported no problem with call coverage in their areas might lead to identification of specific factors that in turn would generate strategies or a model that could be applied in other locales to alleviate problems with call coverage.

Additional meaningful data optimally would illuminate the path toward productive change and aid the many neurosurgeons who want to improve the delivery of neurosurgical emergency services to those who need them. ■

**Manda J. Seaver** is staff editor of the *AANS Bulletin*.

### For More Information

- Seaver MJ: Baseline ER survey explores system's cracks: 2004 AANS/CNS neurosurgical emergency and trauma services survey. *AANS Bulletin* 13(4): 19–24, 2004. [www.AANS.org](http://www.AANS.org), Article ID 26367
- Valadka AB: The ER: Who is answering call? In some hospitals, not neurosurgeons. *AANS Bulletin* 13(4): 6–12, 2004. [www.AANS.org](http://www.AANS.org), Article ID 26358
- Wohns RN: Liability is rooted in elective spine cases. *AANS Bulletin*, 14(2): 18–19, 2005. [www.AANS.org](http://www.AANS.org), Article ID 37060

# WHAT WILL IMPROVE NEUROSURGICAL EMERGENCY COVERAGE?



MANDA J. SEAVER

**A**s the picture of neurosurgical emergency coverage is becoming clearer, neurosurgeons and others involved in the emergency medical system have recognized that in at least some situations and geographic areas, delivery of neurosurgical emergency care could be improved.

Measures to improve availability of on-call specialists were proposed in *Hospital-Based Emergency Care: At the Breaking Point*, one of three Institute of Medicine reports released June 14. The IOM specifically called for the regionalization of certain emergency specialty services; improved reimbursement for emergency services; medical liability reform; and the creation of a new acute care surgery specialty. The American Association of Neurological Surgeons, together with the Congress of Neurological Surgeons, offered three of these recommendations to the IOM in February 2005. The AANS opposes the creation of an acute care surgical specialty, which, as the IOM described, would include neurosurgical and orthopedic procedures “that can be safely performed without the direct intervention of these specialists.”

Some of these measures are reflected in *A Growing Crisis in*

*Patient Access to Emergency Surgical Care*, a position paper by the American College of Surgeons released June 23. Regarding regionalization, the ACS said it is “achieving some consensus on how to apply the trauma system model so that a blueprint can be developed for better regionalizing specialty care services that may be required in an emergency situation.” The ACS also noted that support for comprehensive medical liability reform is shared by “all medical and surgical specialty organizations” and expressed support for broad-based improved reimbursement—reform of the Medicare payment system, for example—rather than specifically for emergency services. The creation of an acute care surgery specialty was not mentioned in the report.

The AANS’ ongoing advocacy for comprehensive federal medical liability reform is well documented in the pages of the *AANS Bulletin*, as is the AANS’ position on improved reimbursement for emergency services, which specifies “reasonable compensation” for on-call neurosurgeons. The introduction of an acute care surgery specialty and the concept of regionalization as it relates to emergency specialty care have only recently been discussed, and these ideas are ripe for exploration.

### Acute Care Surgery? Longing for Cooperation

That a new surgical specialty was under serious consideration by several of surgery's national organizations was brought to the attention of *Bulletin* readers in 2004 by Alex Valadka, MD, then chair of the AANS/CNS Section on Neurotrauma and Critical Care. The proposed new breed of specialist, who perhaps would be known as an emergency surgeon or an acute surgeon, would perform non-trauma surgical emergencies as well as some emergent neurosurgical procedures including craniotomies and insertion of intracranial pressure monitors. After noting that neurosurgeons are the most qualified physicians to help patients with injuries to or disorders of the nervous system, Dr. Valadka warned that "as a profession we must determine whether neurosurgeons will continue to play a dominant role in neurosurgical emergencies, or if instead someone else will answer when the ER calls."

In fall 2005 the AANS Task Force on Neurosurgical Care and Physician Workforce Issues was commissioned. By spring 2006 the development of an acute care surgical specialty again was addressed in the *Bulletin*, this time by 2005–2006 AANS President Fremont Wirth, MD.

Dr. Wirth discussed the "developing crisis in delivery of neurosur-

gical emergency care" as well as the continuing efforts of the AANS to gather information and develop a plan for improving the situation. He acknowledged agreement among leadership that "neurosurgical care is best delivered by trained neurosurgical providers," a position which in April was sanctioned with the Board of Directors' approval of the AANS Policy Statement on Patient Safety:

The AANS affirms that patient safety is best achieved when surgical diseases affecting the nervous system are managed by neurological surgeons.

The development of an acute care surgical specialty, at least to the extent that it would expand into emergency neurosurgery, would run contrary to the AANS position on patient safety. Dr. Wirth stated that the "AANS has opposed this expansion for a number of compelling reasons, chief among them training and current evidence." He also noted that "since most trauma surgeons work in level 1 trauma centers, additional training in neurosurgery—even if effective—is unlikely to benefit neurosurgical trauma patients because by definition neurosurgeons already are available at level 1 trauma cen-

### Neurosurgeons Serving on the ACS Committee on Trauma

On June 10, the American College of Surgeons approved the addition of another neurosurgeon to serve on the COT. Neurosurgeons currently serving are:

**P. David Adelson, MD, FACS**  
**James M. Ecklund, MD, FACS**  
**Domenic P. Esposito, MD, FACS**  
**Karen Margaret Johnston, MD, PhD, FACS**  
**John Hugh McVicker, MD, FACS**  
**Shelly Diane Timmons, MD, FACS**  
**Alex B. Valadka, MD, FACS**

### Interview: ACS Medical Director of Trauma Programs J. Wayne Meredith, MD

In June the AANS *Bulletin* asked ACS Medical Director of Trauma Programs J. Wayne Meredith, MD, to comment on the recent "acute care surgical specialty" discussion and other issues affecting the delivery of neurosurgical emergency care.

When specifically asked whether the Esposito and Moore articles represent the position of the college, Dr. Meredith pointed out that the JACS is a peer-reviewed journal with an editorial board independent of the college's leadership so that, as is true of the AANS *Journal of Neurosurgery*, publication of an article does not imply the parent organization's endorsement unless the article specifically states otherwise.

In describing the college's position on acute care surgery, he exercised caution.

"Right now there is no such thing as an acute care surgery specialist," he said. "We do perceive a growing multifactorial problem with the availability of specialists to perform [neurosurgical emergency] care, and we need to find solutions."

He added that the ACS is not supporting an entity—an acute care surgeon or general or emergency surgeon—that would replace a neurosurgeon.

"Not a trauma surgeon in the country wants to do craniotomies," said Dr. Meredith, who is himself a trauma surgeon as

well as the immediate past chair of the ACS Committee on Trauma. "But we do need to know enough to determine when to call [a neurosurgeon]."

Overall, Dr. Meredith expressed a desire for a collaborative spirit. "We need to restore cooperation in the house of surgery," he said. "Let's figure out what these patients need and do that."

In support of this strategy, he noted that on June 10 the college approved the addition of another neurosurgeon to the Committee on Trauma, a move that he hopes will lead to increased involvement of neurosurgeons in improving the delivery of emergency care to patients. He said the committee's plan is to advocate for a system will lead to regionalization of trauma care.

"There are many obstacles—EMTALA, workforce, politics, liability—and we need to get to the resources and work together," he said. "There's no way to manage without each other."

ters.” He was, however, optimistic following an ACS-organized meeting of specialty leaders that consensus could be reached. “Our collective goal is to develop an effective, unified message to leadership in the U.S. Congress that will facilitate a solution to the delivery of appropriate emergency care to our patients,” he stated.

In the meantime, some trauma surgeons embraced the development of an acute care surgical specialty, not only as a way to speed care to patients in the ER, but also as a means for revival of their own specialty. Two articles published in the April 2006 Journal of the American College of Surgeons discussed the creation of an acute care surgical specialty.

Thomas Esposito, MD, and colleagues asserted in “Making the Case for a Paradigm Shift in Trauma Surgery” that the trauma surgery specialty is “in the throes of an identity crisis that threatens its future.” Their literature review of the causes and implications of this identity crisis includes a table showing the Eastern Association for the Surgery of Trauma’s proposed major areas for inclusion in core curriculum and competencies for an acute care surgeon; “basic neurosurgical” appears under the heading “cognitive and technical principles of treating injuries.”

An editorial in the same JACS issue, “Acute Care Surgery: Eraritjaritjaka,” strongly advocated for the acute care surgery concept. “We submit that the only viable solution to the trauma surgery crisis is to recapture complex elective and emergent operative procedures and extend operative capabilities into other surgical trauma disciplines...and to some extent, orthopedics and neurosurgery,” stated Ernest Moore, MD, and colleagues. Eraritjaritjaka, an Aboriginal expression that translates to longing for something lost, refers in the

article to what the authors call the “golden age” of trauma surgery in the 1970s and 1980s, a period characterized by inspiring mentors and abundant opportunity to perform challenging operative procedures.

It was “Eraritjaritjaka” that prompted a response from Dr. Valadka, Shelly Timmons, MD, and Richard Ellenbogen, MD. Their editorial, submitted to the JACS in June, challenged the authors’ emphasis on “saving the specialty of trauma surgery” and focused instead on the provision of “optimal care of neurosurgical patients in emergency departments.” They presented compelling evidence supportive of such care being managed by neurosurgeons and delivered via a regionalized system modeled on the military’s system of triaged care.

Valadka and colleagues recognized that neurosurgical emergency care involves a great deal more than trauma and called for “a team approach to repair what is broken.” The authors argued that “it is not the neurosurgeon who needs to be supplanted or the trauma surgeon who needs to be reinvented [but rather the] emergency care system which needs to be re-engineered!” They further acknowledged that “thoughtful and equitable regionalization and interspecialty cooperation are essential in any plan to optimize the individual components and overall delivery of emergency care,” and stated that “neurosurgeons...are eager to share in an open and honest dialogue.”

The ACS discussed the acute care surgical specialty in two articles published in the July issue of the ACS Bulletin. Executive Director Thomas R. Russell, MD, called acute care surgery “one of the more controversial ideas under discussion.” He recognized the need for thorough training as well as the input of all specialties in the training curriculum “if we do pursue the development of this specialty,” but focused much of his attention on consensus-building: “Ultimately, we must stay centered on achieving some sort of consensus about which approaches will ensure that surgical patients receive appropriate care by the right person at the right time and in the right place.”

The second article summarized practical advantages and disadvantages of the proposed specialty. For example, an “advantage” of the acute care surgeon’s expanded role is the increased attractiveness of the specialty, which is expected to assist with the recruitment and retention of trauma surgeons. How does this balance the “disadvantage” of the significant challenge of providing this new specialist with adequate training? Author Gregory S. Cherr, MD, called “learning the subtleties of urgent neurosurgical and orthopedic intervention” a “daunting” task and wondered “how this might be accomplished in a brief fellowship rotation.” Further exploration of the proposed specialty will be offered during a symposium with “open mic” to be presented at the 2006 Clinical Congress in October.

While a longing for cooperation and a desire to care for neurosurgical emergency patients appear to be the common ground with respect to the development of an acute care surgical specialty, the concept of regionalization enjoys comparatively widespread support.

### AANS Policy Statement on Patient Safety

*(Statement approved by the AANS Board  
of Directors on April 22, 2006)*

**The AANS affirms that patient safety  
is best achieved when surgical diseases  
affecting the nervous system are  
managed by neurological surgeons.**

This position statement (article ID 38148) and all  
AANS position statements are available in the  
online Library at [www.AANS.org](http://www.AANS.org).

### Regionalization of Emergency Specialty Services

Regionalization of emergency specialty services is proposed as a solution to a variety of emergency system ills, among them the availability of on-call specialists. While there is a good deal of consensus on the concept, the details of implementing such a system remain to be determined, although some models have been proposed.

The IOM report specifically called for “hospitals, physician organizations and public health agencies to collaborate to regionalize critical specialty care on-call services.” Directing patients to the nearest facility with the best resources to handle their needs will improve health outcomes, mitigate overcrowding, reduce costs, and ensure specialty coverage at the regionalized facility, the report stated.

The ACS report advocated building a system of regionalized care based on the trauma system model. The system not only would alleviate overcrowded emergency departments, but also “would be particularly appropriate for services provided by specialties with workforce numbers in the few hundreds or thousands, such as neurological and hand surgery.”

Two recent AANS presidents have tackled this topic: Robert A. Ratcheson, MD, in his 2005 Presidential Address, and Fremont P. Wirth, MD, in the last issue of the AANS *Bulletin*.

Dr. Ratcheson offered several reasons, in addition to improving on-call availability, for fostering regionalization:

[Regionalization] would necessarily promote the formation of neurosurgical teams and enhanced teamwork. It should allow resources to be centralized to serve the needs of patients rather than the desires of hospitals. It may ameliorate the problem of physician fatigue and allow more efficient utilization and greater development of subspecialty skills. It can go a long way toward meeting society’s demands for reasonably rested, well-educated, and up-to-date neurosurgeons who are constantly available, and it can be organized to ease the burden of trauma call, which is exacerbated by the availability of too few individuals covering multiple hospitals. It may allow lifestyle considerations to be addressed in more satisfactory ways and encourage more women to enter neurosurgery. I think this is a change that will be good for neurosurgeons, and most importantly, for our patients.

Dr. Wirth observed that “the crisis in emergency care with respect to neurosurgery has as much to do with distribution of neurosurgical trauma care as with a shortage of it.” He noted the many factors underlying the problems with delivery of care, some of which have been mentioned here—medical liability, lack of reimbursement—and some that have not: lack of neurosurgical unit intensive care beds, lack of appropriate imaging or neurosurgical endovascular capabilities, and lack of adequately trained personnel to assist in the complex care of neurosurgical patients.

“It is likely that the [AANS Task Force on Neurosurgical Care and Physician Workforce Issues] will recommend some reorganization of the system for providing neurosurgical care,” he stated. “Such an approach has the potential for improving the quality of life for neu-

rosurgical providers as well as enhancing the availability of high quality neurosurgical care for our patients.”

Most recently, Valadka and colleagues offered support of the regionalized emergency care concept as well as two possible models, one based on the U.S. military’s medical system and the other on the emergency system in the Pacific Northwest. They described the military’s sophisticated and efficient triage system as allowing neurosurgeons to be strategically located in well-equipped facilities and patients quickly delivered to them, or using telemedicine and teleradiology to provide neurosurgical expertise to those in remote locations. They cited the Pacific Northwest for its “very well-developed emergency system...in which complex patients are rapidly stabilized at community hospitals and then evacuated as needed to a level 1 or level 2 trauma center.”

Valadka and colleagues suggested that “regionalization, a plan which eliminates redundancy, provides patient safety nets, and lessens competition for limited resources, will ultimately improve quality and safety and also save money...it simply needs to be championed at a national level by all surgeons.”

Both the proposed specialty of acute care surgery and regionalization of emergency specialty services are likely to be among the topics addressed in the recommendations of the AANS Task Force on Neurosurgical Care and Physician Workforce Issues. ■

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Manda J. Seaver is staff editor of the AANS *Bulletin*.

### For More Information

- AANS Position on Improving Access to Emergency Neurosurgical Services, [www.AANS.org](http://www.AANS.org), Article ID 9760
- Cherr GS: Acute care surgery: Enhancing outcomes or fragmenting care? *ACS Bulletin* 91(7):40–43, 2006
- Esposito TJ, Rotondo M, Barie PS, Reilly P, Pasquale MD: Making the case for a paradigm shift in trauma surgery. *J Am Coll Surg* 202(4):655–67, 2006
- A Growing Crisis in Patient Access to Emergency Surgical Care, [www.facs.org/ahp/emergcarecrisis.pdf](http://www.facs.org/ahp/emergcarecrisis.pdf)
- Moore EE, Maier RV, Hoyt DB, Jurkovich GJ, Trunkey DD: Acute care surgery: Eraritjaritjaka. *J Am Coll Surg* 202(4):698–701, 2006
- Ratcheson RA: Fast forwarding: The evolution of neurosurgery. The 2005 presidential address. *J Neurosurg* 103:585–590, 2005
- Russell, TR: From my perspective. *ACS Bulletin* 91(7):4–5, 2006
- Valadka AB: The ER: Who is answering call? In some hospitals, not neurosurgeons. *AANS Bulletin* 13(4): 6–12, 2004. [www.AANS.org](http://www.AANS.org), Article ID 26358
- Wirth FP: The moral of the story: Neurosurgery’s professionals offer best neurosurgical emergency care. President’s Message. *AANS Bulletin* 15(1):3–4, 2006. [www.AANS.org](http://www.AANS.org), Article ID 38188

# Sweet Success in San Francisco

## *74th Annual Meeting Initiates AANS' Diamond Jubilee Year*

By MANDA J. SEAVER

**W**hen the 74th AANS Annual Meeting officially opened on Monday, April 24, Annual Meeting Chair James T. Rutka, MD, announced the expectation that the event would be “the most successful annual meeting in the history of the AANS.”

The final numbers bear out Dr. Rutka's optimism. With medical attendees totaling 3,172, the San Francisco meeting proved to be the most successful ever by this measure, and the grand total of 6,887 attendees puts the meeting in contention for top honors with the year 2000 meeting. The meeting's success sets the bar high in keeping with great expectations for the AANS 75th anniversary, a celebration that began with the 2006 meeting, continues throughout the year, and culminates in the 75th Annual Meeting: Celebrating AANS' Diamond Jubilee, to be held in Washington, D.C., April 14–19, 2007.

Of course, stellar attendance is but one indicator of success. This meeting's singular mix of science, social events, and the city's hospitality coalesced in a particularly memorable occasion.

The meeting owes its success in large part to Dr. Rutka and to the entire planning team, including Mitchel S. Berger, MD, scientific program chair, and Timothy B. Mapstone, MD, scientific posters chair; Russell J. Andrews, MD, Nicholas M. Barbaro, MD, Sue Ellen Barbaro, Deborah L. Benzil, MD, Lawrence S. Chin, MD, E. Sander Connolly Jr., MD, Anthony L. D'Ambrosio, MD, Joseph A. Hlavin, PA-C, David F. Jimenez, MD, Eric A. Potts, MD, Andrea Strayer, CNRN, Vincent C. Traynelis, MD, and Eve C. Tsai, MD.

This meeting's 38 practical clinics, 19 general scientific sessions, 77 breakfast seminars, 135 oral abstract presentations, more than 500 poster presentations, and 234 companies exhibiting the latest neurosurgical technology and products were introduced to a broader audience through media outreach. The AANS not only promoted the meeting and the association itself, it also employed



a peer-review process to select scientific topics from all accepted annual meeting oral abstracts for release to the media.

This year's 13 annual meeting scientific press releases reflected a wide range of neurosurgical topics, covering, for example, spinal fusion and artificial discs, the use of cortical language mapping before glioma surgery, skull protection offered to children by bicycle helmets, and deep brain stimulation. The scientific releases as well as the public interest releases associated with Neurosurgery Awareness Week, held concurrently with the AANS Annual Meeting, generated considerable media attention, with print and broadcast media reaching an estimated worldwide audience of 636 million and counting. Notable online publications covering the meeting included Yahoo!News, USA Today, Reuters, HealthScout, HealthDay, HealthCentral, Excite and Forbes. Major newspapers and magazines included The Wall Street Journal, The Cleveland Plain Dealer, Star Tribune, Indianapolis Star, and Business Week.

## CME: A Main Attraction

A major attraction of the meeting is the opportunity to earn continuing medical education credit. Meeting registrants could earn 20.75 category 1 CME credits, and those attending ticketed educational programs such as breakfast seminars, practical clinics, the Pain Section Satellite Symposium and the Japanese American Friendship Symposium, additionally could earn up to 35 category 1 CME credits.

While the meeting has concluded, the opportunity to learn continues. Audio recordings on compact disc cover the plenary, scientific, subspecialty section, and socioeconomic sessions. Titles of the individual programs recorded are listed on the order form available in the AANS Online Marketplace at [www.AANS.org](http://www.AANS.org). In addition, DVD recordings of three programs—Cerebral Trauma State-of-the-Art Treatment, Head Trauma: Current Treatments and Controversies, and Minimally Invasive Microendoscopic



"Chinatown"

Dissectomy—offer CME credit and also are available in the Online Marketplace.

## Memorable Moments

Following two days of intensive, hands-on practical clinics, the Sunday evening opening reception marked the ceremonial start of the 74th AANS Annual Meeting in an event that offered 3,000 guests the opportunity to stroll through the streets of San Francisco without ever leaving the friendly confines of the AANS headquarters hotel. Fisherman's Wharf, Chinatown, and the Giants' stadium were among the attractions. The "sweet spot" and a popular destination was Ghirardelli Square, appropriately located on Rich Street (named, as were all these "San Francisco" streets, for an AANS president, in this case 1996–1997 President J. Charles Rich).

Continued on page 18

## AWARDS AND HONORS



### Cushing Medal— David G. Kline, MD

Dr. Kline received the Cushing Medal, the highest honor that is bestowed by the AANS. "Few have given so generously of themselves over time to the field of

neurosurgery," said Dr. Wirth in his introduction, in which he recognized Dr. Kline for launching a peripheral nerves clinic. Dr. Kline, recounted his experience "rendering care without electricity, air conditioning or elevators" during the evacuation of intensive care unit patients during the harrowing period during and after Hurricane Katrina.



### Distinguished Service Award— Lyal G. Leibrock, MD

"This afternoon I am honored and sad because the AANS is recognizing a neurosurgeon posthumously after his protracted bat-

tle with colon cancer," said Dr. Wirth. He noted Dr. Leibrock's many years of service and his initiation of the Neurosurgical Leadership Development Conference. Judi Leibrock, accepting the award on behalf of her husband, discussed his love of neurosurgery and said, "This is wonderful, thank you."



Judi Leibrock accepts the Distinguished Service Award from Fremont P. Wirth, MD, in honor of her late husband, Lyal G. Leibrock, MD.



### Humanitarian Award— Gene E. Bolles, MD

Dr. Bolles was honored in recognition of his many professional accomplishments to the development of neurosurgery and for his extensive efforts in Mexico, Belize and Albania. "I am surprised, honored and humbled to receive this award," he said. He described his volunteer work as educational and extremely rewarding and encouraged "each and every one of you to become involved in this kind of work." He said that he and his family were leaving the following week to volunteer in Iraq. "It's important to express to the rest of the world the humanness of Americans," he said.



### Robert Florin Award— Douglas Kondziolka, MD

Dr. Kondziolka received the Florin Award for his paper "Improving the Informed Consent Process for Surgery." The paper demonstrated that a patient's recall of

informed consent information can be improved when a surgeon goes through the form with the patient followed later by a staff member asking the same questions of the patient. "Patients can be well informed, informed consent can be documented in an efficient manner, and efforts to improve the informed consent process are valued by patients," he said.



### Cone Pevehouse Award— Ming-Yuan Tseng, MD

Dr. Tseng received the Pevehouse Award for his paper "Survival Analysis for 540 Patients With Primary Spinal Intramedullary Gliomas in England and

Wales: A Population-Based Study." The study identified old age, nonependymoma, and high grade tumors as negative prognostic factors for these patients' survival. Dr. Tseng and colleagues concluded that results from this population-based study are very helpful for comparison with other hospital-based studies and for public health purposes.

Continued from page 17

On Monday, two luminaries from different walks of life, Volker K.H. Sonntag, MD, and George Will, offered tales from their respective experience. As the Rhoton Family Lecturer, Dr. Sonntag discussed the "Journey of Spinal Neurosurgery in the United States," a journey that began in 1905 when Cushing removed an "inoperable" spinal lesion. He said that neurosurgical treatment of the entire spinal column began to be emphasized in the 1980s, and tension that arose between neurosurgery and orthopedics in 1989 with the approval of spine fellowship training in orthopedics was not resolved until the specialties together faced the pedicle screw challenge in the 1990s. Observing that the *Journal of Neurosurgery: Spine* now is published monthly and that the Decade of the Spine spans 2001 to 2010, he teasingly concluded that "vascular neurosurgery is out and spinal neurosurgery is in," to general amusement and applause.

Cushing Orator George F. Will delivered an entertaining amalgam of economics, politics, American wit and wisdom, and baseball. "This is a country in which the American people have decided that the government has a role in assuaging two ancient fears: illness and old age," he said. He discussed entitlements, "promises we have made to ourselves," such as Social Security. "Fixing Social Security is easy: Raise the retirement age," he said. Noting that "medicine is another matter," he discussed the growth of medicine from 6 percent of the U.S. gross domestic product in 1960 to the point at which medical centers now often are the largest employers in cities like Cleveland and Houston.

"Prosperity produced by a dynamic economy creates economic hypochondria," he said, a concept which he described as Americans driving "Lincoln Navigators, barely making it from one gas station to another, sipping designer water that costs more than a gallon of gasoline, and talking on their cell phones discussing how arduous life in America has become."

The business meeting of the AANS and the American Association of Neurosurgeons concluded the day with the election of 2006–2007 AANS leadership: Executive Committee members are Donald O.



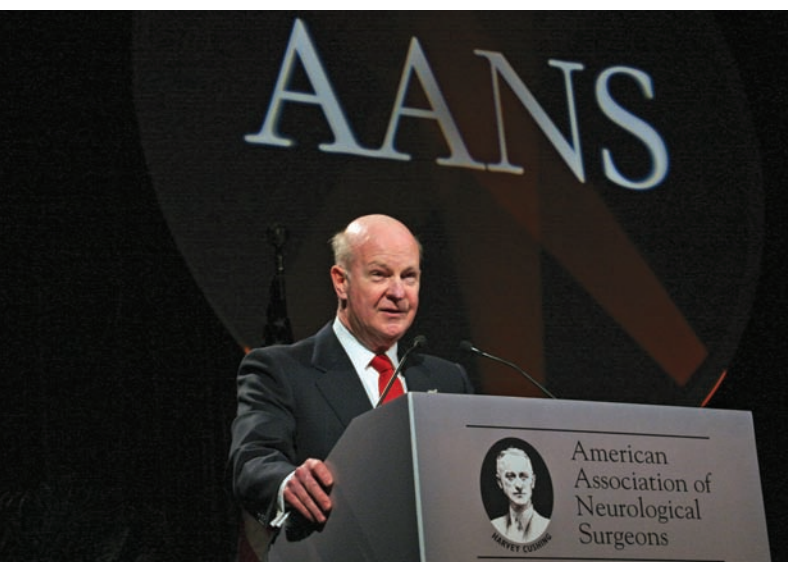
Alioto's on Fisherman's Wharf was among the opening reception attractions on Sunday evening. The event marked the ceremonial start of the 74th AANS Annual Meeting, offering 3,000 guests the opportunity to stroll through the streets of San Francisco without ever leaving the friendly confines of the headquarters hotel.

Quest, MD, president, Jon H. Robertson, MD, president-elect, Arthur L. Day, MD, vice-president; James T. Rutka, MD, PhD, secretary; James R. Bean, MD, treasurer; and Fremont P. Wirth, MD, past president.

Rounding out the Board of Directors are directors at large William T. Couldwell, MD, PhD, Robert E. Harbaugh, MD, Christopher M. Loftus, MD, Warren R. Selman, MD, Troy M. Tippet, MD; regional directors Jeffrey W. Cozzens, MD, R. Patrick Jacob, MD, Stephen T. Onesti, MD, and Edie E. Zusman, MD; historian Eugene S. Flamm, MD; ex-officio members Rick Abbott, MD, P. David Adelson, MD, Charles L. Branch Jr., MD, Lawrence S. Chin, MD, Fernando G. Diaz, MD, PhD, Andres M. Lozano, MD, Richard K. Osenbach, MD, Setti S. Rengachary, MD, B. Gregory Thompson Jr., MD, and Ronald E. Warnick, MD; and liaisons Richard G. Ellenbogen, MD, H. Derek Fewer, MD, and Isabelle M. Germano, MD.

The scientific papers presented Tuesday morning were punctuated with presentations by A. John Popp, MD, and Martin W. Weiss, MD. Representing Doctors for Medical Liability Reform, Dr. Popp related the recent progress of medical liability reform in Congress. "When I talk to neurosurgeons about this, I sense their frustration," he said. He discussed the establishment of AANSPAC, neurosurgery's new political action committee that is funding the campaign for federal tort reform, and he stressed the importance of each neurosurgeon's commitment to this effort. Pointing to his jacket, he said, "This lapel cost a thousand dollars because I'm wearing an AANSPAC founders' pin, and I hope that as I walk through the hall today I will see many more."

Representing the Neurosurgery Research and Education Foundation, Dr. Weiss described the NREF's impressive 25-year track record of finding ways to fund the research projects of neurosurgeons through donations and through corporate partnerships. "Research and development, corporate or scientific, is the foundation of the



Fremont P. Wirth, MD, delivers the Presidential Address.

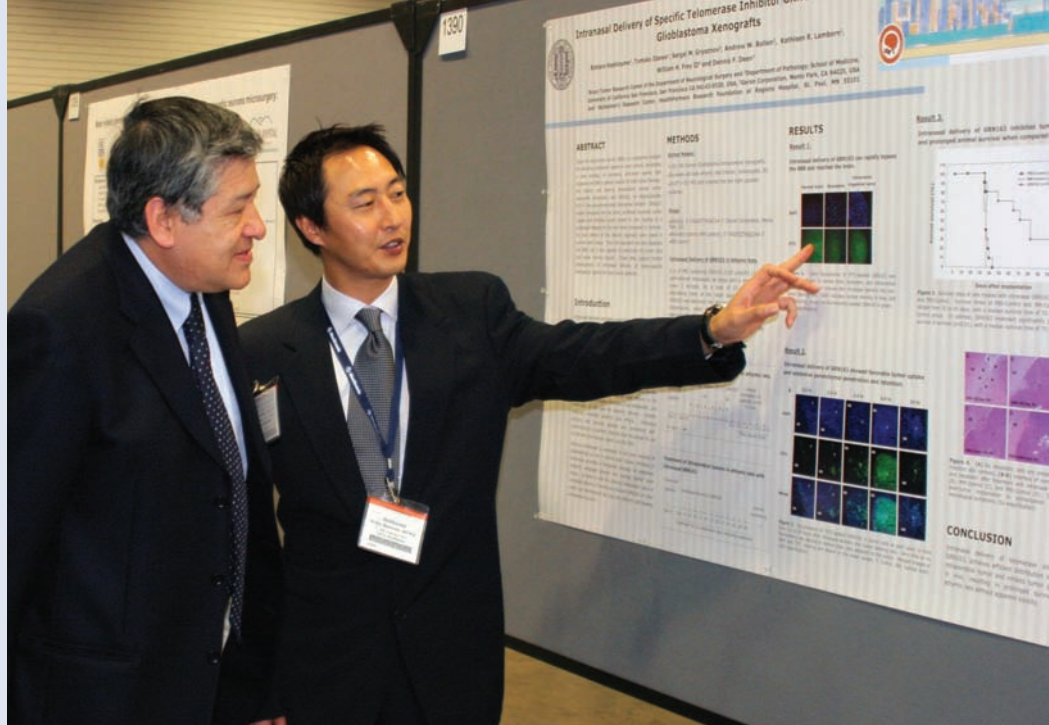
## Developing Science

**P**oster Chair Timothy Mapstone, MD, and the Scientific Program Committee selected more than 500 abstract submissions for poster presentation at the 74th AANS Annual Meeting. The top three posters in each of the following categories were recognized, and first place awardees and their topics are listed below.

■ **Cerebrovascular** Shaye I. Moskowitz, MD, "Statin Use Increases the Risk of Vasospasm Following Aneurysmal Subarachnoid Hemorrhage"

■ **General Interest** Pankaj A. Gore, MD, "Normobaric Oxygen Therapy Strategies in the Treatment of Postcraniotomy Pneumocephalus"

■ **History** William C. Bergman, MD, "Walter Dandy and His Approaches to the Third Ventricle Circa 1933"



■ **Pain** Aneela Darbar, MD, "Efficacy of Gamma Knife Radiosurgery For Trigeminal Neuralgia Associated With Multiple Sclerosis"

■ **Pediatrics** Richard J. Edwards, MD, "The Development of a Telemetric Intracranial Pressure Sensor for Long-term Monitoring of Intracranial Pressure"

■ **Spine and Peripheral Nerves** Denis J. DiAngelo, PhD, "Biomechanical Comparison of the Charite and Prodisc-L Lumbar Disc Prostheses"

■ **Stereotactic and Functional** Abbas F. Sadikot, MD, "Probabilistic Maps of Subthalamic Electrodes in an MRI-Atlas Integrated Reference Space Correlated with Clinical Outcome"

■ **Trauma and Critical Care** Lori Shutter, MD, "Unhelmeted Motorcyclists—Higher Mortality, Morbidity and Costs"

■ **Tumor** Hidenobu Ochiai, MD, "Targeted Therapy for Glioblastoma Multiforme Neoplastic Meningitis With Intrathecal Delivery of an Oncolytic Recombinant Poliovirus"



Above, Rintaro Hashizume, MD, PhD, points to research results shown on his poster "Intranasal Delivery of Specific Telomerase Inhibitor GRN163 in Human Glioblastoma Xenografts." At left, Ajay Niranjani, MCh, discusses his poster "Biochemical Assessment After Radiosurgery for Growth Hormone Secreting Pituitary Adenomas."

future," he said. Noting that participation in just the Young Neurosurgeons Committee's Silent Auction, held in the exhibit hall during the meeting, funds one NREF award, he encouraged broader, enthusiastic support of the NREF.

### Presidential Address

Fremont P. Wirth, MD, identified five main issues with which neurosurgery today must contend: (1) education; (2) defining the boundaries of neurosurgical practice (3) responding to changing demands of society (4) influencing increase in reimbursement; and (5) medical liability reform. He called education the fundamental issue for neurosurgery as well as a primary mission of the AANS, which is bent upon providing "modern, efficient, responsive educational programs for neurosurgeons."

Dr. Wirth defined the most recent challenge to the scope of

neurosurgical practice as the possible encroachment of proposed specialists in acute care surgery. He explained that these specialists would be expected to perform among their duties emergency neurosurgical procedures, contrary to the idea that "patients are safest when neurosurgeons provide neurosurgical care." He discussed the results of the AANS 2006 Workforce Survey, which demonstrated that most neurosurgeons are providing on-call services. Acknowledging that there may be a better system for providing neurosurgical emergency care, he said that ideas for improving the delivery of such care were being explored.

Dr. Wirth also described organized neurosurgery's efforts for medical liability reform and other issues on the national agenda as moving forward in cooperation with colleagues in other specialties. He warned that advocacy efforts such as these can be protracted and

Continued on page 20

Continued from page 19



(l-r) Donald O. Quest, MD, Julia Grubb, Peggy Ratcheson, Robert L. Grubb, MD, Ilona Quest, and Robert A. Ratcheson, MD, gather around the street sign honoring Dr. Ratcheson, the 2004–2005 AANS president, at the opening reception.

that apathy toward continuing involvement in these matters is a worthy opponent. “We must step up to the plate,” he said. “It’s going to take time, effort and money. Individual neurosurgeons can have an impact.”

On Wednesday, communication, science and politics were the focus of two lecturers. Mark Bernstein, MD, the Theodore Kurze lecturer, honored the raconteur in Dr. Kurze by discussing the importance of neurosurgeons making their voices heard more widely through publication in nonbiomedical venues. Dr. Bernstein noted that Harvey Cushing, a Pulitzer Prize winner, could serve as

inspiration. “Narrative stories reach people,” he said. “It’s never too late to try.” Hunt-Wilson Lecturer Arnold Kriegstein, MD, reviewed the science and politics currently affecting neural stem cell research. He said that current stem cell research in the United States is moving forward at the state level, led by New Jersey, Illinois, Maryland, Connecticut, and California, and that the Uni-

versity of California, San Francisco has planned a stem cell training program.

The Thursday socioeconomic session was highlighted by pointed discussion of and audience commentary on the Centers for Medicare and Medicaid Services’ pay-for-performance project. Jeffrey Flick, the CMS administrator for region IX, presented rationale for the program and said that the 262 hospitals already participating in CMS P4P have demonstrated that “just measuring and publishing improves quality.” He said that the CMS is “looking for your help to make sure we have this right” and encouraged physicians to participate in the CMS’ P4P demonstration program. “I believe that physicians are likely to be paid just for reporting as early as next year,” he said.

Robert E. Harbaugh, MD, chair of the Quality Improvement Workgroup of the AANS/CNS Washington Committee, expressed neurosurgery’s concerns involving establishment of appropriate P4P measurements. “All measures are focused on management of chronic disease, so application to surgical patients is a concern,” he said. Acknowledging that there is “widespread, bipartisan support in all of Washington” for P4P and that the CMS is very committed to the program as a way to save money, Dr. Harbaugh suggested that neurosurgery should participate but should develop its own quality measures based on prospectively collected outcomes data.

Presentations by master neurosurgeons Kevin T. Foley, MD, spine; Patrick J. Kelley, MD, tumor; Michael T. Lawton, MD, vascular; Johannes Schramm, MD, epilepsy; and Albert L. Rhoton, MD, cerebrovascular, concluded the meeting. ■

**Manda J. Seaver** is staff editor of the *AANS Bulletin*.

## 2006 International Awardees

**D**uring the AANS Annual Meeting in San Francisco, the following 2006 International Award recipients were announced.

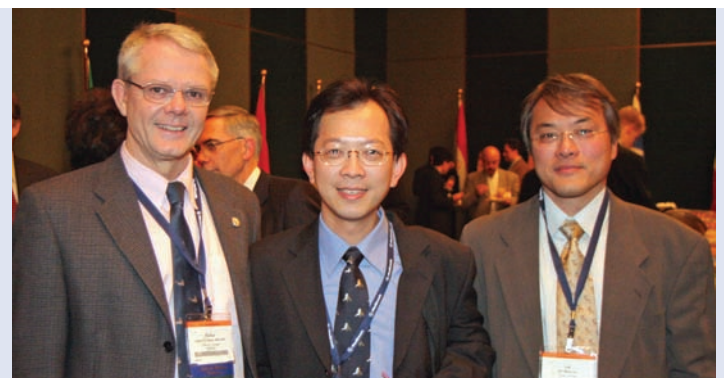
The International Abstract Award was presented to Ming-Yuan Tseng, MD, of the United Kingdom, for “Biological Effects of Acute Pravastatin Therapy On Cerebral Vasospasm, Delayed Ischemic Deficits, and Outcome in Patients Following Aneurysmal Subarachnoid Hemorrhage: A Randomized Controlled Trial.”

The International Travel Scholarship recipient was Emad K. Hammood, BSN, of Iraq for “Surgical Management of Brain Hydatid Cyst in the North of Iraq.”

The association also announced the first two recipients of the first AANS International Visiting Surgeons Fellowships. They are Mirsad Hodzic, MD, of Bosnia and Herzegovina, and Rene Fernando Paz, MD, of Honduras.

Dr. Hodzic, whose fellowship will be at the University of New York at Buffalo, is specifically interested in developing new knowledge in minimally invasive neurosurgery in children.

Dr. Paz will complete his fellowship at the University of Colorado Health Sciences Center. His research study will involve the



(l-r) James T. Rutka, MD, and Muh-Lii Liang, MD, both of Canada, and Dar-ming D. Lai, MD, of Taipei, are pictured at the international attendee reception on Wednesday evening.

effects of spinal decompression and stabilization, and time of surgical treatment on patient outcomes.

Additionally, the recipient of the FIENS/Integra Fellowship was announced at the AANS Annual Meeting. He is Sushil Shilpakur, MBBS, of Nepal, who is studying neuroendoscopy during his fellowship at the CURE Children’s Hospital of Uganda.

With the exception of the FIENS/Integra Fellowship, these awards are managed by the AANS International Outreach Committee. All awards will be offered again in 2007.

# Easy Money: Find the Hidden PPOs

*When Insurers Share Savings, You Don't Have to Suffer*

In this era of reimbursement cutbacks and rising overhead, it is becoming increasingly difficult to improve the net income of a practice. Yet, there is a relatively easy way to accomplish this with a little research and a willingness to drop one or more insurance plans. This method is to find and eliminate the "hidden PPOs."

A hidden PPO is an insurance company that discounts your charges without your consent. This can happen when insurance companies with which you have signed contracts for a set fee schedule then pass these rates on to other insurance companies with which they have contractual relationships, but you do not. This dubious discounting technique has been used at an increasing rate in recent years.

## Untangling Dubious Discounts

There are at least two ways to discover if you are the victim of hidden PPOs.

■ **Audit EOBs** The simplest method is to audit the explanation of benefits forms that you receive from insurance companies—especially the EOBs of those companies that are paying charges or a percentage of charges rather than those remitting based on contractually set fees. You may find that you are not being paid the correct amount and that in many cases you are being paid significantly less. Upon contacting the insurance company (Company B), its representative may inform you that "we priced the bill at the rate you contracted with Company A, and according to your contract, we can apply that rate because of our contract with Company A."

Your practice's billers, particularly if they are rewarded on a days-in-receivable basis, may not have delved into the underlying problem; to move the account off the books, their interest may be in just posting the payment and writing off the remainder of the charge to a contractual adjustment.

The solution may be either to hire someone to do EOB audits (a position that usually will pay for itself, especially in large practices), have a supervisor perform the audits, or contract a consultant.

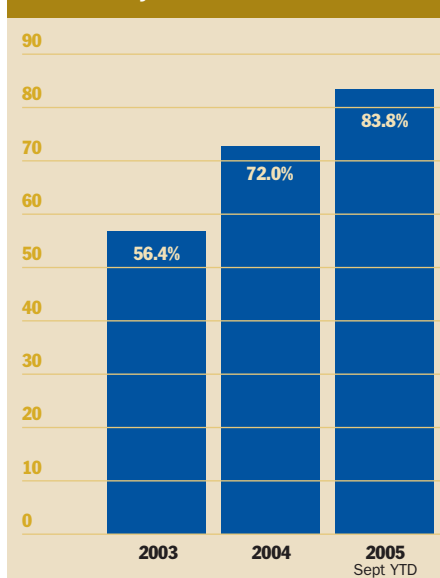
■ **Analyze Financial Reports** A second way to find hidden PPOs is to perform analysis that can help determine the possible extent of underpayment. First run reports that provide payments and adjustments for charge-based payers—auto insurers, for example. Run these reports for the last three to five years. For each year, add the payments and adjustments. Divide the payments for each year by the totals for each year calculated previously. You may be able to see trends of decreasing percentages of payment or absolute levels of payments.

**The deterioration was traced to one PPO that represented only 3.5 percent of our business. The insurance companies with which this PPO had contracts actually paid the PPO a percentage of the savings from our charges.**

## Once the Problem Is Identified, Take Action

For our practice, I run payer-mix reports on cash payments instead of just charges. This method found that the actual payment percentages for our auto insurance charge-based payers had dropped from about 85 percent of charges to about 55 percent over a five-year period. This deterioration was traced to one PPO that represented only 3.5 percent of our business. The insurance companies with which this PPO had contracts actually paid the PPO a percent-

Increased Payment Rates from Auto Insurers



A tough decision to drop an insurer in 2003 came after financial reports revealed a decline in the insurer's payment rate. Since then, the rates have climbed back.

age of the savings from our charges.

After a one-month failed negotiation process, our practice decided to drop this PPO effective Jan. 1, 2004. This was a very difficult decision to reach within our own group. Some physicians were extremely reluctant to say no to any business and also doubted whether we would really see any increased reimbursement. As shown in the chart, since that time we have seen our payment rates from auto insurers return nearly to the 85 percent level, increasing our practice's annual reimbursement by more than \$650,000.

This is not to say that your results will match this dramatic outcome. However, finding hidden PPOs may well be the easiest way to significantly improve practice net income available today. ■

**Nick Green** is past president of NERVES, [www.nervesadmin.com](http://www.nervesadmin.com), and practice administrator for Michigan Head and Spine Institute PC in Southfield, Mich.

# Inspirations and

## WHAT WOULD YOU TITLE YOUR STORY?

**W**hether standing at neurosurgery's threshold (Great Expectations), juggling a thousand responsibilities at midcareer (Who Moved My Cheese?) or enjoying the fruits of a long career (Life of [Boswell], or possibly The Expanding Universe), you have a story to tell. What would you title it? Who or what inspired you to enter this profession? What from your experience would you share with a medical student? What do you still love about your daily work? During the AANS 75th anniversary year, when neurosurgery's origins and organizers will be recognized and remembered, accounts of inspiration and epiphany by today's neurosurgeons are being published in the AANS *Bulletin*. Send your account (300-word maximum) by e-mail to [bulletin@AANS.org](mailto:bulletin@AANS.org). You will receive an automatic confirmation of receipt, and you will be contacted if your item is selected for publication in an upcoming issue of the *Bulletin*.

**I**n 1954 I was beginning my third year of medical school in Mexico, where I was born, when I decided it was time to choose a field of specialization. At that early stage of my career I only knew that there were medical and surgical specialties. I decided to embrace a surgical specialty, but which one?

It seemed natural to me to choose the most difficult specialty, but again, which one? I started to ask around. The overwhelming answer from my fellow students, my professors and hospital personnel was neurosurgery, which in most opinions was not only the most difficult but also the most daring, glamorous and challenging of all medical and surgical specialties. Armed with this information, I began to ponder other aspects of neurological surgery. For one, there were but a handful of trained neurosurgeons, which meant more work and less competition. For another, if a patient survived an appendectomy, that was expected and therefore it was not a big deal. But if a patient survived and did well after a craniotomy, that was almost a miracle. Finally, and perhaps least importantly, were financial considerations. I learned that the fee for a craniotomy was 10 times higher than the fee for an appendectomy.

In 1955 I started an "apprenticeship" with Juan Cardenas, who received his training from Leo M. Davidoff in New York and was the first neurosurgeon in Latin America certified by the American Board of Neurological Surgeons. He was my inspiration. Finally, I started



Leo M. Davidoff, MD

my residency in neurosurgery at Case Western Reserve University. Finishing my training in 1965, I returned to Mexico and from then on have had a most enjoyable and quite successful private practice. My advice to a medical student: If you are thinking about neurosurgery, do it.

*Javier Verdura Riva Palacio, MD  
Oaxtepec, Mexico*

**I** decided to become a neurosurgeon as a first year medical student after hearing Stephen Mahaley at the University of North Carolina deliver a lecture about third ventricular tumors. He was just great and I couldn't imagine a more interesting career or a more inspiring role model. My decision became firm after watching him do a temporal lobectomy for tumor. During the setup of the case we all watched the Duke-UNC basketball game, which he had transmitted into the OR on closed-circuit TV. He also was the track neurosurgeon at the Darlington Raceway where he had a special parking place for his black Porsche.

Dr. Mahaley was as inspirational a figure as I ever saw, and he stimulated many young UNC medical students to enter neurosurgery.

*Phillip S. Dickey, MD  
New Haven, Conn.*



Stephen Mahaley, MD

**B**ecoming a neurological surgeon was something I never anticipated either during college or medical school. But when I assisted a neurosurgeon during the third year of my general surgery residency, my love of the specialty was immediate.

It was John (Jack) T. Bakody who introduced me to the "queen of the medical specialties," and I assisted him frequently in addition to my general surgery responsibilities. My application was accepted at the University of Michigan, but I was drafted and served in Vietnam as C.O. of the 62nd surgical mobile unit. After service in the army, I was able to train with Edgar Kahn and Kearsley Welch and to complete the neurosurgical program at New York University under Joseph Ransohoff.

Throughout my training and career, my love affair with the specialty grew. Although I admit that at times the path was difficult, I



Edgar Kahn, MD



Kearsley Welch, MD

# Epiphanies

have no regrets. There is for me no other specialty in medicine that compares to neurological surgery for its challenges, rigorous intellectual honest analysis, consummate operative skill and compassionate care of patients. I cherish the moments with the program directors and residents, and the professional camaraderie and satisfaction of being a team leader able to successfully improve the quality of life of patients.

Severe, disabling health problems abruptly precluded my continuation of this beautiful and demanding specialty. Despite this, I love neurological surgery and the privileged, marvelous and unique opportunity to glimpse in wonder at the inner man, as created by the Higher Being.

*Michel W. Andre Kildare, MD, FACS  
Marysville, Calif.*

**I was 17 years old and in medical school.**

I'll never forget the excitement I experienced when I saw it for the first time: the human brain! The 1,500 grams of soft tissue is what imparts *Homo sapiens* their unique essence and distinguishes them from every other animal on the planet. A billion neurons, spreading their dendrites and axons throughout the body, create consciousness and contemplation and are responsible for the birth of civilization that gave us the Roman coliseum, Mona Lisa, Taj Mahal, Darwin's theory of evolution and a plethora of religions and philosophies. So much function of the body is controlled by so small a mass, intricate, complex and highly organized.

I was drawn by its aura of mystery and wonder. I knew then that I wanted to deal with this incredible structure that requires handling with utmost reverence, patience, unwavering hand, thorough knowledge, and a penchant for meticulous detail—all necessary attributes for a brain surgeon. I decided to take up the challenge.

Thirty years later my excitement upon first seeing the brain, instead of waning, is magnified because I look at and operate on brains that are alive, pulsating synchronously with the heartbeat. Any mishap could result in the patient's devastating debilitation or death, which explains one's healthy apprehension while performing delicate brain surgery. But the rewards of emotional and professional satisfaction when an aneurysm is successfully clipped or

a life is brought back from the doorstep of death via timely evacuation of an epidural hematoma are extremely fulfilling. So is alleviating the pain and suffering of patients from pinched nerves and improving their quality of life.

*Vivekanand Palavali, MD  
Flint, Mich.*

**W**hat initially drew me to neurosurgery was the notion that as a doctor and surgeon one would be dealing directly with the brain, which I thought was a very privileged position to be in. I was also attracted to the complex organization of the nervous system, which unlike many other body systems, allows precise localization of the lesion from a history and physical examination. Finally, I was attracted to the technical challenge of brain surgery.

Neurological surgery is a challenging and demanding specialty by many criteria: hours expended, physical stamina required, and emotional toll exacted. Neurosurgeons have to balance their jobs with the other important areas of their lives: family, physical fitness, friends, and spirituality. Furthermore, there are very few opportunities for "mid-course" career corrections once one has become fully engaged in neurosurgical practice. Neurosurgery's tradition as a discipline whose practitioners are intellectually restless and rarely satisfied with old maxims or current statistics holds true to the present time.

For all its difficulties, when done well neurological surgery gives one a great sense of personal satisfaction and also is capable of making great differences in the lives of our patients. It is undergoing fascinating changes in the way we treat patients, largely due to

new technologies. We are currently undergoing radical subspecialization, with pediatric, spinal and functional neurosurgery being the most obvious and well-developed examples.

All neurosurgeons have to balance decisiveness and assertiveness with approachability and excellent patient communication skills. Aspiring neurosurgeons should be self-motivated, ambitious, obsessive for detail and deeply analytical. They should be willing to learn and able to perform well under pressure and handle stress.

*Sanjay Mongia, MD  
Mumbai, India*



# The Basics of Practice Management

## *You Can Clip an Aneurysm, but Can You Compute Cost Per RVU?*

**C**ost per RVU (that's relative value unit) can be determined by dividing total practice expenses by total RVUs, yielding a number that can be compared annually as an indicator of a practice's performance. If you didn't know that, you are not alone. Neurosurgical residency programs do a great job of teaching how to diagnose and operate, but they typically do a poor job of preparing residents for the practical aspects of managing a neurosurgical practice, which in reality is a small business. This article offers some basics of practice management for the new-to-practice neurosurgeon, with focus on four primary areas: compliance, billing, office management, and patient relations.

With the passage of the Health Insurance Portability and Accountability Act, ensuring compliance is one of the most important functions of an office manager. In addition to HIPAA, there are federal, state, and local regulations regarding the flow of information between patients and doctors, doctors and doctors, and doctors and the insurance carriers (including government payers). Medicare regulations generally are followed by most insurance plans, but specifics for a particular region can be found by accessing the Web site of the regional Medicare intermediary. For example, Trailblazers is the intermediary responsible for handling all Medicare claims in Baltimore.

The most visible aspect of HIPAA in an office setting relates to patient privacy. In general, relating more than one unique piece of identifying information should be avoided. For example, patients may be identified by name, but not also with their doctor's name or diagnosis. Release of patient information is allowed to referring physicians only; all others must have patient consent. Use of patient informa-

tion for research must also be approved; one strategy is to have patients sign a consent form at initial consultation that allows their information to be used for research purposes.

Knowing how to code a surgical procedure properly is important for every neurosurgeon because even when someone else handles coding, the neurosurgeon is responsible for the accuracy of submitted bills. All residents should attend a billing course such as those offered by the AANS before starting practice. The most common Current Procedural Terminology codes, which describe the operation, and ICD-9 codes, which provide the diagnosis or the symptoms, should be learned. Medicare publishes quarterly updates that detail which codes may be added on (for more reimbursement) and when "unbundling"—breaking down a procedure into smaller parts for greater reimbursement—is disallowed. An average practice of five neurosurgeons performing 1,400 cases and seeing patients in 6,000 office visits per year will need two coders and two collectors. At least one of the coders should be certified, a process that requires at least two years' experience and annual recertification.

A medium-to-large practice will need a practice manager. A bachelor's degree is a minimum requirement, and often this person will have an MBA or other master's degree, or other appropriate credentials such as a CPA. A practice manager's responsibilities include hiring and evaluating staff, promotions, preparing the budget and payroll, cash management, and maintaining supplies. The practice manager as well as coders and collectors should be included in a practice's incentive program to reward them for going the extra mile.

Patient satisfaction is the ultimate goal of a neurosurgical practice. An office management axiom is "A happy patient tells

one person, but a dissatisfied patient tells 13 people." Find out what the patients think; send out surveys, and make sure that the practice's phones are answered by a live person. Listen to patients' concerns and respond to them quickly.

Probably the best advice is to avoid micromanaging the practice. Let the practice manager handle the details, but know what he or she is doing because ultimately the neurosurgeon is responsible.

### Resources for the Real World

In acknowledgement of the complex practice environment faced by today's neurosurgical residents, resources that better prepare residents for the transition are under development. At least one training program, the Medical College of Georgia in Augusta, requires a Web-based course that acquaints its residents with basics of practice management. The AANS recently offered the course *Neurosurgery in the Real World*, which covered coding and reimbursement, government regulations, contract negotiations, practice development and professional liability. In addition, print resources such as *Starting a Medical Practice* and *Managing the Medical Practice* are available from the AANS Online Marketplace, [www.AANS.org](http://www.AANS.org).

Perhaps the greatest resource for neurosurgeons entering practice is the AANS Young Neurosurgeons Committee. The YNC provides information at [www.AANS.org](http://www.AANS.org) > Young Neurosurgeons and develops programs like the Real World course that respond to the needs of early career neurosurgeons while opening the door to involvement in the AANS. ■

**Lawrence S. Chin, MD**, is chair of the Department of Neurosurgery at Boston University School of Medicine and chair of the AANS Young Neurosurgeons Committee. **Gloria Jones**, office manager at University of Maryland Neurosurgical Associates, contributed to this article.

# Tort Reform Falls Short in Senate

## *DMLR Campaign Presses Forward*

A minority of U.S. senators used procedural devices to prevent two medical liability reform bills from reaching the Senate floor for an up or down vote on May 8.

First, the Medical Care Access Protection Act of 2006, S. 22, was effectively blocked when its supporters were unable to gain the necessary 60 votes to break a Democrat-led filibuster. The MCAP is modeled after recent Texas reform legislation and includes, among other things, a \$250,000 cap on noneconomic damages against physicians, limits on attorneys' fees, and expert witness reforms. The motion to proceed (required before action on the underlying bill could be considered) on S. 22 was defeated by a vote of 48 to 42. All Democrats who voted, joined by three Republicans, opposed the measure. Regrettably, 10 senators were not present, among them four senators who had previously supported reform legislation.

Immediately following the first vote, the Senate considered a motion to proceed to debate the Healthy Mothers and Healthy Babies Access to Care Act, S. 23, which

applies the same reform provisions as S. 22, but for obstetrics and gynecological services only. This motion also failed, but by a vote of 49 to 44 with seven not present. Of the three additional senators voting, one was a Republican and two were Democrats.

Despite the Senate filibuster, some in Congress have vowed to continue the fight in support of comprehensive medical liability reform legislation. The talk on Capitol Hill is that the House of Representatives may take up this issue again sometime this summer and the Senate may revisit medical liability reform before the November campaign season gets into full swing. Organized neurosurgery, through its participation in Doctors for Medical Liability Reform, will continue to press Congress for action.

### **DMLR Campaign Builds Momentum for Tort Reform**

DMLR's Protect Patients Now national campaign for medical liability reform continues to build impressive momentum. Using creative animations, Web advertisements, and radio and print media, DMLR is building its

activist database and grassroots network. As of early June, DMLR has reached approximately 65 million listeners through several "radio tours" held since the campaign redeployed last October. Neurosurgeons Troy Tippet, MD, from Pensacola, Fla., and John Caruso, MD, from Hagerstown, Md., participated in these radio interview programs. DMLR has collected more than 40,000 signatures for its petition drive, and more than 15,000 letters have been sent to Congress (over 5,000 in the week immediately before the Senate vote). The grassroots network is nearly 150,000 strong, and it continues to expand every day.

In light of the recent unsuccessful votes in the U.S. Senate, DMLR is redoubling its grassroots outreach efforts and is working hard to recruit more patients to join the campaign to stop medical lawsuit abuse. The success of the program depends on neurosurgeons helping to spread the word about the medical liability crisis and DMLR's Protect Patients Now campaign. It is vital that neurosurgeons stay the course and stay involved in the DMLR campaign.

Members of the U.S. Senate need to hear from patients as well as doctors on this vitally important health care issue. One easy way to help is by introducing patients to medical liability reform issues and solutions through the DMLR's Patient Outreach Kit. The kit includes:

- a packet of informational brochures that have a tear-off portion allowing patients to sign and mail a petition in support of reform;
- a poster, which dramatically illustrates the crisis;
- a pad of tear-off postcards that are attached to the poster and can be filled in and mailed back to DMLR; and
- wearable "Stop Medical Lawsuit Abuse" buttons.

### **The Fight to Pass Reform—By the Numbers**

**65 million** The number of people who have heard DMLR's message on the radio.

**150,000** The number of people who have joined DMLR's grassroots network.

**40,000** The number of individuals who have signed DMLR's petition for reform.

**15,000** The number of letters that have been sent to Congress.

**800** The number of physicians who have requested DMLR's patient outreach materials.

**The talk on Capitol Hill is that the House of Representatives may take up this issue again sometime this summer and the Senate may revisit medical liability reform before the November campaign season gets into full swing.**

These materials are free of charge and will be shipped directly to your office once the order is placed. Neurosurgeons are encouraged to get an outreach kit and help spread the word about the crisis and our campaign for reform.

With your help, DMLR will continue to build its grassroots network, educate patients, and put a stop to medical lawsuit

abuse. DMLR also will continue to keep neurosurgeons informed and involved through regular e-mail messages. In addition, neurosurgeons are encouraged to watch for new information and campaign updates on the Protect Patients Now Web site, [www.protectpatientsnow.org](http://www.protectpatientsnow.org). Remember, this is a marathon, not a sprint, and all neurosurgeons must get involved and

continue to stay involved until we succeed at passing reform legislation. ■

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**For Further Information**

■ How They Voted: S. 22, Medical Care Access Protection Act of 2006, and S. 23 Healthy Mothers and Healthy Babies Access to Care Act, [www.senate.gov](http://www.senate.gov) > Votes > Roll Call Tables 2006 (109th, 2nd) > Votes 00115 and 00116

■ DMLR's Patient Outreach Kit, [www.protectpatientsnow.org](http://www.protectpatientsnow.org) > Physicians > Patient Outreach Kit

■ Texas Teaches That Tort Reform Works, page 34

# Concurrent Spinal Procedures

## *Coding Frequently Changes for Established Procedures, Too*

**T**he increase in spinal fusion procedures during the past decade has drawn scrutiny from the Centers for Medicare and Medicaid Services and third party payers, resulting in coverage limitations for some of these procedures. Recent CMS coverage decisions for established, concurrent spinal procedures will be examined in this Coding Corner.

### **Coding for Decompression and Arthrodesis for Spondylolisthesis**

A common procedure for lumbar spondylolisthesis involves decompression of the nerve roots and a lumbar arthrodesis. A variety of procedures exist for decompression including laminectomy for lateral recess stenosis (63047) or for Gill fragment removal (63012), and discectomy for posterolateral herniation (63030), for far lateral disc herniation (63056), or for re-exploration of a disc herniation (63042).

Several years ago, the Current Procedural Terminology Editorial Panel approved an editorial change to posterior lumbar interbody arthrodesis (22630) that includes laminectomy and discectomy work other than that needed for decompression. However, the National Correct Coding Initiative of the CMS excluded coding of 22630 concurrently with the decompression codes under ordinary circumstances.

The vignette describing posterior lumbar interbody arthrodesis identifies a patient with mechanical back pain after prior discectomy and failed posterolateral fusion who undergoes a laminectomy, discectomy and interbody arthrodesis. Since the described patient does not have radiculopathy, a decompression above and beyond what is required to perform the posterior interbody fusion is not included in the vignette. However, the vignette does describe mobilization of nerve roots and dural sac as well as dissection of scar tissue

necessary to perform the fusion. It may be difficult when coding to differentiate the incidental decompression that occurs during the laminectomy and discectomy approach for the interbody fusion from the additional decompression that may be warranted because of neurological symptoms from compressive lesions. Correct coding for interbody fusion is further complicated when a unilateral approach using a transforaminal technique is performed because code 22630 describes a bilateral procedure. In either instance, if a decompression procedure is performed beyond what is required for the interbody exposure, then the decompression should be appended with the -59 modifier (unusual procedural services) to acknowledge this as separately identifiable additional work, and it is critical for the neurosurgeon to document the separate location of compression that is being treated.

Another recent limitation imposed by the CMS is for concurrent performance of a posterior arthrodesis and a posterior lumbar interbody fusion. The authors of the lumbar fusion guidelines, published in June 2005, concluded that complications and costs were higher and without an observed benefit when a posterior fusion is performed in addition to an interbody fusion. This year, CMS payment policy precludes payment for a posterior fusion when an interbody fusion is performed. The various surgical societies representing spinal surgery are reviewing the guidelines and their implications before preparing a response to the CMS decision.

### **Coding for Revision Spinal Surgery**

Additional difficulties in proper coding are encountered when revision spinal surgery is performed. For example, a revision of a prior fusion may include procedures such as exploration of a fusion (22830), removal (22852), reinsertion (22849), or placement

of spinal instrumentation (22840-22844), and performance of a fusion at the same or adjacent levels (22612, 22614, 22630, 22632). The CMS has used National Correct Coding Initiative edits for years to preclude payment for an exploration of fusion with arthrodesis, despite introductory language in CPT that specifically identifies arthrodesis and instrumentation as separate physician work. Although an exploration of fusion and arthrodesis at the same level should be considered inclusive, arthrodesis at adjacent levels is separately identifiable and the arthrodesis code should be appended with the -59 modifier. If spinal instrumentation is removed and replaced at the same levels, only code 22849 should be used, rather than a removal code and an insertion code.

When spinal instrumentation is removed and then replaced with instrumentation extended to additional levels, one must balance the lesser work of replacing fixation in sites that have been prepared previously with the new work of exposing and placing fixation at new levels. An insertion code that describes the entire span of instrumentation (both revised and new) would reflect the physician work under most circumstances because the work of removal and replacement at an individual level is similar to work of preparation and insertion at a new level. The neurosurgeon should be aware that the removal and reinsertion of instrumentation codes are 90-day global codes to which the multiple procedure modifier -51 applies, whereas the insertion codes are ZZZ global codes and are not subject to a 50 percent payment reduction when used with other stand-alone codes.

The area of spinal coding and reimbursement is frequently changing. Therefore, it behooves neurosurgeons to keep abreast of these changes annually. ■

**Gregory J. Przybylski, MD**, is professor and director of neurosurgery at JFK Medical Center in Edison, N.J. He is chair of the AANS/CNS Coding and Reimbursement Committee and a member of the CMS Practicing Physicians Advisory Council, and he chairs and instructs coding courses for the AANS and the North American Spine Society.

# Whom Does Credentialing Protect?

## *Medical Professionalism Meets Hospital Board Protectionism*

**A**fter neurosurgeon Steve Cathey invested in the Arkansas Surgical Hospital—a private, for-profit 16-bed specialty hospital designed for orthopedic and neurosurgical spine care—his wife, gynecologist Janet Cathey, was threatened with revocation of privileges at Baptist Health Hospital in Little Rock. According to American Medical News, this action was possible because Baptist Health System’s board had “adopted a policy that mandates denial of initial or renewed staff privileges to any practitioner who, directly or indirectly, acquires or holds an ownership or investment interest in a competing hospital” and had extended the restriction to the immediate family members of anyone who invested in a competing hospital.

Such economic-based criteria, however, are not among the goals for medical staff credentialing and privileging as defined by the Joint Commission on Accreditation of Healthcare Organizations. Instead, the JCAHO goals center on quality patient care and safety and specifically state that the purpose of medical staff credentialing and privileging is to determine competency of physicians, assess physical and mental ability of physicians to discharge patient care responsibilities and perform ongoing assessment of the safety and quality of care provided by physicians.

JCAHO further asserts that the credibility of the credentialing process requires cooperation between the hospital governing body and medical staff through its appointed designees. The medical staff leadership designees make recommendations to the hospital governing body regarding a physician’s appropriateness for credentials and privileges. The hospital governing body must act on these recommendations and report back to the medical staff regarding its decisions and the underlying rationale.



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Thus, hospital credentialing and privileging are a medical staff function. As such, physicians who participate in this process are guided by the American Medical Association Code of Medical Ethics, Opinion 4.07:

The mutual objective of both the governing board and the medical staff is to improve the quality and efficiency of patient care in the hospital. Decisions regarding hospital privileges should be based upon the training, experience, and demonstrated competence of candidates, taking into consideration the availability of facilities and the overall medical needs of the community, the hospital, and especially patients.... Physicians who are involved in the granting, denying, or termination of hospital privileges have an ethical responsibility to be guided primarily by concern for the welfare and best interests of patients in discharging this responsibility.

The inclusion of this opinion in the Code of Medical Ethics underscores the integral role credentialing fulfills in the professional social contract to ensure patient access to appropriate, safe and quality care. The AMA, as it notes in a recently adopted Council on Medical Service report, additionally has several existing policies that oppose loss or restriction of privileges based solely on economic factors.

Despite the alignment of the JCAHO goals with the professional medical code of conduct as well as AMA policies opposing economic credentialing, the legal system has allowed healthcare delivery organizations to use credentialing to address market concerns over patient interests.

Some hospitals have adopted policies to limit or effectively prohibit perceived competitive behavior by credentialed physicians. Targeted physician behaviors include failing to sign loyalty oaths, perform a defined percentage of procedures at a hospital, or admit a specific percentage of their patients to a hospital; referring patients out of an integrated system; accepting staff privileges or leadership positions at a competing hospital; and having financial interest in a competing healthcare delivery entity. These “competitive behaviors” have resulted in denial or revocation of physician hospital privileges.

### **Legal Challenges to Economic Credentialing**

Hospital policies involving economic credentialing have been met by legal challenges on several grounds.

In *Mahan v. Avera St. Luke’s*, the South Dakota Supreme Court stressed that the “continued economic viability of the hospital” is sufficient reason to deny privileges to physician applicants, and that such denials may be based on “any reasonable basis,” including “the common good of the public and the hospital.” This decision allows the credentialing process for physician hospital privileges to be used to erect barriers to competition, impeding function of competitive market forces and raising anticompetitive behavior concerns. Challenges to such behavior under Section 1 of the Sherman Act on balance have failed to prevail because it is difficult to demonstrate a conspiracy. This

is due in part to the prevailing judicial philosophy that the stakeholders in the hospital credentialing process (that is, the medical staff and hospital governance) are a single entity.

Claims of willful acquisition or maintenance of monopoly power under Section 2 of the Sherman Act also have been unsuccessful in providing relief to physician plaintiffs. Such claims have been complicated by the fact that exclusion of physicians from a medical staff via the credentialing process could diminish rather than enhance hospital revenues. The impact of corollary claims of intimidation and adhesion contracting to control market competition is yet to be vetted in the judicial process.

The courts have been less permissive when hospital privileges are denied based on claims of conflict of interest, such as staff privileges at competing organizations, ownership in competing entities, or failure to attain admission or procedure volumes. In *Potters Medical Center v. City Hospital Association*, the court found that restricting a physician's ability to practice at competing facilities for reasons of conflict of interest may constitute monopolization. In *Miller v. Indiana Hospital*, the court found that hospital privileges were unreasonably terminated when a surgeon opened a competing healthcare delivery facility.

A common defense theme for hospitals when accused by physicians of anticompetitive behavior based on conflict-of-interest rationale for denial or revocation of privileges is that of "cherry picking" patients for the physician-owned facility to the detriment of the hospital. In *Blue Cross v. Kitsap Physician Service*, the court substantially weakened this claim when it found that financial interests are a fundamental motivation in a free market and necessary for rational healthcare delivery in such a market.

In addition to insulating hospitals from competitive market forces, the courts have supported credentialing for physician hospital privileges as a mechanism to protect and enhance hospital revenues. In these

**Physicians should advocate for a hospital credentialing process that establishes privileges based on patient interests.**

instances, the economic impact of physician admissions, treatment plans, and procedure performance is seen as a sufficient basis to deny or revoke hospital privileges, and the courts have upheld such decisions. In general, economic criteria used to adjudicate credentialing must be explicitly characterized in the organization's bylaws. The bulk of legal arguments have centered on contract law, and in general, the courts have deferred to "reasonable" management discretion for hospital governance.

Public policy law also has helped shape the legal debate regarding the appropriate denial of hospital privileges to physicians. A hospital's nonprofit status is statutorily defined in the Internal Revenue Service Ruling 69.545. This rule outlines the necessary preconditions for a hospital to claim nonprofit status and explicitly requires such a hospital to maintain a medical staff that is open to all qualified physicians. In the event of an investigation, the burden of proof falls to the hospital to demonstrate that the underlying purpose of the restrictive credentialing policies and decisions is beneficial to the community and consistent with a nonprofit mission. Because it is difficult for a hospital to develop substantive, demonstrable arguments for community benefit that override a statutory obligation to credential all qualified physicians, physician challenges to the nonprofit status of hospital organizations are the most effective approach to challenging credentialing policies.

However, the courts have been sympathetic to hospital boards that cite a fiduciary rationale to place organizational,

economic considerations above patient interests. This is due in part to a common but questionable judicial philosophy that for-profit governance principles are appropriate in the nonprofit sector. Broad management discretion under the business judgment rule may well be inappropriate in the nonprofit sector because of lack of public reporting, transparency of decision making, and public accountability.

Overall, the courts have supported the use of credentialing to shield hospitals from market competition and protect established revenue. The impact of the legal system has been to place patient quality and safety as a necessary but insufficient basis for physician hospital privileges in opposition to the professional ethical code which guides physicians who are willing to represent the medical staff in the credentialing process.

**Credentialing Should Protect Patients**

The divergence of professional ethical opinion and the legal adjudication of hospital credentialing for physician privileges calls for physicians involved in the medical staff credentialing process to effect change.

Physicians should advocate for a hospital credentialing process that establishes privileges based on patient interests and in accordance with the Code of Medical Ethics, which clearly places patient interests above market and financial considerations. Perhaps this is best accomplished by physician advocacy for public access to the hospital institutional bylaws and medical staff bylaws. Physicians further can support revisions to these documents as necessary to maintain credentialing on the basis of physician competency and quality. Model medical staff bylaws to accomplish these goals are available through the AMA.

These physician actions would restore credentialing to its proper position as a safeguard to society for accessible and excellent healthcare rather than a mechanism that shields hospitals from competitive market forces. ■

# TIMELINE: Neurosurgery Through History

## Is It Really Brain Surgery?

MICHAEL SCHULDER, MD

Is it only neurosurgeons who can perform neurosurgical procedures? If there are places where patients suffer delayed treatment because of the need to transfer them to a medical facility with neurosurgical coverage, might not the answer be to train a new cadre of “generalist” trauma or “acute care” surgeons?

It may be useful to consider these questions in light of the environment that gave rise to neurosurgery as a specialty. Gilbert Horrax described this period in his book *Neurosurgery: An Historical Sketch*. In the early years of the 20th century, general surgeons “unfamiliar as yet with any special knowledge of how to handle brain tissue, were attempting at infrequent intervals to do something to which they were entirely unaccustomed.” It became apparent that “to attain the desired end someone would have to devote his entire time to working out a new technic [sic] for operations upon the central nervous system.”

Horrax proceeded to document Harvey Cushing’s thoughts on the subject in 1905:

...many of [his colleagues in surgery] have expressed themselves emphatically against any form of operative specialization...I do not see how such particularization can be avoided if we wish more surely and progressively to advance our manipulative therapy. Are practice of hand and concentration of thought to go for nothing?

Wartime brought a new urgency to the question of who should perform neurological surgery. In his memoir *Fifty Years of Neurosurgery*, Ernest Sachs Sr. described the situation as the United States entered World War I. Cushing was already in Europe in 1917 when nearly every other American neurosurgeon was summoned to Washington. The U.S. Army planned to create 100 hospitals and wanted a neurosurgeon in each one. When informed that there were not 100 neurosurgeons in the

During World War I Surgeon General William Gorgas called for 8,000 nurses, as the poster at right testifies. He also needed 100 neurosurgeons, at a time when there weren’t that many in the United States. Ernest Sachs Sr. (pictured below) was among the neurosurgeons who created three programs where general surgeons were trained for the Army’s neurosurgical positions. (Poster: Library of Congress, Prints & Photographs Division, WWI Posters, LC-USZC4-7781.)



Ernest Sachs Sr.



Eben Alexander Jr.



Donald Matson



Joseph Ransohoff



Bertram Selverstone

Training general surgeons in neurosurgery during World War II involved a six-week introductory course by civilian neurosurgeons followed by two to three months at an Army neurosurgical center. Prominent neurosurgeons who arose out of this training included Eben Alexander Jr., Donald Matson, Joseph Ransohoff, and Bertram Selverstone.

world (remember, this was a specialty that was 12 years old at the time), Surgeon General William Gorgas replied, “That doesn’t interest me! It’s up to you to furnish the men!” In response, three centers were established, in New York, Chicago, and St. Louis, where experienced general surgeons learned the essentials of neurosurgery in six- to 12-week courses. The Army got its “neurosurgeons,” and as far as Sachs knew, “none of them went into neurological surgery as a specialty after the war.”

History more or less repeated itself a generation later. In 1941 the United States entered World War II, shortly after the American Board of Neurological Surgery came into being. There were only 30 or so Americans who were qualified in neurosurgery and ready for active military duty. Again, plans were made to turn “medical officers trained in general surgery” into combat-ready neurosurgeons. The training this time was slightly more elaborate, with a six-week introductory course taught by civilian neurosurgeons followed by two to

three months at an Army neurosurgical center, as described by Eben Alexander Jr. in the *AANS Journal of Neurosurgery*. Some prominent neurosurgical careers arose out of this training, including those of Dr. Alexander himself, Donald Matson, Joseph Ransohoff, and Bertram Selverstone.

We would be foolish to pretend that appropriately intense training cannot teach other surgeons the necessary rudiments of neurosurgery. But we are not at war, at least not the kind mandating complete mobilization and massive deployments as in the world wars. Would we really be satisfied in turning the clock back so far that the rudiments of head trauma management would suffice as appropriate, quality care for our patients today? Shouldn’t we insist that neurosurgeons are those best equipped to manage diseases affecting the nervous system? Indeed, are practice of hand and concentration of thought to go for nothing? ■

Michael Scholder, MD, is professor and vice-chair in the Department of Neurological Surgery at New Jersey Medical School in Newark.

# Collaboration Benefits Education

## *Endovascular Course for Residents Generates Enthusiastic Response*

**O**n April 1, the AANS hosted a unique educational opportunity for senior neurosurgical residents. The course, *Endovascular Techniques for Residents*, was held at the Medical Education and Resource Institute in Memphis, Tenn. While as a state-of-the-art facility MERI contributed to the course's success, it was the dedication of expert faculty and the financial support and equipment donations of corporate sponsors that made the course possible and available at no cost to the 14 residents selected for participation.

The endovascular course was the brainchild of Jon H. Robertson, MD, AANS president-elect and Development Committee chair. He selected Robert H. Rosenwasser, MD, to serve as course director based on his reputation and extensive expertise in the ever-growing endovascular neurosurgery field. Dr. Rosenwasser designed the course with topical instruction and instrumentation that would appeal to senior residents interested in advanced training in endovascular procedures, including arterial and venous femoral access; therapies for aneurysms and arteriovenous malformations; use of mechanical devices to treat strokes; carotid angioplasty; and stenting.

Dr. Rosenwasser chose course faculty who provided additional endovascular expertise, including B. Gregory Thompson, MD, Elad I. Levy, MD, Erol Veznedaroglu, MD, and Charles J. Prestigiacomo, MD.

Residents attended a morning of didactic instruction that included presentations on hemorrhagic and ischemic disease and then performed endovascular techniques using balloons and catheters on live hogs. A simulator provided by Cordis gave residents an opportunity to develop endovascular skills using the same equipment they will use on actual patients, but in an environment that provides instructive feedback as they progress on the learning curve.



Charles J. Prestigiacomo, MD, demonstrates a procedure during *Endovascular Techniques for Residents*, a new AANS course held April 1 at MERI in Memphis.

Comments provided by participants indicated that the program was outstanding. "Learning how to manipulate catheters and wires and experiencing how it feels in a real brain was so helpful along with learning how to use the stent and deploy it," noted Sheila Smitherman, senior resident at Baylor. "Overall, the lab was superb."

Warren Roberts, senior resident at Portland University, summarized the course as "[an] excellent presentation of topics [that are] extremely important in the training of neurosurgeons." Residents also overwhelmingly expressed appreciation for the opportunity to meet with the endovascular thought leaders and learn concepts from renowned experts in the field.

"This course was designed to be an introduction for neurosurgical residents to endovascular techniques," said Dr. Robertson. "It represents a wonderful educational experience which will influence those in training to consider a career in endovascular neurosurgery."

What made this course so unique was that it forged a perfect marriage between corporations and education. Support for this course was secured from corporate partners Boston Scientific, Micrus Endovascular and Cordis Neurovascular Inc. For

these corporate sponsors, the course provided an opportunity to interact with residents on a variety of levels. Industry representatives participated side by side with residents and displayed their newest technologies as well as provided instruction on how to use the equipment.

"The number of work stations [in the animal lab] was ideal, giving everyone the opportunity for hands-on experience with each product and procedure," commented Roberto Refeca of the Regulatory Affairs Department of Cordis Neurovascular, Inc. "Where necessary, the residents were able to repeat procedures as they desired because resources were not restricted."

The generous corporate financial support made it feasible for the AANS to provide neurosurgical residents considering fellowship opportunities in endovascular techniques with a specialized learning opportunity that the AANS would be unable to provide on its own. In order to participate in the endovascular course, the corporate sponsors agreed to become members of the AANS Pinnacle Partners Program. Each company invested an additional \$25,000 beyond the cost of the course for future funding of neurosurgical education and research opportunities.

"Generous corporate support provides advanced educational instruction that augments resident learning," said John A. Wilson, MD, chair of the AANS Education and Practice Management Committee. "I look forward to working closely with the Development Committee on similar initiatives."

The AANS continues to invest in educational offerings for residents. Two additional courses have been scheduled for 2006, including a minimally invasive spine course in August at MERI and a socioeconomic course for senior residents in September. ■

**Joni L. Shulman** is AANS associate executive director, education and meetings.

# Texas Teaches That Tort Reform Works

## *Will Other States Learn the Lesson?*

Neurosurgeons are well aware of the significant financial impact that skyrocketing medical liability insurance premiums can have on their practices, and organized neurosurgery has been at the forefront of efforts to institute medical tort reform at both the federal and state levels. Yet a long-standing debate continues on the real impact of tort reform on malpractice insurance premiums. Some argue that there is no correlation between the capping of noneconomic damage awards and the annual insurance premiums and argue further that the premiums set by the insurance industry have nothing to do with jury verdicts and awards.

However, medical tort reform enacted in Texas on Sept. 12, 2003, refutes that idea and supports the position that appropriate reforms will reduce medical malpractice premiums and increase patients' access to care. In fact, Texas House Bill 4 and its constitutional amendment, Proposition 12, have served to reduce high rates of medical malpractice insurance by granting the Texas Legislature the authority to limit noneconomic medical civil liability damages to no more than \$250,000 in medical malpractice lawsuits. The cap was established at \$250,000 for all doctors (no matter how many are named in a lawsuit) and \$250,000 per healthcare institution (up to two institutions). All actual medical expenses, lost past and future income and other expenses that can be translated into an actual dollar amount (such as maid service, transportation) are still recoverable.

The reforms, which were intended to help reduce frivolous medical malpractice lawsuits and to decrease escalating medical liability insurance rates, began to pay dividends soon after enactment. As early as Jan. 1, 2004, Texas Medical Liability Trust, the largest medical malpractice insurer in Texas, reduced its rates by 12 percent across

the board. This was followed nine months later by another 5 percent rate reduction. Between February 2005 and March 2006, additional rate decreases were announced by numerous other Texas professional liability insurance underwriters, including American Physicians Insurance Company (9 percent–14 percent), The Joint Underwriting Association (10 percent), Medical Protective (2 percent), Texas Medical Liability (an additional 5 percent) and The Doctors Company (18 percent).

In 2005, Bernard Black and colleagues reported that the total number of medical malpractice claims for 2002 was 6,929 compared with a high of 8,943 claims filed the preceding year. In 2003, the year in which tort reform passed, there was a transition drop in claims to 5,967 as reported to the Texas Department of Insurance by the four largest medical malpractice insuring companies in Texas; figures from these companies represent claims for approximately 60 percent of Texas physicians, according to Kenneth McDaniel of the Texas Department of Insurance Professional Liability Commercial Property/Casualty Division. Additional decreases in claim rates also are being observed using the same TDI data set, indicating a reduction in medical malpractice claims in 2004 to 2,359 and in 2005 to 2,259. The overall number of claims in 2005 was roughly just one third of the number reported in 2002, the year immediately prior to reform enactment.

This dramatic difference is echoed by Texas Department of Insurance data which shows that medical malpractice lawsuit filings decreased by half by 2006. Additionally, the agency reported its action to deny rate increases that did not take into account the reduced exposure to frivolous claims. The agency further reported that within months of reform passage, it had been con-

tacted by more than two dozen companies for information on entering the malpractice insurance market, and an insurer who had announced plans to pull out of the Texas market began expanding and writing new business.

The reforms have wrought additional beneficial changes in Texas healthcare, among them:

- From May 2003 through July 2005 there was an increase of approximately 3,000 new doctors establishing practices in Texas, many of whom serve in high-risk specialty medicine. (Texas Medical Association, March 23, 2006).

- Some Texas communities (Corpus Christi, Beaumont, the Rio Grande Valley, Webb County) are experiencing surges in physician recruitment (American Medical Association, May 9, 2005).

- Texas physicians are now able to shop for medical malpractice insurance since the number of new and start-up medical malpractice insurers increased from four pre-reform to roughly 20 new entities. (Beaumont Enterprise, Feb. 22, 2005).

Texas teaches that appropriate medical tort reform does indeed work. It lowers medical malpractice premiums and increases the number of available doctors, thus increasing patients' access to care. An important caveat, however, is that Texas voters passed a constitutional amendment that makes it highly unlikely for the state's high court to overturn the cap. The question now is whether other states will learn Texas' very valuable lesson. ■

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David F. Jimenez, MD, FACS, is professor and chair of the Department of Neurosurgery at the University of Texas Health Science Center, San Antonio.

**Editor:**

I read this particular article ["To Prevail, First Prepare," *AANS Bulletin*, 15(1):22, 2006; [www.AANS.org](http://www.AANS.org), article ID 38174] with interest. However, I believe that item 10 in the article, Trust your lawyer, is a generalized statement that should be carefully considered.

In my experience in the past 30-plus years, I have found that most defense attorneys do not expedite matters in court. Even though many medical liability cases are dropped or dismissed by a judge as frivolous, these lawsuits drain the money from insurance companies, and most of the money, unfortunately, goes to our own defense lawyers. For example, instead of taking 90 or 120 days to get an expert's report, the process is deliberately delayed because the attorneys make no money if the case is disposed of quickly. This is not to say that all defense attorneys are the same, but one can say that there is little financial incentive to expedite cases.

Also, your defense attorney should provide you with insight into the plaintiff attorney you are dealing with because they are not all the same. A very good attorney will tell you what to expect and how to respond to questioning.

I must add that we must make every effort nationwide to resolve this medical liability crisis.

*David A. Yazdan, MD, FACS  
Brick, N.J.*

**The Author Responds:**

My best advice is, Don't sweat the small stuff. Concentrate and remain focused on the medical aspects of your case. Leave the "lawyering" to the lawyer and "the lawyer's bill" with your insurance company. That's why you pay insurance. He must justify his fees to the insurance company. You have more than enough to worry about.

Remember the operant word is "trust." If you don't trust your lawyer, get another lawyer! Keep the lines of communication open. If you have questions and concerns about your case, call your lawyer and don't worry about "running up the tab." Your professional integrity and personal assets are on the line. Don't be penny-wise. Ask him about opposing counsel if he has not prepped you in that regard.

With regard to solving the medical liability crisis: Not in our lifetime.

*Stanley W. Fronczak MD, JD, FACS  
Oak Brook, Ill.*

**A Defense Attorney's Perspective:**

This letter to the editor illustrates the need for effective communication between the three parties involved in defending a malpractice claim: the physician, the insurer and defense counsel. A

successful defense of a malpractice suit is often affected by how well the physician, defense counsel and the insurer's claim counsel work together. Ideally, these three parties should act in partnership to pursue resolution of a claim. However, due to the varying concerns and interests that each party has, and the failure to communicate, the relationship often fails to approach that ideal.

It is no secret that being sued for malpractice is a traumatic experience that often elicits emotional responses ranging from outrage to resignation. These emotions often influence how a physician prefers that a case be defended. In some cases, a physician might desire a fast settlement of the claim, period. In others, the physician's goal might be to seek vindication through complete litigation of the claim.

The insurer's goal is to resolve the claim in a cost-efficient manner. Unfortunately, this goal has the potential to create a conflict of interest between the insurer and the insured physician. For example, while the physician might want a claim settled as quickly as possible, the insurer, based on its assessment of the exposure, might not be willing to accede to the plaintiff's early settlement demands.

Conflicts between the insurer and the insured place defense counsel in an uncomfortable position. It is without question that defense counsel's paramount duty is owed to the insured. However, defense counsel is obligated to report to the insurer, which is paying defense counsel's bills, to provide objective advice concerning what is necessary and appropriate for a defense and to assess exposure and the reasonableness of a potential settlement, regardless of whether such advice might displease either the insurer or the insured.

The single most important factor in developing and maintaining a productive relationship between the physician, the insurer and defense counsel is communication. Defense counsel must make the physician and the insurer feel that they are informed and involved in the management of the defense. Similarly, the physician and the insurer need to continuously advise defense counsel about their respective views concerning the case. A breakdown in communication between the physician, the insurer and defense counsel only serves to benefit one party: the plaintiff.

*Michael A. Chabraja, JD  
Chicago, Ill.*

**COMMUNICATE YOUR THOUGHTS**

Share your point of view regarding malpractice litigation, reimbursement, ER coverage or other issues in neurosurgery with the editor at [bulletin@AANS.org](mailto:bulletin@AANS.org). Letters are assumed to be for publication unless otherwise specified. Correspondence selected for publication may be edited for length, style and clarity.

# Two Disciplinary Actions Announced

## *AANS Board Approves Four PCC Recommendations*

**A**t its meeting April 21 in San Francisco, the AANS Board of Directors approved the recommendation of the Professional Conduct Committee that four members be disciplined for unprofessional conduct while testifying as expert witnesses in medical malpractice lawsuits. Two of those disciplinary actions, an expulsion and a six-month suspension of membership, are being appealed to the general membership of the AANS. The two disciplinary actions that are not being appealed are summarized below.

### **Edwin R. Buster, MD**

In the underlying malpractice litigation, a 53-year-old man who experienced sudden nontraumatic onset of back pain, sense of leg heaviness, and leg pain was admitted to a hospital through the emergency room in January of 2000. The admitting neurologist ordered that vital signs and neurological evaluations be obtained every four hours by the nursing staff during the night. When the neurologist examined his

patient the next morning on rounds, he found him to be densely paraparetic/paraplegic. The ordered neurological checks had not been documented and apparently had not been performed during the night. An emergency MRI of the thoracic and lumbar spine demonstrated a large left-sided disc herniation with cord compression at T8–9. A neurosurgeon was then consulted and performed an emergency decompression with left posterolateral excision of the herniated disc at T8–9. The patient gradually improved from his essentially paraplegic state to a paraparesis with neurogenic bladder.

The patient sued the hospital, the nurse who had been on duty the night of the patient's deterioration, and the neurosurgeon. The neurosurgical expert witness for the plaintiff testified to the hospital's negligence but was not at all critical of the surgery for removal of the thoracic disc herniation. Dr. Buster, the defense medical expert for the hospital, testified in his discovery deposition that the failure of the

nursing staff to check vital signs and neurological function as ordered by the admitting neurologist did not fall below the acceptable standard of nursing care. Dr. Buster further testified that the surgical procedure was inappropriate and that the defendant neurosurgeon could have been "up to 50 percent responsible" for the patient's resulting neurological deficit.

During the Professional Conduct Committee hearing, Dr. Buster stated that he had not thoroughly reviewed the nursing records prior to testifying in his deposition and that "looking back on it now" the standard of proper nursing care was not met. The Professional Conduct Committee concluded that Dr. Buster's testimony as a defense expert witness for the hospital consisted of improper advocacy in denying negligence by the hospital and in misrepresenting the range of surgical standards for excising thoracic disc herniations in an attempt to shift responsibility for the neurological deficits from the hospital to the treating neurological surgeon. The AANS Board of Directors agreed with the PCC's findings and voted to suspend Dr. Buster's membership in the AANS for one year.

### **William H. Bloom, MD**

The underlying lawsuit in this case involved a 44-year-old man who complained of a history of right arm pain with numbness in his right index and middle fingers. The problem reportedly began when he awakened one morning with scapular pain that was soon followed by right arm pain. A CT scan showed foraminal narrowing with spondylosis and some spinal stenosis. Approximately one month later the patient reported having experienced some "electric shock" sensations in his left arm. Surgery was carried out in the lateral position with bilateral laminectomies at C4, C5, C6 and C7. The operative note describes decom-

### **ABOUT THE AANS PROFESSIONAL CONDUCT PROGRAM**

The AANS Professional Conduct Committee evaluates complaints by one or more AANS members about another member or members and makes recommendations to the Board of Directors. Established in 1982, the PCC has served as a model for other professional associations to structure and adopt similar professional conduct programs. In June of 2001, the AANS Professional Conduct Committee's work was examined by the 7th Circuit Court of Appeals in a landmark case for professional associations, *Austin v. AANS*. This opinion strongly supported the AANS Professional Conduct Program and the importance to a professional association of having an internal mechanism for self-regulation. The program also received an honor roll designation from the American Society of Association Executives in 2002.

The AANS rules for expert witness testimony are reprinted on page 37. These rules, the AANS Code of Ethics and more information related to association governance are available online at [www.aans.org/about](http://www.aans.org/about) in the Governance and Leadership area.

pression of the right C5, C6 and C7 nerve roots and the left C6 and C7 nerve roots. Postoperatively the patient experienced pain in his left hand, and his right deltoid was very weak. The deltoid strength recovered spontaneously, but the left-hand pain persisted. A cervical MRI done postoperatively showed an abnormal signal in the left paracentral region of the cord at about C5–6. The patient was treated with some sympathetic blocks that did not relieve the pain, and he underwent implantation of a cervical epidural stimulator. The patient filed his lawsuit shortly after learning about the abnormal signal shown in the MRI.

Dr. Bloom, the plaintiff's medical expert, testified in his deposition that the postoperative abnormal cervical cord MRI

signal indicated a surgical cord contusion despite having disclaimed personal expertise in the interpretation of abnormal MRI signals. In his deposition, Dr. Bloom was excessively vague, unclear, and forgetful about what he reviewed or did not review. He did not recall whether he saw all of the MRI films or any of the CT films.

The Professional Conduct Committee concluded that, despite some problems with documentation, surgical indications and confusion about some aspects of the surgical procedure on the part of the treating neurosurgeon, Dr. Bloom failed to sufficiently review and familiarize himself with the relevant medical records. Because Dr. Bloom disclaimed any expertise in the interpretation of abnormal MRI signals, he

therefore improperly gave unequivocal testimony that nothing other than operative contusion could have caused the postoperative MRI findings. The Professional Conduct Committee concluded that Dr. Bloom demonstrated inadequate subject matter knowledge and/or improper advocacy in parts of his testimony. The AANS Board of Directors concurred and since Dr. Bloom's membership in the AANS had previously been suspended in another matter, the board voted to extend that suspension by one year from whatever point Dr. Bloom might otherwise be entitled to reapply for active AANS membership. ■

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**W. Ben Blackett, MD, JD**, is chair of the AANS Professional Conduct Committee, and **Russell M. Pelton, JD**, is AANS general counsel.

## AANS Rules for Neurosurgical Medical/Legal Expert Opinion Services

Revised March 22, 2006

### Preamble

The American legal system often calls for expert medical testimony. Proper functioning of this system requires that when such testimony is needed, it be truly expert, impartial and available to all litigants. To that end, the following rules have been adopted by the American Association of Neurological Surgeons. These rules apply to all AANS members providing expert opinion services to attorneys, litigants, or the judiciary in the context of civil or criminal matters and include written expert opinions as well as sworn testimony.

### A. Impartial Testimony

1. The neurosurgical expert witness shall be an impartial educator for attorneys, jurors and the court on the subject of neurosurgical practice.
2. The neurosurgical expert witness shall represent and testify as to the practice behavior of a prudent neurological surgeon giving different viewpoints if such there are.
3. The neurosurgical expert witness shall identify as such any personal opinions that vary significantly from generally accepted neurosurgical practice.
4. The neurosurgical expert witness shall recognize and correctly represent the full standard of neurosurgical care and shall with reasonable accuracy state whether a particular action was clearly within, clearly outside of, or close to the margins of the standard of neurosurgical care.

5. The neurosurgical expert witness shall not be evasive for the purpose of favoring one litigant over another. The neurosurgical expert shall answer all properly framed questions pertaining to his or her opinions on the subject matter thereof.

### B. Subject Matter Knowledge

1. The neurosurgical expert witness shall have sufficient knowledge of and experience in the specific subject(s) of his or her written expert opinion or sworn oral testimony to warrant designation as an expert.
2. The neurosurgical expert witness shall review all pertinent available medical information about a particular patient prior to rendering an opinion about the appropriateness of medical or surgical management of that patient.
3. The neurosurgical expert witness shall be very familiar with prior and current concepts of standard neurosurgical practices before giving testimony or providing written opinion about such practice standards.

### C. Compensation

1. The neurosurgical expert witness shall not accept a contingency fee for providing expert medical opinion services.
2. Charges for medical expert opinion services shall be reasonable and commensurate with the time and effort given to preparing and providing those services.

# Two NREF Milestones

## *25 Years, Record Number of Awards Are Reasons to Cheer*

**T**he Neurosurgery Research and Education Foundation is celebrating two milestones in 2006. The first is the NREF's silver anniversary. In 1981 Robert Ojemann, MD, Robert King, MD, Sidney Goldring, MD, and William Buchheit, MD, with the help of a number of other AANS members, formed the NREF to: provide private, nongovernmental funding for neurosciences research; to ensure continued viability and expansion of the field based on fundamental research in the basic sciences and clinical enterprises; to augment support for research by the neurosurgical community; and to stimulate life-long learning by neurosurgeons. During the past 25 years, the NREF has awarded nearly \$4.5 million dollars in one- and two-year grants to 113 residents and junior neurosurgical faculty members.

Alone, the NREF's 25th anniversary is a cause for celebration; however, an equally important milestone also was achieved this year. For the first time the NREF awarded a double-digit number of grants, 12 total. Eight applicants received research fellowships and four received young clinician investigator awards.

Robert Grossman, MD, chair of the NREF's Scientific Advisory Committee, thinks that some of the most innovative and interesting investigations occurring in neurosurgical labs today are funded by the NREF. "The scientific quality of the grant applications has increased each year and meets our highest expectations," he stated.

Thanks to generous support of the Corporate Associates program by AANS members, hospitals, neurosurgery departments, the general public, and our corporate partners, the NREF has committed \$500,000 in research support for 2006, an increase of \$100,000 from last year.

"The NREF continues to secure support from neurosurgeons, neurosurgical prac-

tices and programs, hospitals and the general public," noted Martin H. Weiss, MD, FACS, chair of the NREF Executive Council. "However, we are consistently exploring other partnerships in an effort to fund as much great science as we can."

Partnerships with industry, foundations and voluntary health associations have enabled the NREF to maximize its funding without compromising its integrity. In 2004, the AANS Development Committee, under the leadership of Jon H. Robertson, MD, developed the Guidelines for Corporate Relations document. The guidelines define appropriate relationships between the AANS and NREF and their corporate partners such as DePuy Spine, Kyphon Inc., Medtronic Neurological, and W. Lorenz Surgical. According to Dr. Weiss, such partnerships enable the NREF to allocate more funding for research grants each year while building ethical relationships with industry.

In 2006 the AANS and NREF will cosponsor an annual research grant from funds raised through the AANS Pinnacle Partners in Neurosurgery corporate giving program. "The Pinnacle Partners program provides an opportunity for industry to financially support neurosurgical research and education through the NREF in a responsible and ethical manner," said Dr. Robertson. "A company's participation in the Pinnacle Partners program generates recognition that reflects its commitment to the future of neurosurgery and the public good."

The 2006 NREF awardees come from 11 different neurosurgery programs. The research grants encompass neurosurgical areas of pediatric brain tumors, spine trauma, deep brain stimulation, aneurysms, epilepsy, pain biomaterials and stem cell research.

**The 2006 Research Fellows include:** Ming (David) Cheng, MD (University of North Carolina), Lewis Chun Hou, MD (Stanford University), Eric M. Jackson, MD (University of Pennsylvania), Adrian W. Laxton, MD (University of Toronto), Daniel A. Lim, MD, PhD (UCSF), Neil R. Malhotra, MD (University of Pennsylvania), Wael Musleh, MD, PhD (University of Chicago), and Lyman Whitlach, MD, PhD (Duke University).

**The 2006 Young Clinician Investigators include:** John A. Boockvar, MD (Cornell Medical College), Alfredo Quinones-Hinojosa, MD (Johns Hopkins University), Michael D. Taylor, MD, PhD (Hospital for Sick Children, Toronto), and G. Edward Vates, MD (University of Rochester).

### Cutting-Edge Research

Two examples of the cutting-edge research the NREF is funding this year are the projects of Dr. Lim and Dr. Boockvar. Dr. Lim's research has established an in vitro SVZ stem cell culture system which will allow him to determine the role that the Mll gene plays in stem cell self-renewal, differentiation, cellular migration, and cell survival. Dr. Boockvar's research seeks to identify the mechanism by which EGFR signaling enhances human progenitor cell invasiveness for the purpose of improving the treatment of glioblastoma multiforme.

It is hoped that the exciting potential of projects like these will stimulate continued growth in financial support from neurosurgeons, as well as partnerships with industry and other funding sources. The extent to which the entire neurosurgical community recognizes the importance of research and development to the future of the specialty and the patients it serves will determine the outlook for the NREF research grant program over the next 25 years.

For information about the NREF or to make a donation, visit [www.aans.org/research](http://www.aans.org/research) or contact the AANS Development department at (847) 378-0500. ■

**Michele S. Gregory** is AANS director of development.

## Neurosurgery - Roanoke, Virginia

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For detailed information about the opportunity, or to submit a cover letter and CV please contact Andrea Henson, Physician Recruiter, Carilion Health System [ahenson@carilion.com](mailto:ahenson@carilion.com) 540-224-5241 office, 540-985-5329 fax. [www.carilion.com](http://www.carilion.com)

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## Southern Oregon Neurosurgery Opportunity

Join a well-established group of four neurosurgeons and five neurologists in southern Oregon. Income guarantee with a partnership track. Medford is a community of approximately 75,000 with a medical service area of 750,000. There are two hospitals that share a joint medical staff and the neurosurgeons provide coverage at both hospitals, but this is not a hospital-based practice. The medical community is sophisticated and reputable, and the clinic, medical facilities and equipment are state-of-the-art. The draw to this area and this opportunity is the ability to recognize an unprecedented balance of personal and professional quality of life in a very desirable location.

Contact:

**Anne Folger, Executive Director,**  
**Health Future** – *A unique healthcare consortium owned by Oregon hospitals and healthcare systems*  
**Email:** [a-folger@healthfuture.org](mailto:a-folger@healthfuture.org)  
**Phone:** 541/618-7240

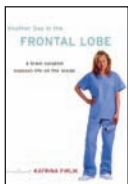
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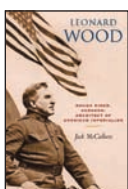
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# Too Much Like Ourselves?

*Neurosurgeons Author Two New Books*



**Another Day in the Frontal Lobe: A Brain Surgeon Exposes Life on the Inside**, by Katrina Firlik, 2006, Random House, 271 pp., \$24.95.



**Leonard Wood: Rough Rider, Surgeon, Architect of American Imperialism**, by Jack McCallum, 2006, New York University Press, 355 pp., \$34.95.

Neurosurgeons are writing books! Hot off the presses are two new titles by Jack McCallum, MD, and Katrina Firlik, MD. McCallum, who is on the neurosurgery faculty at Baylor and also teaches history at the Texas Christian University, has written a scholarly biography of Leonard Wood; Firlik, a recent neurosurgical graduate from the University of Pittsburgh, has published the story of her neurosurgical residency with the attention-getting moniker of *Another Day in the Frontal Lobe*.

Firlik's book is in the tradition of Rudy Giuliani and Erin Brockovich. Books that glorify the American dream come true have always found an audience, and Random House is betting that people will want to read the story of a woman from Harvey Cushing's hometown who has made it in the male-dominated world of brain surgery.

Firlik has a gift for making neurosurgery sound intriguing. The book begins with this attention grabber: "The brain is soft. Some of my colleagues compare its consistency to toothpaste, but that's not quite right. Tofu—the soft variety, for those knowledgeable about tofu—may be a more accurate comparison." Neurosurgeons will probably not find this book as fascinating as some of our patients might.

McCallum says of Leonard Wood,

"Today, were it not for an army base that bears his name, we would never hear of Leonard Wood." For neurosurgeons, that may not be true. Those of us who have read Cushing biographies by John Fulton and more recently by Michael Bliss know Leonard Wood as a famous patient. McCallum sets the record straight as to Wood's medical history, but does much more in allowing us to know the doctor who became a soldier.

Leonard Wood was born Oct. 9, 1860, in Pocasset, Mass., and died in the operating room at Boston's Peter Bent Brigham Hospital at 1:50 a.m., Aug. 6, 1927. The 1880s were the decade in which American medicine transformed itself from a cult to a science, and Harvard Medical School, where Wood framed as a physician, was the nexus of that revolution. But Wood enlisted as a military surgeon and became a soldier more than a doctor. His medical background, however, had profound influence on his legacy as an administrator.

Wood's first military experience was chasing Geronimo, and he won the Medal of Honor just as Frederick Jackson Turner declared the American frontier closed. He spent a year as Georgia Tech's first football coach before moving to Washington where he developed a lifelong friendship with the assistant secretary of the U.S. Navy, Theodore Roosevelt.

Leonard Wood's conversion from physician to professional soldier was completed when Roosevelt convinced President McKinley that a cowboy regiment should join the Spanish War. The Rough Riders were a combination of Wood's western contacts plus Roosevelt's assortment of Ivy League ex-athletes. When the war ended, Wood accomplished great things as a natural administrator and a zealous autocrat. Within one year, he was military governor of Cuba. The crowning achievement of all his

**Firlik's book is in the tradition of Rudy Giuliani and Erin Brockovich. Books that glorify the American dream come true have always found an audience....**

training was funding and taking responsibility for Walter Reed's yellow fever experiments and authorizing William Gorgas to use the finding to virtually eradicate yellow fever and malaria from Cuba.

The later chapters of Wood's life as military commander and governor general of the Philippines were not as successful. Wood had a dark side and at times his disdain descended to cruelty and even murder. Wood at his best was altruistic, intelligent, creative, self-confident and indefatigable. On the other had, he was intolerably self-righteous and his insatiable appetite for power culminated in his unsuccessful run for the U.S. presidency.

McCallum offers an interesting conclusion in the epilogue of his book: "In the end ... Wood never quite discovered how to fulfill himself or to satisfy others in the exertion of his own remarkable powers. Perhaps we have forgotten him because he was too much like ourselves."

Ah, there's the rub.

Here you have two new books by fellow neurosurgeons. Both of these books will serve as mirrors, and both will help us to understand ourselves better. ■

**Gary Vander Ark, MD**, is director of the Neurosurgery Residency Program at the University of Colorado. He is the 2001 recipient of the AANS Humanitarian Award.

## Spinal Surgery Fellowship July 2007 & 2008

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**Department of Neurosurgery**  
**MEDICAL COLLEGE OF WISCONSIN**  
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**Milwaukee, WI 53226**  
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## AANS Bulletin: A Top Member Benefit and a Leading Predictor of Satisfaction With AANS Membership



The AANS *Bulletin* is the primary source of news that affects the practice of neurosurgery: practice management, legislation, coding and reimbursement, professional development and education, and more. Readers are invited to participate in the *Bulletin*:

### Neurosurgical Professionals

- Write a letter to the editor.
- Submit an article or article idea.
- Submit socioeconomic research papers for peer review.
- Provide news briefs to News.org.
- Submit a neurosurgical meeting to the online calendar.

### Corporations

- Advertise in the *Bulletin*.
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Learn more at [www.aans.org/bulletin](http://www.aans.org/bulletin).

## Chief Operating Officer Department of Neurosurgery University of Minnesota Medical School

The Department of Neurosurgery at the University of Minnesota seeks a Chief Operating Officer to provide oversight of all aspects of billing, coding and collection for services provided by faculty and extenders of the Neurosurgery Clinical Staff Unit.

This position is accountable for the efficiency of the Neurosurgery outpatient clinic functions in concert with the clinic leadership, faculty and staff and provides integrational support of the CSU staff with clinic staff in order to optimize patient care and patient satisfaction. Department oversight will include involvement in managing hiring, promotion, discipline, payroll, work hours, vacation and sick leave, in order to adequately staff the daily operations of the Neurosurgery department and CSU.

Qualifications include a Bachelor's degree with a minimum of 4-6 years of progressively responsible experience, and with specific experience in a senior management position in the clinic administration of a physician's practice. Supervision of personnel in the areas of billing and collection of provider fees, third party agreements, and physician support. Knowledge of coding and billing, financial reporting, and staff management in a physician-oriented clinical setting is essential.

Interested candidates may send a resume and letter of interest to:

Rob Super, Search Committee Chair  
University of Minnesota  
MMC 391, 420 Delaware Street SE  
Minneapolis, MN 55455  
e-mail: [super002@umn.edu](mailto:super002@umn.edu)

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## AANS Humanitarian Awardees

*Nominations for the 2007 award are due Oct. 15.*

### 2006

Gene Bolles, MD

### 2005

Tetsuo Tatsumi, MD, FACS

### 2004

Charles L. Branch Sr., MD

### 2003

No award

### 2002

Edgar M. Housepian, MD

### 2001

Gary D. Vander Ark, MD

### 2000

Merwyn Bagan, MD, MPH

### 1999

Thomas B. Flynn, MD

### 1998

Lee Finney, MD

### 1997

Robert J. White, MD

### 1996

No award

### 1995

Melvin L. Cheatham, MD

### 1994

E. Fletcher Eyster, MD

### 1993

Manuel Velasco-Suarez, MD

### 1992

William H. Mosberg Jr., MD

### 1991

George B. Udvarhelyi, MD

### 1990

A. Roy Tyrer Jr., MD

### 1989

Hugo V. Rizzoli, MD

### 1988

Gaston Acosta-Rua, MD

### 1987

Courtland H. Davis Jr., MD

## AANS Releases New Mission and Vision During 75th Anniversary Year

On April 21, the AANS Board of Directors approved a new mission and vision for the organization:

### AANS Mission

The American Association of Neurological Surgeons (AANS) is the organization that speaks for all of neurosurgery. The AANS is dedicated to advancing the specialty of neurological surgery in order to promote the highest quality of patient care.

### AANS Vision

The American Association of Neurological Surgeons will ensure that neurosurgeons are recognized as the preeminent providers of quality care to patients with surgical disorders that affect the nervous system.

The American Association of Neurological Surgeons will work to expand the scope of neurosurgical care as new technologies and treatments of neurological disorders become available.

The American Association of Neurological Surgeons will be the organization speaking for neurosurgery through its communications and interactions with the public, media, government, medical communities, and third party payers.

The American Association of Neurological Surgeons will be its members' principal resource for professional interaction, practice information and education.

The American Association of Neurological Surgeons will promote and support appropriate clinical and basic science to expand the scope of neurosurgical practice.

## AANS Seeks Standardization of Radiological Images Presented on CD

At the suggestion of an AANS member during the AANS Annual Meeting in April, the AANS asked the American College of Radiology to consider development of standards for production of radiological images on CD. AANS President Donald O. Quest, MD, communicated neurosurgeons' concern about this issue in a May 10 letter to ACR Board of Chancellors Chair James P. Borgstede, MD. The AANS, joined by the

CNS, formalized this concern in a resolution submitted in May to the American Medical Association House of Delegates. The resolution "to develop standards for MRI equipment and interpretation for the purpose of improving patient safety" asked: "That our American Medical Association convene a meeting(s) with representatives from MRI manufacturers, radiology and other interested medical specialties, and imaging facilities, with the goals of: (1) agreeing to standards in electronic imaging formats (e.g., left to right, axial, coronal, sagittal); (2) developing standards of data manipulation and localization consistent throughout all units for best interpretation of the data; and (3) ensuring that each electronic format is equipped with the capability of loading and launching its contained images on the physician's computer."

## 2007 Humanitarian Award Nominations Due Oct. 15

Voting members of the AANS are invited to submit nominations for the 2007 Humanitarian Award by Oct. 15. The award will be presented at the 2007 AANS Annual Meeting in Washington, D.C., April 14-19, 2007. The Humanitarian Award honors a member of the AANS whose activities outside of medicine bring great benefit to society. Nominees can be living members from any category of AANS membership who give selflessly of time or talents to a charitable or public activity; who are deserving of recognition by the AANS; and whose actions enhance neurosurgery's image. Activities may be international, national, regional or local in nature and benefit humanity collectively or individually without providing remuneration to the recipient. Additional details and the nomination form are available at [www.aans.org/shared\\_pdfs/nomination\\_%20form.pdf](http://www.aans.org/shared_pdfs/nomination_%20form.pdf), or contact Susan E. Funk at [sef@AANS.org](mailto:sef@AANS.org) or (847) 378-0507.

## AANS Streamlines Disclosure Process for Speakers

Speakers at AANS educational meetings are required annually to disclose their financial relationships with commercial interests. Individuals can now meet the requirement by completing the online Disclosure Statement once. After it is submitted, the information will remain available online, where it must be

## NERVES Releases Results of Second Annual Neurosurgical Practice Survey

Submitted by Hiroshi Nakano, chair of the NERVES Survey Committee

**T**he Second Annual NERVES (Neurosurgery Executives' Resource Value and Education Society) Socio-Economic Survey was released to participating neurosurgical practices in April 2006. The overall response rate from NERVES member practices was 28 percent. The participation of practices in this 2005 survey increased by 27 percent over participation in the inaugural 2004 survey, and the number of neurosurgeons represented in the survey results increased by 23 percent.

The consulting group of Heaton and Eadie provided survey design, data collection and reporting services for the second straight year. The survey was based on 2004 data. Survey methodology and overall results from the first NERVES Socio-Economic Survey were published in the Fall 2005 issue of the AANS *Bulletin* in an article that provided results of the 2004 survey and highlighted several areas important to the practice of neurosurgery.

The data collected through the survey is

demonstrating its value to any neurosurgical practice that aims to improve operational and financial results by benchmarking itself against peer practices.

A comparison of 2005 survey results with those of the 2004 survey highlighted several emerging trends that should be watched in the future, including the following.

■ **Practices are looking for additional sources of revenue.** As neurosurgery continues to face the challenges of falling reimbursement, increasing practice costs, and competition from other specialties, the survey results showed that an increasing number of practices are expanding their lines of service (36 percent reported in 2005 compared with 15 percent in 2004), including the addition of ancillary services and surgery centers.

■ **Neurosurgery incomes are rising.** Despite the concerns of falling reimbursement, the median income for a neurosurgeon increased by approximately 16 percent in 2005. Perhaps this is a result of the increasing interest and success of ancillary revenue streams or practices are becoming better managed. Future surveys should help

show this trend. However, this may also simply be an aberration in the data collection process, due to increased numbers of practices reporting for this survey.

■ **Malpractice costs continue to rise.**

While in certain parts of the country, malpractice premiums are reportedly stabilizing after several years of large increases, the NERVES survey reported a 21 percent increase in average malpractice premiums nationally.

Two data points do not make a trend. But the availability of practice data through the NERVES survey is beginning to provide answers that have long been sought by neurosurgeons and their professional practice administrators. The NERVES organization is providing a valuable resource for addressing the socioeconomic issues facing neurosurgery today. The quality of the data and the value to neurosurgery will improve as participation improves. We would ask neurosurgeons to encourage their administrators to participate in the survey by joining NERVES. ■

Additional information about NERVES is available at [www.nervesadmin.com](http://www.nervesadmin.com).

updated yearly or as necessary to report status changes. The Disclosure Statement and additional information are accessible at [www.MyAANS.org](http://www.MyAANS.org) by selecting "Disclosure" from the navigation bar. Questions about this new process can be directed to the AANS at (888) 566-2267.

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**Abstract Deadline for the 2007 AANS Annual Meeting Is Sept. 15** Abstract submissions for the 2007 AANS Annual Meeting: Celebrating the AANS' Diamond Jubilee are being accepted until Sept. 15. The Call for Abstracts brochure containing instructions on the submission process and access to the online Abstract Center are available at [www.aans.org/annual/2007/abstract.asp](http://www.aans.org/annual/2007/abstract.asp).

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**New Book Tackles Tough Topics** *Controversies in Neurological Surgery*, a new book by Michael T. Lawton, Daryl R. Gress, and Randall T. Higashida, provides insight into trends and controversial issues regarding state-of-the-art techniques in neurosurgery, interventional neuroradiology and endovascular surgery. Copublished by Thieme and

the AANS, *Controversies* confronts many of the topics fueling neurosurgical discussions, with detailed coverage of treatments for ischemic diseases such as extracranial and intracranial atherosclerosis. Many of the organizational issues of integrating subspecialties and training subspecialists are discussed. The 336-page book contains 240 illustrations, figures, and radiological images and offers 15 continuing medical education credits. Information is available in the AANS Online Marketplace, [www.AANS.org](http://www.AANS.org).

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**AANS Members Serving on Committees Get New Information Management Tool** Members now can access information about their committees at [www.MyAANS.org](http://www.MyAANS.org), including a committee roster with contact information, an archive of past minutes and other materials, and upcoming meeting information for each committee on which an individual serves. The information is accessible after logging in to [www.MyAANS.org](http://www.MyAANS.org) and selecting "Committees" from the navigation bar. Those who want to volunteer for a particular committee can do so in this area as well by selecting "Edit" next to Volunteer for Committee.

### Softball Tournament Has Raised \$100,000 for Pediatric Brain Tumor Research

On June 10 in New York's Central Park, teams representing eight of the nation's medical centers competed in the Third Annual Neurosurgery Charity Softball Tournament benefiting Columbia University's Pediatric Brain Tumor Research Fund. Top finishers were the University of Pennsylvania, Columbia University and Mt. Sinai School of Medicine. The next event is planned for June 9, 2007 ([www.KidsBrainResearch.org](http://www.KidsBrainResearch.org)).

# EVENTS

## Calendar of Neurosurgical Events

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### Aspen Symposium on Brain Tumor Immunotherapy

Aug. 7–9, 2006  
Aspen, Colo.  
[diana.doyle@ucltsc.edu](mailto:diana.doyle@ucltsc.edu)

### 2nd International Conference on Intracranial Atherosclerosis

Aug. 11–12, 2006  
San Francisco, Calif.  
[www.cme.ucsf.edu](http://www.cme.ucsf.edu)

### Tennessee Neurosurgical Society<sup>+</sup>

Aug. 19–20, 2006  
Chattanooga, Tenn.  
(423) 265-2233

### Hydrocephalus 2006

Sept. 6–9, 2006  
Goteborg, Sweden  
[www.hydrocephalus2006.com](http://www.hydrocephalus2006.com)

### Spinal Surgery in Elderly Patients

Sept. 7–9, 2006  
Frankfurt, Germany  
[www.bgu-frankfurt.de](http://www.bgu-frankfurt.de)

### 8th Annual Interventional Neuroradiology Symposium

Sept. 8–9, 2006  
Toronto, Canada  
[www.cme.utoronto.ca](http://www.cme.utoronto.ca)

### Egyptian Society of Neurological Surgeons: Minimally Invasive Neurosurgery

Sept. 13–15, 2006  
Alexandria, Egypt  
[www.esns.org.eg](http://www.esns.org.eg)

### Western Neurosurgical Society<sup>+</sup>

Sept. 16–19, 2006  
Blaine, Wash.  
[www.westnsurg.org](http://www.westnsurg.org)

### 56th Annual Meeting of the Congress of Neurological Surgeons

Oct. 7–12, 2006  
Chicago, Ill.  
[www.neurosurgeon.org](http://www.neurosurgeon.org)

### American Neurological Association Annual Meeting

Oct. 8–11, 2006  
Chicago, Ill.  
[www.aneuroa.org](http://www.aneuroa.org)

### American Academy of Neurological Surgery<sup>+</sup>

Oct. 18–22, 2006  
Greensboro, Ga.  
(602) 406-3159

### XXXII Meeting of the Latin American Federation of Neurosurgical Societies

Oct. 21–26, 2006  
Buenos Aires, Argentina  
[www.clan2006.com.ar](http://www.clan2006.com.ar)

### Research Updates in Neurobiology for Neurosurgeons

Oct. 21–28, 2006  
Woods Hole, Mass.  
[www.societytyns.org](http://www.societytyns.org)

### Neurocritical Care 2006: Synchronicity

Nov. 2–5, 2006  
Baltimore, Md.  
[www.neurocriticalcare.org](http://www.neurocriticalcare.org)

### 3rd International Symposium on Microneurosurgical Anatomy

Nov. 5–8, 2006  
Antalya, Turkey  
[www.isma2006.org](http://www.isma2006.org)

### 67th Annual American Academy of Physical Medicine and Rehabilitation Annual Assembly

Nov. 9–12, 2006  
Honolulu, Hawaii  
[www.aapmr.org](http://www.aapmr.org)

### AANS/CNS Section on Pediatric Neurological Surgery<sup>+</sup>

Nov. 28–Dec. 1, 2006  
Denver, Colo.  
[www.neurosurgery.org/pediatric](http://www.neurosurgery.org/pediatric)

### 19th Annual Contemporary Update on Disorders of the Spine<sup>+</sup>

Jan. 13–19, 2007  
Whistler, Canada  
[www.cme.hsc.usf.edu/dots](http://www.cme.hsc.usf.edu/dots)

### Southern Neurosurgical Society Annual Meeting<sup>+</sup>

March 15–18, 2007  
Sea Island, Ga.  
[www.southernneurosurgery.org](http://www.southernneurosurgery.org)

### 75th AANS Annual Meeting

April 14–19, 2007  
Washington, D.C.  
[www.aans.org](http://www.aans.org)

<sup>+</sup> These meetings are jointly sponsored or cosponsored by the American Association of Neurological Surgeons.

The frequently updated Meetings Calendar and continuing medical education information are available at [www.aans.org/education](http://www.aans.org/education).

## AANS Courses

For information or to register call (888) 566-AANS or visit [www.aans.org/education](http://www.aans.org/education).

### ■ Managing Coding & Reimbursement Challenges in Neurosurgery

<b>Power Coding</b>	Sept. 8–9, 2006	Chicago, Ill.
<b>"Coding for the Pros"</b>	Nov. 3–4, 2006	Los Angeles, Calif.
Prerequisite: AANS coding course taken within two years.		

### ■ Neurosurgery Review by Case Management: Oral Board Preparation

Nov. 5–6, 2006	.....	Houston, Texas
May 20–22, 2007	.....	Houston, Texas
Nov. 4–6, 2007	.....	Houston, Texas

### ■ Neurosurgical Practice Management: Improving the Financial Health of Your Practice

Sept. 10, 2006	.....	Chicago, Ill.
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