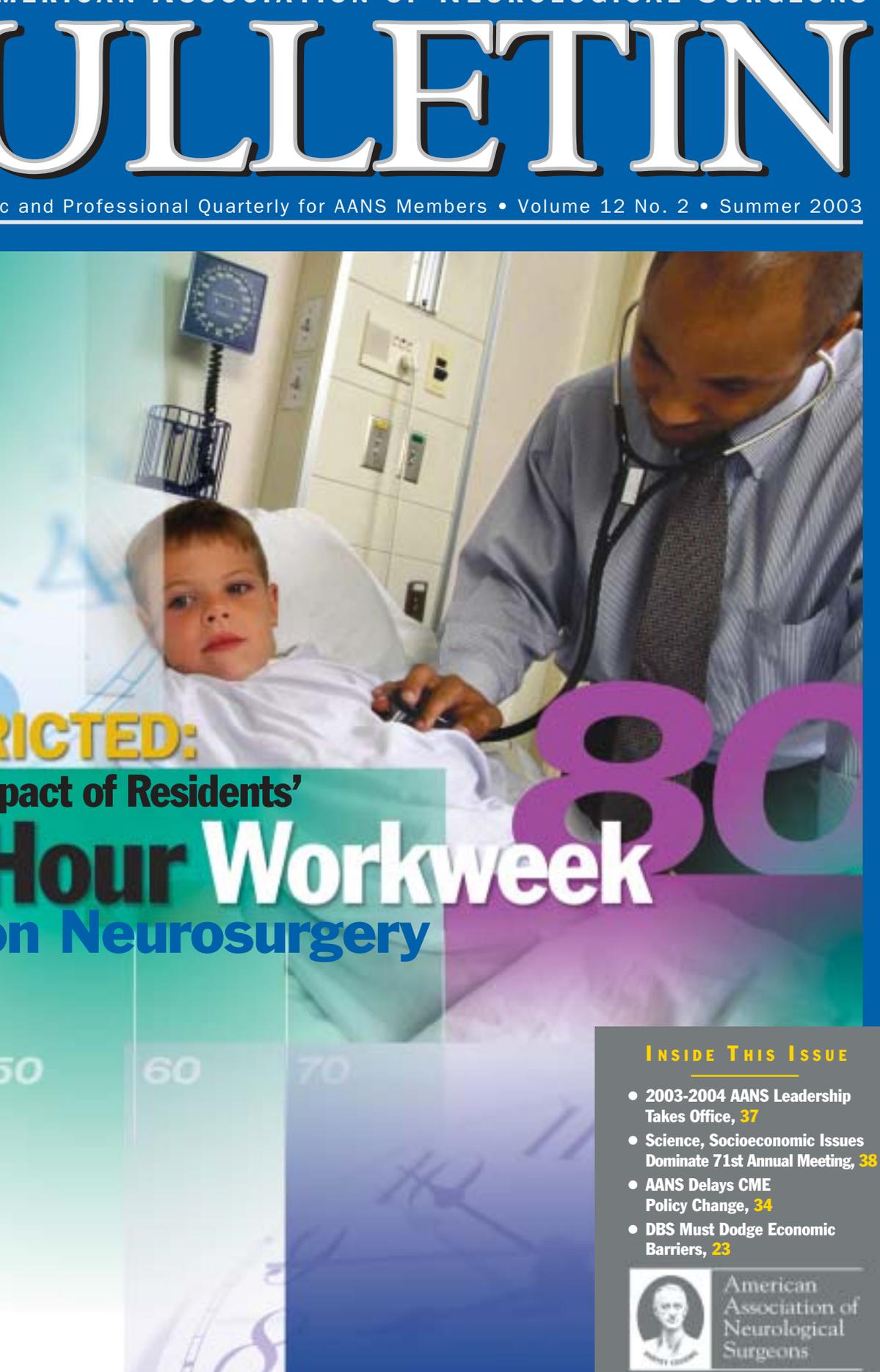


AMERICAN ASSOCIATION OF NEUROLOGICAL SURGEONS BULLETIN

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RESTRICTED:
The Impact of Residents'
80-Hour Workweek
on Neurosurgery

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 American Association of Neurological Surgeons



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VOLUME 12 NO. 2

AANS MISSION

The AANS is dedicated to advancing the specialty of neurological surgery in order to provide the highest quality of neurosurgical care to the public.

AANS BULLETIN

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

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On the Road to ...

Fully Mobilizing the AANS to Enhance Neurosurgical Practice and Advance Patient Care

There are a few things in particular I appreciate about the late Bob Hope. Besides the veteran performer's admirable longevity—he performed for 60 years and celebrated his 100th birthday in May—he was always journeying somewhere, or I should say, he was always “on the road”; he routinely opened his radio broadcasts with, “This is Bob [fill in name of remote location] Hope.” Throughout his career, he exhibited a remarkable ability to adapt to change. At about the same time neurosurgeons were organizing the Harvey Cushing Society, Hope already was trading vaudeville for Broadway. Utilizing the wonders of technology, he advanced his career by reaching burgeoning audiences through radio, film, television, and now, DVD.

Perhaps most importantly and certainly most memorably, Hope was able to combine creativity with impeccable timing to help the nation address serious concerns during difficult times. Take, for example, this pithy parable as remembered by a Marine nearly 30 years after he heard it at a USO show in Da Nang:

“Boy, that road is really muddy between here and the airstrip. (pause)

In fact, we were driving over here today when we passed a soldier buried in the mud up to his neck! (pause)

We offered to dig him out and give him a ride, but he turned us down. (pause)

“He said, ‘Thank you sir, but I’m not supposed to leave this jeep I’m sitting on.’”

By drawing a few parallels between a venerable comedian and our profession, I am not suggesting humor as a cure for the

ills currently facing neurosurgery—although I will allow that a good dose of it is welcome on occasion. As I look forward to a year serving as the 73rd president of the American Association of Neurological Surgeons (AANS), it seems that the formidable challenges to our profession are commensurate with the scientific and technological advances that are available now and in the near future for aiding our patients.

On Our Road

Professional Liability Insurance Crisis. At the forefront of these challenges surely is the crisis of rapidly escalating professional li-

A. John Popp, MD, is the 2003-2004 AANS president. He is Henry and Sally Schaffer Chair of Surgery at Albany Medical College in New York.



bility insurance (PLI) premiums. This challenge goes straight to the heart of whether or not a neurosurgeon is able to practice, not 20 years from now, but tomorrow. Many neurosurgeons are modifying or moving their practices to reduce premiums, practicing without insurance, or retiring, and people in communities across the United States subsequently are finding themselves without neurosurgical coverage when they need it. Organized neurosurgery must work intelligently and aggressively and in collaboration with other medical specialties for passage of federal tort reform that will help end the PLI crisis.

Neurosurgeons to Preserve Healthcare Access Campaign. Toward this end the AANS, together with the CNS, launched

Neurosurgeons to Preserve Health Care Access (NPHCA), neurosurgery's new 501(c)(4) tax-exempt entity whose sole purpose is to spearhead our aggressive public education and lobbying campaign for federal medical liability reform. Already the AANS has contributed \$100,000 to NPHCA, and every member of the AANS Board of Directors personally has committed to initially giving at least \$1,000 every year for three years. Other contributions, including respective \$100,000 donations from the CNS and the AANS/CNS Spine Section, as well as gifts from board members of the Council of State Neurosurgical Societies, AANS/CNS sections and other neurosurgical societies, demonstrate neurosurgery's commitment to this crucial campaign. Contributions from individual neurosurgeons—the AANS is asking each member to join in the effort by giving \$1,000 each year for three years—will serve as a grassroots mandate for this important, all-out effort for federal medical liability reform that already is underway.

Continuing Medical Education Requirements. Another issue of immediate and intense concern is that of evolving requirements for neurosurgical continuing medical education (CME). As reported in the Winter 2002 issue of the *Bulletin*, changes in CME requirements, stemming from the influential Institute of Medicine report that challenged all physicians to demonstrate competence and verify performance throughout their careers, are imminent. In brief, in a bid to meet this challenge and preempt external oversight of neurosurgical medical education, the American Board of Neurological Surgery (ABNS) initiated development of its maintenance of certification (MOC™) program.

To help AANS members meet the MOC requirements set forth thus far, as well as

the elements that have yet to be defined, the AANS is reinventing its education component and realigning its neurosurgical CME requirements to mesh with the ABNS requirements. The AANS absolutely is dedicated to marshaling all of its resources so that complying with the myriad complexities involving neurosurgical CME is rendered a simple matter for AANS members.

... **And More.** An additional concern facing neurosurgery is the restriction on resident work hours. The Accreditation Council for Graduate Medical Education decision, effective as of July 1, has implications beyond who will cover when residents are not available and how the cost of that coverage will be paid. The deeper questions involve the very nature of what is required of a neurosurgeon today and how a resident can be adequately prepared to meet those challenges; the AANS will continue to participate in debate on this subject that has great impact on the future of our profession.

Adequate reimbursement for neurosurgical services remains near the top of our agenda. Not only must we continually work to stem the tide of declining reimbursement, we must act to ensure that new technologies, procedures, and medications which help our patients are covered by insurance and that the work to implement them is correctly valued. Working primarily through the Washington Committee, the AANS remains ever vigilant on this front.

Mapping the Route: The AANS Strategic Plan

As this brief review of topical issues attests, the AANS is always “on the road,” constantly leading, reacting and adapting. The question is, what destination is our objective? Is it a destination of our choosing, reached through our input and influence, or instead imposed upon us?

Not one of us would wish to go into surgery without a thoroughly conceived plan of action, a knowledgeable, accomplished team and appropriate instrumentation. Similarly, a cohesive methodology

“A cohesive methodology that fully utilizes all of our resources and allows the AANS to act in a timely fashion is necessary for achieving neurosurgery’s current agenda and the long-term goals we say we cherish.”

that fully utilizes all of our resources and allows the AANS to act in a timely fashion is necessary for achieving neurosurgery’s current agenda and the long-term goals we say we cherish.

With the aim of developing a strategic plan, a thorough evaluation of AANS infrastructure was conducted last year. This effort might be characterized as a continuation of the rebuilding process that the AANS has undertaken during the last few years, a process that has resulted in restoring the AANS to fiscal health.

During this evaluation, abundantly in evidence was our membership’s impressive array of talent, ideas and experience; several ways to maximize these resources became apparent, particularly with regard to our committees. Those who have served on a committee in the past few months already are acquainted with this portion of the strategic plan, which ensures that each committee has developed clear charges that are synchronized with the AANS’ goals, as well as a work plan that utilizes the creativity and energy of every member. Overall, the new strategic plan, to be released in the next few months, will allow the AANS to focus the considerable energy and collective intelligence of our members, together with our resources at the AANS Executive Office, on achieving our association’s goals.

Meet Me in Orlando

In the short term, my presidency will culminate in the 2004 AANS Annual Meeting. This brings me to the subject that is closest to my heart and at the core of our association’s very existence: our patients. It is my hope that this meeting will not only uphold the high standards set by past meetings—the stellar meeting that just concluded in San Diego under the leadership of Roberto Heros, MD, immediately springs to mind—but will serve as a nexus of leading-edge

neurosurgery, technology and the creativity that we must employ in providing exemplary patient care. I hope you will plan now to join me for the 2004 AANS Annual Meeting, “Advancing Patient Care Through Technology and Creativity,” May 1-6 in Orlando.

Dear Prez, I Wanna Tell Ya

I am thankful for the opportunity to serve as your president at a time when the AANS is poised to achieve so much for our members and our patients. The AANS is “on the road” to progress on many initiatives. With this in mind, I hope you recognize that your participation as well as that of AANS leadership is absolutely critical for the success of our association. Are you interested in serving on a committee? Do you have a particular facility for writing, an affinity for public speaking, or an aptitude for working with the media? Can you contribute financially to research through the Neurosurgery Research and Education Foundation (NREF) or to our campaign for federal medical liability reform?

Bob Hope, whom President Ford called “the only person I know who says that the White House is his favorite Bed and Breakfast in Washington, D.C.,” joked about his experiences with 12 U.S. presidents in his book, *Dear Prez, I Wanna Tell Ya*. With this touch of levity, but in all seriousness, I invite you to share with me your suggestions regarding the AANS. Your concern for and involvement in the AANS will ensure that we stay the course on our road to success. ■

More About Neurosurgery’s Hot Topics

- Neurosurgery’s campaign for federal medical liability reform, page 38.
- AANS and CME opportunities, page 34.
- Restrictions on resident work hours, page 7.

NEWSLINE

News Members Trends Legislation

FROM THE HILL

NEBRASKA'S \$1.25 MILLION CAP RULED CONSTITUTIONAL

On May 16, the Nebraska Supreme Court ruled 5 to 2 that the state's \$1.25 million cap on medical liability is constitutional. In a 68-page opinion, the court affirmed that the legislature acted within its powers in enacting the medical liability cap.

<http://court.nol.org/opinions/2003/may/may16/s00-679.pdf>.

For frequent updates to legislative news, see the Hot Topics page at www.neurosurgery.org/socioeconomic.

- **Medical Liability Reform Legislation Dead for Now in the Senate** Voting mostly along party lines, on July 9 the U.S. Senate refused to take up S. 11, the Patients First Act. Modeled after California's MICRA legislation, the bill would, among other things, cap noneconomic damages at \$250,000 and establish expert witness standards in professional liability lawsuits. The vote was 49 to 48, 11 votes short of the 60 needed to overcome the Democrat-led filibuster. All Republicans but two—Richard Shelby of Alabama and Lindsey Graham of South Carolina—voted for the bill. Voting against it were 45 Democrats and one Independent. Presidential candidates John Kerry, D-Mass., and Bob Graham, D-Fla., as well as Zell Miller D-Ga., did not vote. Senate leaders have vowed to bring medical liability legislation up for additional votes throughout the remainder of the 108th Congress. View the vote at www.senate.gov/legislative/LIS/roll_call_lists/roll_call_vote_cfm.cfm?congress=108&session=1&vote=00264.
- **House and Senate Pass Medicare Reform Legislation** On June 27 the Senate passed S. 1, the Prescription Drug and Medicare Improvement Act of 2003, by a vote of 76 to 21. The House of Representatives likewise passed H.R. 1, the Medicare Prescription Drug and Modernization Act of 2003, by the narrow margin of 216 to 215. These bills include a new Medicare prescription drug benefit and some minimal Medicare structural reforms. In addition they include a variety of Medicare provider provisions. The House bill would prevent any cuts in Medicare physician reimbursement for 2004 and 2005, and would provide for physician updates of at least 1.5 percent in these two years. The House bill also includes the regulatory relief provisions (including reforms related to the Emergency Medical Treatment and Labor Act, EMTALA) that passed the House during the 107th Congress. The differences between the two bills now will be worked out in a conference committee. To view the text of the bills go to <http://thomas.loc.gov> and enter the bill numbers (H.R. 1 and S.1) in the Bill Number box.
- **Ready for HIPAA Title II?** The compliance date is Oct. 16 for those who last fall filed an extension for the "Title II" Electronic Data Transaction Standards and Code Sets provision of the Health Insurance Portability and Accountability Act (HIPAA). In anticipation, the Office of the Inspector General in June released its HIPAA Readiness study of Medicare Part B providers, such as physicians (<http://oig.hhs.gov/oei/reports/oei-09-02-00422.pdf>). The study found that "94 percent of Medicare Part B providers expect to be in compliance with HIPAA standards by October 2003." However, it also found that "47 percent of respondents...expressed concerns that vendors and trading partners could affect their ability to meet the compliance deadline."
- **N.C. Court Overrules State Medical Board in Lustgarten Appeal** Florida neurosurgeon Gary J. Lustgarten, MD, may have regained his ability to hold a North Carolina medical license owing to a Superior Court decision in April that reversed all but one of the North Carolina Medical Board's grounds for disciplining him. The board had revoked his license in July 2002 for unprofessional conduct resulting from his expert testimony in a 1998 case. The North Carolina Medical Board plans to appeal the ruling, which was based on the judge's conclusion that the North Carolina Medical Act does not specifically include false trial testimony as a basis for disciplinary action, according to Russell Pelton, general counsel for the American Association of Neurological Surgeons (AANS). "The decision will have minimal impact in states where the medical acts are worded differently," he said. "The decision does, however, support the plaintiffs' proposition that providing expert testimony does not constitute the practice of medicine, a position which both the AANS and the American Medical Association have been advocating." The AANS suspended Dr. Lustgarten twice for his unprofessional testimony as an expert witness; one suspension stemmed from his testimony in the 1998 case. Information on the AANS Expert Witness Guidelines and the AANS Professional Conduct Program is available at www.neurosurgery.org/aans/bulletin/spring02/index.html.

NEURO NEWS

AANS HUMANITARIAN AWARDEES

1987

COURTLAND H. DAVIS JR., MD

1988

GASTON ACOSTA-RUA, MD

1989

HUGO V. RIZZOLI, MD

1990

A. ROY TYRER JR., MD

1991

GEORGE B. UDVARHELYI, MD

1992

WILLIAM H. MOSBERG JR., MD

1993

MANUEL VELASCO-SUAREZ, MD

1994

E. FLETCHER EYSTER, MD

1995

MELVIN L. CHEATHAM, MD

1996

NO AWARD

1997

ROBERT J. WHITE, MD

1998

LEE FINNEY, MD

1999

THOMAS B. FLYNN, MD

2000

MERWYN BAGAN, MD, MPH

2001

GARY D. VANDER ARK, MD

2002

EDGAR M. HOUSEPIAN, MD

2003

NO AWARD

- **2004 Humanitarian Award Nominations Due Oct. 15** Voting members of the American Association of Neurological Surgeons (AANS) are invited to submit nominations for the 2004 Humanitarian Award by Oct. 15. The award will be presented at the 2004 Annual Meeting in Orlando, May 1-6. The Humanitarian Award was established in 1987 to honor an AANS member whose activities outside the art and science of medicine bring great benefit to medicine. 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. Nominees may be recognized for activities of national, regional or local nature that benefit humanity collectively or individually without providing remuneration to the recipient. Nominations must be submitted using the form available at www.AANS.org, or by contacting Susan Eget at sme@AANS.org or (847) 378-0514.
- **Deep Brain Stimulation Codes' Value May Increase** Doctors who perform deep brain stimulation (DBS) with intraoperative microelectrode recording (MER) may be looking at a sharp increase in reimbursement next year. At its April 27 meeting, the American Medical Association's Relative Value Update Committee, known as the RUC, voted to increase the work relative value of DBS performed with MER (new CPT code 6186X3) from 19.0 to 31.34. According to Jeffrey W. Cozzens, MD, who serves on the AANS/CNS Current Procedural Terminology Subcommittee and attended the RUC meeting, if the Centers for Medicare and Medicaid Services accept the recommendation, the increase will translate to at least a 30 percent increase in reimbursement for this procedure. "It all depends on what is published in the Federal Register on Nov. 1, but I think that optimistically we can expect probably a 50 percent increase over the previous code," he stated. Other new approved codes related to DBS include: DBS with MER, each additional array (6186X4), 7.92; DBS without MER, (6186X1), 19.0; and DBS without MER, each additional array (6186X2), 4.50. For more information about DBS, see "Deep Brain Stimulation: Expanding Indications and Increasing Reimbursement," page 23.
- **AANS Delays New Definition of Neurosurgical CME Until Jan. 1, 2005** In response to questions raised by a number of members, in March the Executive Committee of the American Association of Neurological Surgeons (AANS) delayed implementation of AANS' new definition of what programs are acceptable for attaining neurosurgical continuing medical education (CME) credit until Jan. 1, 2005, when the new three-year CME cycle begins. See the Education column, page 34, for more on this story.
- **Registration Opens for Distinctive ".Pro" and ".Med.Pro" Internet Addresses** Beginning in July 2003, physicians and other professionals can register for the new Internet "top-level" .pro domain name. Medical and osteopathic doctors, as well as medical organizations also will be able to register for the new .med.pro sub-domain. According to a statement released by .pro domain operator RegistryPro Inc., .pro offers a way for professionals to distinguish themselves on the Internet and provides access to secure electronic communications. Registrants self-certify that they are professionals, providing licensing and identity information that is independently cross-checked by each .pro registrar. Once professional status is verified, a digital certificate is issued. This certificate, "an online passport that facilitates secure communications and transactions," is reissued annually, and the eligibility for the .pro registration is re-verified at least annually. More information is available at www.registrypro.pro.

Send Neuro News briefs to the *Bulletin* at bulletin@AANS.org.

Everyone Has a Story

Can Neurosurgery Close the Book on the Resident Work Hours Controversy, or Is a New Chapter About to Be Written?

A street intersection sticks in my memory from my neurosurgery residency years. I drove the two-mile distance from hospital to home every other evening, usually after dark, seeking a few hours of sleep, a change of clothes, and a chance to see my wife and young son, if he was still awake. I sometimes fell asleep, usually only nodding briefly, but sometimes sinking into profound stupor only to be startled awake by a blast from an automobile horn as I waited at the long stoplight only a quarter of a mile from home. Too fatigued to pause for even 60 seconds without fading out, I learned to set my foot tightly against the brake.

A room darkened for the Saturday morning neuropathology conference meant a catnap for a clouded mind after a Friday night on call. Even as little as two hours of sleep could stave off the torpor of sleeplessness.

Every neurosurgeon has a story, or many stories, of fatigue, countless long hours, and work to the point of exhaustion during training. For some the pace continues long after residency or fellowship, especially where emergency and trauma call is heavy. Subarachnoid hemorrhage respects no hours. Traumatic cerebral contusion knows no schedules. This is what our training taught us; this is what neurosurgeons do.

Whether training into and through a state of exhaustion was correct or even necessary is called into question by the limiting of resident work hours. The Accreditation Council for Graduate Medical Education (ACGME) has long endorsed a limit of 80 hours per week for resident work and call. The policy has not been vigorously enforced, until now.

The New York Committee on Interns and Residents (CIR), among others, was successful in lobbying for and gaining pas-

sage of a statute in New York State more than 10 years ago, limiting resident work to 80 hours per week. The law has not produced inferior neurosurgery residents. But it has made it harder to keep a clinical service covered.

Last year the CIR, citizens' groups, and others lobbied unsuccessfully for a bill in Congress to similarly limit resident work hours nationwide. The AANS/CNS Washington Committee vigorously opposed any federal legislation mandating specific medical training work hours, believing it best to

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leave judgement in the hands of the professionals who designed and reviewed training programs, namely the ACGME and the residency review committees.

The arguments for limits on resident work hours are several. Fatigue clouds judgment, blocks learning, and leads to errors, which imperil patient safety. Even resident safety is threatened, when residents fall asleep on the road after two days of continuous call. Excess resident hours are often consumed by "scut work," ancillary service without educational value and unrelated to actual physician responsibilities.

Arguments against the 80-hour week also exist and are compelling, at least to neurosurgeons. Neurosurgery is a specialty with an arduous training program; all other specialties know it and neurosurgery resi-

dents know it coming in. Limiting work hours reduces the number of patients for whom a resident can care, and can affect the continuity of care during cases, such as long surgical cases. Neurosurgery is a high risk, difficult discipline, requiring long hours of unflinching dedication to the patient, a lesson that must be learned by experience during training in preparation for the work hours demanded in practice, where a neurosurgeon can't just walk off the job like a shift worker when an arbitrary time limit passes.

A further consideration for practicing neurosurgeons is a corollary to the restrictions on resident work hours. If 80 hours defines the limit of safe practice time per week for a resident, how can a practicing neurosurgeon safely commit more hours? Does this rule create a liability for any neurosurgeons who serve their communities more than 80 hours per week, creating simply another future problem of access to neurosurgery care? And regarding access to neurosurgery services, with neurosurgeons less available because of time restrictions, and emergency room coverage already a problem, won't trauma and other neurosurgery emergency services become even scarcer?

Just to further complicate the issue, the European Union allows only 58 work hours per week for residents, to be dropped to 48 hours over the next decade. Denmark allows only 37 hours, yet does not lack neurosurgery service or adequately trained neurosurgeons.

The issue of resident work hours is complex, but the ACGME restrictions exist and the enforcement penalty is high. For better or for worse, beginning this summer neurosurgery will experience another transition, this time to a limited resident workweek. ■

RESTRICTED:

The Impact of Residents' 80-Hour Workweek on Neurosurgical Resident Training and Patient Care

DONGWOO JOHN CHANG, MD, AND SUSAN BELL, RN

In many ways, the 80-hour workweek guidelines set forth by the Accreditation Council for Graduate Medical Education (ACGME), effective July 1, 2003, seem to be a leap forward into a civilized era of medical training characterized by enlightenment and foresight. Neurosurgeons will be among the agents of implementation of these guidelines, as well as recipients of the consequences that follow.

In order to evaluate the guidelines' perceived impact on training and patient care in neurosurgery, a confidential questionnaire was sent by e-mail to every neurosurgical resident and program director in the United States. Preliminary results of this survey were presented in the spring at the AANS Annual Meeting, and final results are released in this article.

The data are based on a 42 percent response from neurosurgery residency program directors and an approximately 10 percent response from neurosurgery residents. An overwhelming majority of program directors (79 percent) and more than a majority (62 percent) of the residents opposed the work hour restrictions. Fifty-nine percent of program directors and 40 percent of residents believed that the guidelines would affect patient care negatively. Eighty percent of program directors and 56 percent of residents felt that the guidelines would have a negative impact on training. Sixty-six percent of program directors felt that training duration should not be lengthened despite the shortfall in educational opportunities imposed by the guidelines, while 86 percent of trainees were opposed to extending the length of neurosurgery residency.

The respondents suggested several solutions to the problems that are anticipated as a result of ACGME work hour restrictions. These

included lengthening—or shortening—the residency program, petitioning for more resident positions, hiring pre-residency fellows, instituting a night-float system, reducing elective/research time, reducing resident involvement in cases, having academic attending physicians take primary night call, creating more post-residency subspecialty fellowships, and employing nurse practitioners and physician assistants, collectively known as physician extenders (PEs), to cover those non-educational duties traditionally performed by neurosurgery residents.

Respondents' comments were vehement and passionate. Many felt that the loss of auto-regulation and self-determination would erode the professionalism important in neurosurgery. Loss of continuity of care was a point of concern for most individuals at all levels of seniority. Virtually all trainees and program directors predicted a reduction in educational and operative opportunities. In particular, trainees' exposure to the subspecialties involving intracranial pathology, such as cerebrovascular, tumors, trauma, and skull base, was felt to be affected most negatively by the new guidelines. Concern over the

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Restricted: The Impact of Residents' 80-Hour Workweek

Continued from page 7

transition to a “shift worker” mentality was a prevalent theme. Many thought that the finishing residents would not be prepared for the “real world” responsibility of functioning as an attending neurosurgeon. It was generally felt that the guidelines would have an extremely detrimental impact on academic neurosurgery, adding to an already compromised academic neurosurgical structure in the United States.

Firm conclusions cannot be drawn from the data because a 100 percent response from program directors and residents could not be obtained. However, each of the prevalent themes deserves further scrutiny. The following paragraphs reflect opinions of the authors and do not represent the official views of any other individuals or organizations.

Lengthening Residency. Lengthening residency appears simple enough, but perhaps monumentally difficult to implement because of neurosurgical workforce considerations, financial constraints on funding the additional years of “training,” and the effect longer training might have on the relative attractiveness of neurosurgery as a potential career choice. The basic neurosurgical training pro-

gram of six to seven years is felt to be long enough by most people. There are at least a few programs that are eight years in length; these have built-in features with merit in their own right. However, can one claim that these have to be a part of the general training of a neurosurgeon? Would it be appropriate to extend the length of every program to eight or nine years for the main purpose of providing coverage? How would current residents feel about this change after having signed on for a program that was originally six years long?

Shortening Residency. Conversely, some respondents felt that neurosurgical training should be shortened. There is some merit in this idea. It is arguably possible to train a very good clinical neurosurgeon within a five-year period, which would include one year of fundamental clinical skills and four years of neurosurgery; the four years could include 12 months of neurology, neuroradiology, and neuropathology rotations under the current scheme of requirements. Perhaps the research components and subspecialty training should be considered additional experiences beyond the general training period, to truly reflect an individual's sincere interest in further pursuits aimed at a focused career goal.

Increasing the Number of Residents. Petitioning the Residency Review Committee and the American Board of Neurological Surgery for more positions may be beneficial for the specialty and the universities, primarily by increasing the sheer number of neurosurgeons in the work force available for covering the hours for which residents formerly were responsible. Also, consider that no trainee can fully capture all of the educational opportunities of any training program and benefit from them, no matter how narrow or expansive the program's scope may be. There are only so many paths that a resident can pursue, not only in the research arena, but also in the related disciplines of the clinical neurosciences. Training is not exclusively about surgery, although for most of us surgery provides the most satisfaction within the gamut of activities of being a trainee or an attending. However, increasing the number of training positions means that eventually there may be an excess of neurosurgeons for the number of available jobs. Already there is an overabundance of neurosurgeons in some locales and too few in others. How distribution of an increased number of neurosurgeons could be worked out logistically clearly is not an easy task.

Employing Pre-Residency Fellows. Utilizing pre-residency fellows is potentially a reasonable solution. Virtually all of these individuals desire a categorical position in neurosurgery. They are another supply of the potential excess of future neurosurgeons. But what about the ethics of hiring these people, perhaps knowing in advance that their chance of getting into a U.S. program realistically is slim to none? We all know of individuals who, for a variety of reasons, did not get into a neurosurgery program after having spent years performing the functions of a clinical house officer as well as or better than the U.S. senior medical students or categorical neurosurgery residents with whom they worked side by side.

The Survey Says...

RESPONSE RATE

42% Neurosurgery Residency Program Directors
10% (approximately) Neurosurgery Residents

OPPOSE WORK HOUR RESTRICTIONS

79% Neurosurgery Residency Program Directors
62% Neurosurgery Residents

EXPECT NEGATIVE EFFECTS ON PATIENT CARE

59% Neurosurgery Residency Program Directors
40% Neurosurgery Residents

EXPECT NEGATIVE EFFECTS ON NEUROSURGICAL TRAINING

80% Neurosurgery Residency Program Directors
56% Neurosurgery Residents

OPPOSE EXTENSION OF NEUROSURGICAL TRAINING

66% Neurosurgery Residency Program Directors
86% Neurosurgery Residents

SOURCE: How Will the 80-Hour Workweek Guidelines for Residents Affect Neurosurgical Training and Patient Care? An opinion survey of neurosurgery residents and program directors conducted by Dongwo John Chang, MD, FRCS(C) and Susan Bell, RN, MS, CNRN, CNP.

Federal Legislation Eventually May Restrict Resident Work Hours

KATIE O. ORRICO, JD

Legislation that would make resident work hour restrictions, similar to those implemented this summer by the Accreditation Council for Graduate Medical Education (ACGME), the law of the land was introduced in Congress in the spring.

On March 12 Rep. John Conyers, D-Mich., introduced H.R. 1228, the Patient and Physician Safety and Protection Act, and on April 30 Sen. Jon Corzine, D-N.J., introduced the companion measure, S. 952. Neither bill has any additional cosponsors at press time. This legislation was first introduced last year, but died when the 107th Congress adjourned.

Although passage of either bill during the 108th Congress is unlikely, particularly in light of the fact that the ACGME now has implemented its own regulations, enactment would require hospitals to establish limits on working hours for certain members of the medical staff and postgraduate trainees (defined as postgraduate interns, residents or fellows) as a condition of participation in the Medicare program.

Key provisions would require:

- limiting call to no more than every third night;

- limiting work hours to 80 hours per week and no more than 24 hours per shift;
- at least 10 hours between shifts; and
- at least one full day out of seven off and one full weekend off per month.

The Department of Health and Human Services would be responsible for developing regulations related to the transfer of patients from one resident to another at the end of each 24-hour period.

Penalties for noncompliance would be steep. Any hospital that violates the law would be subject to a civil penalty of up to \$100,000 for each residency training program in violation during any six-month period.

The proposed legislation is consistent with the new ACGME duty hour requirements, however the ACGME rules are a bit more flexible as they allow for, among other things, a limited exception to the 80-hour limit.

- To get a copy of the Patient and Physician Safety and Protection Act, go to: <http://thomas.loc.gov>. Once there, enter "H.R. 1228" or "S. 952" in the Bill Number box.

Katie O. Orrico, JD, is director of the AANS/CNS Washington Office.

Perhaps we should tell them up front that they ought to seek other avenues of career satisfaction. In the end, we may create a situation that will generate much ill will, especially considering that many of these "fellows" are foreign medical doctors. Employing pre-residency fellows might seem to be a ready-made panacea, but perhaps it is not.

Instituting a Night-Float System. Some studies have shown that a night-float system, a system in which designated residents cover night call for a specific time period such as five days per month, is more detrimental to patient care than the traditional system of the same team providing continuous care. That is, a tired team of residents that knows the patient and the nuances of his or her care has been demonstrated to be better for the continuity of care than a rested team that did not know the patient. The residents who are being utilized to cover the night-float system often are sacrificing their time on research or electives which is all about education unrelated to the issues of hospital coverage.

Reducing Research and Electives. Reducing research or elective time and reducing resident involvement in cases sounds convenient, but doing so unquestionably reduces the educational component of

the training program. If the problem in many U.S. neurosurgery programs is that there is inadequate education and operative experience, how can we justify taking more of either component away to cover a "teaching" hospital? None of us can feel that doing so is beneficial to either patient care or to our profession in the long term.

Rotating Attendings On Call. Academic attending physicians taking primary call in rotation with residents is something to ponder because it is not entirely unrealistic. It would affect the minority of neurosurgeons who are in full-time academic practices, but it would have no effect on the vast majority of practicing neurosurgeons who cover their patients and the emergency department without a resident buffer.

One must keep in mind that the traditional structure for academic neurosurgery was not designed primarily to create a buffer for the sole interest of the teaching neurosurgeons nor for the exclusive purpose of providing surgical experience so a trainee could try things out while in a "protected" situation. It was conceived as a system of apprenticeship for the trainee to learn the judgment and skills to go on one's own after completion of a suitable period of time. The very essence of this paradigm now is being put to the test.

Restricted: The Impact of Residents' 80-Hour Workweek

Continued from page 9

Expanding the Role of Post-Residency Fellows. Under these circumstances, the role played by post-residency subspecialty fellows may be expanded to include some of the house staff coverage issues, which by necessity means taking away some of the educational opportunities which might be available to the residents under more traditional circumstances. It might become necessary to create more intracranial subspecialty fellowships if, as many of the study's respondents believe will happen, intracranial neurosurgical education suffers with the advent of the work hour guidelines.

Employing Physician Extenders Employing PEs was cited as a solution by virtually all of the survey respondents. Realistically, can this be an option for all university hospitals and furthermore, what funds would support this? Should funding come out of the already compromised faculty practice revenue or should teaching hospitals support PEs so that all residents could work reasonable hours (by the way, most people in society don't think that 80 hours of work per week is reasonable) and faculty neurosurgeons would not have to take primary call? Is it reasonable to assign the degree of responsibility of a mid- or senior-level neurosurgery resident to a mid-level provider? The question here is not whether PEs can and do provide excellent care; they can and they do, particularly in neurosurgery. But is it appropriate to assign that level of responsibility to a mid-level provider and how

Student Group Supports Federal Restrictions

A medical student group urged support of the Patient and Physician Safety and Protection Act of 2003 in a statement whose release coincided with the July 1 effective date of the Accreditation Council for Graduate Medical Education's (ACGME) restrictions on resident work hours.

The 40,000-member American Medical Student Association (AMSA), an independent, student-governed national association of students, interns and residents, holds that the ACGME's new guidelines lack independent oversight and enforcement, as well as whistleblower protections for residents.

The absence of anonymous reporting provisions in ACGME's guidelines will discourage residents, who depend on their superiors for letters of recommendation, from reporting infractions of the guidelines, AMSA said. The group also said that the ACGME guidelines neither allow for public disclosure of hospitals and programs that force residents to work long hours, nor incorporate civil penalties for programs that violate the regulations.

More information is available at www.amsa.org. Also see "Federal Legislation Eventually May Restrict Resident Work Hours," on page 9.

—Manda J. Seaver

should this be decided? And is there a ready supply of mid-level providers who are ready to jump into a university practice in neurosurgery?

More Questions than Answers

Many more provocative questions are raised than answered by the implementation of the ACGME's guidelines. What is academic neurosurgery and what should be the focus of academicians? What are the goals of neurosurgery residency? How long does this process take and to what "acceptable" standard? What is "acceptable" neurosurgical care? How do we go about providing it, while minimizing the necessary casualties and sacrifices that will be made in the transition? In the end, neurosurgical training may be neither about education nor about patient care, but about following a rule that affects specialties differently.

Neurosurgery is a demanding specialty that requires much time and effort to do it justice, just as any other high-stress, performance-driven endeavor. But we cannot ignore the consequences of the work hour restrictions in the hope that an exemption will be granted for neurosurgery. While it is true that neurosurgery is one of the most costly, potentially lucrative, and certainly the highest risk of the medical and surgical specialties, we are going to have to play by the rules like everyone else. The structure of neurosurgical training and, to some extent, neurosurgical practice, now must adapt to accommodate a regulation that neurosurgeons ostensibly had no major role in designing or opposing. And it will be tough, especially in today's challenging healthcare environment.

Neurosurgery residency in particular (and the medical profession in general) is about service and education, not only education without a service component. Every activity has educational value, even those that are primarily about service, because they can add to the knowledge base for total care delivery. Furthermore, not all trainees (and therefore, not all neurosurgeons) learn and progress at the same rate or arrive at the same destination, as Donlin M. Long, MD, at Johns Hopkins Hospital has demonstrated. Perhaps it is time for us to take a hard look at what we are training people to do, why, and for how long.

A new curriculum, designed to address refined educational objectives within the context of the 80-hour guidelines, is in order, to be tempered by market needs. If we don't take a proactive stance to determine the future of our own specialty, especially with regard to how and to what extent our future specialists are trained, the rules will be made by others who don't understand the implications of major sweeping changes, such as this one, which ultimately compromise both service and education.

Dongwoo John Chang, MD, FRCS (C), is director of the Neurosurgery Residency Program and assistant professor of Neurological Surgery at The Ohio State University in Columbus. Susan Bell, RN, MS, CNRN, CNP, is in the Division of Neurological Surgery at The Ohio State University.

ACGME's New Requirements: An Overview

MANDA J. SEAVER

On Feb. 13 the Accreditation Council for Graduate Medical Education (ACGME) approved new "resident duty hours language...for insertion into the common program requirements for all core and subspecialty programs by July 1, 2003."

The final regulations are the culmination of the ACGME's expeditious effort to address the complex issue of resident work hours in the context of medical education. The new requirements are rooted in a report by the ACGME Work Group on Resident Duty Hours and the Learning Environment, which was commissioned in September 2001.

At its meeting the following June, the ACGME announced preliminary approval of a set of common standards for resident duty hours that would become effective in July 2003. Of these proposed standards, ACGME Executive Director David C. Leach, MD, observed in the August 2002 issue of the ACGME *Bulletin*, "The change is incremental rather than radical; nonetheless all change affords the opportunity for unintended consequences. Will our attempts to strengthen education and patient safety actually impair the resident's ability to acquire 'practical wisdom?'"

The ACGME approved the proposed standards in September 2002, and accepted public comment until Dec. 31. The final resident duty hours language subsequently announced in February remained very similar to the originally proposed language.

The final language, as well as additional information regarding resident duty hours, is available at www.acgme.org. The requirements recognize the importance of "providing residents with a sound academic and clinical education" that is "carefully planned and balanced with concerns for patient safety and resident well-being," and also that "duty hour assignments must recognize that faculty and residents collectively have responsibility for the safety and welfare of patients." Six areas under Resident Duty Hours and the Working Environment are addressed: supervision, duty hours, on-call activities, moonlighting, oversight, and duty hours exceptions.

Those voicing support for the ACGME's plan to address resident work hours have included the Association of American Medical Colleges and the American College of Surgeons. In separate statements on resident work hours issued in June 2002, the AAMC pledged to "work with our members to ensure they continue to closely supervise the learning environments of residents and remain committed to maintaining adequate rest and time off as high priorities of their graduate medical education programs" and the ACS asserted that "patients have a right to expect a healthy, alert, responsible and responsive physician" and that "it is critical to monitor, modify and optimize the work environment" to achieve quality patient care.

In July 2002 *American Medical News* reported that the ACGME's restrictions were supported at the AMA's June meeting when the AMA passed nearly identical work hour restrictions; the article's subtitle was prescient: "While some hope this will preempt federal

Highlights of ACGME Restrictions

- 80 hours per week, averaged over four weeks, inclusive of all in-house call activities, with up to a 10 percent exception possible.
- One day in seven "off" (one continuous 24-hour period free from all clinical, educational, and administrative activities) averaged over four weeks, inclusive of call.
- 10 hours off between all daily duty periods and after in-house call.
- In-house call every third night, averaged over four weeks.
- 24 consecutive hours on-site, including call, with up to six additional hours for participating in educational activities and maintaining continuity of medical and surgical care.
- Moonlighting is monitored by the program director, and "internal" moonlighting counts toward the 80-hour weekly limit.

ACGME-Approved "Specialty Specific" Language for Neurological Surgery

- Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Residents may remain on duty for up to six additional hours to participate in didactic activities, transfer care of patients, conduct outpatient clinics, and maintain continuity of medical and surgical care. This may include resident participation in the first surgical case of the day.
- No new patients may be accepted after 24 hours of continuous duty. A new patient is defined as any patient for whom the neurological surgery service or department has not previously provided care. The resident should evaluate the patient before participating in surgery.

action, others voice concern over the impact on training programs." In October 2002, the Occupational Safety and Health Administration (OSHA) denied an April 2001 petition by Public Citizen, the Committee of Interns and Residents and the American Medical Student Association that was intended to implement restrictions on resident work hours at the federal level. The petition was denied, partially because of the ACGME's move to restrict and monitor resident work hours, and also in recognition that the issues involved with resident work hours are more expansive than job safety. However, federal legislation governing resident work hours, proposed but not enacted in 2002, again is pending in Congress.

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

Neurosurgery Seeks Exemptions

Request May Be Resubmitted After One-Year Mark

MANDA J. SEAVER

In anticipation of the July 1 effective date of the Accreditation Council for Graduate Medical Education (ACGME) restrictions on resident work hours, last spring neurosurgery appealed to the ACGME for an “exemption from specific limited aspects” of the duty hours standards that the ACGME proposed in June 2002.

The application for exemption, drafted by Ralph G. Dacey Jr., MD, chair of the Department of Surgery at Washington University School of Medicine in St. Louis, detailed the characteristics of neurosurgical training as well as probable effects of resident work hour restrictions on neurosurgical training programs.

According to Dr. Dacey, at its February 2003 meeting the ACGME tabled neurosurgery’s request. “The ACGME has said that it will consider requests for specialty-wide exceptions after its new requirements have been in place for one year,” he stated. “The Committee on Program Requirements of the ACGME considered the proposal at its meeting in June and denied the request for specialty-wide exemption. It is conceivable that another specialty-wide exemption for neurosurgery could be considered by the ACGME next year.”

The application for exemption stated in part:

While recognizing the importance of appropriate limits on [resident duty hours], many neurosurgical educators have serious concerns about the impact of these proposed common standards on the process of educating a neurosurgeon. Clearly resident fatigue has the potential to cause adverse patient outcomes, but if the neurosurgical educational process is severely compromised it is very likely that more adverse outcomes will result from inadequately trained residents ...

We support the efforts of the ACGME to improve resident education and as a group we are actively preparing for the new requirements. We feel that the [proposed residency duty hours standards] will improve resident education overall but some aspects of the standards may make it difficult to effectively prepare neurosurgical residents for ultimate independent practice.

Is Neurosurgery “Different”?

“Neurosurgeons are not different from other physicians, but the diseases they care for and the context in which they work and learn are quite different.” The complexity of the nervous system itself, the breadth and depth of neurosurgical cases, and the rapidity of onset and severity of consequence of neurosurgical complications were among the factors cited in support of exemptions from work hour restrictions.

Other evidence pointed to the relatively few practicing neurosurgeons in the United States who must provide neurosurgical care to an aging population; in 2001 there were fewer than 3,000 to staff more than 6,000 U.S. hospitals. Out of 16,000 medical students, neurosurgical training programs select only 143 first year residents, and after the first year, most programs train one resident per year

for five or six years, amounting to slightly more than 800 neurosurgeons in training.

Neurosurgical training includes one year as chief resident, a transitional year to independent practice described as “the most important part of the [training] experience” because “it is only through this type of multitasking experience that a chief resident learns his or her limits and develops the emotional stamina to care for sick neurosurgical patients.”

These factors and others led to the development of the four exemptions requested of the ACGME:

Proposed Regulation: Residents must not be scheduled for more than 80 hours per week, averaged over a four-week period, with the provision that individual programs may apply to their sponsoring institution’s Graduate Medical Education Committee (GMEC) for an increase in this limit of up to 10 percent if they can provide a sound educational rationale.

Exemption Requested: Neurosurgical educators request that neurosurgery resident duty hours be limited to a maximum of 88 hours per week averaged over a four-week period.

Proposed Regulation: Continuous time on duty (call) is limited to 24 hours, with additional time up to six hours for inpatient and outpatient continuity, transfer of care, educational debriefing and formal didactic activities. Residents may not assume responsibility for new patients after 24 hours.

Exemption Requested: Because of the potential adverse effect of the 24-hour limit on resident operative experience and continuity of care, we request that residents be permitted to participate in first surgical cases scheduled for the “post call” day.

ACGME Proposed Regulation: Residents should have a minimum rest period of 10 hours between duty periods.

Exemption Requested: In programs operating “night float” arrangements, we request eight hours between duty periods be permitted.

Proposed Regulation: When residents take call from home and are called into the hospital, the time spent in the hospital must be counted toward the weekly duty hour limit.

Exemption Requested: Because of the special importance of the chief resident experience, we request that chief residents be exempted from [resident duty hours] restrictions.

Exemptions were not requested for the following regulations:

- Residents must have at least one full (24-hour) day out of seven free of patient care duties, averaged over four weeks.
- Residents must not be assigned in-house call more often than every third night, averaged over four weeks. ■

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

Collateral Damage

Work Hour Restrictions' Impact Extends to the Community

PATRICK W. McCORMICK, MD

For community-based neurosurgeons and hospitals, it might be expected that the effects of the Accreditation Council for Graduate Medical Education's mandate to restrict resident work hours would be minimal. Instead, the ACGME decision has had perhaps an unanticipated effect on physician practice coverage arrangements, hospital house coverage arrangements, and community-based trauma programs.

Neurosurgeons Rethink "Call" Strategies

Many community-based neurosurgeons have depended on an often informal affiliation between their very busy practices and nearby neurosurgical training programs as an effective means of providing call coverage during off hours, weekends and holidays. Due to the restrictions on resident work hours, such arrangements are no longer feasible except in unusual situations, prompting community-based neurosurgeons to rethink their call coverage obligations and strategies.

Hospitals Scramble for Alternatives

Hospital physician coverage has become an issue, particularly in many of the smaller community hospitals. Typically these hospitals employ a physician in-house during off hours, weekends and holidays to respond to inpatient emergencies such as postoperative chest pain, shortness of breath and medication reactions. Alternatively, emergency room physicians cover these types of emergencies, leaving the emergency room temporarily staffed by other medical personnel such as moonlighting residents. Such arrangements, for the most part, have been completely terminated because residents are not allowed to moonlight during their hours away from the training program; this circumstance has compelled hospitals to rapidly identify new sources of care providers to provide coverage in these situations.

In an attempt to identify physicians willing to cover call on nights and weekends, some hospitals canvassed the medical community; as one might imagine, the positive-response rate was quite low, forcing hospitals to enter into coverage arrangements that are sometimes convoluted, typically quite expensive, and often temporary in nature. Some hospitals increased the onus on the admitting physician to respond to in-house emergencies. This course of action has been distinctly unpopular with the admitting physicians and has created an incentive for them to concentrate their practices in hospitals with less coverage obligation. Occasionally hospital relations and referral patterns have been disrupted over these issues.

Trauma Programs Feel the Strain

Many trauma programs throughout the United States are based in community hospitals that do not have supporting neurosurgical training programs. The burden of taking level I and even level II trauma call for the average private practice neurosurgeon has been



widely recognized. Many trauma programs previously sought to relieve the burden on neurosurgeons (who typically divide 365 days of call amongst three to five physicians) by supplying residents from general surgical and emergency room training programs to cover call. Such an arrangement is less feasible as resident work hours are trimmed.

With regard to trauma call coverage, withdrawal of resident support affects all surgical subspecialists. The sponsoring institution must support call services by investing additional funds to employ physician extenders, chiefly physician assistants and nurse practitioners, or increase the time commitment of already overburdened subspecialists.

Collateral Damage: The Bottom Line

The financial impact on most trauma programs further jeopardizes their long-term stability as hospital and healthcare systems tighten their budgets. Similarly, in the struggle of community-based hospitals to make alternative arrangements for coverage, unbudgeted dollars are being spent. This stress on hospital budgets has caused other programs and capital outlays to be postponed or canceled. In the often zero-sum fiscal environment, funds for updating neurosurgical equipment or acquiring state-of-the-art technology may be constrained.

There is ample evidence of the collateral damage in our communities resulting from resident work hour restrictions. Practicing neurosurgeons are unable to fill the void created by the work hour restrictions: Their small numbers do not allow for absorption of the additional time commitment, and while an increase in reimbursement could provide some incentive to take on additional call, the cost to community-based hospitals would be prohibitive. Furthermore, the downside risk of excessive work hours on patient care—to the extent that it exists—is simply shifted from the residents to the practicing neurosurgeons. The conclusion reached by many is that employing physician extenders, typically as hospital employees, is the most workable solution. Whether this is an acceptable solution that ultimately results in better, safer patient care remains to be seen. ■

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Incorporating Physician Extenders

Third-Party Billing Methods for PE Services in Neurosurgery Practices

KIM POLLOCK, RN, MBA, AND GREGORY J. PRZYBYLSKI, MD

The new restrictions on resident work hours are likely to generate a need for physician extenders to facilitate patient care. Moreover, the shrinking neurosurgical workforce has already stimulated utilization of physician assistants and nurse practitioners—collectively termed physician extenders or PEs—in neurosurgical practices to assist with patient care responsibilities in a variety of settings, including the office and the operating room. This article addresses the appropriate third-party billing methods for PE services that have been incorporated into neurosurgical practices.

Medicare's Rules Regarding PE Services

Medicare assigns a provider number to an eligible PE; local Medicare carriers can provide eligibility requirements and an application. From Medicare's perspective, PE services typically fall into two categories: "direct" and "incident-to" services. When a PE provides a service, the

claim is filed with the PE's assigned provider number, and Medicare reimburses the PE at 85 percent of the physician allowable. In contrast, according to the Medicare Carriers Manual Transmittal (MCM) 1764 of Aug. 28, 2002, the PE may perform a service that is incidental to the "direct, personal, professional service furnished by the physician" who initiates the course of treatment. In this circumstance, the claim is filed using the provider number assigned to the physician who is directly supervising the service. Medicare reimburses this service at 100 percent of the physician allowable.

Medicare's Rules for Surgical Assistance

Although Current Procedural Terminology (CPT) only has modifiers for surgeons assisting at surgery (-80, -81, -82), Medicare created the -AS modifier to identify the surgical assistance of the PE. These services are directly billed under the PE provider number and the modifier -AS is appended to all surgical procedure codes on the claim for which the PE provided surgical assistance. Medicare reimburses the PE at 85 percent of the physician allowable, which is 16 percent of the primary surgeon's allowable.

Medicare's Rules for Evaluation & Management Services

Evaluation & Management (E&M) codes in the office or in the hospital may be directly billed by a PE or provided as an "incident-to" service. Further clarification of the billing guidelines described in MCM Transmittal 1764 were published in MCM Transmittal 1776 of Oct. 25, 2002. The accompanying tables summarize the different patient care scenarios utilizing a PE with the appropriate Medicare billing guidelines.

Billing Rules for Other Payers

The billing rules for other payers are not as clear or consistent as Medicare's. Some non-Medicare payers will credential and assign a provider number to your PE so that services can be directly billed. Other payers require services to be billed "incident to" the supervising physician. Do not assume modifiers -80 (assistant surgeon) or -81 (minimum assistant surgeon) are appropriate for PE surgical assistant services; these modifiers imply physician participation. It is best to obtain individual payer policies in writing as some insurance companies do not allow reimbursement for non-physician provider services.

PEs increasingly are being utilized in neurosurgical practices. Knowing your payers' billing guidelines will ensure appropriate revenue and reduce the risk for billing errors. ■

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Office/Clinic Scenarios for a New Patient or Established Patient With a New Problem

SCENARIO	MEDICARE'S BILLING GUIDELINES
1. PE sees the patient to review the health history form (review of systems, past, family and social history) and take vital signs. The neurosurgeon takes the remaining history (chief complaint, history of present illness), reviews and signs the health history form, performs the exam, and discusses the diagnosis and treatment plan.	1. Report the service using the neurosurgeon's UPIN/PIN. The billing physician does not have to personally obtain the review of systems, past, family, social history, or vital signs.
2. PE does the history and exam then discusses the case with the physician. The neurosurgeon then sees the patient, does a brief history and exam but mainly discusses the diagnosis and treatment plan (otherwise known as medical decision making).	2. Medicare considers this a "split service" and requires both providers to bill an unlisted E&M code (99499). Submit two paper claims, one for each provider, and attach each provider's separate documentation. Do not use one E&M code with modifier -52 (reduced services). Do not report this as an "incident to" service using the neurosurgeon's provider number.
3. PE sees the patient and provides the entire service (history, exam, medical decision making); the neurosurgeon does not see the patient.	3. Directly bill the service using the PE provider number.

Office/Clinic Scenarios for an Established Patient With an Established Problem

SCENARIO	MEDICARE'S BILLING GUIDELINES
1. PE provides the service. The billing neurosurgeon is in the office but does not see the patient.	1. May report service as "incident to" using the neurosurgeon's provider number.
2. PE provides the service but a billing neurosurgeon is not in the office.	2. Bill the service using the PE provider number.

Hospital Inpatient/Hospital Outpatient/Emergency Department Services

SCENARIO	MEDICARE'S BILLING GUIDELINES
1. PE sees the patient and does the history and exam. The billing neurosurgeon also sees the patient on the same day and determines the diagnosis and treatment plan. Both providers document their service to the patient.	1. Medicare calls this a "shared service," which may be reported using the neurosurgeon's provider number.
2. PE sees the patient and provides the service. The neurosurgeon is tied up and cannot see the patient that day.	2. Directly bill the service using the PE provider number.

Resident Work Hour Restrictions

The New York Experience

ALAN S. BOULOS, MD, AND A. JOHN POPP, MD

While medical training programs nationwide adjust to comply with the July 1 effective date of the restrictions on resident work hours mandated by the Accreditation Council for Graduate Medical Education (ACGME), and the U.S. Congress considers a bill that would make similar restrictions the law across the United States, the attention of many is drawn to New York, where restrictions on resident work hours have been in place for more than 10 years.

In 1989, Section 405 of the New York State Health Code became the guiding regulation governing resident work hours in New York. This unusual step by a state government resulted from the 1984 death of a patient at a teaching hospital in New York City. Substantial publicity of the case resulted in the State Health Commissioner's appointment of an advisory committee under the leadership of Bertrand Bell, MD, to review the management of the case. The Bell Commission noted that resident fatigue and lack of attending supervision were possible factors that lead to the patient's demise. Hence, the commission recommended stricter supervision of residents, as well as restrictions on resident work hours, and the New York legislature passed what has become known as the 405 Regulations.

In 2000, fueled by the death of a cardiology fellow in a vehicular accident after being on night call, the state legislature passed the Health Care Reform Act. Included in the newer law were funds for hospital audits and stiff penalties for hospitals not in compliance with the 405 Regulations. Island Peer Review Organization, or IPRO, subsequently won the contract for audit services.

The current New York regulations require that residents work no more than 80 hours per week averaged over a four-week period and no more than 24 hours per shift, with 24 consecutive hours off per week. There are exceptions for surgical residents such that they can be exempted from the 80-hour limit if the hospital schedules them for call no more than every third night, can document that residents are generally resting when on call (difficult criteria to fulfill for most institutions), has procedures in place to relieve a fatigued on-call resident when necessary, and ensures 16 hours off following each day of call.

As a recent neurosurgical resident and current attending physician, and as chair of a surgical department, we hope to shed some light on how others might comply with the ACGME's restrictions. Our own experiences with the implementation of New York's 405 Regulations at Albany Medical Center, an academic health center that includes Albany Medical College and Albany Medical Center Hospital, provide a measure of insight into the transitional period in which many healthcare personnel across the nation now find themselves.

A Resident/Attending's Perspective: Alan S. Boulos, MD

From the perspective of first a resident, and now as an attending physician, I have had the opportunity to view the process of com-



pliance with New York's 405 Regulations. While the 405 Regulations have been in existence since July 1, 1989, it was during my senior years in residency that the regulations first were strictly enforced. The two main difficulties that were immediately encountered were that the clinical responsibility for patients had to shift in order to allow residents time off on the day after on-call service, and operative cases in some instances had no resident coverage. Both of these changes impacted the education of the residents by reducing their exposure to clinical experiences.

Now as an attending, I have a first-hand understanding of the importance of attaining a greater breadth of neurosurgical experience during residency. Furthermore, the intensive first year of neurosurgical training with emphasis on nonoperative patient care responsibilities is intended to result in efficiency and facility to make critical clinical decisions, even when one is fatigued; this facility may develop unevenly by dilution of the residency experience and limitations on work hours.

New York's 405 Regulations have resulted in a number of substantial changes in the day-to-day functioning of neurosurgical residency programs. Several changes in the residency program at Albany Medical Center have had mixed results. The most profound change has been the use of "at home" call. By allowing the resident to take call from home, the work hour clock is reset so that the resident may work the following day. This has improved the quality of life for the resident, but it has also made call more challenging by changing the question of, *Do I need to get out of bed to see this patient, to Do I need to drive to the hospital to see this patient.* The

time commitment changes with each of these scenarios: only 10 minutes may be required for the former, while the latter requires the addition of travel time to and from the hospital, perhaps 20 minutes to one hour. In practice, when taking call from home and the necessity of checking on a patient is not clearly indicated, the addition of travel time can function as a disincentive to see a patient.

The scope and technical components of neurosurgery are evolving rapidly at a time when the educational paradigm has been changed abruptly by limitations on resident work hours. The residents are not immersed in the field to the same degree, and therefore they do not gain the same clinical experience. The change has resulted in an increasing number of residents continuing their education through fellowships.

The work hour limitations do not apply to fellows or attending staff. The ability to work in strenuous circumstances, including fatigue, is part of an attending's everyday experience; therefore, the 405 Regulations do harm by preventing residents from learning and taking care of patients under those conditions.

Overall, the changes in resident education that are the product of the work hour restrictions may result in an increasing number of graduating residents being ill prepared for what is to come.

A Department Chair's Perspective:

A. John Popp, MD

At Albany Medical Center, the responsibility falls on the department chair to assure the institution's Graduate Medical Education Committee that the seven surgical resident training programs are in compliance with 405 Regulations as they apply to supervision of residents and restrictions on work hours. When these regulations initially were promulgated, each department was asked to describe how it would bring programs into compliance and ensure that no aspect of the 405 Regulations would be violated.

The Department of Surgery's plan to cover the supervisory aspect of the 405 Regulations was to identify one general surgeon, certified by the American Board of Surgery, who would serve "in-house" on nights and weekends. Having such an individual readily available for all surgical services, as well as to adjudicate and triage all cases that required supervision, would ensure appropriate patient care until the patient's actual attending physician was contacted.

Similarly, a portion of the department's plan to comply with the restrictions on resident work hours centered on identifying alternative providers of care who could fill the personnel void created by strict adherence to the 405 Regulations. Several physician assistants and nurse practitioners, collectively termed physician extenders (PEs), were identified.

Surprisingly, unlike most government mandates concerning healthcare services, the regulations provided for at least partial financial support of the necessary steps for compliance. The Department of Surgery annually has received approximately one-half of the sum that it determined was necessary for compliance.

The department currently employs several PEs and a general surgeon who receives a stipend for in-house availability each night and every weekend for resident supervisory responsibilities.

Adjusting schedules to comply with the resident work hour component of the 405 regulations has been more challenging. Some divisions of surgery with a sufficient number of residents have instituted a night-float rotation such that residents on the rotation begin call in-house at 6 p.m. and leave in the morning after sign-out.

Some surgical specialties allow residents to take call from home. In this setting, the clock is not running continuously as it is in the case of in-house call. That is, if the resident gets a reasonable amount of sleep while taking call from home, then the period of at-home call does not count toward either toward the 80-hour workweek or toward the 24-hours of continuous call limitation, and compliance with the 405 Regulations can be achieved more easily.

Of all the surgical specialties at Albany Medical Center, the neurosurgical residency program has experienced a particularly challenging time meeting the criteria established by the 405 Regulations. The AMC's neurosurgical residency program trains five residents. Each spends one year at the adjacent Veteran's Administration hospital, one year in the research laboratory, three months on the required neurology rotation, and three months on neuroradiology and neuropathology. Each resident also receives four weeks of vacation and/or meeting attendance time, which from the perspective of the neurosurgical training program adds up to five months with one less neurosurgical resident available for call.

To bring the neurosurgical training program into compliance, a number of changes were introduced: 1) The three-month neurology rotation has been moved into the first year of training; 2) all residents, including the lab resident, take night call; 3) residents on the neuroradiology and neuropathology rotation or assigned to the laboratory, on an ad hoc basis may be called upon to assume daytime clinical responsibilities; and 4) a growing number of surgical cases do not have resident involvement.

None of these changes to our training program has enhanced residency training, and some may have diminished the breadth of resident experience. Some rhetorical questions to ponder:

- Are one-resident-per-year programs anachronisms since the latitude to meet the educational priorities is missing?
- Should residency training in neurosurgery be lengthened to ensure that residents have the appropriate amount and breadth of clinical experience?
- Should residency education in neurosurgery be entirely revamped? After all, the specialty of neurosurgery has changed dramatically in the past 30 years, and yet we are educating residents in the same paradigm that was in place decades ago. ■

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Dollars and Sense

Tallying the Costs of New York's 405 Regulations

DEBORAH L. BENZIL, MD

No one could have predicted that Libby Zion's admission to New York Hospital shortly before midnight on March 4, 1984, with a high fever and myriad other symptoms ultimately would result in radical changes to medical education and training nationwide. In 1989 New York became the first state to formally legislate resident work hour restrictions (commonly known as the 405 Regulations). Strong financial and professional penalties were instituted in 2000 to enforce compliance: \$6,000 per violation on initial review, \$25,000 per violation on next follow-up and \$50,000 per violation on subsequent follow-up; also assessment of professional misconduct for any physician found falsifying, or verifying falsified reporting of resident work hours.

To date, the costs of New York's 405 Regulations have not been reported. The decision by the Accreditation Council for Graduate Medical Education (ACGME) to implement similar limits on July 1, and the related federal legislation introduced in the 108th Congress make apparent the need for an accounting of the 405 Regulations' impact.

The financial and educational impact of the 405 Regulations has been substantial for New York hospitals, academic departments, residents and all training programs. The specific costs include hiring of additional support personnel (physician extenders, fellows), expanded ancillary services, compliance administrators, and fines levied against hospitals or medical schools. The responsibility of meeting these costs may fall primarily to the hospitals because they have been designated as the legally responsible party; however, in the case where a hospital constricts its financial support, there remains significant potential for some or all of the costs to be transferred to individual departments or physician practices.

The Department of Neurosurgery at New York Medical College/Westchester Medical Center (NYMC/WMC) adopted policies and procedures that allow full compliance with 405 Regulations. To determine the direct and indirect costs of compliance, a review conducted for the period of 1998 to 2002 considered resident and staff schedules, cost of additional staff, and hours worked by both residents and staff at its primary hospital, WMC.

WMC, a level 1 trauma center and an American College of Surgeons-designated cancer center, is a 1,000-bed facility with 650 acute care beds. Three of NYMC/WMC's five neurosurgery residents (and one rotating intern) staff WMC. During the 1998-2002 period, 750-1,000 major neurosurgical procedures were performed annually.

Our studies of WMC revealed the following impact of restricted resident work hours on the neurosurgical residency program:

- Direct instruction time to residents was reduced by 25 percent.
- Staff schedules were adjusted.



- Conference times were changed (post-call residents cannot stay for 5 p.m. conferences), and total conference time was reduced. (NYMC/WMC still requires conferences, but there are less of them.)
- There was a loss of 120 resident work hours per week.
- Total resident hours in the hospital decreased by 20 percent.
- Three additional physician extenders were hired to fill in for the reduction of residents' hours at a cost of \$375,000 to the hospital payroll.

The hospital-wide impact was proportionately greater. For example, the hospital budget for physician extenders increased by \$3 million compared with the increase of \$375,000 that the Department of Neurosurgery allocated for physician extenders to cover the hours previously worked by neurosurgical residents. In addition, more transport nurses were hired by the hospital along with other ancillary service providers at a cost of approximately \$800,000 per year, and a compliance office was established with half-time employee at a cost of \$44,500 per year.

Extrapolating these costs to nationwide application is, of course, impossible. Some large training programs may be able to make internal adjustments that obviate the need for hiring of additional staff. Programs may elect to lengthen training by one year and absorb the associated costs. Enforcement of ACGME or any federal rules that might be passed may differ significantly from the current enforcement of New York's 405 Regulations.

Regardless, work hour restrictions come with a steep price tag, if only in educational time for residents. Careful analysis of the impact of these regulations on resident performance and satisfaction as well as patient outcome will be essential over the next few years. ■

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For the Record

PATH Audits Impel Accurate Documentation for Medicare Billing

At the same time that practices concerning supervision of residents and their work hours have been under review, the Office of the Inspector General (OIG) has been increasing its scrutiny of how well physicians who supervise residents document their services when Medicare is billed. Ten years ago, the OIG initiated audits of physicians at teaching hospitals, called PATH audits. The purpose was to determine if the presence of the attending physician was documented in the patient records, and to verify that the appropriate level of service was provided.

The Stakes Are High

The first audit, which took place at the University of Pennsylvania in Philadelphia, resulted in the 1996 OIG determination that the university had received \$5.9 million in overpayment from Medicare; the university voluntarily repaid "double damages" in the amount of \$12 million. Based upon violations of the False Claims Act, the violator is potentially liable for triple damages. When Jefferson Medical College in Philadelphia subsequently found itself under OIG audit, the college conducted an independent review voluntarily at its own expense in the hope of limiting punitive damages, and ultimately settled for a similar amount. In four of the first six academic institutions investigated, significant errors were identified, resulting in settlements of \$67 million.

The OIG continued with PATH audits, finding evidence of both compliance and overpayment based on the documentation provided. By 2000, PATH audits had recovered more than \$1 billion, and annual savings to CMS were estimated at nearly \$16 billion. However, the rising frequency of criminal investigations has been the most alarming trend observed, with 414 filed in 2000.

With increasing education at teaching

facilities regarding how to bill Medicare appropriately for physicians' supervisory services, it seemed that documentation was improving, until recently. A compliance officer at the University of Washington alerted the OIG to repeated failures to correct inappropriate billing patterns and inadequate documentation for services billed to Medicare. A grand jury was convened and indictments were levied upon two surgeons and a radiologist.

How to Comply

Under the current Medicare system, the Centers for Medicare and Medicaid Services (CMS) makes payments to teaching hospitals for resident physician services provided to Medicare patients through Medicare Part A. This payment includes graduate medical education costs as well as indirect medical education costs, estimated to be \$8 billion in 1998. CMS also separately pays for the services of attending physicians under Medicare Part B if the attending physician provided a properly documented service. (The CMS clarified these regulations in July 1996.)

In order for the attending physician to separately bill Medicare for a service provided at the teaching hospital, he or she must be physically present and directly participate in the key portion of the service or procedure for which reimbursement is sought. Most university hospitals have instituted compliance programs and have developed institutional policies which sometimes go further in the documentation required of their attending staff. The CMS' compliance regulations, published in the Federal Register on Feb. 23, 1998, included the requirements that:

- only services provided could be billed;
- the attending physician was responsible for proper documentation; and

- the documentation must exist in the patient record and be signed by the attending physician.

For evaluation and management encounters, the attending physician must document provision and/or supervision of all three key components (history, examination, and medical decision making). For example, the attending physician must document that he or she personally obtained or reviewed the history with the patient, personally examined the patient, and personally participated in the medical decision making with the resident physician. In contrast, the documentation in surgical procedures must include a statement by the attending surgeon attesting to his or her physical presence during the key portion(s) of the procedure in order to separately bill for the service rendered. In circumstances where a qualified resident physician is unavailable to assist an attending surgeon, another attending surgeon may assist using the -82 modifier. However, the operative note must document the absence of a qualified resident to act as an assistant at surgery.

Although the regulations for documenting services separately billed to Medicare by attending physicians seem fairly straightforward, they demonstrate the importance of clear documentation of the service provided if one seeks Medicare reimbursement. With the reduced training hours for resident physicians, it is anticipated that the attending physicians will play an even greater role in the direct care of patients. Consequently, it is imperative that they clearly understand the regulations and properly document their presence as well as the type of service provided. ■

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When an Insurer Won't Pay

Help Patients Appeal an Insurance Denial and Get the Treatment They Need

Doctors can be passionate patient advocates. But, typically, busy physicians have neither the time nor the economic incentive to appeal health plan coverage decisions.

"Doctors aren't reimbursed one darn cent for the time they spend going to bat for patients," said Scottsdale, Ariz, gastroenterologist Joel Brill, who has worked as a reviewer for both health plans and an individual practice association. "As a result, the number of doctors who get deeply involved in the process is exceedingly small."

Still, there are things physicians can—and, in some cases, should—do to help patients. We talked to practicing doctors, as well as current and former health plan medical directors, to find out just what those things are and how much effort they will take. An instruction sheet that you can give patients so they can more easily help themselves is available at www.memag.com/hostedfiles/clipcopy0509.pdf.

Simple Steps to Make Things Run Smoother

From their own experience, doctors know that most health plan denials do not require an appeal. Over the years, doctors have developed a range of "informal" techniques for dealing with utilization review rejections.

Steven D. Kamajian, a family practitioner in Montrose, Calif., instructs his patients who work for self-insured companies to contact their benefits managers. "A call from someone paying the premiums for 500 employees has far more impact than anything I can say," said Kamajian.

Richard J. Sagall, a Philadelphia family practitioner, takes matters into his own hands. When dealing with a reviewer who refuses to budge, he first asks for a name and phone number. "I then tell the review-



er that I'm including this information in the patient's chart, along with details of our discussion and a note outlining my continuing belief that the referral or treatment is medically necessary," Sagall said. "The prospect of having the reviewer's name and contact information in the chart changes a lot of their minds."

But what if your authorization request is still denied—despite your best efforts?

At this point, laws in all 50 states give you and your patient the right to appeal the health plan's decision to an in-house panel. (Standards for internal review vary significantly among the states, although most make allowances for expedited appeals in emergencies.) Before initiating an appeal, doctors and their patients can save time while increasing their odds of success by following two simple initial steps:

1. Look closely at the benefit. Just because you are convinced a specific treatment or regimen will help your patient's medical problem doesn't mean it is a covered benefit.

"To take a far-fetched example, consider the woman with arthritis who's told by her

doctors that she should swim in a heated pool, and she asks her health plan to build her one," said Abbie Leibowitz, former chief medical officer of Aetna US Healthcare and one of the founding partners of Health Advocate, a patient advocacy company in Pennsylvania. "Building a heated pool is certainly not a covered benefit. But there may be some form of reimbursement or discount for an exercise program."

In most physician practices, the first line of defense in such cases is the practice's benefits or insurance coordinator. If she isn't convinced a specific benefit actually exists, it probably doesn't.

2. Find support for the procedure. Everyone knows that plans generally do not cover experimental treatments, but doctors don't always realize that plans might not cover "nonstandard application of an established procedure," said Leibowitz. So, for doctors and patients contemplating an appeal, it is crucial to find proper support for the treatment in question. "Most plans will listen if there's support for a procedure in the peer-reviewed medical literature—even if it's a cutting edge use of an existing technology or an off-label use of a recognized drug," Leibowitz said.

A case brought to his own patient advocacy company illustrates the point. Doctors wanted to treat a patient suffering from myasthenia gravis with a drug that typically has been used to prevent rejections during organ transplant surgeries. But doctors had also read about its efficacy in treating MG and possibly other autoimmune diseases.

"The plan said that the drug wasn't covered because the proposed treatment was an off-label use of the medication, although that shouldn't have been an automatic disqualifier," said Leibowitz. "We talked to the expert on the subject at Johns Hopkins who'd written an article in

Neurology. He said the drug has become the standard of care for this kind of patient. Based on his opinion and similar evidence, we were able to make the case that got the treatment approved.”

Don't Write the Wrong Letter

If the referral, treatment, or test you are recommending is both a covered benefit and supported by expert opinion, you have to convey that information to the health plan.

Unfortunately, doctors often end up writing the wrong letter. “The doctor may write that it’s medically necessary to treat this patient,” said Leibowitz. “But often the plan isn’t questioning medical necessity per se. It’s questioning the necessity of treating the patient in this fashion. Doctors must be sure to address the question that the plan is basing its decision on.”

Pediatrician Alberto Kriger of Pembroke Pines, Fla., learned this lesson the hard way. “I’d write a letter, and it would be rejected,” said Kriger. “Then I’d write another letter and something else was missing, and it went on like this.”

Now Kriger does his homework beforehand. “If parents who’ve been denied a service tell me they want to appeal, I tell them to contact someone accountable in the health plan and find out exactly what needs to go into the letter,” he said. “Often, I’ll tell the parents to write a first draft, which I then revise, adding the appropriate medical terminology and whatever additional documentation is necessary.”

Sometimes a phone call prior to any written communications can work wonders. But it is crucial for busy doctors not to “get sucked into the bureaucracy of the plan,” said Leibowitz. “The best thing for a doctor who wants to get a clinical issue addressed is to speak to one of the plan’s medical directors. Virtually every medical director in every plan will speak with a physician if he’s persistent enough.”

Of course, even the medical director won’t necessarily resolve things in your favor.

Dermatologist Stephanie A. Mackey of Lancaster, Pa., found that out when she

appealed her plan’s referral policy. “Primary care doctors would refer some high-risk patients to me, and those referrals would routinely be denied by a local HMO,” Mackey said. “The plan’s position was that the primary care physicians could check their own patients’ skin. So I met with the medical director and showed him a list of patients I’d seen whose problems had been misdiagnosed or treated improperly. He stuck to his guns anyway.”

In the end, Mackey withdrew from participation in the plan, in part because of liability concerns. “I’ll accept liability when I’m seeing a patient all along, but if I see a patient once or twice and then future referrals are denied, then I have a problem.”

But despite the inevitable setbacks, persistence more often than not pays off. Said former medical director Leibowitz: “You have to persevere and not take a lack of a response as an answer.”

Help Patients Navigate External Appeals

In 43 states and the District of Columbia, denials by health plans can also be appealed to an external or independent review panel.¹ All but one of these states require patients to have exhausted their health plan’s internal appeals process before taking their case outside the plan, according to the Health Policy Tracking Service of the National Conference of State Legislatures. The one exception is Missouri, although even here patients as a practical matter are likely to follow the typical pattern.

Patients who appeal plan decisions find relief about half the time, according to studies by both the managed care industry and independent groups. Despite this, a study released last March by The Henry J. Kaiser Family Foundation reported that the external review option is used “infrequently” (it is estimated that only 4,000 appeals are filed annually).

Among the factors cited for the low turnout are the policy of requiring patients to exhaust the internal review process before moving on, the difficulty many

patients have navigating the multilevel review process, state policies that permit belated notices of external review rights, and overly strict eligibility requirements.

To offset these problems, doctors should advise eligible patients of the resources available to them. These include:

- *A Consumer Guide to Handling Disputes with Your Employer or Private Health Plan*, (2003 Update). A joint project of The Henry J. Kaiser Family Foundation and Consumers Union. www.kff.org/content/2003/20030123a; www.consumersunion.org/health/hmo-review; (800) 656-4533.
- Patient Advocate Foundation, Newport News, Va. www.patientadvocate.org; help@patientadvocate.org; (800) 532-5274.
- Disease-related groups and associations, such as the American Cancer Society and the Epilepsy Foundation, can lend their expertise during an external appeal.
- Employer patient advocacy programs. Examples are Health Advocate (www.healthadvocate.net); Patient Care, a service of New Orleans-based Labyrinth HealthCare Group; and CareCounsel, in San Rafael, Calif.

Resources like these can help your patients—without taking you away from your practice. ■

¹As of December 2002, only Idaho, Mississippi, Nebraska, Nevada, North Dakota, South Dakota, and Wyoming do not require external review.

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Choosing Practice Management Software

Neurosurgeon's HIPAA Compliance Quest Leads to an Info Tech Overhaul

In the summer of 2002 our three-neurosurgeon practice was faced with the task of upgrading our practice management software to meet the new requirements of the Health Insurance Portability and Accountability Act. I had recently joined the practice after completing my residency, and in my spare time I spent a great deal of time researching electronic medical records and practice management software packages. I was surprised at how difficult it was to find detailed and unbiased information. This article summarizes my experience and hopefully will provide you with some useful information if you are facing a similar situation.

The best resource that I found is the American Association of Family Physician's Technology Guide (www.aafp.org/techguide.xml). The AAFP and Microsoft worked together to identify practice management software that could accomplish a set of tasks that are fundamental to the business activities of a solo or small-group family practice. The software needed to be well designed and technically robust, as well as developed and supported by a company that could continue to support the product in the future.

AAFP's Review

The AAFP's review identified 11 vendors with products that use a Microsoft operating system and database. Of these, nine vendors agreed to participate:

- Compusense, Inc. (now A⁴ Health Systems) (www.compusenseinc.com)
- e-MDs (www.e-mds.com)
- Greenway Medical Technologies, Inc. (www.greenwaymedical.com)
- InfoSys, Inc. (www.infosysusa.com)
- MedStar Systems, LLC (www.medstarsystems.com)
- Millbrook Corporation (www.millbrook.com)

- NextGen Healthcare Information Systems, Inc. (www.nextgen.com)
- PerfectPractice, MD (www.perfectpractice.md)
- Visionary Medical Systems, Inc. (www.visionarymed.com)

Each company's software package underwent an extensive evaluation of its functional capabilities, technical performance, financial stability of the parent company, and finally, the satisfaction of the customers who actually use the product. The functional capabilities were assessed by identifying the presence or absence of 57 criteria deemed to be essential to the day-to-day management of a practice. Very little variation was found among the products.

The technical aspects of each software package were assessed by a team from Microsoft that analyzed the design, architecture, scalability and reliability of the software. The team identified 58 criteria and ranked the products based on these criteria. There was significant variation in the scores, with Greenway's PrimePractice scoring the highest and MedStar System's MedStar software scoring the lowest.

The financial stability of each company was evaluated by an independent auditor. NextGen ranked the highest while e-MDs ranked the lowest. An assessment of customer satisfaction was attempted, but there was such a low response rate that it was difficult to draw any conclusions; thus, that data was not included in the final rankings.

An overall score was given, and based on this evaluation, four companies scored above 75 on a scale of 0 to 100 (with 100 ranking the highest): Compusense, Greenway, Millbrook, and NextGen.

Applying AAFP's Findings in Our Search

The daily volume of patients in a neurosurgeon's office is certainly less than that of

a family physician's office, and therefore we suspected that any product that would perform well in that setting would perform well in ours. We invited the top two vendors, as well as the vendor of our existing software, for an in-office demonstration. Each of the companies provided a return on investment (ROI) analysis that indicated how much money would be made (or saved) by using their product. In addition each of the companies offered to provide training as well as data migration services.

All of the software packages we tested performed well, and in the end we chose the one that seemed to be the best fit for us, Greenway's PrimeSuite. (PrimeSuite incorporates both PrimePractice, the practice management module, and PrimeChart, the electronic medical record module.)

As a side note, another factor played an important role in our decision to go ahead with the purchase. There is a little-publicized part of the Sept. 11 economic stimulus package, Tax Code 179, that accelerates the depreciation and thus the write-off of technology purchases (www.irs.gov/forms/pubs/page/0,,id=12910,00.html).

It took almost eight months from the time we identified that we needed to upgrade our computer system to the time that the new system was implemented. So far we have been very pleased with PrimeSuite. The technical support has been excellent and there really have not been any problems. We are about to go live with the electronic medical records module, and we are particularly interested in seeing if the ROI predictions materialize and improve our bottom line. ■

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Deep Brain Stimulation

Expanding Indications and Increasing Reimbursement

By PHILIP A. STARR, MD, PHD

Originally developed in the 1970s for the treatment of pain, chronic electrical stimulation of the brain, or deep brain stimulation (DBS), is being applied in a rapidly expanding menu of indications. While the improvement brought to patients by this technique may be profound, economic barriers—insurers refusing to cover it, or low reimbursement for those performing it—may prevent DBS from reaching many whom it could benefit.

DBS involves the placement of a permanent stimulating electrode into one of a variety of subcortical structures to modulate abnormal neuronal activity. It is essentially a brain pacemaker, though the exact mechanism of action at a cellular level is not well understood. In Parkinson's disease (PD), the discovery that basal ganglia output is excessive and irregularly patterned led directly to trials of DBS of the subthalamic nucleus or globus pallidus internus for PD.¹ Many consider this the most important advance in the treatment of PD since the introduction of levodopa in the 1960s.

FDA Approvals Bolster Case for Reimbursement

Widely available for years in Europe, DBS for treatment of movement disorders was approved by the U.S. Food and Drug Administration only recently. Thalamic DBS for Parkinsonian and essential tremors was approved by the FDA in 1997, but pallidal and subthalamic stimulation for treatment of advanced PD was not FDA approved until 2002. In April a third category of movement disorder—dystonia—was added to the list of on-label indications. With these approvals, more consistent coverage by insurers is anticipated.

Other economic barriers remain, however. The work relative value units (RVUs) assigned to DBS have poorly reflected the time, expertise, and equipment required to perform these procedures correctly. Advanced neurophysiological techniques such as single unit microelectrode recording (MER) can enhance the precision of implantation, but add time and intricacy to the procedure. At present, American neurosurgeons who perform DBS do so at an economic loss compared with the reimbursement they would receive spending the same time performing other neurosurgical procedures.

RUC Recommends RVU Increase: 19 to 31

At the April meeting of the American Medical Association's Relative Value Update Committee, known as the RUC, a recommendation was made to increase the RVU assignment for MER-guided DBS from 19 to 31. If this recommendation is accepted by the Centers for Medicare and Medicaid Services, it should blunt the economic disincentive that is currently in place for performing DBS.

An additional reimbursement barrier also must be addressed: the

minimal compensation for long-term postoperative management of DBS devices by movement disorders neurologists. While DBS promises to greatly improve the lives of many persons with moderately advanced PD, it also adds much time and complexity to their management. In our clinic at the University of California, San Francisco, there is a very large volume of referrals of patients who could benefit—yet it is difficult to find neurologists willing to manage the device programming in conjunction with the overall medical management of the patient. Such integrated, longitudinal management by a movement disorders expert, in addition to patient selection and surgical technique, is a critical determinant of outcome in DBS for PD.

Most of the expanding indications for DBS have been prompted by neurophysiological studies of brain disease that pinpoint areas of excessive or irregularly patterned activity. As discreet abnormalities in diseased brain circuitry are identified, the list of disorders treatable by DBS will expand. The finding from functional imaging that orbitofrontal-striatal circuitry is abnormally active in obsessive-compulsive disorder has led to promising trials of DBS to modulate cortical efferent fibers innervating the limbic striatum.⁴ The finding of increased metabolism in the lateral hypothalamus during cluster headache attacks has encouraged the application of DBS for this disorder as well.³ Studies of DBS in epilepsy and Tourette's syndrome are underway.^{2,5}

Advances in neuroscience are rapidly fueling imaginative new indications for DBS in otherwise highly debilitating brain disorders. For many conditions, DBS promises to help patients achieve a degree of normal functionality while sparing them the unwanted effects of systemic medicine on normal brain circuitry. To be able to apply this technique in the real world for our patients, however, economic barriers must continue to yield. ■

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FOR FURTHER INFORMATION

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CSNS Attends to Business

April Meeting Sparks Debate, Action

The Council of State Neurosurgical Societies (CSNS) held its semiannual plenary session on April 26 in conjunction with the Annual Meeting of the American Association of Neurological Surgeons (AANS) in San Diego. During the plenary session, a new administration was voted into office. Officers include Frederick Boop, MD, chair; David Jimenez, MD, immediate past chair; Fernando Diaz, MD, vice-chair; Edie Zusman, MD, corresponding secretary; Thomas Rigsby, MD, recording secretary; and Gary Bloomgarten, MD, treasurer.

Eight resolutions were debated during the plenary session, but discussion centered on three: Resolution I and IV (combined), involving the resource-based relative value system, commonly known as RBRVS; Resolution V, regarding the neurosurgical continuing medical education (CME) requirements of the American Association of Neurological Surgeons (AANS); and Resolution VIII, involving CSNS representation to the American Board of Neurological Surgery (ABNS).

Resolution I, a combination of resolutions I and IV, called for the AANS and CNS leadership to oppose an RBRVS system for compensation for workers' compensation patients. During debate, some mentioned difficulties in several states that had adopted a modified Medicare fee schedule for worker's compensation, but others gave testimony that the worker's compensation in their own state was working well and that a broad-based policy could lead to a change in reimbursement in states that currently are not experiencing difficulty. Given the complexities of the issue, the resolution was referred to committee for study, with a report requested at the next plenary session in October.

Resolution V concerned changes to the



Frederick Boop, MD (left), newly elected chair of the Council of State Neurosurgical Societies, congratulates his predecessor, David Jimenez, MD, on a successful term as CSNS chair.

AANS requirements for neurosurgical CME. The AANS had announced last winter that for AANS Active and Active Provisional members seeking to earn the 60 neurosurgical CME credits required during every three-year cycle, credits earned only at programs sponsored or jointly sponsored by the AANS could be accepted. The reasoning behind the policy was stated, chiefly that there must be a mechanism available to verify the quality of neurosurgical CME and that for AANS-sponsored and jointly sponsored programs, such a mechanism already is in place. However, concern was expressed that the new policy could exclude credits earned at non-neurosurgical meetings such as the North American Spine Society and the American Epilepsy Society. The need for the resolution was questioned given that in March the AANS Executive Committee already had delayed any policy change at least until the start of the next CME cycle in January 2005. However, an amended Resolution V was passed.

Resolution VIII called for CSNS representation at the ABNS, which currently is

developing its Maintenance of Certification (MOC™) process. It was thought that CSNS representation at the ABNS would ensure that the MOC process would be scrutinized in terms of time away from practice and expense to the practicing neurosurgeon. An amended resolution passed, and since that time the ABNS has been contacted and has expressed interest in inviting CSNS members to serve as guest examiners for the board on a regular basis.

More Meeting Highlights

Neurosurgery Executive's Resource Value and Educational Society, the NERVES group of practice managers, was formally recognized during the plenary session, and its leadership team, headed by Mark Mason, was introduced. NERVES conducted several sessions for practice managers in conjunction with the AANS Annual Meeting. The CSNS encourages neurosurgeons to foster this group by supporting the participation of their practice managers.

The Washington Committee of the AANS and the Congress of Neurological Surgeons (CNS) provided an overview of

FINAL RESOLUTIONS

RESOLUTION I

Title: Comparable Worth, RBRVS, Workers' Compensation, OMFS
Action: **Adopted Reference Committee Recommendation**

Combine Resolution I and Resolution IV into one resolution concerning reimbursement for workers' compensation reimbursement methodologies, then refer this to committee for formulation of a review paper to be presented at our next plenary session.

RESOLUTION II

Title: Justice, Cost Escalation, Re-Privatizing Healthcare
Action: **Not Adopted**

RESOLUTION III

Title: Justice, Freedom, Federal Health Reserve Board
Action: **Not Adopted**

RESOLUTION IV

Title: Worker's Compensation, Negotiations, State Action Exemption
Action: **SEE RESOLUTION I (Resolutions I and 4 combined)**

RESOLUTION V

Title: Rescission of the AANS Requirement for AANS-Sponsored CME

Action: **Adopted Amended Resolution** BE IT RESOLVED, that the CSNS strongly recommends that the AANS reconsider the CME rule change that only AANS sponsored CME credits be acceptable for continuing membership in the AANS.

RESOLUTION VI

Title: Elimination of the Global Surgical Fee Schedule
Action: **Not Adopted**

RESOLUTION VII

Title: Patient Education of Neurosurgical Liability Crisis
Action: **Withdrawn**

RESOLUTION VIII

Title: CSNS Liaison to ABNS
Action: **Adopted Amended Resolution** BE IT RESOLVED, that the CSNS requests that the AANS and CNS accept nominations from the CSNS for their positions on the ABNS Board of Directors.

neurosurgery's progress toward resolution of the professional liability insurance crisis. Neurosurgeons to Preserve Health Care Access (NPHCA) was introduced; this is the 501(c)(4) tax-exempt entity formed by the AANS and the CNS to allow the maximum flexibility for fully funding neurosurgery's campaign for federal medical liability reform. The membership endorsed a proposal for neurosurgeons to contribute \$1,000 each year for three years to NPHCA, adding to substantial funds that organized neurosurgery already committed to NPHCA.

The week at the AANS Annual Meeting

closed with a platform session on Thursday for which David Jimenez, MD, and Stanley Fronczak, MD, put together a morning program featuring in-depth presentations on aspects of the professional liability insurance crisis. This session was well attended and feedback on the topic was outstanding.

Looking Ahead

The CSNS is in the process of organizing its third Neurosurgical Leadership Development Conference (NLDC) to be held in Washington, D.C., in July of 2004. Following the format of the first two successful and well-attended conferences, this

NLDC will feature a series of lectures addressing current issues important to neurosurgeons, coupled with advice on how they can effectively lobby their representatives. To conclude the conference, attendees will meet with their representatives on Capitol Hill to discuss with them organized neurosurgery's position on issues such as federal tort reform and patient access to healthcare. We hope that as the third leadership development conference approaches, you will consider taking the time to attend the conference and become politically involved. ■

Frederick Boop, MD, is chair of the Council of State Neurosurgical Societies.

For More Information

- **CSNS Web Site**
www.neurosurgery.org/csns
- **About Resource-Based Relative Value System (RBRVS)**
For an explanation of RBRVS, see the Coding Corner in the Fall 2001 issue of the *Bulletin*: "RBRVS—A Management Tool" by Gregory J. Przybylski, MD. www.neurosurgery.org/aans/bulletin/fall01/codingcorner.html
- **AANS and Neurosurgical CME**
To review the current AANS requirements for neurosurgical CME, go to www.neurosurgery.org/aans/meetings/cme. For current information about the AANS CME policy and the new opportunity to track CME credits online, turn to the Education column in this issue, page 34.
- **ABNS and Maintenance of Certification (MOC™)**
For background on the American Board of Neurological Surgery's Maintenance of Certification requirements, as well as its relationship to the AANS CME policy, see the cover story of the Winter 2002 issue of the *Bulletin*, www.neurosurgery.org/aans/bulletin/winter02.
- **Neurosurgeons to Preserve Health Care Access (NPHCA)**
See the 2003 Annual Meeting feature in this issue.

Coming this fall:
www.neuros2preserverecare.org.

NEWS.ORG

AANS/CNS Sections Committees Associations Societies

Web Sightings

Be on the lookout this fall for the launch of www.NeurosurgeryToday.org, a new user-friendly site designed to acquaint patients, their families, and the public with neurological disorders and how neurosurgeons can help. In addition, www.AANS.org is undergoing complete reconditioning, and the AANS plans to unveil a greatly improved site in the next few months.

AANS Neurosurgery Reference Cards Available Now The pocket-sized Neurosurgery Reference Cards developed by the American Association of Neurological Surgery (AANS) contain the most commonly used charts and information for neurosurgery including: the Glasgow Coma Scale; Peripheral Nerve Distribution; Karnofsky Scale and Dermatomal Sensory Distribution. The AANS recently distributed reference cards to nearly 10,000 second-year medical students nationwide. Neurosurgery Reference Cards are available for purchase (AANS members, \$30 per card; non-members, \$45 per card). For information, contact the AANS Member Services Department at (888) 566-2267, ext. 539, or visit the AANS Online Marketplace at www.AANS.org.

Oct. 1 Deadline for AANS Van Wagenen Traveling Fellowship Candidacy for the annual William P. Van Wagenen Traveling Fellowship is open to all senior neurosurgical residents in approved neurosurgery residency programs, either in the United States or abroad. Applicants must intend to pursue an academic career in neurosurgery. The fellowship provides a \$45,000 stipend for post-resident neurosurgical study in a country different than the applicant's country of residence for a period of six to 12 months. Further information, including the application for the 2004 fellowship, is available at (888) 566-AANS or at www.neurosurgery.org/aans/research/vanwagenen. Applications must be received by Oct. 1, 2003.

NREF Announces 2003 Awardees and Research Grants Totaling \$410,000 The Neurosurgery Research and Education Foundation (NREF) in 2003 awarded eight grants, five Research Fellowships and three Young Clinician Investigator awards totaling more than \$410,000—the most given since NREF's inception in 1981. Applications are available for the 2004 NREF grants. Detailed information is available at (888) 566-AANS, or at www.neurosurgery.org/aans/research.

The Research Fellowship provides awards of \$70,000 (two years) or \$40,000 (one year) for residents in neurosurgery who are preparing for academic careers as clinician investigators. The 2003 awardees include:

- Ramin Amirnovin, MD—Research Fellow (two years)
- Robert J. Kowalski, MD—DePuy AcroMed Research Fellow (two years)
- John S. Kuo, MD, PhD—American Brain Tumor Association Research Fellow (one year)
- Todd G. Mainprize, MD—Research Fellow (two years)
- Atom Sarkar, MD, PhD—Research Fellow (one year)

The Young Clinician Investigator Award provides \$40,000 to junior faculty members who are pursuing careers in research. The 2003 awardees include:

- Judy Huang, MD—Young Clinician Investigator
- Andrew T. Parsa, MD, PhD—Young Clinician Investigator
- Kevin A. Walter, MD—Young Clinician Investigator

AANS/CNS Section on Tumors Update (Contributed by Jack P. Rock, MD) As of April 2003 James Rutka, MD, completed his tenure as chairman of the AANS/CNS Section on Tumors. Members of the section offered their sincere appreciation to Dr. Rutka for his extensive and effective efforts as well as his exceptional collegiality. Raymond Sawaya, MD, became chairman through 2005, with Ronald Warnick, MD, serving as secretary-treasurer. Dr. Sawaya intends to highlight all facets of the Tumor Section, including a 20-year anniversary celebration of its establishment.

Thanks largely to the efforts of Joseph M. Piepmeier, MD, during the past two years, the *Journal of Neuro-Oncology* has become the official journal of the Tumor Section. Continued strong relationships and support from the National Brain Tumor Foundation, the Preuss Foundation, the Farber Foundation, the American Brain Tumor Association, Kluwer Academic, and the AANS have allowed the maintenance of the section's awards program. A formal document for the accreditation of fellowships in neuro-oncology has recently been submitted to the Society of Neurosurgeons. In addition, an exceptional number of scientific submissions leading to very well-attended sessions at the recent AANS meeting, a highly successful satellite symposium which immediately followed the AANS meeting, and a surge in section membership, have been highlights. Additional information is available at www.neurosurgery.org/tumor.

Can Five Dysfunctions Help Build a Team?

Understanding the Negatives Can Help Your Team Overcome Them

As members of a department, division or practice, neurosurgeons function as members of a team. Whenever we perform surgery, for example, we serve as captains of a team. Since the well-being of our patients and our practices depends in large part on the success of one team or another, we all could benefit from a lesson in team building. For such instruction, in this column we turn to Patrick Lencioni, a master teacher with a series of best-selling books.

“Like so many other aspects of life, teamwork comes down to mastering a set of behaviors that are at once theoretically uncomplicated, but extremely difficult to put into practice,” Lencioni explains in the book’s introduction. “Success comes only for those groups that overcome the all-too-human behavioral tendencies that corrupt teams and breed dysfunctional politics within them.”

“The well-being of our patients and our practices depends in large part on the success of one team or another...”

One might say that he approaches the subject of team building in a negative way by focusing on the five dysfunctions of a team. However, to illustrate his points Lencioni uses a fable, as he terms it, involving “DecisionTech” and its new CEO, “Kathryn,” who has a gift for team building. Overall, *The Five Dysfunctions of a Team* is a very positive book that reads like a two-hour novel. Following is a brief synopsis of the five dysfunctions that the author identifies.

The first dysfunction of a team is absence of trust. Trust, the foundation of team building, is the confidence among team members that their peers’ intentions

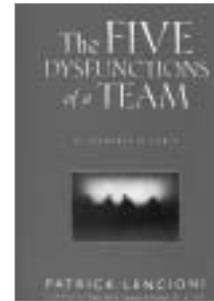
are good, and that there is no reason to be protective or careful around the group. Trust requires honesty between teammates. They must be able to feel vulnerable around one another, and admit weaknesses, ask for help, and accept questions about their areas of responsibility. Without trust there can be no team.

The second dysfunction of a team is fear of conflict. If a team’s meetings are boring, chances are that the teammates fear conflict. Effective, insightful criticism is essential to achieving team goals, and such criticism depends on trust. Criticism needs to be openly aired and should never be sacrificed in favor of artificial harmony. While effective teams listen to everyone, passive, sarcastic comments detract from trust and ultimately, from achievement of the team’s goals.

Lencioni identifies lack of commitment, a function of clarity and buy-in, as the third dysfunction of a team. He says that the two

greatest causes of the lack of commitment are the desire for consensus and the need for certainty. Many teams become paralyzed by their need for complete agreement, and thus are unable to move beyond debate. Ambiguity is the opposite of commitment. Teams must learn from mistakes and ought to be able to change direction without hesitation or guilt.

The fourth dysfunction is avoidance of accountability. Every member of a team first must have clear responsibilities to fulfill and when responsibilities are not met, peers should be able to discuss the shortfall, however difficult the conversation. Excessive bureaucracy that encumbers performance



The Five Dysfunctions of a Team, by Patrick Lencioni, Jossey-Bass, San Francisco, 2002, 229 pp.

management and corrective action is counterproductive and should be avoided. Poor performers must feel pressure to improve.

The final dysfunction is inattention to results. Every good organization specifies what it plans to achieve in a given period, and the results must be measurable.

The ultimate dysfunction of a team is the tendency of members to care about something other than the collective goals of the group. In the same way that great basketball players put winning a game ahead of enhancing their own statistics, team members must be able to subjugate their personal goals for the good of the team.

Teamwork ultimately comes down to practicing a few specific principles over a long period of time. Success depends on embracing common sense with uncommon levels of discipline and persistence.

Since our success as neurosurgeons depends so much on building effective teams, reading this book is worth the modest time investment. As with all enduring fables, it is by persistently putting these ideas into practice, a more challenging endeavor, that we will reap rewards. ■

Gary Vander Ark, MD, is director of the Neurosurgery Residency Program at the University of Colorado and past president of the Colorado Medical Society. He is the 2001 recipient of the AANS Humanitarian Award.

Ending the PLI Crisis

NPHCA Will Fund Federal Medical Liability Reform

Dear Dr. Bean:

I enjoyed reading your article "Ending the PLI Crisis" in the AANS *Bulletin* (Spring 2003). I find it very attractive to go ahead with an assessment of \$1,000 for three years for each neurosurgeon in the country. I believe that many of us are fed up with the current crisis and would like to contribute. What has thwarted me in the past is the fear that no one else is contributing and therefore the financial contributions of the few may go to waste. However, with the knowledge that the assessment is mandatory for all membership, then I have a feeling that we'll all be in favor of [it].

C.G. Salame, MD, MS, Norwich, Conn.

EDITORIAL NOTE: The article referenced, "Ending the PLI Crisis" (www.neurosurgery.org/aans/bulletin/spring03/pli-crisis.html), stated that the Washington Committee of the American Association of Neurological Surgeons (AANS) and the Congress of Neurological Surgeons (CNS) "recommended that each neurosurgeon pay an assessment of \$1,000 per year for three years" to fund neurosurgery's campaign to pass the HEALTH Act. Subsequently, the respective presidents of the AANS and the CNS sent a letter to neurosurgeons requesting "that every neurosurgeon contribute a minimum of \$1,000 per year for the next several years to fund this campaign." The entity created for funding the campaign, Neurosurgeons

Consider Contributing to the *Bulletin*

Readers are invited to send corrections, comments and suggestions to the *Bulletin* at bulletin@AANS.org or AANS, 5550 Meadowbrook Drive, Rolling Meadows, IL 60008. Letters are assumed to be for publication unless otherwise specified. Correspondence selected for publication may be edited for length, style and clarity.

to Preserve Health Care Access (NPHCA), is a 501(c)(4) tax-exempt entity that allows maximum flexibility for raising funds for an aggressive public education and lobbying campaign to achieve federal medical liability reform. While the contributions to NPHCA are not mandatory, it is hoped that neurosurgeons' enthusiastic support of the campaign will translate to a mandate for tort reform. See the Annual Meeting feature on page 38 for more on the launch of NPHCA.

For advertising information, contact
Holly Baker, hbaker@ascendmedica.com or
(913) 344-1392.

Creating the Changes He Wishes to See

Young Clinician Investigator Continues Research and Humanitarian Work

Nicholas Boulis, MD, is immersed in a neurosurgical career focusing on research, thanks in part to a \$40,000 grant from the Neurosurgery Research and Education Foundation (NREF) of the American Association of Neurological Surgeons (AANS). Dr. Boulis is the recipient of the 2002 Young Clinician Investigator Award for his proposal to define small peptides that would allow for enhanced uptake of genes and proteins into the nervous system. If successful, the study could pave the way to development of surgical therapies for amyotrophic lateral sclerosis, which is more commonly known as ALS or Lou Gehrig's disease.

Dr. Boulis proposed to use the "neurotropic properties of neurotoxins in conjunction with the technique of phage display to define small peptides capable of triggering the uptake and retrograde transport of these therapeutic proteins and vectors." The "phage study" took on increased importance this year as the need to understand how neurotoxins work became vital in response to the threat of bioterrorism and biological warfare. Dr. Boulis has applied for additional grants from both the Department of Defense and the National Institutes of Health in order to continue the study.

Humanitarian Work Began Early

Before embarking on the phage study, Dr. Boulis had developed a laboratory to pursue gene therapy for the spinal cord. At the same time, he organized Project Shunt, an effort to help Guatemalan children with hydrocephalus and spinal bifida. His experiences working in developing countries early in his career helped prepare him for this lifesaving project.

After graduating from Yale in 1988,



Nicholas Boulis, MD

Dr. Boulis worked in Nicaragua, Costa Rica, Haiti and the Dominican Republic, concentrating on human rights and medicine. On his return from the Dominican Republic in 1990, he worked at the Walter Reed Army Medical Center where he became interested in neurosurgery, but wished to connect his new interest with helping underserved people in developing countries. After graduating from Harvard Medical School and beginning residency at the University of Michigan, Dr. Boulis became involved with the Michigan Chapter of Healing the Children, a national relief organization, and was introduced to the epidemic of neural tube defects and hydrocephalus in Latin America.

In 1997 Dr. Boulis participated in a trip to Guatemala to evaluate the potential for a collaboration between Healing the Children and the Pediatric Foundation of Guatemala. When he arrived in Guatemala he began evaluating children with neural tube defects. "Many of the children who didn't have access to American help had either died or were deteriorating," Dr. Boulis said. "For many of the hydrocephalics who did manage to get shunts, it was too late. The poor supply of shunts led to patients languishing in hospitals for months with externalized infected systems."

Project Shunt Aids Guatemalans

The fact-finding mission demonstrated that the Guatemalans desperately needed shunts and many more neurosurgeons to perform the procedures. In 1998, Dr. Boulis

"We worked nonstop under incredibly difficult conditions."

organized an eight-person medical team, led by Karin Muraszko, MD, to return to Guatemala to help children with hydrocephalus and spina bifida. Upon the team's arrival 50 families showed their appreciation with a standing ovation. Initiating what became known as Project Shunt, the team performed 13 shunt operations on children with hydrocephalus and 11 spina bifida repairs.

"We worked nonstop under incredibly difficult conditions. It was extremely hot and the team was exhausted," Dr. Boulis said. "But it was an unbelievably valuable experience." The trip was successful not only for the patients and doctors, but it helped improve the way Americans are viewed by the people in Guatemala. "The parents of these children will always view Americans in a positive light," he said.

For his work on Project Shunt, the AANS Young Neurosurgeons Committee awarded Dr. Boulis a public service citation. Since that initial trip to Guatemala, he has put in place a system with standard operating procedures that allows the project to continue. Now a participant rather than a project leader, Dr. Boulis said he hopes that eventually more than 10 teams will be able to make the trip each year.

Whether he is concentrating his efforts on helping children in third world countries, working on his phage display study, or beginning a new project, Dr. Boulis continues to use his education and training to assist patients and further his profession. ■

Laurie M. Singer is marketing coordinator in the AANS Marketing Department.

Tracking CME Online

A Neurosurgeon Test Drives the CME Area of MyAANS.org

Online software that can alleviate the administrative burden of managing continuing medical education (CME) requirements and monitoring credits is one of the newest benefits of membership in the American Association of Neurological Surgeons (AANS).

The new software represents a significant improvement in tracking CME credits. For all members, the software serves as

an electronic filing cabinet that contains CME records and course certificates from 1990 to present. So rather than accumulating paper certificates, you can monitor your own CME online, access information about courses you have attended, and print certificates whenever you need them—when required for local practices or medical societies for example.

To aid in attaining additional CME

credits, the software also features interactive links to upcoming neurosurgical meetings and courses.

While the software is available to all members, it is particularly useful for Active and Active Provisional members, who need to achieve 60 hours of neurosurgical CME credit per three-year cycle to receive the Continuing Education Award in Neurosurgery and remain in good standing.

Track Your CME: Ready, Set, Go

www.AANS.org > Select the MyAANS.org button in the masthead.

www.MyAANS.org > Register with your AANS member identification number (contact AANS Member Services if you don't have it handy), log in, and select the CME tab at upper right.

Which Credits Can the Site Track? All credits earned for the neurosurgery category 1 American Medical Association's Physician Recognition Award (AMA PRA) can be tracked for you.

What Does "Automatic" Tracking Mean? Some credits you have earned are included in your transcript without any effort from you. AANS is able to automatically include some credits in your transcript because it has ready access to the attendance records for the programs. These include all AANS-sponsored meetings and courses, as well as AANS/CNS section meetings, meetings that are jointly sponsored by AANS, and credits earned from participating in the AANS Neurosurgical Topics Home Study Exam program.

For these programs, you have only to monitor your CME progress and notify AANS if you notice that something is amiss in your transcript. Individual certificates of attendance for these programs are available from the View Transcript screen by clicking on the course number and printing them at will.

What Does "Manual" Tracking Mean? Including some credits in the online tracking database requires a bit of help from you. While your



transcript can include any neurosurgery category 1 AMA/PRA credits you have earned, the AANS does not have access to these attendance records. To have credits for programs other than AANS-sponsored and jointly sponsored programs, AANS/CNS section meetings, and the AANS Neurosurgical Topics Home Study Exam program included in your transcript, simply send your certificate(s) of attendance by mail to AANS Member Services Department at 5550 Meadowbrook Drive, Rolling Meadows, IL 60008, by fax to (847) 378-0638, or by e-mail to cmeinfo@AANS.org. (Although these credits will appear in your transcript, the certificates of attendance for these programs will not be available online.)

View the AANS CME Policy. Links to the AANS CME policy are prominent in the CME tracking software. The AANS CME policy and the CME tracking software are expected to be updated to assist members in meeting the American Board of Neurological Surgery's Maintenance of Certification™ requirements as they are announced.

Questions about or suggestions for the CME tracking service? Call the AANS at (888) 566-AANS or e-mail cmeinfo@AANS.org.

Kim A. Loebe contributed to this article.

The Test Drive

The CME tracking software can be accessed by selecting the MyAANS.org button in the masthead of the AANS Web site, www.aans.org, or by going directly to www.MyAANS.org. Because MyAANS.org is a secure, members-only location, log-in is required.

Logging into the MyAANS.org Web site is quite easy. If you haven't used MyAANS.org before, you will need to register with your AANS member identification number (just call AANS Member Services if you need assistance). Once you have selected a password, you can proceed. There are a series of tabs that allow you to navigate through this site. At the top on the far right is the CME tab. Once you click on this tab, you can access the features of online CME tracking.

You will then see a screen that describes which CME credits are tracked on the site. This screen also includes: a button for listing a personalized transcript by date ranges; a link to upcoming CME offerings; a link to the AANS CME policy; and a link to instructions for how to submit CME.

The tracking software is personalized, so the appearance of the initial CME screen will vary slightly depending on your membership type and the particular requirements that you must meet. For example, Associate members such as neuroscience nurses and physician assistants will view

AANS Delays New Definition of Neurosurgical CME Until Jan. 1, 2005

MANDA J. SEEVER

In response to questions raised by a number of members, in March the Executive Committee of the American Association of Neurological Surgeons (AANS) delayed implementation of AANS' new definition of what programs are acceptable for attaining neurosurgical continuing medical education (CME) credit until Jan. 1, 2005, when the new three-year CME cycle begins.

"The AANS is committed to helping members maintain both their AANS membership and their ABNS certification while at the same time minimizing cumbersome record-keeping," stated A. John Popp, MD, AANS president. "Synchronizing the evolving requirements of these two organizations, while a challenge for all of us, is a necessary undertaking. To ensure that members are not left behind as the process of lifelong learning evolves, the AANS will remain in the vanguard of addressing the changes that are called for, as well as open to members' suggestions for their successful implementation."

The new definition of neurosurgical CME credit, reported in the cover story of the Winter 2002 *Bulletin* ("Toward Lifelong Learning"), specified "AANS sponsored or jointly sponsored meetings; AANS education and practice management courses; Congress of Neurological Surgeons annual meetings; and AANS/CNS section meetings" as available venues for earning neurosurgical CME credit.

Previously, neurosurgical programs designated for category 1 credit toward the American Medical Association Physician's Recognition Award also were accepted by the AANS as satisfying the neurosurgical CME requirement for Active and Active Provisional membership. With the Executive Committee's March decision, this broader definition of what constitutes neurosurgical CME—attendance at category 1 AMA PRA-designated neurosurgical programs—will remain effective through Dec. 31, 2004.

"The mandate for evidence-based self-regulation of medicine, called for in the Institute of Medicine's influential report on medical errors, is manifested in the changes that currently are underway or that already have been implemented by the ABNS and the American Board of Medical

Specialties," said Robert A. Ratcheson, MD, AANS president-elect. "This movement toward demonstrating competence and verifying performance throughout our neurosurgical careers is essentially what is driving the AANS' progress toward a specific definition of neurosurgical CME credit."

AANS members' most frequently expressed concern was that the selection of acceptable programs specified by the proposed definition was too limited. Thus far in 2003, the acceptable programs under the proposed definition number 28 and offer approximately 473 neurosurgical credits.

"The AANS heard our members' concerns, and recognized that the perception is that presently the selection of programs included under the proposed definition is limited," Dr. Ratcheson said. "As we gear up for the new CME cycle beginning January 2005, the AANS is working to expand the number of jointly sponsored programs so that members will be able to have an even greater choice of neurosurgical CME venues, and significant progress toward this goal already is underway."

However, as the ABNS' MOC program evolves, the ABNS may assume responsibility for designating which programs can be attended for neurosurgical CME. Dr. Ratcheson said that if this happens, the AANS will adjust accordingly.

AANS last altered CME requirements for Active and Active Provisional members in 1999, when requirements were reduced from 90 credits every three years, to 60 credits every three years.

"Active" members of the AANS are neurosurgeons who are certified by the American Board of Neurological Surgery (ABNS), the Royal College of Physicians and Surgeons (Neurosurgery) of Canada, or the Mexican Council of Neurological Surgery, AC. "Active Provisional" members are those who are in the process of attaining certification. The Active and Active Provisional membership categories together comprise more than half of AANS' membership.

More information is available at www.neurosurgery.org/aans/meetings/cme/index.html and www.neurosurgery.org/aans/bulletin/winter02/index.html.

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

text reminding them to check their CME requirements with the boards that govern their certification.

Most Active and Active Provisional members will see a screen that indicates the current CME cycle, Jan. 1, 2002-Dec. 31, 2004, and a blue bar that shows the individual's progress toward the required 60 neurosurgical credits. When 60 credits have been reached, these members will be able to print their Continuing Education Award in Neurosurgery whenever they wish. Active and Active Provisional members who joined the AANS during the current cycle are exempted from the 60-credit requirement until the next cycle begins Jan. 1, 2005, so the information related to the current CME cycle will not appear to them.

From the main screen all members can view their transcripts. Under the View

Transcript heading, simply select a date range—the default is the current CME cycle—and select the "List" button. Doing so will show you all the programs you have attended by course number, provider name, course description, course date, and the amount of CME credits per course, as well as the total of credits attained in the given date range. The transcript can be viewed by subspecialty to facilitate monitoring for subsection requirements. Both a comprehensive transcript and a subspecialty transcript can be printed by date range. Further, a personalized certificate of attendance for each course listed can be obtained at will by clicking on the underlined course number.

The software not only helps you monitor the courses you have attended, it helps you plan to attend the courses for the CME

credit you still need. By clicking on the View Upcoming CME Offerings link, you can display all the upcoming offerings or select programs by region. There also is a link to the interactive Meetings Calendar at www.neurosurgery.org/aans/calendar, which provides a comprehensive listing of neurosurgical programs and links to information on how to register for them.

This online CME tracking site simplifies some of the administrative burden of monitoring ongoing education. It allows subspecialty tracking. It also enables searching for approved courses for CME credit. Although the site requires some manual work to track all CME credits, it does represent a significant improvement over keeping all records by hand.

Eric A. Potts, MD, is a neurosurgeon in Indianapolis, Ind.

Taking Care of Business

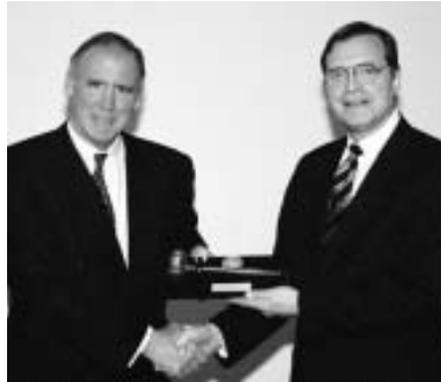
AANS Ushers in New Leadership, Upholds a Member's Suspension

Leadership of the American Association of Neurological Surgeons (AANS) for the 2003-2004 term was elected at the AANS annual business meeting on April 28.

The new Executive Committee is composed of A. John Popp, MD, president; Robert A. Ratcheson, MD, president-elect; Randall W. Smith, MD, vice-president; Jon H. Robertson, MD, secretary, Arthur L. Day, MD, treasurer, and Roberto C. Heros, MD, immediate past president.

Dr. Popp praised Dr. Heros for his outstanding leadership over the past year and expressed the deep gratitude of the AANS for his service. Dr. Heros continues to serve on the Executive Committee as immediate past president for the 2003-2004 term.

Retiring board members were individually recognized for their service. They included Stan Pelofsky, MD, past president; Fremont P. Wirth, MD, vice-president; John J. Oro, MD, director-at-large; Theodore R.



"This organization could not be in better hands," said Roberto C. Heros, MD (left), the 72nd AANS president. He is shown ceremoniously handing the gavel to A. John Popp, MD, who was elected the 2003-2004 AANS president at the annual business meeting

Jacobs, MD, NE regional director; Dominic P. Esposito, MD, SE regional director; David F. Jimenez, MD, Council of State Neurosurgical Societies; Joel D. MacDonald, MD, Neurosurgery://On Call; Edie

Zusman, MD, Women in Neurosurgery; and John G. Golfinos, MD, Young Neurosurgeons. Retiring AANS/CNS section chairs were Robert E. Harbaugh, MD, Cerebrovascular Surgery; Nevan G. Baldwin, MD, Disorders of the Spine and Peripheral Nerves; Jaimie M. Henderson, MD, Pain; Thomas G. Luerssen, MD, Pediatric Surgery; Douglas S. Kondziolka, MD, Stereotactic and Functional Neurosurgery; and James T. Rutka, MD, Tumors.

The Board of Directors for 2003-2004 is listed on page 44 of this issue as well as on the Web site at www.neurosurgery.org/aans/about/officers.asp.

In other business, the appeal of Pedro Mario Caram, MD, was heard, and the general membership voted by secret ballot to uphold the suspension of his AANS membership (See "Notice of Suspension," this page.) ■

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

Notice of Suspension

At the annual business meeting of the American Association of Neurological Surgeons (AANS) on April 28, the AANS general membership voted 89 to 6 to sustain the Board of Directors' decision to suspend for three months the membership of Pedro Mario Caram, MD, of Houston, Texas, for unprofessional conduct.

Dr. Caram had written a letter to a plaintiff's attorney in Texas stating that another neurosurgeon had missed an aneurysm that was "clearly visible" at the A1-A2 junction and that the patient's neurological deficits were proximately caused by this and by other substandard management. Such a letter was required under Texas law

in order for a malpractice suit to proceed.

After two arteriograms failed to confirm an aneurysm, the patient was transferred to a second neurosurgeon who arranged for a third arteriogram that showed a small, mid-A1 segment aneurysm. That aneurysm was surgically clipped. During this surgery the entire anterior communicating complex was explored and confirmed to be free of any aneurysm. At the Professional Conduct Committee hearing, the committee members reviewed the patient's first two arteriograms and could not see an aneurysm. During the hearing Dr. Caram admitted that the patient's neurological deficits had not been caused by substandard neurosurgical management.

The lawsuit was dismissed in the early

discovery phase, and the treating neurosurgeon filed a complaint with the AANS Professional Conduct Committee. The committee found that the content of Dr. Caram's "expert opinion" letter was grossly incorrect, inconsistent with his later admission to the Professional Conduct Committee, and constituted unprofessional conduct. The Board of Directors concurred and voted to suspend Dr. Caram's membership for three months. Dr. Caram then brought his appeal before the AANS membership at the business meeting in San Diego, and the membership sustained the Board of Directors' decision.

—Russell Pelton, JD
AANS General Counsel

AANS Annual Meeting's

Scientific and Cultural Connections Abound at 71st Event

By MANDA J. SEAVER

From April 26 to May 1, 6,433 participants, 2,864 of them medical registrants, focused their attention on the 2003 Annual Meeting of the American Association of Neurological Surgeons (AANS) and the abundance of informative and “event-full” presentations it offered.

The meeting, chaired by Ralph G. Dacey Jr., MD, proved a resounding success by every measure. San Diego itself set the stage for science amidst a surfeit of sea and sun. The meeting's theme, “Cultural Connections: Bringing Global Perspective to Neurosurgery” was reflected in every facet of the meeting, from international speakers to attendees, scientific presentations to special events.

William T. Couldwell, MD, PhD, chaired the scientific program, which featured 42 practical clinics, 75 breakfast seminars, three plenary sessions, six scientific sessions, three special courses, more than 500 poster abstracts, and 117 oral abstracts. In addition, AANS/CNS sections planned eight sessions that focused on neurosurgery's subspecialties.

Special lecturers from across the globe represented different aspects of neurosurgery. They included: Madjid Samii, MD, PhD (Richard C. Schnieder Lecture) Neal F. Kassell, MD, (First Annual Van Wagenen Lecture) Fred H. Gage, PhD (Hunt-Wilson Lecture), James A. Johnson, MD (Rhoton Family Lecture), and M. Gazi Yasargil, MD (First Annual Kurze Lecture).

In all, neurosurgeons attending the meeting could earn 20 category 1 continuing medical education credits toward the American Medical Association's Physician Recognition Award. An additional 24 credits could be earned by attending optional educational programs such as the practical clinics and breakfast seminars. As an



A member samples the latest technology in the exhibit hall.

added perk for members, these credits were “automatically” recorded for AANS members in their personalized online transcripts (see related articles in Education, page 34).

Other member benefits were showcased in the AANS Resource Center, centrally located in the exhibit hall. At the Resource Center, members were reacquainted with helpful aspects of their membership they may have forgotten, as well as introduced to several new benefits. The Technology Pavilion, which offered helpful classes on billing and compliance, PowerPoint presentations and more, was among the resources available there.

In the surrounding exhibit hall, 656 booths and 212 companies afforded attendees ample opportunity to explore the latest scientific advances in neurosurgical technology. Given the nearly one-to-one ratio between medical attendees and exhibitors, leading-edge equipment was available and questions could be answered promptly.



An Impassioned Appeal. The 2003 AANS Annual Meeting proved an opportune vehicle for launching Neurosurgeons to Preserve Health Care Access (NPHCA). Stewart B. Dunsker, MD, who is pictured in the NPHCA booth (on the right) with AANS Treasurer Arthur L. Day, center, and another neurosurgeon, serves as NPHCA president. NPHCA is the 501(c)(4) organization formed to allow maximum flexibility for funding neurosurgery's aggressive public education and advocacy campaign aimed at passing federal medical liability reform legislation. Dr. Dunsker's impassioned appeal for every neurosurgeon to contribute \$1,000 during the meeting was amply rewarded. According to Katie Orrico, director of the AANS/CNS Washington Office, following the meeting the campaign fund totaled \$500,000 toward the goal of \$3 million.

The Fall 2003 *Bulletin* will focus on neurosurgery's campaign for federal medical liability reform. In the meantime, questions about NPHCA can be directed to Katie Orrico at (202) 628-2883, or visit the Web site, www.neuros2preservcare.org (available this fall).

Simply a Success

AWARDS AND HONORS



Cushing Medalist

Stewart B. Dunsker, MD, was honored as the 2003 Cushing Medalist. In presenting the

AANS' highest award, Roberto C. Heros, MD, commended Dr. Dunsker for inspiring "legions of neurosurgeons to emulate his humanity, highest standards of ethical behavior and concern for his patients."

"I am honored today more than I can describe or show," said Dr. Dunsker, a past president of the AANS who currently heads Neurosurgeons to Preserve Health Care Access.

Established in 1977, the Cushing Medal is awarded to a member who displays unparalleled and distinguished service to the entire field of neurosurgery. Each year the AANS Awards Committee recommends a candidate to the Board of Directors, which makes the final selection.



Distinguished Service Awardee Troy M. Tippett, MD, was presented with the 2003 Distinguished Service Award.

Tippett, MD, was presented with the 2003 Distinguished Service Award.

Roberto C. Heros, MD, introduced Dr. Tippett as "a man who has worked longer and harder for neurosurgery than anyone I know." Dr. Tippett, a former president of the Florida Neurosurgical Society, was recognized in part for his role as a leader in the fight for relief of the professional liability insurance crisis.

"I haven't done anything more or less than anyone out there would do if they had the same opportunity to serve this great organization," said Dr. Tippett. "Thanks for the opportunity to serve."

The Distinguished Service Awardee is chosen annually by the AANS president with consent of the Executive Committee.



Van Wagenen Fellow

Odette A. Harris, MD, is the 2003 Van Wagenen Fellow. Pictured at the Van Wagenen

Past Fellows Luncheon, she explains how she will put her \$45,000 fellowship to work. Dr. Harris will evaluate the management of traumatic brain injury in the developing world at the University Hospital of the West Indies in Jamaica, and compare the outcomes to those in an indigent setting within the United States. She plans to pursue an academic career in neurosurgery with a focus on neurotrauma.

The Van Wagenen Fellowship, first awarded in 1968, provides a stipend for living and travel expenses during post-resident neurosurgical study in a foreign country for six to 12 months. Applications for the 2004 fellowship are due Oct. 1.

Concerns related to the socioeconomic aspects of neurosurgery were addressed in several programs. A number of these events took place before the Annual Meeting commenced, including the Council of State Neurosurgical Societies semiannual meeting; the first NERVES programs planned by and for practice managers; and the Japanese-American Friendship Symposium, which included a comparison of the Japanese and American healthcare systems as a complement to the clinical papers presented.

While the thread of socioeconomic concerns was woven throughout the Annual Meeting, one concern in particular was the focus of a new special course, "The 2003 Malpractice Crisis: Current Perspectives." Moderated by David F. Jimenez, the panel of physicians and attorneys provided an in-depth view of the professional liability insurance, or PLI, crisis. Using wireless keypad technology, speakers were able to poll the audience for real-time feedback on the effects of the PLI crisis.

The President's Perspective: Patients First

Presiding over the meeting, Roberto C. Heros, MD, targeted neurosurgeons' concerns about the future of neurosurgical education and the PLI crisis in his Presidential Address, "Neurosurgical Education: The 'Other' Competencies." In what he termed a "chat between friends and colleagues," Dr. Heros offered his perspective, stressing the importance of intellectual honesty throughout his discussion of the competencies neurosurgeons must maintain to attain or retain board certification. "Our challenge as mentors is to instill in our trainees a commitment to enhancing the scientific foundation of our profession without becoming enslaved by the scientific method," he said. Addressing the impact of the PLI crisis on neurosurgery, he stated, "The worst consequence of the medicolegal crisis is the deterioration of the physician-patient relationship. It is our responsibility and it is within our power to prevent this from happening... Always do what is best for the patient."

Continued on page 40

MAKING CULTURAL CONNECTIONS



Ena Miller Molina, MD, speaks to a standing-room-only crowd during Cultural Connections, a program presented by Women in Neurosurgery (WINS) during the Annual Meeting. Organized by WINS with the World Federation of Neurosurgical Societies (WFNS), the program brought neurosurgeons from four continents together to discuss strategies for improving

the international delivery of neurosurgical care. Debate over medical liability reform, work hour regulations, and the value of gene therapy faded in importance as neurosurgeons from many countries including Nepal and Honduras described training in and practicing neurosurgery in developing countries. Neurosurgeons who have donated their expertise in Peru, South Africa and Zimbabwe also shared their experiences. Gail Rosseau, MD, WINS past president, and the WINS Executive Board invited speakers from the AANS Board of Directors, WFNS officers, and individual neurosurgeons from developing countries to serve on a dynamic panel. A. John Popp, MD, opened the program by underscoring the commitment of the AANS to international membership and cross-cultural programs. Jacques Brotchi, MD, spoke movingly about the efforts of the WFNS in conjunction with the Foundation for International Education in Neurosurgery to bring neurosurgical training and education directly to underserved areas and how their efforts generate good will and greatly improved conditions in those areas.

— contributed by Deborah L. Benzil, MD

Festivities Inspire Fun, Philanthropy

The Sunday evening opening reception, always a memorable event, featured international ports of call—Cairo, Rio de Janeiro, and Barcelona, among them—to stunning effect as daylight gave way to starlight under the massive “sails” of the convention center’s Sails Pavilion. Then delectable desserts and a night of dancing awaited guests at the second annual “Fun”draiser of the Neurosurgery Research and Education Foundation (NREF). Guilford Pharmaceuticals sponsored this event, entitled “The Last Port of Call,” and 400 guests showed their support of research and education by purchasing tickets and tables for the event fundraiser. In addition, the Young Neurosurgeons Committee raised \$16,000 for NREF fellowships through the Fifth Annual Silent Auction. A hit among the 60 items featured was the first annual “Dinner with the Masters”—Arthur Day, MD, Peter Jannetta, MD, and Robert Spetzler, MD; the winning bidder was Thomas Flynn, MD. At the Donor/Award Winner Reception on Tuesday, NREF Chair Julian Hoff, MD, recog-

nized the 2002 Campaign’s more than 600 contributors for their dedication and support of NREF.

Global Media Gets Connected To Neurosurgery

Media coverage of the Annual Meeting reached an estimated 84 million people—and counting—worldwide, mirroring the meeting’s overall success. The media kit and public relations efforts generated published articles covering the meeting in general, appointments to the AANS Executive Committee, and all seven scientific press releases.

A wide range of media exhibited interest in the Annual Meeting, from trade publications, newspapers, national television and radio stations to online publications and newswires across the United States and overseas. The Washington Post; Globe and Mail (Toronto); WebMD; Kiplinger.com; HealthScout; The Times of India (New Delhi, India); ESPN.com; USA Today; Associated Press; ABC; and CNN are some of the media that covered the meeting.

Radio Interviews Connect Neurosurgeons With Hometowns

A total of 54 AANS members participated in radio interviews that were recorded during the meeting. Each member’s one-minute neurosurgical message was broadcast to radio stations in his or her own hometown. The interviews, heard on 1,847 radio stations nationwide by a combined total audience of more than 49 million listeners, “sounded” like this:

Voiceover: Innovations and research in neurosurgery are being shared as the American Association of Neurological Surgeons convenes its Annual Meeting. These innovations result in the newest breakthroughs and improvements in healthcare.

Dr. Alex Valadka is from Baylor College of Medicine and Ben Taub Hospital. He spoke to reporter Christopher Michael about the importance of being careful when you’re out there exercising and playing this summer.

Christopher Michael: Well, we all look forward to getting outside and doing a lot of exciting activities, but we need to be careful, too, don’t we?

Dr. Valadka: Absolutely. As the days get longer and the weather is warmer, people spend more time outside, especially after the school year ends. It is important that people remember to take a few basic safety precautions. Things like wearing your bike helmet, wearing a helmet if you rollerblade or skate or play baseball; things like never diving into the shallow end of a pool, and if you’re not sure how deep the water is, always go with your feet first the first time. Unfortunately in our line of work we’ve seen people who’ve forgotten to do these things if even for a brief moment, and that moment has come back to haunt many of them the rest of their lives. ■

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

A Conversation With Kissinger

By MANDA J. SEAVER

The Cushing Orator of the American Association of Neurological Surgeons (AANS) traditionally is a contemporary philosopher whose accomplishments are of significant interest to the neurosurgical community. Henry A. Kissinger, PhD, national security adviser for six years, secretary of state to two presidents, and a Nobel laureate for his role in negotiating the withdrawal of American forces from Vietnam, was well prepared for his latest role.

Dr. Kissinger began his afternoon lecture with a bit of levity, recalling a time when a woman approached him at a reception: "I understand you are a fascinating man," she said. "Fascinate me." The standing ovation at the conclusion of his address showed Dr. Kissinger to be equal to the challenge. By all accounts, the same was true of his conversation over breakfast with AANS President Roberto C. Heros and his guests. Between the two events, Dr. Kissinger made himself available for an interview with the *Bulletin*.

Within days following the interview, the aircraft carrier Abraham Lincoln would reach San Diego Harbor on its return from the Persian Gulf. Aboard the vessel, President George W. Bush would declare an end to the military phase of the battle to end Saddam Hussein's government in Iraq, less than two months after the war's inception. The president also would name as his envoy to Iraq L. Paul Bremer III, who at one time had been managing director of the Kissinger Group; nationwide, news anchors sought Dr. Kissinger's commentary.

Less than one month thereafter, on May 27, Dr. Kissinger would reach the milestone of his 80th year.

Excerpts from the interview follow. The complete interview is available at www.neurosurgery.org/aans/bulletin.

You have said in your latest book [*Does America Need a Foreign Policy? Toward a Diplomacy for the 21st Century*] that the task of leaders is to take society from where they are to where they have never been.

HK: Well, the important moments of history are where societies are transformed or the international system is transformed. In such a situation, the general public is familiar with what it knows, but it does not yet fully understand the shape of what is emerging. The task of the leader is to bridge that gap, to inspire a society and to educate a society to move towards the future. And this is why almost all great leaders, at least in my field, in foreign policy, have been those who had a sense of history and a sense of the evolution of things.

You talked a little bit more about that in your book, as well—the importance of philosophy and history in being a background for effective foreign policy.

HK: When you have to make a decision at a high level, the reason it gets to a high level is because the pros and cons are very evenly divided, or because the consequences of what you are doing are very drastic. You cannot navigate this simply by knowledge because it's knowledge that has produced a close ballot. So you need some conviction and some moral certitude, otherwise you go crazy in high office.

You were a university professor before you became national security adviser and also secretary of state. What was that transition like for you?

HK: Well, of course, academic fights are more brutal than our fights in



the real world because the stakes are so low, so the passions are very high. There is a big difference [between the attitude of] an observer and the attitude of a participant. For me the transition was made easier by the fact that I had been a White House consultant under President Kennedy for a year. So I had seen how the system works, and it

helped me a lot when I came back in a position of responsibility. Otherwise, it would have been a very drastic change, and I don't know whether I could have managed it.

Also part of that transition [was] that all of the sudden these decisions you are making are affecting people on such a large scale—

HK: That is true, that has to affect you. But...if you think about it every minute, you go crazy. So it's something with which you have to come to terms, more or less once and for all. You know it affects things. You know it has serious consequences. But you also know you have to act, because non-action is ultimately a decision. And, so this is one of the dilemmas of foreign policy.

Getting back to [the idea] that you have to have a moral certitude—

HK: Well of course, a lot of people have moral certitude; moral certitude is no guarantee. You also need a certain humility. There was a 19th century statesman who said, *The best a statesman can do is listen to the footsteps of God. Get ahold of the hem of his cloak, and walk with him a few steps of the way.* So this is a combination of fates and humility that in a way is needed.

When your latest book came out, it was right before Sept. 11, correct?

HK: Yes.

And you talk about Iraq in your book...You talk about American hegemony and you say—this is not specific to Iraq—but you say that it would be the wrong course for America—

HK: We can do nothing about being the strongest nation in the world. And that's desirable. That's not undesirable anyway, but that's what we are. But, by hegemony I understand that we impose our preferences on unwilling people. If we can translate our power into acceptance, so that other nations want to do what we think is best, and even better, if we get into a frame of mind where we want to do what is best for other people too, I don't consider that hegemony.

So our action in Iraq...how would you classify it?

HK: Our action in Iraq I would consider partly self-defense, and partly an attempt to create a new international system, which is necessary anyway, in which other nations can participate.

In Iraq, what can we expect?

HK: In Iraq we need—when an existing framework collapses, you need authority to reestablish some degree of order. What we can establish is a rapid improvement of human rights, rapid improvement of constitutionalism, a slower evolution of electoral processes.

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

WSII: More than One Meeting

World Spine II Set to Stimulate Worldwide Spine Health, Aug. 10-13

BY EDWARD C. BENZEL, MD
AND COURTNEY W. BROWN

Disorders of the spine represent one of the largest public health problems in the United States today and cost the healthcare system billions of dollars annually. As our population ages, the prevalence of spinal disorders continues to grow, significantly taxing an already overburdened healthcare delivery system.

The Decade of the Spine (DOS) is a political, social, and educational movement that has its roots in the Decade of the Brain of the 1990s. The goal of the DOS is to highlight the many aspects of spine disease and related treatments, and is designed to improve the quality of life of patients with spinal disorders. From 2001-2010, the North American Spine Society (NASS), the American Association of Neurological Surgeons (AANS), the Congress of Neurological Surgeons (CNS), the Scoliosis Research Society (SRS), and others will coordinate DOS activities that provide a multifaceted approach to enhance the visibility of spinal disorders and spine care.

This is not simply a U.S. or North American initiative. DOS is intended to reach the millions of people throughout the world who suffer from disorders of the spine by heightening the awareness of people regarding disorders of the spine, with a specific focus on healthcare delivery; healthcare delivery will be initially addressed via the World Spine II (WSII) meeting being held Aug. 10-13 in Chicago, Ill.

The WSII meeting, which is predominantly an initiative of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves and NASS, will directly address the issues of world spine health. This three-day meeting (with an additional day of pre-meeting courses) not only will focus on the high-tech aspects of spine care (both surgical and non-surgical), but will also, and most importantly, emphasize the delivery of the appropriate level of care for those in need of spine care worldwide. This meeting will provide education for spine care providers and will emphasize high- as well as low-tech spine care, with a significant focus on the provision of care to people with suboptimal resources, particularly in regions of the world where such resources are simply unavailable. Speakers from the World Health Organization, American Medical Association, and from developing as well as developed countries will provide much needed insight into world spine health.

Additionally, it is hoped that the WSII meeting will become a powerful stimulus for a variety of initiatives, including the establishment of a "world federation of spine societies" or "spine care specialists" and the provision of spine care technology, including equipment and implants, to regions of the where these resources are



deficient or nonexistent. It is planned that such initiatives will be unveiled at the WSII meeting in Chicago.

The WSII meeting owes significant debt to Mario Brock, MD, the chairman and major organizer of the World Spine I (WSI) meeting held in Berlin, Germany, in 2000. Essentially, he single-handedly established the World Spine meeting concept and courageously brought it to reality. He

then passed the baton to North American spine care physicians who have organized the WSII meeting and have played a seminal role in the development and nurturing of the DOS.

The Council of Spine Societies (COSS) has monitored this entire process, most recently under the leadership of Courtney Brown, MD. This council represents multiple spine organizations in North America, thus providing a multidimensional, multifaceted, multidisciplinary, and broad-based approach to spine politics and program development, particularly as it relates to collegiality and the coming together of multiple specialties for common purposes, as evidenced by DOS and WSII.

It is hoped that the WSII meeting will serve to "kick-off" a drive to further accelerate the momentum regarding the DOS, the perpetuation of World Spine meetings in the future (approximately every three years), an international organization of spine physicians or spine societies, a heightened awareness for spinal disorders, and a heightened level of care for those afflicted with spinal disorders worldwide.

For More Information

More information regarding the DOS or WSII is available at the WSII Web site at www.worldspine.org, where one can download logos, obtain useful information regarding world spine health and obtain information regarding participation in the DOS.

Please plan to attend WSII, Aug. 10-13 in Chicago, for an eye-opening view into world spine health and advances in technology. Be prepared to come away with an unparalleled insight into the practice of spinal care medicine. ■

Edward C. Benzel, MD, is a neurosurgeon at the Cleveland Clinic Foundation and Spine Institute in Cleveland, Ohio. Courtney W. Brown, MD, is an orthopedic surgeon at Panorama Orthopedics in Golden, Colo.



EVENTS

Calendar of Neurosurgical Events

AANS LEADERSHIP 2003-2004

OFFICERS

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 Randall W. Smith, MD, *vice-president*
 Jon H. Robertson, MD, *secretary*
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 Roberto C. Heros, MD, *past president*

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 Web site: www.neurosurgery.org/
 socioeconomic/dstaff.html

AO ASIF Comprehensive and Interactive Spine Course

Aug. 7-10, 2003
 Quebec, Canada
 (800) 769-1391

World Spine II: Second Inter-disciplinary Congress on Spine Care

Aug. 10-13, 2003
 Chicago, Ill.
 (708) 588-8080
 www.worldspine.org

Spine Review Hands-On 2003

Aug. 14-20, 2003
 Cleveland, Ohio
 (800) 223-2273 ext. 53449
 www.clevelandclinic.org/
 neurosurgery/2ndlevel/
 physician/education/default.htm

7th Congress of the European Federation of Neurological Sciences (EFNS 2003)

Aug. 30-Sept. 2, 2003
 Helsinki, Finland
 efn03@kenes.com

Neurocritical Care 2003

Sept. 5-6, 2003
 Cleveland, Ohio
 (800) 223-2273 ext. 40133
 www.clevelandclinic.org/
 neurosurgery/2ndlevel/
 physician/education

12th European Congress of Neurosurgery

Sept. 7-12, 2003
 Lisbon, Portugal
 info@eans2003.com
 www.eans2003.com

American Association of Electro-diagnostic Medicine Annual Meeting

Sept. 8-14, 2003
 San Diego, Calif.
 www.aaem.net/registration_
 brochure_online.htm

New England Neurosurgical Society Meeting

Sept. 12, 2003
 Springfield, Mass.
 (781) 744-8698
 peter.k.dempsey@lahey.org

31st Annual Meeting International Society for Pediatric Neurosurgery

Sept. 14-18, 2003
 Monte Carlo, Monaco
 ebellemain@intra-mtv.com
 www.ispn.org

The 27th International Congress of Clinical Neurophysiology

Sept. 16-20, 2003
 San Francisco, Calif.
 (507) 288-0100
 www.aaem.net

Postrumatic Brain Contusions and Lacerations: An International Focus

Sept. 19-20, 2003
 Rimini, Italy
 info@csrcongressi.com
 www.csrcongressi.com/
 congresso_q11.html

3rd International Conference on Biochemical Markers for Brain Damage

Sept. 25-27, 2003
 Lund, Sweden
 cecilia.bergh@thorax.lu.se
 www.bmbd.lu.se

62nd Annual Meeting of the Japan Neurosurgical Society

Oct. 1-3, 2003
 Sendai, Japan
 jokuraa@nsg.med.tohoku.ac.jp

2003 Annual Meeting of the Society of Neurosurgical Anesthesia and Critical Care

Oct. 10, 2003
 San Francisco, Calif.
 (804) 673-9037
 www.snacc.org

2003 Annual Meeting of the American Society of Anesthesiologists

Oct. 11-15, 2003
 San Francisco, Calif.
 (847) 825-5586
 www.asahq.org/annmtg

2003 Annual Meeting of the Congress of Neurological Surgeons

Oct. 18-23, 2003
 Denver, Colo.
 www.neurosurgery.org/cns/
 meetings

American Neurological Association Annual Meeting

Oct. 19-22, 2003
 San Francisco, Calif.
 (612) 545-6284
 www.aneuroa.org

Advanced Neuroendoscopy Course

Oct. 24-25, 2003
 Tuttlingen, Germany
 tanja.bauer@aesculap.de
 www.aesculap-neuro.com

For a frequently updated, comprehensive listing, go to www.neurosurgery.org/aans/calendar.

Upcoming AANS Courses

For information or to register call (888) 566-AANS or visit www.neurosurgery.org/aans/meetings/epm/epmcourses.html.

● Advanced Coding Course & Reimbursement Challenges in Neurosurgery

Sept. 26-27, 2003San Francisco, Calif.
 March 19-20, 2004Atlanta, Ga.

● Basic Principles of Anatomy and Terminology

Jan. 29, 2004New Orleans, La.
 Feb. 19, 2004Scottsdale, Ariz.

● Beyond Residency: The Real World

Oct. 4, 2003Los Angeles, Calif. (UCLA)

● Managing Coding & Reimbursement Challenges in Neurosurgery

Aug. 22-23, 2003Charlotte, N.C.
 Oct. 31 - Nov. 2, 2003Maui, Hawaii
 Nov. 21-22, 2003Baltimore, Md.

● Neurosurgery Review by Case Management: Oral Board Preparation

Nov. 9-11, 2003Houston, Texas

● Neurosurgical Practice Management: Improving the Financial Health of Your Practice

Sept. 28, 2003San Francisco, Calif.
 May 23, 2004Boston, Mass.
 Aug. 29, 2004Chicago, Ill.