
AANS Bulletin

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Volume 7 • Number 2
Spring 1998

Articles

- 10 Cover Story—Task Force Recommends Action to Improve Fellowship Process
- 13 Neurosurgery in the Marketplace
- 15 Guest Column—Redefining Neurosurgery to Meet New Market Demands
- 23 AANS Annual Meeting: How to Make the Exhibits Work For You
- 26 Report from the American College of Surgeons

Departments

- 2 President's Message—AANS Addresses Socioeconomic and Training Issues
- 3 Washington Update—Development of Proposed New Practice Expense RVUs Nearing Completion: HCFA Still Not On Right Track
- 9 Governance
- 12 Neurosurgical News
 - Neurosurgical Core Curriculum Developed
 - ABNS Develops Re-Certification Process
 - Skull Base Surgeons Start Process to Form Joint Section
- 14 Managed Care Update—Managed Care Plans Dominated in 1997, But What of the Future?
- 21 Section News
- 24 Continuing Medical Education Opportunities
- 27 **N://OC®**—Cyber Museum Opens Online
- 28 Positions
- 33 Research Foundation—Research Foundation Recognizes Campaign 1997 Donors
- 36 Membership—44 New Members Approved

President's message

AANS Addresses Socioeconomic and Training Issues



Edward R. Laws, Jr., MD

This is the last report that I will prepare as President of The American Association of Neurological Surgeons (AANS). We have had an eventful year and I hope that the membership is reassured about the strength and direction of the AANS.

Task Force on Fellowships

The Fellowship Task Force has successfully addressed the important issue of subspecialty fellowships in neurosurgery and all of their implications for training and for clinical practice. A firm stance has been taken to review the quality of fellowships and not to provide any certification associated with various fellowship programs. A detailed article on the work and recommendations of the Task Force can be found elsewhere in this issue of the *Bulletin*.

Cerebrovascular/ Endovascular

The Cerebrovascular/Endovascular Task Force is still working on methods of improving the role of neurosurgeons in endovascular procedures. We are optimistic that continued collaboration with our colleagues in neuroradiology will result in real advances in this new and growing field of collaborative endeavor.

Cost Containment Task Force

In the area of reimbursement, The Cost Containment Task Force has been working hard to achieve its dual goals of decreasing the cost of neurosurgical care to our patients and in increasing the efficacy and cost effectiveness of neurosurgical practices in general.

In recognition of the fact that reimbursement is so closely tied to CPT coding, the Joint Officers of the AANS and Congress of Neurological Surgeons (CNS) have just created a new task force centered on the various aspects of CPT coding. This will include the correctness and appropriateness of codes, the development of new codes for new procedures, the teaching of proper coding practices, and the proper valuation of various neurosurgical procedures for reimbursement. Richard Roski, MD, has been appointed the Chair of this task force, and we expect that it will remain in the center of reimbursement activities for the near future.

How Neurosurgery has Evolved

As I reflect on the practice of neurosurgery and how it has evolved, it becomes clear to me that there is a tremendous vitality within our field and I think there is room for significant optimism on almost every front. As I look back on my own clinical activities over the past five years, it is extraordinary how many new procedures have been incorporated into my own day-to-day practice.

Endoscopic approaches have become routine for carpal tunnel surgery; for performing third ventriculostomy and operating on third ventricular tumors; for assisting in transsphenoidal surgery; for adjunctive use in craniotomies with operations around and about the optic chiasm; and lamina terminalis. I have been using computer-guided surgery incorporating laser guides, pointers and

stereotactic microscopes for many different types of intracranial surgery and have recently incorporated the functional MRI into the actual interactive computer guided techniques.

Three-dimensional computerized image planing has been used for stereotactic pallidotomy and thalamotomy with great effect. We have now moved to using the same techniques for deep brain stimulation for the relief of essential tremor and tremor of parkinsonism.

We have used selective dorsal rhizotomy with a minimal exposure for the treatment of children with spastic cerebral palsy, and intercostal neurotization for brachial plexus injuries. We have been using BCNU wafers in the adjunctive management of glioblastomas. We have used lateral mass plates for the correction of cervical spine fracture dislocations and have used proximal intraoperative balloon occlusion for clipping of a basilar tip aneurysm along with an intraoperative angiography.

These are just a few of the procedures that a single neurosurgeon has adopted over a relatively short period of time and after more than 25 years of neurosurgical practice. I hope this example is as encouraging to others as it has been to me with regard to the future of neurosurgery and that of clinical neuroscience in general.

Edward R. Laws, Jr., MD, FACS
President

*Please join AANS President Edward R. Laws, Jr.
and your colleagues at the
Annual Meeting Opening Reception
Sunday, April 26
6:30-9 PM
Grand Hall, Philadelphia Convention Center*



Development Of Proposed New Practice Expense RVUs Nearing Completion: HCFA Still Not On Right Track

by Katie O. Orrico
Director AANS/CNS Washington Office



The Health Care Financing Administration (HCFA) is in the process of finalizing its proposed new practice expense relative value units (RVUs) for the practice expense component of the resource based relative value scale (RBRVS). The RBRVS is used by

Medicare and many other private insurers to determine physician reimbursement. The proposed new values are currently scheduled to be published in the *Federal Register* on May 1, 1998. Following a 90-day comment period, HCFA will finalize the new RVUs, which will go into effect on January 1, 1999.

Last year, HCFA had proposed practice expense RVUs that would have reduced total neurosurgical income by 25-30 percent. This situation brought much of organized medicine together to seek federal legislation aimed at preventing the implementation of this plan. Neurosurgery was at the forefront of this successful legislative campaign, which resulted in the passage of a new law that delayed the implementation of the new payment system and mandated HCFA to take an entirely new approach to devising the new payment system. The AANS and CNS continue to be concerned that HCFA will not make significant changes to last year's proposal, although with continued oversight by Congress and the General Accounting Office, we remain hopeful that HCFA will publish new practice expense values that reflect neurosurgeons' actual practice costs.

The purpose of this article is to bring AANS and CNS members up-to-date on some of the recent activities related to this project.

Balanced Budget Act of 1997

Last August, Congress passed the Balanced Budget Act (BBA) of 1997, which was subsequently signed into law by President Clinton. The AANS and CNS, in conjunction with the Practice Expense Coalition, the AMA and the American College of Surgeons, were successful in getting extensive practice expense provisions included in the BBA. The BBA, among other things, requires the following:

- A one-year delay in the implementation date of new practice expense RVUs from January 1998 to January 1999;
- A four year phase-in of the new values from 1999-2002;
- A General Accounting Office (GAO) review and evaluation of HCFA's proposed methodology, including an evaluation of the adequacy of the data and the potential impact of the proposal on Medicare beneficiary's access to services; and
- Detailed requirements for HCFA in developing new practice expense RVUs, including a directive to use generally accepted cost accounting principles and data based on actual physician practice expenses. HCFA is also required to work closely with physicians in developing the new values.

HCFA's Activities Since the Enactment of the BBA

Since last August, HCFA has convened a series of meetings with the physician community – the October “validation” panel meeting, the November “indirect expense” conference, and December's “cross-specialty” panel meeting. HCFA also published a Notice of Intent to Regulate in the *Federal Register*, seeking suggestions from medical groups as to how the agency should proceed in developing the new values. Finally, HCFA has held private meetings with a number of interested parties.

Representatives from the AANS and CNS participated at each of these meetings, and we submitted comments in response to the *Federal Register* notice. Based on this experience, however, it is clear that HCFA is not meeting the directives of the BBA. In general, no new data on actual physician

practice expenses were collected, and HCFA continues to resist making any changes to last year's proposal. For example, at both the October and December meetings, we offered detailed data refuting HCFA's numbers. At each of these sessions, however, neurosurgery was “outnumbered,” and when put to a vote, our data were essentially rejected.

HCFA is currently in the process of finalizing the new proposed values. In its recent Report to Congress, HCFA outlined several “options” under consideration for the May rule. Although the report lacked sufficient detail, it appears that HCFA will use last year's methodology and data, making only minor changes.

The GAO Report

As required by Congress, the General Accounting Office (GAO) conducted a thorough review of HCFA's original proposal. Issued on Friday, February 27, 1998, the GAO report is titled: “HCFA Can Improve Methods for Revising Physician Expense Payments.” Even though HCFA has made considerable progress developing the new practice expense RVUs, the GAO notes that “much remains to be done before the new fee schedule payments are implemented in 1999.” The report identifies several key problem areas that must be addressed before a final system is in place. These include:

1. **HCFA's failure to validate the data produced by the clinical practice expert panels.** In 1996, HCFA convened a number of expert panels to collect information on direct costs. While the GAO concluded that the process itself for collecting this information was acceptable, it recommended that these data be validated using surveys of actual physician practices – something HCFA has not done.
2. **HCFA's use of statistical techniques to manipulate the direct cost data.** These statistical manipulations were primarily responsible for the large cuts in payments for many neurosurgical procedures. For instance, the practice expense reimbursement for CPT code 63047, lumbar spinal decompression, would have been reduced by 65 percent under the original proposal. The GAO raises serious questions about the use of these statistical manipulations, recommending that they be substantially revised.

(continued on page 4)

3. **HCFA's failure to use specialty specific costs to formulate "indirect" practice expenses.** HCFA proposes to divide physician practice expenses into direct and indirect costs. Because HCFA abandoned its survey of physician practices, it has no data on indirect expenses. It therefore had to use estimates rather than actual data. Moreover, HCFA decided to allocate expense data based on a single direct/indirect cost ratio of 55/45 percent for all specialties (neurosurgery's ratio is 35/65 percent). The GAO report points out that the use of specialty specific indirect expense ratios would be more consistent with the law, which requires HCFA to use actual practice expense data.
4. **HCFA's disallowance of certain costs.** HCFA has disallowed nearly all the costs physicians incur when they bring their own staff to the hospital to assist in the care of patients, arguing that these costs are already included in the hospital payment rates. However, several specialties, including neurosurgery, regularly use their own staff to perform these functions and are not reimbursed by the hospitals for these services. The GAO acknowledged that there may have been a shift in hospital and physician practices that Medicare has not recognized in its reimbursement methods. If hospitals are no longer providing the same level of staff support and physicians are supplementing this with their own personnel, these costs need to be recognized in the physician fee schedule.

The GAO report also cautions that the magnitude of the changes proposed last June were "significant and could affect

physician decisions regarding care of Medicare beneficiaries." The GAO therefore suggests that there be ongoing review of beneficiary access to care once the new system is in place, with a special focus on access to those services that see the biggest payment reductions.

Congressional Hearings

Congress continues to be sensitive to this issue and recently two committees held public hearings on the status of this project. On March 3, 1998, the House Ways and Means Health Subcommittee convened a hearing to review the GAO report. The GAO, Practice Expense Coalition, AMA, American Society of Internal Medicine (ASIM) and American Academy of Family Physicians (AAFP) testified at the hearing.

Committee members raised several concerns about HCFA's proposal and expressed their support for GAO continuing its oversight of the project. Representatives Jim McCrery (R-LA), John Cooksey (R-LA) and Nancy Johnson (R-CT) were particularly critical of HCFA. Rep. Johnson noted that the lack of supporting data was "very serious" and "disturbing," adding: "I think the weaknesses in HCFA's work... are substantial."

Senator Arlen Specter (R-PA), Chairman of the Senate Labor and Health and Human Services Appropriations Subcommittee, invited Arthur Day, MD, AANS Board Member and Chairman of the Joint Washington Committee, to testify at a March 10, 1998, hearing. Dr. Day spoke on behalf of the AANS, CNS and the Practice Expense Coalition. Also appearing before the subcommittee were representatives of HCFA, Society of Thoracic Surgeons, ASIM and AAFP.

In our testimony, we outlined the numerous problems with HCFA's data and

methodology and stressed that without substantial correction, HCFA's current effort to develop new practice expense relative values will cause access to care problems. We also requested additional funding for HCFA to collect actual physician practice cost data. Senator Specter expressed serious concerns about the direction of HCFA's work and indicated his willingness to provide the additional resources necessary to get accurate data. At the conclusion of the hearing, Senator Specter requested that the HCFA Administrator, Nancy-Ann Min DeParle, meet with Dr. Day to further discuss ways in which HCFA can improve its methodology and data.

AANS/CNS Strategy for 1998

The AANS and CNS have a comprehensive strategy in place for 1998. Once again, our efforts will focus on each branch of government – Congress, Executive and Judiciary. Specifically we will engage in the following activities:

1. **The Congress.** Given this year's short legislative session (at press time less than 60 legislative days remained), Congress will have limited opportunity to review HCFA's proposal or, if necessary, to intervene on the final proposal before it is implemented on January 1, 1999. Nevertheless, there are a number of things we can do to keep Congress involved and informed about this issue.

These include:

- Meeting with key Members of Congress and their staff,
- Urging Members to write to HCFA expressing their concern about the proposal
- Urging Congress to convene additional oversight hearings; and
- Conducting a grassroots letter writing campaign.

The AANS and CNS will facilitate these activities through our participation in the Practice Expense Coalition, which has retained several ex-Members of Congress as outside consultants. We will also utilize our Key Person Program, if necessary. Despite the fact that HCFA has not made many changes to its original proposal, it is clear that significant ongoing Congressional

(continued on page 9)

HCFA'S TIME TABLE FOR IMPLEMENTATION

TABLE 1

April 1, 1998	Begin Internal Clearance Process
May 1, 1998	Publish Proposed RVUs in <i>Federal Register</i>
July 29, 1998	90-Day Public Comment Period Ends
October 31, 1998	Publishes Interim Final RVUs in <i>Federal Register</i>
January 1, 1999	25% of New Practice Expense RVUs Go Into Effect
January 1, 2000	50% of New Practice Expense RVUs Go Into Effect
January 1, 2001	75% of New Practice Expense RVUs Go Into Effect
January 1, 2002	100% of New Practice Expense RVUs Go Into Effect



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Suspension of Member

On November 22, 1997, the AANS Board of Directors approved the recommendation of the Professional Conduct Committee that a Connecticut neurosurgeon's membership in the AANS be suspended for a period of six months because of unprofessional conduct. That conduct included giving testimony as an expert witness in a medical malpractice case involving aneurysm surgery despite having done no aneurysm surgery himself for close to 15 years prior to his trial testimony. The Professional Conduct Committee concluded, and the Board of Directors agreed, that the neurosurgeon's trial testimony demonstrated inappropriate advocacy, marginal subject matter and a lack of adequate objective research.

Leadership Meeting

The leaders of the AANS and CNS Joint Sections met along with the AANS and CNS Executive Committees in January to enhance working relationships between the Sections and the parent organizations.



AANS/CNS Joint Officers: The Joint Officers of the AANS and CNS met in January to discuss joint projects and issues. Pictured, left to right, first row: Marc R. Mayberg, MD, (CNS Past President); Stephen M. Papadopoulos, MD, (CNS Treasurer); William A. Friedman, MD, (CNS President); Edward R. Laws, Jr, MD, (AANS President); Stewart B. Dunsker, MD, (AANS Treasurer); Stanley Pelofsky, MD, (AANS Secretary); second row: Mark N. Hadley, MD, (CNS Secretary); Russell L. Travis, MD, (AANS President-Elect); H. Hunt Batjer, MD, (CNS President-Elect); James R. Bean, MD, (Chairman, CSNS); J. Charles Rich, Jr, MD, (AANS Past President); and Mitchel S. Berger, MD, (CNS Vice President).

During the meeting, Section leaders shared ideas and strategies on meeting planning, project development, membership and the development or practice guidelines. Attendees also heard from Ossama Al-Mefty, MD, on the possible establishment of a skull base section; Bruce Kaufman, MD, on coordinating communi-

cation and public relations efforts; and Charles Tator, MD, on the Joint Trauma Section's proposed gun safety initiative.

Future Section Leadership Conferences are now planned to coincide with the Joint Officer's Meeting in January of each year in Chicago.

Washington Update (continued from page 4)

pressure will help temper the magnitude of the reductions.

2. **The Executive.** This is where most of the action will be this year. A variety of activities are planned to influence HCFA's final proposal.

These include:

- Collecting additional practice expense data. The AANS and CNS are in the process of conducting a survey of 300 private neurosurgical practices, and all academic practices, to collect detailed practice expense data. The purpose of this survey is twofold: (1) to influence HCFA and (2) to develop practice expense benchmarks for AANS and CNS members to use in evaluating their own practice expenses. **It is critical for each neurosurgeon receiving this survey to complete and return it promptly. Without adequate data, we will not be able to convince HCFA to make changes to its proposal.**

- Developing an alternative methodology for devising practice expense RVUs. The Practice Expense Coalition has hired Coopers and Lybrand, a well known national accounting firm with extensive health care experience, to develop an alternative methodology.
 - Conduct a grassroots writing campaign, whereby individual neurosurgeons submit individual comments to HCFA in response to the May proposal.
3. **Judiciary.** The AANS and CNS will review avenues for potential litigation. The Practice Expense Coalition has retained two law firms to develop a detailed litigation strategy, should we decide to sue HCFA.

Final Thoughts

Even though it appears that HCFA is merely recycling last year's proposal, there are signs that we are making progress.

HCFA's administrator has questioned the need to make these drastic changes. HCFA is testing the alternative methodologies we have suggested. Congress remains committed to achieving a reasonable solution. While neurosurgeons will likely see some fee reductions, we are hopeful that we will not be facing the magnitude of cuts proposed last year.

The AANS and CNS leadership will continue to keep our members informed about this issue as HCFA moves forward. Last year's legislative victory was achieved because most of you took the time to make a phone call, write a letter or send an e-mail to your Member of Congress. Our work is not done, and each and every neurosurgeon needs to participate, when called upon, or we will not be successful.

For more information, please contact Katie Orrico in the Washington Office at (202) 628-2072 or e-mail at kateorrico@aol.com.



Task Force Recommends Action to Improve Fellowship Process

Every year as their residencies end, more than 120 neurosurgeons make the decision to continue their training in the form of a fellowship. But, what exactly is a “fellowship,” who sets the curriculum, is anyone measuring the quality of the programs and what do residents gain by pursuing this additional training?

The American Association of Neurological Surgeons/Congress of Neurological Surgeons Task Force on Fellowships was formed in April of 1997 by the Joint Officers after a series of fellowship-related resolutions advanced by the Council of State Neurosurgical Societies (CSNS). The Task Force was chaired by Julian Hoff, MD, and submitted its final report to the AANS/CNS Joint Officers in January, 1998.

The members of the Task Force included: Frederick Boop, MD; David Jimenez, MD; James Bean, MD; Stewart Dunsker, MD; Hunt Batjer, MD; Kim Burchell, MD; and Stephen Haines, MD.

“Fellowships are definitely a rising trend in neurosurgery and there’s a growing concern about who and how these fellowship programs are being monitored for quality,” Dr. Hoff said. “This is an issue that needs to be addressed by organized neurosurgery.”

Conclusions

During its 9-month investigation, the Task Force polled neurosurgical residents, program directors, and other medical specialties about fellowships, quality standards and accreditation. Based on its research, the Task Force developed four general conclusions about neurosurgical fellowships:

- 1) The natural and historical trend in medicine has been toward subspecialization. Survey data from within neurosurgery as well as other surgical and medical subspecialties suggests that this trend will continue.
- 2) Other surgical subspecialties offer formal guidelines for fellowship training and monitor the quality and impact of these fellowships. In orthopedics, for example, the Residency Review Committee (RRC) is charged with monitoring and credentialing fellowships.
- 3) Surveys of current residents, chief residents, and recent graduates suggest that between 20 and 25 percent of graduating neurosurgeons plan to enter fellowship subspecialty training. Currently, at least 127 neurosurgical fellowships are offered in the United States in 10 different areas of subspecialization. These fellowships last from 3 months to 2 years, have no minimum quality standards established, and little data exists as to their impact upon residency training or the practicing community. Given their prevalence, it is recognized that mechanisms need to be established to develop guidelines for fellowship training in neurosurgery and to insure a consistent quality product for the trainees.
- 4) The practicing neurosurgical community is opposed to formal subspecialty certification, feeling that it

will confer an unfair market advantage against the non-subspecialty trained neurosurgeon and that it may place them in medicolegal jeopardy.

Recommendations for Action

Based on these conclusions, the Task Force made five recommendations for action.

These recommendations have been approved and accepted by the AANS Board of Directors and the CNS Executive Committee.

Recommendation One: Definition of “Fellowship.” A fellowship is defined as specialized training and acquisition of skills beyond ordinary residency training requirements and should occur within an ACGME accredited institution, but not necessarily within an ABNS approved neurosurgical training program. It should occur later than the PGY-4 and should be distinguished from the general residency training, and focused upon a particular area of interest within the scope of neurosurgical practice such as neurotrauma, endovascular, spine, cerebrovascular, tumor, pediatrics, skull base surgery, pain or functional and stereotactic surgery.

Recommendation Two: Fellowship Content. Written guidelines should be developed by the appropriate AANS/CNS Joint Section for each type of fellowship. The Residency Review Committee (RRC) should review and approve this curriculum and oversee its implementation.

Several Joint Sections, including Pediatrics, have all ready developed written guidelines for fellowships in their area of interest. Once approved by the RRC, these guidelines will be used to monitor programs for content and quality.

Recommendation Three: Fellowship Duration. The Task Force felt that a formal fellowship should be a minimum of 12 months duration. Focused educational experiences of shorter duration occurring prior to residency, during residency (elective

Number of Currently Available Fellowships in the US and Canada

Cerebrovascular	17
Endovascular	3
Epilepsy	17
Neuro-oncology	23
Pediatrics	15
Peripheral Nerve	1
Spine	29
Skull Base	6
Stereotactic/Functional	12
Trauma/Critical Care	15

rotations), or following residency should not be considered fellowships.

There are approximately 26 existing fellowship programs, including 9 spine and 8 functional, that are less than 12 months in duration. The remaining programs are currently between 12 and 24 months. Approximately 95 percent of fellows polled felt their fellowship was adequate in length.

Recommendation Four: Qualifications and Responsibilities. The RRC should establish faculty qualifications and responsibilities for fellowship training. Furthermore, it was felt that the RRC would be the most appropriate body to develop institutional requirements for fellowships and to monitor their quality, in addition to their impact, upon residency training. Once this process is established, fellowships should be accredited through the RRC.

Recommendation Five: Certification Criteria. Because we do not currently know how to monitor competence, and because the neurosurgical community remains opposed to national certification of fellowships, certification criteria for fellowships must presently remain at the institutional level.

The American Board of Orthopedic Surgery (ABOS) currently recognizes eight areas of fellowships – hand, foot and ankle, pediatrics, musculoskeletal, oncology, reconstruction, trauma, sports medicine and spine, but the only subcertification given is a Certificate of Additional Qualifications in Surgery of the Hand. This certificate is given in conjunction with the American Board of Plastic Surgery and American Board of Surgery.

In neurosurgery, the AANS/CNS Joint Sections have been created to address the issues of the subspecialties. There are Joint Sections on pediatrics, cerebrovascular surgery, tumors, trauma and critical care, stereotactic and functional, pain and spine. All of the Joint Sections have seen substantial growth over the years (please see chart 2) and many have formed their own executive committees, task forces, annual meetings, newsletters, research awards and policy statements.

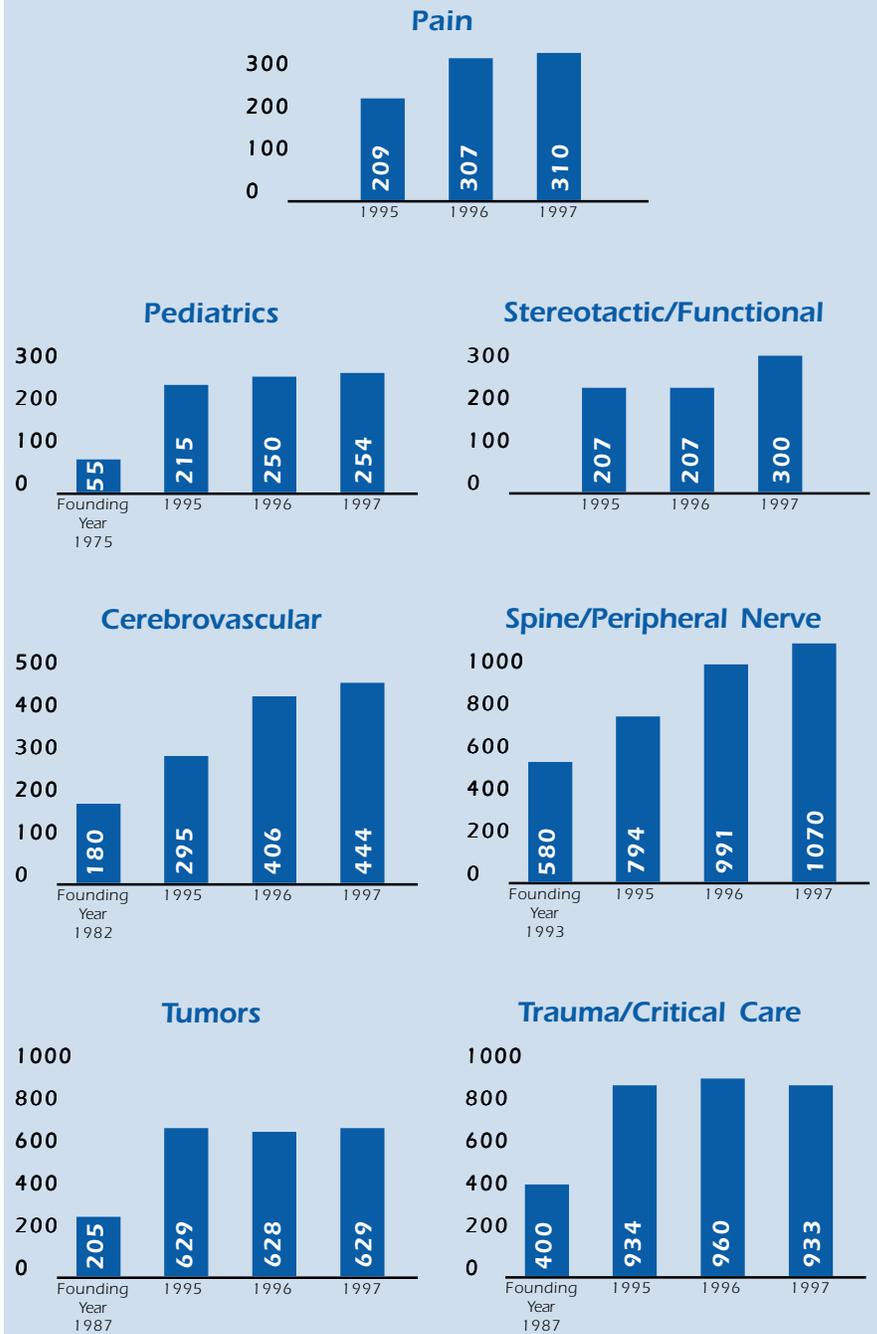
The Next Step

The recommendations for action have been sent to the RRC for neurosurgery and

the American Board of Neurological Surgery (ABNS) for review. If the RRC and ABNS approve and accept the recommendations, the process will begin to develop the quality standards, accredit programs and monitor institutions for quality.

“At this point, we’ve made what we think are good, strong recommendations,” Dr. Hoff said. “We now need to wait for the RRC and ABNS’s comments and go from there.”

MEMBERSHIP GROWTH AANS/CNS JOINT SECTIONS



Recommended Neurosurgical Core Curriculum Developed for Medical Schools

The Education Committees of The American Association of Neurological Surgeons and Congress of Neurological Surgeons have developed a core curriculum in neurological surgery for medical students. The curriculum outlines the basic neurological disease processes, and was distributed to medical school deans.

The core curriculum was developed out of concern for the variability of curriculum and level of knowledge of graduating medical students regarding the indications and general principles of surgical therapy for neurological disease.

“Most of these medical students will never receive subsequent formal teaching about neurological disease. Yet, these will be the physicians entrusted with the front line decisions in health care systems of tomorrow,” Edward R. Laws, Jr., MD, president of the AANS, said. “They must decide whether a headache may be due to a brain tumor or ruptured aneurysm, what may be an early warning sign of stroke, or whether a child who struck his head or had a seizure will need specialized intervention. In each case, there must be minimal standards for recognizing the presenting symptoms of neurological disease, an understanding of the initial management principles and diagnostic pathways, and a reliable threshold for referral to specialized expertise.”

The objectives and topics listed in the core curriculum were designed to assist deans, curriculum committees and faculty members with the difficult task of adjudicating what must be known by medical students. The Core Curriculum includes areas on General Skills, Intracranial Disease, Spinal Disease, Peripheral Nerve Disease and Other Common Neurosurgical Problems. The Recommended Core Curriculum was approved by both the AANS and CNS.

If you would like to view the Recommended Core Curriculum in Neurological Surgery, please visit **NEUROSURGERY://ON-CALL**® (www.neurosurgery.org).

ABNS Develops Re-Certification Process for Neurosurgeons

By Stewart Dunsker, MD

The American Board of Neurological Surgery (ABNS) has approved a new re-certification process that will affect all neurosurgeons who become board certified after November of 1998. This new process will require neurosurgeons to be re-certified every ten years.

The ABNS is the last Board of the American Board of Medical Specialties to submit a plan for re-certification. All other Boards have mandatory or voluntary re-certification. In addition, individual states are moving toward a process of requiring re-licensure or re-certification every 10 years.

The desire of the ABNS is to produce a meaningful exam that will be a fair test of a neurosurgeon's practice. It will not be an examination of minutia, basic science or arcane material. The ABNS wants to utilize the practice experience of physicians, as well as existing CME credits. Neurosurgeons will be allowed to take the re-certification exam multiple times, if necessary.

The requirements for re-certification for those certified after November of 1998 include:

1. CME Requirement

All diplomats must provide evidence of successful completion of at least 90 hours of category I CME credits during the 3 years preceding the application to the ABNS for re-certification. These requirements may be documented by a certificate from the AANS, qualification for the Physician's Recognition Award (APRA), Award of the American Medical Association or by completion of a list of CME Programs accredited by the ACCME.

2. Written examination

A. The diplomats must have successfully attained a passing grade on a written examination emphasizing neurosurgical practice and offered by the ABNS.

B. Re-certification Interval: Beginning in November 1998, the ABNS will begin issuing time-limited certificates. The certificates may be renewed every 10 years through the process of re-certification. The diplomats may

enter the re-certification process after 3 years prior to the expiration of their current certificate. The first re-certification process will begin in the year 2005.

C. Repeating the examination: There will be no limit in the number of times diplomats may attempt to complete the re-certification process. A diplomat who has entered the re-certification process will be maintained on a list of certified diplomats for two years after his/her time limit and certificate have expired.

3. General Requirements

The re-certification of the ABNS will be open only to individuals who have been certified in the past by the ABNS. These individuals will need to have a valid medical license, which is full and unrestricted. They will need to supply verification of satisfactory performance, such as letters from Chiefs of Staff.

Any questions regarding this process can be directed to Ms. Mary Louise Sanderson, Administrator, American Board of Neurological Surgery, 6550 Fannin Street, Houston, Texas, 77030.

Skull Base Surgeons Start Process to Form Joint Section

A group of skull base neurosurgeons have petitioned the AANS/CNS Joint Officers for the formation of a Joint Section on Skull Base Surgery. The proposal was brought forward at the January 1998 Joint Officers Meeting, and will be on the agenda again at the April 25th Joint Officer's Meeting in Philadelphia.

“There is a continuum of neurological surgeons entering practice with an interest in skull base surgery and a need for continuing education, professional development and a solid resource base,” said Ossama Al-Mefty, MD, who presented the proposal to the Joint Officers on behalf of the 25 neurosurgeons who signed the petition requesting formation of the new Section.

In his presentation, Dr. Al-Mefty noted that a survey of neurosurgical residency program directors had been conducted to determine the level of importance placed on skull base surgery in training programs. Over 97 percent of residency program

(continued on page 13)

Neurosurgery in the Marketplace

By Cary D. Alberstone, MD, Edward C. Benzel, MD, FACS, Deborah Garcia, CNRN

Manpower issues have been a hot topic for several years in the neurosurgical community, but, there is currently very little data about the market demands for practicing neurosurgeons. A report published in the *Journal of the American Medical Association* utilized the conference board help-wanted index to evaluate trends in physician marketplace demand. The *JAMA* study concluded that over the past

five years there has been a significant fall in demand for specialist physicians. However, neurosurgery was not one of the fields included in the *JAMA* study. By employing the same methodology as was used in the *JAMA* study to neurosurgery, the results challenge *JAMA's* conclusion and show that, in fact, the neurosurgical market is actually quite stable.

The JAMA Study

The study conducted by Seifer et al in *JAMA* used the conference board help-wanted index as its methodology. This index tracks national changes in job availability by comparing changes in the number of help-wanted advertisements to a base figure.

In the study, Seifer et al used the *Annals of Internal Medicine*, *American Family Physician*, *Pediatrics*, *Anesthesiology*, *Chest*, *the Journal of Bone and Joint Surgery* and the *New England Journal of Medicine* to analyze market trends in the appropriate medical generalist and specialty fields. The September of 1984 issue was used as the base year and the study compared the September issue of 1987, 1990, 1993 and 1995 to that base.

After analyzing the data, Seifer et al concluded that over the past five years there have been steep declines in the number of advertised positions for specialist physicians. In 1990, for example, there was a 4:1 ratio of specialist to generalist positions advertised, but, in 1995, this ratio dropped to

1:8. The most dramatic change was in medical specialists, where there was a 75 percent decline in the number of positions advertised between 1990 and 1995. Orthopedic surgery was the only surgical subspecialty included in the study and saw a 50 percent decline.

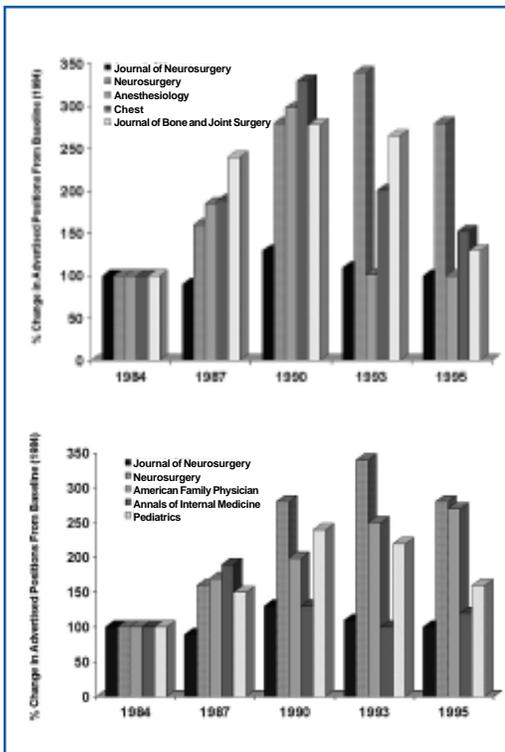
Applying the Methodology to Neurosurgery

In order to apply this methodology to neurosurgery, data on the number of advertisements for positions was obtained from the *Journal of Neurosurgery* and *Neurosurgery*. From 1990 to 1995, there was only a 13 percent decline in the number of position advertisements. This is considerably less than the other specialties included in the *JAMA* study

Conclusions

Using this methodology to analyze both specialists and generalists, neurosurgeons have reason for cautious optimism. The number of advertised positions in neurosurgery appears to be relatively stable compared to other specialties.

How accurately the conference board help-wanted index can be applied to professional medicine remains to be proven. However, in light of how little concrete information there is on marketplace trends in medicine, it does provide information that has logical reasoning behind it.



Neurosurgical news (continued from page 12)

directors stated they have faculty with skull base surgery dedicated as their area of interest and have resident training in skull base surgery. There have also been 29 new CPT codes established relating directly to skull base surgery.

Several national, regional and international skull base societies consisting of physicians from neurological surgery, otolaryngology, ophthalmology, plastic surgery, radiology, pathology, radiation oncology and oncology have been formed recently. The American Academy of Otolaryngology Head and Neck Surgery

established a Standing Committee for Skull Base Surgery in 1995. Currently, several AANS/CNS Joint Sections, including tumor, cerebrovascular and trauma, address skull base surgery issues.

According to the proposal, the formation of a Joint Skull Base Section would:

- 1) Support, coordinate and enhance efforts to generate and disseminate scientific information useful to neurosurgeons caring for patients with diseases of the skull base.
- 2) Promote advancement in skull base surgery by sponsoring and promoting

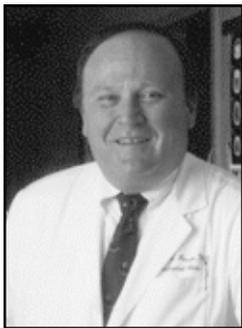
clinical and basic research related to the disease of the skull base.

- 3) Promote the mutual fellowship and cooperation among various scientific disciplines that deal with diseases on the skull base.
- 4) Promote the public welfare through advancement of skull base surgery and related sciences.

If you have questions about this proposed Joint Section, please call Dr. Al-Mefty at the University of Arkansas, (501) 686-8757.

MANAGED CARE update

Managed Care Plans Dominated in 1997, But What of the Future?



By John A. Kusske, MD

Managed care does not seem to be winning any popularity contests - as witnessed by audience reaction to the castigation of HMOs in the movie "As Good as It Gets," or if you tabulate the new laws that regulate health maintenance organizations.

But as the *New York*

Times reports in its January 20, 1998 edition, managed care plans achieved a near monopoly of employer health plans last year. The *Times* reports that managed care plans enrolled 85 percent of employees in 1997, up from 77 percent in 1996 and only 48 percent five years ago.

The shift to managed care helped to keep overall health care costs flat last year, according to a survey published by the Foster Higgins unit of William M. Mercer benefits consulting firm. According to John Erb, a principal at Mercer, it was the biggest one-year shift out of traditional indemnity coverage since 1994. That surprising migration has been at the root of corporate America's success in reversing several years of double-digit inflation in the late 1980s and early 1990s.

Total U.S. health expenditures rose an inflation-adjusted 1.9 percent in 1996, according to data presented in the January 13, 1998 edition of the *Wall Street Journal*. This was the slowest rate of growth in nearly four decades, according to the article. But the report comes amid growing concerns, especially among the nation's employers, that the many problems in the managed care industry jeopardizes a five-year string of victories in keeping the lid on medical bills.

Health Care Tab Continues to Grow

According to data published in *Health Affairs*, the total healthcare tab in the U.S. topped \$1 trillion for the first time in

1996. That amounted to 13.6 percent of the gross domestic product (GDP), a percentage that has remained steady since 1993. The Congressional Budget Office projects that the growth in health premiums will be 5.5 percent in 1998, up from the 3.8 percent in 1997. They further state that the growth in healthcare spending will soon accelerate, and that national health expenditure will reach 15.5 percent of GDP by 2008.

One factor affecting these increases in the private sector relates to the profit crunch at major managed care companies. The prognosis for managed care companies is, at the same time, growing grimmer. According to *Business Week*, analysts had projected premium increases of 5 percent to 10 percent for this year, but most plans are settling for increases of 3 percent to 5 percent. Insurers who had been intent on setting up national managed care plans are stumbling, reporting sharply lower quarterly earnings largely due to rapidly rising medical costs.

The primary problem, according to *Business Week*, is that managed care is turning into a commodity business, where the cost savings have been made and now insurers must compete on price alone in a market where substantial over-capacity exists.

According to a *Wall Street Journal* report, managed care plans are priced lower than traditional insurance. The gap is narrowing, however, as traditional insurers try to price their products competitively.

Many new enrollees, according to the *Journal* in a January 20, 1998 story, sign up for "preferred provider organizations" or for "point of service" HMOs. But in their drive to attract members, managed-care companies have offered such plans with aggressive prices that threaten profitability. Furthermore, since managed care plans now have 85 percent of employees, many high cost members have joined their rolls and those patients are driving up the portion of premium revenues that the plans must spend on medical care.

Beginning of the End?

Other authors predict the beginning of the end for HMOs. In a *Healthcare Forum Journal* article published in the November/December 1997 issue entitled "The Emerging Market," the author challenges the assumption that HMOs manage care, saying that "the essence of today's HMO remains pricing—offering competitive prices to purchasers of health care and negotiating profitable prices with

providers." He does not see this strategy as sustainable; in a competitive market, the middleman role will ultimately disappear because it represents another layer of costs.

It is also not clear, according to the author, that HMOs have really been the major factor in bringing about health spending reductions. To a large extent, the loss of health benefits for many workers and low inflation for all goods and services are the real causes. HMOs relationships with employers is also under siege, much as it is with those covered by the insurance products. Employers question whether managed care plans are really saving money and they are troubled by the lack of cost and outcome data. The author sees provider sponsored organizations as the key to effecting systematic health care reforms as a new generation of health care providers begins to adapt to the managed care norm.

Integrated Healthcare Report, in its October 1997 issue, featured a story entitled "Is Direct Contracting the Next Wave?" Their conclusions are worth reviewing. Initially HMOs grew by taking relatively healthy customers in large companies away from indemnity plans. That left the sicker, more expensive patients with indemnity and further drove up indemnity premiums. Not surprisingly, indemnity fell like a rock in a matter of two years. Next, HMOs went after the same relatively healthy employee groups in midsize and even smaller employers. A similar shift out of indemnity happened.

Today, HMOs are turning their attention to capturing Medicare and Medicaid market segments. Competition in many urban markets is now between HMOs and no longer focused on trying to wrest control from indemnity insurance. Soon enough we might see competition that attempts to convince employers that the HMO who is taking 25-30 percent of the premium is actually adding value. The paradigm of "bigger is better" may be reaching the end of the rope. Consumers and employers are beginning to search for other answers.

We as neurosurgeons must be aware of these changing attitudes so that we can respond in a proactive fashion as these alterations unfold in the delivery of healthcare. The road to direct contracting will be a long and arduous trail because many physicians and their organizations do not yet possess the structure necessary to make this a successful venture. In our next column, we will speak more about direct contracting.

Redefining Neurosurgery to Meet New Market Demands

By Edward C. Benzel, MD
Chairman, AANS Professional
Development Program
Past Chairman, AANS / CNS Joint
Section on Disorders of the Spine
and Peripheral Nerves

The question is often asked “Are there too many neurosurgeons?” The answer is not a simple yes or no. It lies deep within the complex environment of the discipline of neurosurgery, and hinges on its definition. Perhaps one should first ask the question, “what is a neurosurgeon?” Although neurosurgeons are commonly thought of as “brain surgeons,” this aspect of neurosurgery only encompasses 25-30 percent of the whole. Occlusive vascular surgery, critical care, spine and peripheral nerve surgery etc., comprise the remaining 70 percent.

Neurosurgery Manpower – The Statistics

The job market for neurosurgeons is, as with all other specialties, somewhat uncertain. The medical and surgical specialties have been challenged regarding their position in the marketplace by the recent article by Seifer et al in the *Journal of the American Medical Association*.³ Seifer et al’s work, however, has itself been challenged regarding neurosurgery by Alberstone et al (in this issue of the AANS Bulletin).¹

Non-neurosurgery specialists, such as internal medicine, gastroenterology, anesthesiology and orthopedic surgery fared poorly in the marketplace in recent years, as assessed by help wanted index parameters used by Seifer et al.³ Neurosurgery (utilizing similar assessment techniques), however, is faring relatively well and, in fact, is stable in this regard.¹

Can Neurosurgeons Compete?

In order for neurosurgeons to effectively compete, they must solidify their foundation. They must develop strategies that

include the augmentation of post-graduate neurosurgeon education. This can be accomplished through pre-meeting courses, as well as via the Professional Development Program of The American Association of Neurological Surgeons. Great strides, in fact, have been made in this domain in recent years.

Neurosurgery fellowships in spine surgery, peripheral nerve surgery, occlusive vascular surgery, etc., increase the ‘presence’ of neurosurgeons in the academic arena, as well as in the marketplace. This provides training for neurosurgeons so that competent specialist physicians may be appropriately placed in academic centers; thus ensuring that all training programs are capable of training qualified neurosurgeons in all spheres of neurosurgery. This, however, requires that training programs utilize this increased level of expertise to train residents effectively in all aspects of neurosurgery.

Scholarly pursuits must follow. Neurosurgeons must be recognized as being academically progressive and astute in spine care, pain management, tumor, peripheral nerve surgery, occlusive vascular surgery and critical care. For spine care, this includes the domains of spinal cord injury, biomechanics, back pain, outcome assessment, bone physiology, peripheral nerve surgery, occlusive vascular surgery and critical care research.

Unity

Unity is mandatory. This is graphically evident in the domain of spine surgery. The de-emphasis on certificates of special or added qualifications regarding spine surgery (and other components of neurosurgery), and an emphasis on the fact that neurosurgeons are qualified spine surgeons, has played an integral role in the maintenance of neurosurgery’s unity. Neurosurgeons are trained as spine surgeons and have been recognized as such by the Counsel on Spine Societies (COSS). In this vein, board certified or eligible neurosurgeons are equivalent to fellowship trained orthopedic spine surgeons.²

If neurosurgeons had not ‘stood together’ their ranks may have been decimated. The elimination of spine surgeons from the ranks of neurosurgery would have decreased the number of neurosurgeons by greater than one-half. The fact that neurosurgeons stood together helped separate neurosurgery from its competitors, and helped establish **neurosurgeons as spine surgeons**.

The Paranoia

In many respects, neurosurgeons are their own worst enemies. They persist in asking “are there too many neurosurgeons? Are there too many training programs? Should we restrict training?” If a neurosurgeon performs only brain surgery, the answer to these questions is “yes.” If neurosurgery broadens its scope to include the aforementioned components of neurosurgery, the answer is “no.” An assessment of the ‘capitated’ marketplace may help to clarify this issue.

In a capitated environment, the average reimbursement for a cranial neurosurgeon is approximately 7-10 ¢ per member per month (pmpm). If one considers the traditional spine neurosurgeon as the appropriate ‘definition’ of neurosurgeon (performing both cranial and traditional spine surgery, as well as peripheral nerve surgery, etc.), the neurosurgeon is ‘worth’ approximately 20-25 ¢ pmpm. However, if the neurosurgeon provides all of the aforementioned, plus a comprehensive non-operative back pain management program he/she may be worth as much as 40-50 ¢ pmpm. These are sobering figures. They portray the neurosurgeon, in his/her broadest sense (a comprehensive cranial, spinal, and peripheral nerve surgical and non-surgical care provider); and to be worth much more than if considered in his/her narrowest sense (i.e. solely as a brain surgeon).

What Neurosurgeons Must Do

Neurosurgeons as a group must demonstrate competence. They must establish and confirm the comprehensive nature of their training and demonstrate a strong academic and a research presence. The demonstration of competence can be achieved by utilizing standard outcome assessment tools. If clinical results are suboptimal (resulting in suboptimal outcomes), patient management strategies must be altered. If clinical results are good, these results should be used as a marketing tool.

Quality research must be based on the soundest of clinical and scientific foundations. Regarding spine surgery alone, it must be based in multiple arenas, including spinal cord injury, biomechanics, back pain, outcome assessment and bone physiology. Neurosurgeons must firmly and convincingly define (redefine) themselves. They must define themselves as cranial neurosurgeons, occlusive vascular surgeons, peripheral nerve neurosurgeons, pain

(continued on page 16)

management physicians, traditional spine surgeons, complex spine surgeons and non-operative spinal specialists. They cannot be uni-dimensional, but must indeed be multi-dimensional as a group (and for the most part as individuals). They must develop and nurture new and previously inadequately established attributes.

The days are rapidly vanishing when a spine surgeon can refuse to care for a patient without a surgical problem. Those were the days of the silver platter. Instead, neurosurgeons must answer the questions posed by the referring physician and the patient, regardless of the presence or absence of an indication for surgery. The neurosurgeon must deliver the complete package.

Are there too many neurosurgeons and training programs? The answer appears to be no! What neurosurgeons must establish is a high standard of neurosurgical care, and they must maintain this standard. They must remember their roots. Neurosurgeons are complex spine surgeons. They are peripheral nerve surgeons. They can effectively manage pain. They can care for critically ill patients. Neurosurgeons must define themselves. However, they cannot abuse their privileges. They must participate in directing their future.

THE FUTURE

In order to determine how neurosurgeons might survive in the years and decades to come, let us examine how neurosurgery may more effectively position itself in the marketplace. Back pain and the treatment of spinal disorders is perhaps, the perfect paradigm to examine in this regard.

Back Pain: The Paradigm

There are many ways to deal with patients with back pain. One can employ both operative and non-operative management strategies. Internal structural support, by way of spinal fusion, may be employed for most patients. Alternatively, an exercise program that strengthens the supporting structures of the spine is very effective in the majority of cases.

In order to effectively deal with the problem of back pain, back pain must first be defined. It is, indeed, not a homogeneous entity, but rather a very heterogeneous disorder consisting of a broad spectrum of poorly defined maladies. These

include: 1) overt structural failure, 2) muscle spasm, 3) neurogenic disorders, 4) mechanical back pain and related disorders, and 5) a variety of other less common pathologies. The treatment of overt structural failure and neurogenic disorders are relatively straightforward. Overt structural failure, (e.g., secondary to trauma), is effectively treated by surgical stabilization, external splinting and rehabilitation. Neurogenic complaints and radiculopathy are treated by decompression in many cases and non-operative strategies in others. Muscle spasm and mechanical low back pain are effectively treated non-operatively in the great majority of cases.

The Scope of the Problem

It is with the aforementioned in mind that one must consider the significance of the 'back pain problem', as well as its overall significance, in a global manner. Eight of ten people will see a physician for back pain in their lifetime. 93,000,000 work days are lost annually due to back pain. Chiropractors are reimbursed three fold more than neurosurgeons and orthopedic surgeons combined for the management of back pain. Therefore, one might logically conclude that back pain is "big business" and that it behooves neurosurgeons to take a more aggressive posture in this marketplace than they have in the past.

The Charge

Neurosurgeons must educate patients, referring physicians and peers. They must employ *active* management programs and de-emphasize *passive* programs. A program that encompasses all aspects of patient care, including cessation of smoking, weight loss, aerobic exercise, and stretching and strengthening exercises (*active* programs with respect to patient participation) may be implemented. They provide an opportunity for the neurosurgeon to monitor specific aspects of the program. They provide an opportunity for the physician to "contract" with the patient so that the patient and physician are effectively working together to "fight" the enemy - the patient's back pain. *Passive* therapy regarding patient participation, such as surgery or narcotic analgesic use, diminishes this opportunity and disengages the patient from 'therapeutic responsibility'.

The employment of *active* patient participation treatment strategies provides the neurosurgeon with an opportunity to study the effect of these treatment

programs on patient outcome. It provides an opportunity for the neurosurgeon to document the cost of care, the savings provided, and the patient's satisfaction, as well as the outcome achieved.

A Strategy

One might ask how a neurosurgeon can possibly achieve such goals in a busy practice. A neurosurgeon should consider him or herself as the "captain of the ship" (because he/she knows more about back pain than do other health care providers) and, therefore, the director or employer of mid-level health care providers, primary care physicians and others who help "deliver" the product (a comprehensive back pain management program). In order to accomplish this, alliances must be made between the neurosurgeons and primary care physicians and mid-level health care providers. The neurosurgeon can then function as the overseer of such a management scheme (team). The non-surgeon members of the team can then determine, to a significant degree, the management schemes to be used on a patient specific basis. Only rarely is surgery required, but the neurosurgeon is always in "proximal control" by being positioned as the "overseer" or the "captain of the ship." This "proximal control" creates an environment in which all patients are managed similarly. Furthermore, it creates a fixed referral source for surgical pathology, while providing the "complete package" for the customer. It is no longer acceptable to say to the patient "I am sorry I cannot help you (because you do not need surgery)." Rather, the neurosurgeon perhaps should say, "You do not need surgery, but I can provide an alternative management strategy for you." This appeals to most patients, as well as referring physicians.

Is a neurosurgeon worth 7 ¢ pmpm or 50 ¢ pmpm? Can neurosurgeons demonstrate cost savings, patient satisfaction and optimal outcomes in a comprehensive back pain management program? If the answers to these questions are yes, the neurosurgeon should be able to market him/herself effectively, and be able to effectively compete in capitated and managed care environments.

A neurosurgeon must be able to practice efficiently. He/she must 'visualize' and meet the needs of the community by achieving a high and efficient standard of care, as well as by identifying his/her competitors. It is emphasized that these

(continued on page 22)

Cerebrovascular Section

By Philip E. Stieg, PhD, MD

The activities of the Joint Section on Cerebrovascular Surgery continue to thrive and expand. Membership has exceeded 500 and our free-standing Annual Meetings have been a resounding success. The Section has also continued its communication with the American Society of Interventional and Therapeutic Neuroradiology (ASITN), as well as with the American Heart Association. The CV Section's Annual Meeting is held in conjunction with the American Heart Association's International Stroke Meeting, thereby allowing greater interaction and dialogue.

Third Annual Meeting

The Third Annual Meeting took place at Disney World, in Orlando, Florida on February 1-4, 1998. This was the first meeting held in conjunction with the ASITN. The meeting was under the directorship of Drs. Robert Harbaugh, from the Joint Section, and Michele Mawad, from the ASITN.

The scientific sessions focused on the basic science of cerebrovascular disease, innovations in the management of cerebrovascular disease and outcomes analysis. Special lectures were given by Albert Rhoton, MD, on Small Arteries, Large Deficits: Strategically Situated Perforating Arteries; as well as Charles L. Bosk PhD, who spoke on "Forgive and Remember."

Our international relationships were expanded by a presentation by Hiroshi Abe, MD, on The Surgical Treatment of Moya Moya disease. Target Therapeutics also supported the Lussenhop lecture, which was given by Alex Berenstein, MD, on Endovascular Neurosurgery: The Birth of a New Specialty. Bayer Award presentations were also given by Drs. E. Sander Connely and Nicole Moayeri. Panel discussions by leading neurosurgeons and endovascular surgeons proved to be of great value, as it gave everyone an opportunity to voice opinions and discuss difficult cases.

Upcoming Events

The Joint Section also has several upcoming events. The CV Section session at the

AANS Annual Meeting and two sessions at the CNS Annual Meeting are near completion. Next year's Joint Section Annual Meeting will again be held in association with the American Heart Association. It is scheduled to take place on January 28-30, 1999, at the Grand Ole Opry in Nashville, Tennessee. Because of this year's success, the ASITN has also agreed to have a meeting in conjunction with the Joint Section. The meeting will be under the directorship of Drs. Philip Stieg and Randall Higashida.

The CV Section plans to continue its expansion through innovations, collaborative efforts and communication. Our educational goals have been met, but we continue to seek new methods. Recent results from the North American Symptomatic Carotid Endarterectomy Trial (NASCET) data for carotid stenosis, between 50-69 percent, will undoubtedly expand the number of endarterectomies performed. The role for stenting in this disease will continue to be discussed. The indications for clip vs. coil remain a controversial topic and clearly outcomes analysis will be extremely important in these discussions. Any individuals wishing to become a member of the CV Section should contact Joshua Bederson, MD, (212) 831-3324, or the AANS office in Chicago directly, (847) 692-9500.

Joint Section on Neurotrauma and Critical Care

By Charles H. Tator, MD, PhD, FRCS(C)

There are a number of ongoing activities within the Joint Section on Neurotrauma and Critical Care which we would like to bring to the attention the members of The American Association of Neurological Surgeons.

Awards and Fellowships

In order to enhance neurotrauma research and research in neuro critical care, the Joint Section on Neurotrauma and Critical Care has developed a resident and young investigator award for the best papers presented at the Annual Meetings of the AANS and CNS. Please be sure to mark your abstract forms to indicate that you are competing for one of these awards when you submit your abstracts in the areas of neurotrauma and critical care research.

Several applications were received for the new Neurotrauma Research Fellowship

being offered annually by the Joint Section on Neurotrauma and Critical Care. Jack Wilberger, MD is the Chair of this Committee, and applications should be directed toward him. Several applications were received for the January, 1998 deadline and the winner of the 1998 Neurotrauma Research Fellowship will be announced shortly. This will be an annual competition, so please keep this in mind for next year. Basic science or clinical science research in neurotrauma or critical care are eligible topics for this Fellowship.

Critical Care

The Joint Section continues to offer courses in critical care at each of the Annual Meetings of the AANS and CNS. In addition, the Professional Development Committee offers two courses annually in neuro critical care. The Committee on Critical Care, chaired by Michael Rosner, MD is developing a curriculum for residents, which will be presented shortly to the Program Directors at the May meeting of the Society of Neurological Surgeons. The Committee is working to enhance the role of neurosurgeons in critical care.

Prevention of Neurotrauma and Gun Safety

THINK FIRST for Kids is currently being offered in hundreds of elementary schools throughout the United States and Canada. THINK FIRST for Kids is a teacher-administered injury prevention program for grades 1, 2 and 3. This school-based prevention program has 6 modules, which include vehicle safety, water safety, gun safety, etc.

With respect to gun safety, the Gun Safety Committee of the Joint Section is developing strategies to promote the use of child-proof gun safety locks as a means of reducing the incidence of unintentional gunshot injuries in children.

Remuneration for Neurotrauma

The Joint Section is involved in the development of strategies to improve compensation for the management of neurotrauma by neurosurgeons. Together with the Council of State Neurosurgical Societies, a number of strategies are being considered including the provision by hospitals of stipends for neurotrauma call.

(continued on page 22)

State Neurotrauma Initiatives

Several states, including Florida and Kentucky, already have Neurotrauma Funds based on a surcharge on traffic violations. These surcharges are being used to support neurotrauma research and prevention programs. It is the goal of the Joint Section on Neurotrauma and Critical Care to promote the development of Neurotrauma Funds in all States of the United States and all Provinces of Canada.

Tumor Section

By Mark Bernstein MD, FRCSC

The Joint Section on Tumors portion of the Scientific Program for the AANS Meeting in Philadelphia Wednesday afternoon will feature guest presentations on tumor vaccines and anti-angiogenic approaches to glioma therapy. Awards will be given in the categories of best resident research paper (Preuss), best clinical research by a neurosurgeon (Mahaley), best research by a neurosurgeon within the first 6 years of practice (Young Investigator), best translational research by a practicing

neurosurgeon (NBTF), and contributions by an established investigator to neuro-oncology (Farber). There will also be a special course on surgical neuro-oncology on Thursday morning.

The Third Satellite Symposium will take place immediately following the AANS Annual Meeting. Featured topics for invited speakers and platform presentations include tumor promoters and suppressors, meningiomas, futuristic therapies, and angiogenesis and invasion, as well as a special lecture on pituitary tumors by the AANS President, Edward R. Laws, Jr., MD. The quality and quantity of submitted abstracts is gratifying.

Essentials of Clinical Neuro-Oncology

The book "Essentials of Clinical Neuro-Oncology" to be published by Thieme Medical and Scientific Publishers with significant input from members of the Section is progressing. This book will feature chapters on most aspects of neuro-oncology and will incorporate special features such as pearls and pitfalls in

highlighted text. It should be a very informative and user-friendly volume.

Outcomes Projects

The Glioma Outcomes (GO) Project, sponsored by Rhone-Poulenc Rorer, is also well underway with over 30 centers registered. The study features an instrument designed to facilitate prospective collection of outcome data, including comprehensive quality of life information on patients with malignant gliomas. The Section has also taken a leadership role in the development of Practice Parameters for low-grade glioma, which is nearing completion, and brain metastases, which has just started.

We have also recently articulated our perceived priority areas in NIH funding to the Washington Committee: (1) clinical and laboratory studies in gene therapy; (2) basic research into the molecular mechanisms of tumorigenesis, tumor invasion, and tumor resistant to treatment; and (3) clinical studies such as a randomized study of radiation in the initial management of patients with low-grade glioma.

Guest Column (continued from page 16)

competitors are not just other neurosurgeons and orthopedic surgeons. They include chiropractors, physical therapists, primary care physicians, occupational medicine physicians, and physiatrists.

The Marketplace

Neurosurgeons, have the potential for increasing their market share. However, the neurosurgeon's status in the marketplace is not clearly defined. Nevertheless, it is evident that the marketplace decline of other specialists, both surgical and non-surgical, is contrasted by the relatively stable nature of neurosurgery's marketplace status. Neurosurgeons appear to be in a good position to take advantage of the current environment. This may be accomplished by assuming a more aggressive posture

regarding patient care. It most certainly cannot be accomplished by retreating.

A Philosophy

As is true for much of surgery, spine surgery, in the majority of cases, is only appropriate if the patient has failed an aggressive non-operative management program. An aggressive and effective non-operative management program leads to appropriately selected surgical candidates. It helps the neurosurgeon adjust to the new and evolving healthcare environment. It provides satisfaction to the surgeon, as well as the patient, and improves surgical outcomes by providing more precisely selected patients for surgery. This, in turn, makes the surgeon more marketable. In addition, it increases surgical volume because the surgeon has an increased market share. Finally, it augments the

interest level and enthusiasm of the surgeon. The surgical cases become more rewarding because the pathology is often more striking and more amenable to surgical management. More importantly, the patients' outcomes are optimized.

REFERENCES

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2. Ruckman R: Should patients with back pain be referred to orthopaedic surgeons or neurosurgeons?. Spine Letter 4 (4) April, 1997; pp 5
3. Seifer SD, Troupin B, Rubinfeld GD: Changes in marketplace demand for physicians: a study of medical journal recruitment advertisements. JAMA 276:695-699, 1996



How to Make Annual Meeting Exhibits Work For You

Keeping up with the latest neurosurgical advances and innovations can be difficult for even the most earnest of neurosurgeons. But the AANS makes it easy at the 66th Annual Meeting in Philadelphia where almost 200 companies will be showcasing the most up-to-date devices, instruments, computers, software, pharmaceuticals, publications and more in the Exhibit Hall.

“The Exhibit Hall is one aspect of our Annual Meetings where many neurosurgeons miss an opportunity,” said Jon Robertson, MD, chairman of the newly formed Committee on Exhibits. “This is a rare occasion where we have just about every company that has anything to do with neurosurgery in the same place at the same time. It’s a great opportunity to compare, ask questions and see first-hand what’s being developed and how it stacks up to what you currently use.”

Not only will a tour through the Exhibit Hall greatly enhance your educational experience at the meeting, it also will provide a time-efficient chance to order the reference books you’ve needed, register for a Professional Develop Program (PDP) course, and learn the latest about the HCFA mandated E/M guidelines.

Lists of exhibitors and maps of the Exhibit Hall will be available in the Final Program Book, which will be available on site. Companies are listed alphabetically, by product category, or numerically by booth so that you can track the companies and displays you don’t want to miss on the



exhibit floor. Highlights of the Exhibit Hall include:

- **Technical Exhibits** — Preview the latest medical devices, equipment and pharmaceuticals in the neurosurgical field. Doctors can gain hands-on experiences with these new products and discuss benefits, risks, indications, and contraindications with industry representatives. Exhibitors in this area include manufactures of surgical supplies, pharmaceuticals, imaging and diagnostic products.
- **Practice Management/Recruiters** — Find new ways to enhance the management of your practice by previewing the latest in office and patient billing software, and coding. If you are looking for a new practice opportunity, visit one of the physician recruitment exhibits.
- **AANS Membership Booth** — Come learn about CME opportunities and membership benefits at the official AANS booth. Register for a PDP course and save 10% on the registration fee during the meeting. Pick up a free E/M coding reference card. This also is the place to purchase your favorite novelty items, medical encyclopedias on CD-ROM, brain and spine teaching models, and, of course, Harvey Cushing memorabilia.
- **NEUROSURGERY://ON-CALL®** — The Official Web site of the AANS and CNS will be live on the Internet right in the Exhibit Hall. Stop by the **N://OC®** booth to tour the largest neurosurgical Web site in the world. Learn how to conduct on-line library searches, submit on-line abstracts, update your “Find A Neurosurgeon” listing, download outcomes measurement instruments, and much more.
- **Publisher’s Row** — Review the latest neurosurgical text books and journals. There will be a special booth set up for SANS VI and the AANS Publications office.

- **Journal of Neurosurgery** — Visit with the staff of the official AANS scientific journal and learn about subscriptions, submissions and purchasing back issues on CD-ROM. The *Journal* will also display *Neurosurgical Focus*, a peer-reviewed, on-line neurosurgical published journal by the editors of the *Journal*.
- **Posters** — Over 500 poster exhibits will be displayed in the Exhibit Hall. Posters are arranged according to topic and describe the latest in neurosurgical research.
- **Lunch** — If you need a break during the meeting to relax and re-energize, the Exhibit Hall is the place to go. Lunch and refreshments will be served in the Exhibit Hall throughout the meeting.

The Exhibit Hall covers more than 100,000 square feet and is the largest display of neurosurgical products and services in the world. The exhibitors, AANS staff, electricians, foremen, and set-up crews transform the Exhibit Hall from an urban construction site full of boxes, heavy equipment and crates into its final product complete with carpet, 3-story displays, video displays and Internet access in less than four days.

Planning for the Exhibit Hall starts approximately nine months before the Annual Meeting, and Exhibitors spent over \$1.1 million to exhibit at the 1997 AANS Annual Meeting.

“The exhibit fees help keep registration costs down for our members and help subsidize the Scientific Program,” said Hank Polson, Director of Marketing for the AANS. “The revenue provided by our exhibitors has allowed the Annual Meeting to grow in both scope and quality over the years.”

The Exhibit Hall is open from Monday, April 27th and Tuesday, April 28 from 9:00 AM– 4:30 PM and Wednesday, April 29 from 9:00 AM–3:30 PM.

Continuing Medical Education

with the AANS

The AANS Professional Development Program (PDP) brings you a schedule of CME courses that are designed to give you the best and most up-to-date educational opportunities for both clinical training and practice management. Courses available from May to December 1998 include the following:



SOCIOECONOMIC COURSES

1998 Reimbursement Update for Neurosurgeons...

Reimbursement Foundations: Neurosurgical Billing and Coding for Efficiency

June 11-13 – Minneapolis, Minnesota

August 27-29 – Chicago, Illinois

Learn the “best practices” to use in neurosurgery offices for efficient coding and prompt billing and payment. You’ll get practical hands-on coding experience that’s neurosurgery specific. Register early – this popular course fills quickly!

Advanced Coding and Reimbursement Concepts in Neurosurgery

November 13-15 – Cancun, Mexico

This course is for you if you have mastered reimbursement systems and practice management billing, and have a strong interest in correct coding.

CLINICAL SKILLS COURSES

Spine Surgery – Hands-On: A Comprehensive Approach for Neurosurgeons & Neuroscience Nurses

May 16-22 – Albuquerque, New Mexico

This is the consummate course for practicing neurosurgeons who desire an in-depth review of anatomy, surgical exposure, decompression, and stabilization of the entire spinal axis.

Neurosurgery Review by Case Management: Oral Board Preparation

May 24-26 – Cedar Rapids, Iowa

November 8-10 – Houston, Texas

This entirely interactive course provides a review of clinical neurosurgery using case histories in a format patterned after the oral board examination. Work with expert faculty who will critique your neurosurgical skills and help you organize your responses to oral-board type questions.

Re-Introduction to Neurosurgical Critical Care for Neurosurgeons, Neuroscience Nurses & Physician Assistants

June 4-6 – Chicago, Illinois

In this course, you will use clinical problem solving to examine practical applications of critical care management concepts. You’ll learn to better communicate with full-time critical care physicians, pulmonologists, and other surgeons.

Advanced Brain Anatomy for Nurses **NEW!**

June 27-28 – San Francisco, California

November 21-22 – New Orleans, Louisiana

You will receive in-depth instruction of functional anatomy, associated pathology, and clinical syndromes with CT and MRI correlation. Through demonstration on cadaveric brain specimens, you will observe the three-dimensional aspects of the brain.

Surgical Management of Movement Disorders

June 26-27 – San Francisco, California

This advanced course reviews the latest theory and techniques for the surgical management of movement disorders. Hear case discussions by leaders in the field on pallidotomy, thalamotomy, and deep brain stimulation. Review the rationale for these surgeries – and how to avoid complications. Discover how to build and strengthen a successful movement disorders practice.

Spine Review – Hands-On: For Young Neurosurgeons

August 15-21 – Albuquerque, New Mexico

Learn from the best. This is the consummate course for residents, fellows in training or neurosurgeons who have been in practice for less than two years. Provides an in-depth review of anatomy, biomechanics, surgical exposure, decompression, and stabilization of the entire spinal axis. Covers the fundamentals and foundations of spine surgery, with an emphasis on the basic sciences – particularly biomechanics.

Advanced Surgical Pain Management **NEW!**

September 11-12 – Portland, Oregon

You will learn advanced information and hands-on training in interventional therapies for pain management, with a focus on both ablative and augmentative techniques for neurosurgical pain control in a variety of conditions.

Minimally Invasive Neurosurgery: Neuroendoscopy – Hands-On

October 30-31 – Cleveland, Ohio

This course gives you a comprehensive review of endoscopy and its expanding role in neurosurgery. Hands-on instruction allows you to gain expertise in handling a variety of neuroendoscopes while performing dissection exercises on cadaveric materials. You’ll also participate in interactive discussions and reviews of video demonstrations about neuroendoscopic procedures.

Advanced Techniques and Successful Strategies in Image-Guided Neurosurgery: An Intensive Review

November 13-14 – Memphis, Tennessee

More information to come . . . Call for a brochure!

*The AANS—Your Premiere
Source for
Neurosurgical CME*

Continuing Medical Education

with the AANS

Educational Partners to Support Professional Development

This past year, the Professional Development Program (PDP) Committee initiated an innovative program designed to assist with the 'perpetual' provision of neurosurgery education through enhanced resources. The new venture is called "Educational Partnerships with Industry" and will enhance PDP course offerings so that the AANS can continue to provide the highest quality education, while increasing the number of neurosurgeons whom can benefit from this training.

The primary goal is to make the courses more economically feasible for a greater number of members.



Partners Give Support

The 1998 Professional Development Educational Partners are:

- AcroMed
- Codman/Johnson & Johnson
- Elekta
- Medtronic
- Sofamor Danek
- Zeiss

Each of the Educational Partners provided educational grants of \$25,000 to support AANS Professional Development courses.

First Program

In the first year, the PDP Committee plans to direct a portion of the Education

Partners funding to support Spine *Review-Hands-On: For Young Neurosurgeons*. By subsidizing this course, the AANS will be able to provide high quality, low cost education for those of our members who are at the beginning of their careers. Consequently, young neurosurgeons will have the opportunity to attend a fully comprehensive spine surgery course for an extremely reasonable cost.

Although just one example is mentioned, members will be able to see more examples in the future as the partnership program continues to thrive throughout the coming years. In the meantime, the Professional Development Committee would like to acknowledge these partners and thank them for taking the first step with us on what should be a project that will affect and help all members of the AANS!

IT'S EASY TO REGISTER FOR AN AANS PDP COURSE

Did you know the AANS Professional Development Department offers four easy ways to register for our courses? If you have a Visa or MasterCard, you can call your registration into (847) 692-9500 or fax it to (847) 692-2589.

Another option is to register, on-line, via our Web site (www.neurosurgery.org). Once on the site, go to the "Meetings/CME" page and follow it to "AANS Professional Development Program" and then to the "1998 Schedule of Courses". All registrations over the site are secured and your credit card number will be available to no one but our registrars. Also use this site to get the most up-to-date information about the courses!

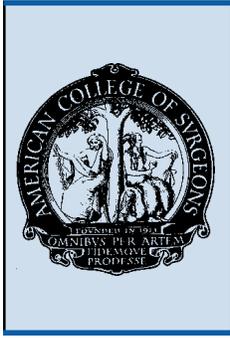
Lastly, if you want to pay via a practice check, just mail your registration to the box number shown on the registration form.

NOTE: Registrations are taken on a first-come, first-served basis and we can only take registrations if some type of payment accompanies them. Because many courses sell-out early, we *strongly urge* you to refrain from making travel reservations until you receive confirmation from the AANS that your registration has been accepted.

Visit the PDP Booth (#623) at the AANS Annual Meeting in Philadelphia!

Be sure to ask us about:

- Earning a 10% discount off remaining 1998 courses, when you register during the AANS Annual Meeting.
- Obtaining a FREE Evaluation & Management CPT Code reference card. When you pick-up the card, ask about the free mini-lectures in the Exhibit Hall which will help you learn how to use the card.



Report from the American College of Surgeons

By Edward R. Laws, Jr., MD

Regent for Neurosurgery, American College of Surgeons

The Board of Regents of the American College of Surgeons met in Chicago, February 6 and 7, 1998. Overall, College finances remain in satisfactory condition and the fellowship is growing at a steady rate. Neurosurgical participation in the fellowship remains significant and neurosurgical participation in the various committees has been outstanding.

Report Card Project and Outcomes

The Report Card Project originally began within the Board of Governors as a response to managed care. The desire, similar to the one in neurosurgery, was to provide Fellows with a means of measuring their own clinical outcomes in comparison to their peers. One of the procedures chosen for the Report Card Project is lumbar laminectomy, and we have been actively involved, along with orthopedic spine surgeons, in reviewing the instrument designed to collect the data for the outcome studies and for the report card itself. This is moving along quite well and will be supported by the American College of Surgeons.

Clinical Trials

The ACS has put on effective courses on Clinical Trials Methods. These are expensive to produce, but the response from the participants that have included neurosurgeons has been encouraging.

The National Cancer Institute has approved a proposal from the ACS to set up a nationwide Clinical Trials program. The statistical arm will be located in Philadelphia and 15 institutions will be involved in the initial phase. The National Cancer Database, maintained by the College of Surgeons, is the base for selection of the initial trials. There will be 11 Clinical Trials supported for the first two to three years, including four in thoracic oncology, two in colorectal cancer, one in retinoblastom and one in breast cancer.

The opportunity for a Neurosurgical Clinical Trial will be forthcoming. Educational opportunities will be built into the framework of the Clinical Trials program and it is recognized that maintaining excellent accrual to the various trials will be essential for their success.

New Technology Educational Courses

At the recommendation of the Committee on Emerging Surgical Technology, the College will undertake a validation process for fellows undergoing educational courses designed to enhance their practice with new technology. This will include such procedures as stereotactic breast biopsy and the use of intraoperative ultrasound for general surgical techniques. Undoubtedly, there will be other College programs designed to teach new technologies. The concerns, of course, are the same as those faced by neurosurgery, in that one must be aware of malpractice exposure, the maintenance of the tax exempt status of the organization providing the instruction, and the antitrust aspects of a verification procedure that might extend to credentials issues.

Subspecialty Advisory Councils

The Advisory Councils for the various subspecialties have been quite active. They have been reviewing together the prerequisites for PGY-1 experience before going into surgical specialties. They have been considering the possibility of including representatives from the candidate group on the various Advisory Councils and have been interacting with The Board of Governors and its Report Card Project. They also will provide material for the recently redesigned *Journal of the American College of Surgeons*, which will periodically highlight specialty areas of surgery, including neurosurgery.

Reimbursement Issues

A position paper on the role of residents in managed care systems was debated and is being matured. It will probably be broadened to include more than just the role of residents. This will be brought before the Regents at the June meeting. The American College of Surgeons participates in the activities of the ICAHO and the Council of Medical Specialty Societies and both of these organizations are continuing to assert their respective influence over important areas in surgical care. The professional liability area has been marked by tort reform initiatives in the various states, some of which have been successful and some of which have been declared unconstitutional. A surgeon has been appointed to The Board of the American Tort Reform Association (ATRA) to replace Ben Blackett, MD, who has served so well for surgery and for neurosurgery.

The regulatory update and physician reimbursement areas are under constant analysis by the College staff. Executive Director Paul Ebert, MD, has been very active in testimony in Washington, with an attempt to deal with both the issue of practice expense and with regard to the conversion factor, both of which areas are of major concern to surgeons. The College's coding activities have expanded significantly and they now have a coding hotline, which handles significant numbers of inquiries every day.

MOVING?

When moving remember to send your change of address to:

AANS Member Services
22 South Washington Street
Park Ridge, Illinois 60068-4287

Cyber Museum Opens Online

NEUROSURGERY://ON-CALL[®] is pleased to announce the grand opening of the Cyber Museum of Neurosurgery. This online museum shares the wealth of information and memorabilia offered by the neurosurgical archives. You can visit the Cyber Museum on **N://OC**[®] at <http://www.neurosurgery.org/pubpages/cybermuseum/entrancehall.html>.

Below is a quick reference guide to the exhibits and halls that you will be able to explore:

Cyber Museum of Neurosurgery Guide Aneurysm and Microneurosurgery

This exhibit, the brochure from the 1995 AANS Archives Exhibit in Orlando, Florida, features leaders in the development of aneurysm and microneurosurgery.

Archives Hall

The Archives Hall contains a bibliography of historical articles neurosurgeons have published in their premiere journals. Future exhibits in Archives Hall will document the development of these journals.

CYBER MUSEUM ANNOUNCES CALL FOR EXHIBITS

Our Featured Exhibits Gallery will spotlight all new exhibits to the Cyber Museum. An open invitation is extended to all special interest groups including the Sections, Women in Neurosurgery, FIENS, military neurosurgeons, the ABNS, CSNS, neuroscience foundations, organized neurosurgical societies, and others to contact Chris Ann Philips, Archives Coordinator (e-mail address: cap@aans.org) to discuss the development of an exhibit.

We value your feedback! Please send any comments about the Cyber Museum of Neurosurgery to info@neurosurgery.org

Art Gallery

This collection of galleries features artwork of and by neurosurgeons and preserves images of items of value to the development of neurosurgery.

Cushing Tumor Registry

This exhibit is the brochure provided at the 1996 AANS Archives Exhibit in Minneapolis. In it, Dr. Wahl documents an important facet of Dr. Cushing's work. In the future, this exhibit will be augmented by a video-taped walking tour narrated by Dr. Wahl of the materials exhibited in 1996.

Donation Office

These are the administrative offices for the Cyber Museum. You will find information about how to donate to the archives, the donor recognition wall and more detailed information about the Archives Committee.

Gift Shop

A virtual gift shop featuring the items available through **NEUROSURGERY://ON-CALL**[®] which are of an historic nature. A portion of all sales will support the AANS Archives and Cyber Museum.

History of Organized Neurosurgery

This exhibit highlights articles about the formation of the five national neurosurgical organizations. A future exhibit for this site includes an article about the history of FIENS, the Foundation for International Education in Neurological Surgery.

Leaders in Neuroscience

We are fortunate that many of the inventors and neurosurgical procedure pioneers are available to interview. Leaders in Neuroscience is a unique video-taped oral history program featuring many of the individuals who were the inventors and pioneers and those who worked with and trained with leading neuroscientists from earlier this century. This exhibit is a compilation of the abstracts from each of the video-interviews. The videotapes are available for sale in the Gift Shop.

Portrait Hall

This gallery of photographs honors the Presidents of The American Association of Neurological Surgeons and Congress of Neurological Surgeons. In the future, photographs of other eminent neuroscientists and short biographies will be added.

Pre-20th Century Neuroscience

This exhibit features a few of the interesting avenues taken by neuroscience prior to the 20th century - in Egypt, Peru, Europe, and North America. Future additions to this exhibit will include an article on Native North American trephination and a walking tour of the 1993 Archives Exhibit narrated by Roy Selby, MD.

Stereotactic Neurosurgery

These exhibits contain an account of the development of Stereotactic Neurosurgery and a collection of photographs taken at the 1992 AANS Archives Exhibit entitled The History of Stereotactic Neurosurgery which was held in San Francisco, California.

Make **N://OC**[®] Your Home Page

For quicker access to **NEUROSURGERY://ON-CALL**[®], you can make **N://OC**[®] your home page. This means every time you log-on to the Internet, **N://OC**[®] will be the Web site that automatically pops up.

Using Netscape (version 4.0 and higher)

1. In the EDIT menu, select PREFERENCES
2. In the right hand box, type <http://www.neurosurgery.org> in the Home Page field "Location"

Using Netscape 3.0

1. In the Options menu, select GENERAL PREFERENCES
2. In the Appearance tab, locate the Start-Up box
3. Select - Browser Starts with Home Page Location and type <http://www.neurosurgery.org> in the field
4. Click OK

Using Internet Explorer

1. In the View menu, selection OPTIONS
2. In the Navigation tab, locate the Customize box
3. In the Page field, make sure "Start Page" is selected
4. In the Address field, type in <http://www.neurosurgery.org>
5. Click Apply, then Click OK

Positions

spring '98

NEUROSURGERY PRACTICE OPPORTUNITY EAST CENTRAL REGION

Premier Neurosurgery group seeks additional BC Neurosurgeon to join their well-established practice.

- * Full-range of surgical procedures (expertise or desire to pursue subspecialization welcomed)
- * High volume practice
- * Excellent income guarantee, production incentives & benefits package
- * Practice out of 900+ bed tertiary care medical center with Level 1 Trauma
- * Academic affiliation

This mid-sized city nestled in a mountain valley provides numerous cultural and recreational activities with easy access to several metro areas!

CONTACT: DANISE A. COOPER
1-800-765-3055, I.D. #5455HS
FAX: 314-726-3009

NEUROSURGEON NEEDED WITH EXPERTISE IN SPINE - Upper Midwest Location -

Prestigious Neuroscience Institute, affiliated with a regional medical center, seeks a BC/BE Neurosurgeon for area's busiest practice. The ideal candidate will possess a strong interest in spinal instrumentation, or will have completed a spine fellowship.

Consider:

- * Joining a team of Neuroscience experts including Neurosurgeons, Neurologists, Neuroradiologists, and Physiatrists
- * Opportunity to step into immediately busy practice
- * Easy access to state-of-the-art resources including CT scanning, MRI and on-site rehabilitation services.
- * Competitive salary, production incentives, with a comprehensive benefits package.

With recreational and cultural activities, a thriving local economy, and a school system that ranks among the highest in the state, the area has much to offer!

CONTACT: DANISE A. COOPER, 1-800-765-3055
ID#: 4710HS FAX: 314/726-3009
222 S. Central Ave., Suite 700, St. Louis, MO 63105

NEUROSURGEON NEEDED NORTHEASTERN LOCATION

Premier multi-specialty group of 220 physicians seeks additional BC/BE neurosurgeon to join established practice. This clinic is a member of the nationwide network of PhyCor managed multi-specialty groups.

The clinic is connected to a 336-bed tertiary care center and teaching hospital with IM, FP and General Surgery residency programs. A research foundation is also located on the main campus. The department consists of three BC/BE neurosurgeons who practice full scope neurosurgery. The ideal candidate will be BC/BE, practice general neurosurgery including Spine and Cerebrovascular, and have an interest in innovative technology and techniques.

This position offers an excellent compensation and benefits package with a 30-month salary guarantee.

The area is abundant in outdoor recreational activities and provides easy access to the Finger Lakes of New York, and the Pocono Mountains of Pennsylvania. Many of the Northeast's metropolitan areas are within close proximity.

Contact: Danise Cooper at 1-800/765-3055
ID#: 5384HS FAX: 314/726-3009



OUTSTANDING NEUROSURGERY OPPORTUNITIES

- * Well established group settings
- * Competitive, guaranteed salary and benefits
- * Bonuses, production incentives & partnership
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- * Medium-sized university towns
- * Outstanding income potential

Please contact:

Betsy Smith or Sherron Soll
1-800-765-3055
FAX: 314/726-3009
E-mail: bsmith@cejka.com or
ssoll@cejka.com

Although the AANS believes these classified advertisements to be from reputable sources, the Association does not investigate offers and assumes no liability concerning them.

Baltimore, Maryland

A third neurosurgeon is needed for a growing practice. Some training or experience with spinal instrumentation is desirable. This group, which is one of the oldest in the Baltimore area, has a very desirable case-mix with each physician averaging well over 200 cases per year. This is a salaried position with emphasis on incentive compensation.

Wanda Parker
E.G. Todd Physician Search
One Byram Brook Place
Armonk, NY 10504
914-273-5666
Fax: 914-273-5895

WISCONSIN

Marshfield Clinic, a 525-physician owned and managed multispecialty group practice, continues to enhance the division of neurosciences and is seeking two additional **BC/BE Neurosurgeons**, one with spine subspecialty interest. The second position affords the opportunity to develop individual subspecialty interests.

These positions will join an existing staff of three neurosurgeons and thirteen neurologists, complemented by staff in Neuroradiology, Neuropathology, Neuropsychology and Epileptology. Saint Joseph's Hospital, a 524-bed tertiary care center, directly adjoins Marshfield Clinic and offers an equally sophisticated medical environment.

These outstanding opportunities are enhanced by a lifestyle rich with four season recreational diversity, excellent schools and family values in Marshfield, Wisconsin, an economically solid, safe community.

If you are interested in the opportunity to practice Neurosurgery in an efficiently managed and financially stable system of health care, while enjoying a quality-of-life second to none, send your C.V., to:



Cindy M. Schuster, Physician Recruitment Manager
MARSHFIELD CLINIC
1000 N. Oak Avenue
Marshfield, WI 54449
or call 1-800-782-8581, extension 93725
FAX: (715) 389-4889
E-Mail: schustec@mfldclin.edu

MARSHFIELD CLINIC

SORRY, NOT A HEALTH PROFESSIONAL SHORTAGE AREA. EOE M/F/H/V

Partnership Practice

We gave our neurosurgeon \$1.5 million to equip the suite and to demonstrate our commitment to the new neurosurgical service. In June 1997, he opened his practice. In November he was doing 32 cases monthly. He will do 300 in his first year. Practice is positioned for substantial growth in a collegially friendly medical community. Catchment area serves 257,000 Carbondale, IL (30,000 residents) is the home of Southern Illinois University with 20,000 students. The University provides a culture uncommon to a city its size. Memorial Hospital is the Regional Referral Center for sixteen counties.

Call Andy or Sue @ 800.333.1929
Fax CV to 618.549.1996
www.sih.net/recruit

Position Listing Service

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spring '98

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(617) 636-5858

Neurosurgical Society of America

May 13 - 17, 1998
Quebec, Canada
(210) 567-5625

Georgia State Neurosurgical Society

May 22 - 24, 1998
Sea Island, Georgia
(404) 876-7535

American Board of Neurological Surgery

May 25 - 28, 1998
Iowa City, Iowa
(713) 790-6015

Iowa-Midwest Neurosurgical Society

May 26 - 29, 1998
Iowa City, Iowa
(402) 559-4301

Southern Neurosurgical Society

June 3 - 7, 1998
Hot Springs, Virginia

International Society for the Study of the Lumbar Spine (ISSLS)

June 9 - 14, 1998
Brussels, Belgium

American Medical Associa- tion Annual Meeting

June 14 - 18, 1998
Chicago, Illinois
(312) 464-5000

Rocky Mountain Neurosurgi- cal Society

June 14 - 18, 1998
Vail, Colorado

Canadian Neurosurgical Society

June 16 - 20, 1998
Montreal, Quebec

Residency Review Committee for Neurological Surgery (ACGME)

June 26 - 27, 1998
Durango, Colorado

Pituitary Society

June 28 - 30, 1998
Naples, Florida

American Board of Medical Specialties

September 17, 1998
Chicago, Illinois
(847) 491-9091

Western Neurosurgical Society

September 12 - 15, 1998
Napa, California

1988 CNS Annual Meeting

October 3 - 8, 1998
Seattle, Washington
Information: Annual Meetings Service
Department
(847) 692-9500