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THE AMERICAN ASSOCIATION OF NEUROLOGICAL SURGEONS

AANS BULLETIN

The quarterly publication of The American Association of Neurological Surgeons

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United We Stand

Working Together to Secure the Future of Neurosurgery.

Thank you for the honor that you have bestowed upon me in allowing me to serve as President of the AANS. During my tenure as President-Elect, I have gained a deep appreciation of the dedication of our leadership to the Association and to neurosurgery; it is my sincere hope to carry these efforts forward in the coming year.

Speaking up for Neurosurgery

The AANS has been the spokesperson for North American neurosurgery since 1965, serving as the neurosurgical voice on such topics as managed care reimbursement, FDA regulations and socioeconomic affairs. The Association has broadened its membership base by welcoming into its ranks certified neurosurgeons from Canada and the Republic of Mexico. We also have invited representatives of their leadership to attend our Board of Directors' meetings as a way to enhance the relationship with our North American colleagues.

Communications

The *Bulletin* constitutes one of numerous communication efforts of the Association. It is our major vehicle for the dissemination of Association-related material and socioeconomic news. Including information on CPT coding, legislation, managed care markets, and outcomes studies. It is your forum for comment to the membership about such issues, and I would strongly encourage you to bring your resources to the membership through this vehicle.

Our major scientific publication is the *Journal of Neurosurgery*. Combined with its online edition, *Neurosurgical Focus*, the *Journal* provides sophisticated peer reviewed neuroscience pertinent to our present practice, as well as the potential growth of neurosurgery.

Research and Education

Medicine is facing an extraordinary challenge from both the private health insurance industry, as well as governmental sources. Your Association is actively involved at all levels to ensure that neurosurgery is fully represented in such negotiations. Our ongoing focus on growth and development of the discipline is essential if we are to ensure the position of neurosurgery in the hierarchy of medical practice.

This growth can only come from continued investment in R&D by the Association and all of the agencies and organizations that it represents and supports. The Research Foundation of the AANS actively supports neurosurgical research efforts at every level, and its recent decision to combine translational

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of Southern California*



research efforts (including clinical research) with the strong basic science program presently in place bodes well for the development of new fundamental precepts for neurosurgical care.

In terms of continuing medical education, the Association's Professional Development Program offers the premier vehicle for dissemination of technical, cognitive and socioeconomic information relevant to our practices. It continues to enjoy great success in service to the membership.

Subspecialization

Although the AANS remains officially opposed to "certified subspecialization" in neurosurgery, we clearly recognize the evolution of specialized areas of interest. This understanding has

led to the development of Sections that represent the "focused" interests of our membership.

The leadership of the Sections will now participate in the deliberations of the AANS Board in order to enhance communication and understanding between the Sections and the AANS.

Young Neurosurgeons

Since Active membership in the AANS requires certification by the American Board of Neurological Surgery, the Royal College of Surgeons (Canada) or the Mexican Council of Neurological Surgery, A.C., there may be a perception among young neurosurgeons that they are not included in the programmatic efforts of the AANS. Nothing could be further from the truth!

Young neurosurgeons tracking for their Boards are eligible for Active (Provisional) membership and residents in training may participate in the AANS as Candidate members. All members at every level are encouraged to participate in the activities of the Association. The Chairman of the Young Neurosurgeons Committee now participates in the Board deliberations so that the specific issues confronting our younger membership can be brought to the attention of the Board in a very direct way.

Broader Representation

During the past year, the AANS leadership has made a deliberate effort to reach out to our constituency. We recognize that this is a two way street - the leadership must have input from our members to develop the programs best designed to meet their needs.

In the past, we have broadened participation on the Board of Directors by developing the quadrant representative positions, thereby assuring input to the Board from each State Neurosurgical Society. With the addition of Board participation by Section leadership and the Young Neurosurgeons Committee, your organization embraces every aspect and need of the entire community of neurosurgeons.

I look forward to working with and for you in the coming year in the firm conviction that our united efforts will assure that the stature of neurosurgery in the medical community is sustained. ■

NEWSLINE

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FROM THE HILL

- **AANS and CNS Endorse “Quality Health Care Coalition Act.”** On March 25, 1999, the AANS and CNS participated in a press conference held by Representatives Tom Campbell (R-CA) and John Conyers (D-MI) announcing the introduction of H.R. 1304, the “Quality Health Care Coalition Act of 1999.” This bipartisan legislation would allow physicians to collectively negotiate the terms and conditions of their contracts (including fees) with health plans, without violating the antitrust laws and without joining a labor union. Under the bill, a group of health care professionals engaged in negotiations with a health plan would be entitled to the same treatment under the antitrust laws as bargaining units, which are recognized under the National Labor Relations Act. The AANS and CNS believe that this bill will help level the playing field between health plans and physicians so doctors can negotiate terms that are beneficial to both them and their patients. Gary C. Dennis, MD, a neurosurgeon from Washington, DC, who represented the AANS and CNS at the press conference, said, “This legislation is an important step in shifting medical decision making power away from health plans and back to physicians and patients, where it belongs.”
- **National Bipartisan Commission on the Future of Medicare Fails to Agree on Reform Proposal.** The National Bipartisan Commission on the Future of Medicare failed to approve Commission Co-Chair Senator John Breaux’s (D-LA) proposal for Medicare reform. The 17-member commission was required by the Balanced Budget Act of 1997 to make recommendations to the Congress on how Medicare could be restructured to modernize the program and extend the life of the Medicare Trust Fund. The Breaux proposal would have used the Federal Employees’ Health Benefit Program as a model for Medicare. Under this plan, Medicare beneficiaries would be given a defined contribution from which they could choose health insurance coverage from a number different health plans. Senator Breaux expects to offer legislation based on the recommendations he presented to the Commission. Senate Finance Committee Chair William Roth (R-DE) plans to mark-up this legislation later this spring.
- **Debate on Managed Care Reform Heats Up.** On March 18, 1999, the Senate Health, Education, Labor and Pensions (HELP) Committee passed along party lines the Senate Republican Leadership “Patients Bill of Rights” (S. 326). Through participation in the Patient Access to Specialty Care Coalition, the AANS and CNS supported a number of democratic amendments aimed at strengthening the bill’s provisions related to choice of physician and access to specialty care. On March 24, 1999, the House Commerce Health Subcommittee held a hearing on patient protection legislation. This committee tentatively plans to mark-up a bill later this spring. Other committees working on managed care reform legislation include the Senate Finance Committee and House Ways and Means and Education and Workforce Committees.
- **AMA Decides Against Union.** Despite complaints from its members regarding managed health care and the loss of physician autonomy, the American Medical Association (AMA) has decided not to form a union. In a recent statement, D. Ted Levers, MD, Vice Chair of the AMA Board of Trustees, said, “The AMA has decided that it will not form a national labor organization representing physicians at this time. We have considered the matter in depth, and we realize that forming a collective bargaining unit has profound implications for the AMA, the medical profession and our patients. The issue is so complex, and of such far-reaching impact on the practice of medicine and patient care, that the matter requires careful and thorough consideration by the House of Delegates before it selects a course of action.”

NEWSLINE

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AANS APPOINTS

NEW EXECUTIVE DIRECTOR

David Fellers, CAE, currently Executive Director of the American Society of Plastic and Reconstructive Surgeons in Arlington Heights, Illinois, has been named the new Executive Director of The American Association of Neurological Surgeons. The announcement of his appointment was made during the AANS Annual Business Meeting April 26, 1999, in New Orleans. Mr. Fellers' appointment will become effective in July.

TRIBUTE TO LESTER A.

MOUNT, MD

Lester A. Mount, MD, President of the AANS from 1976-77, died on March 27, 1999. Dr. Mount, a 51-year member of the AANS, was Professor Emeritus of Clinical Neurological Surgery at Columbia University's College of Physicians and Surgeons. Dr. Mount was the recipient of the 1989 AANS Cushing Medal.

NEURO NEWS

AANS/CNS Support the use of Placebo Surgery in Clinical Trials

There are currently two National Institutes of Health sponsored studies being conducted on Parkinson's Disease patients that use placebo control groups and several other similar studies under consideration. The AANS and CNS have issued a position statement in support of such placebo surgery research studies.

AANS/CNS Position Statement on Placebo Surgery

1. The AANS and CNS support the conduct of rigorous validation trials to insure that new operative procedures are safe and effective.
2. In certain specific neurological conditions, the use of "placebo surgery" may reduce investigator and patient bias in analyzing treatment outcome and, therefore, increase the likelihood that results of a trial will be interpreted correctly.

Rationale

Major scientific and technological advances in recent years have resulted in new opportunities to apply innovative medical and surgical therapies to the treatment of complex neurological diseases. In the interest of public health, it is critical to insure that these new treatment alternatives are safe and effective before they are put into widespread usage. In most situations, trials in human subjects are necessary to determine the effectiveness or safety of a new drug or procedure. The most reliable trials are those conducted prospectively and in which the treatment in question is compared with either no treatment or an alternative treatment. For new drug therapies, the benchmark clinical investigation involves a placebo or control group, which is blinded to the patient and physician investigators. For trials involving surgical procedures, this type of study is complicated by the fact that the patients and physician both know whether the patient underwent the procedure. In certain types of trials, this knowledge may introduce bias into the analysis of results, particularly when the endpoints are somewhat subjective in nature. The use of a placebo surgical control group, may in certain situations, reduce this bias. It is clear that increased objectivity in results analysis is desirable and could feasibly protect the public welfare by insuring that an invalid or dangerous procedure not achieve widespread usage following incorrect interpretation of initial results.

Therefore, the AANS and CNS support the use of placebo surgery in clinical trials, but under limited and carefully selected guidelines:

- a) each prospective study should be evaluated individually by appropriate federal and/or local institutional oversight committees to determine if a placebo surgery group is necessary to determine accurate results
- b) the placebo procedure should be as safe as possible and designed so as to properly blind the study and insure accurate analysis of the results
- c) patients must be fully informed as to the nature of the study, necessity for the placebo control group, risks of placebo procedure and treatment alternatives

Is subcertification good for neurosurgery?

By Barbara Peck

Subspecialization is a controversial topic that organized neurosurgery, and other medical specialties, has been debating for the greater part of the past decade. Should fellowship-trained neurosurgeons qualify to sit for Certificates of Added Qualifications under the American Board of Neurological Surgery? Should subspecialties that cross more than one currently recognized specialty, like Pain Medicine, be allowed to form their own boards, or issue joint specialty subcertificates? Or, should every neurosurgeon, equally trained in residency, receive the same specialty qualifications, regardless of whether an individual chooses to focus on a specific area of the field, therefore representing a single, united definition of “neurosurgeon” to patients, third-party payers and referring physicians?

The American Board of Medical Specialties

The American Board of Medical Specialties (ABMS) is made up of representatives from its 24 approved medical specialty boards, including the American Board of Neurological Surgery. The ABMS charges itself with the mission of maintaining and approving the quality of medical care by assisting member boards in their efforts to develop and utilize professional and educational standards for the evaluation and certification of physician specialists. Member boards must adhere to the standards set by the ABMS in relation to how certificates are awarded, and cannot change certification requirements without the consent of the ABMS. Each member board must have strict, written criteria for issuing board certification including residency requirements, case load requirements, written and oral exams and more. One of the reasons the ABMS was initially created in 1933, was to standardize the definition, training and certification of medical specialists.

The ABMS also establishes standards for the approval of new specialties and subspecialties. In order for a new board to join the ABMS, it must receive approval by both the ABMS and the American Medical Association’s Council on Medical Education (AMA/CME). The process begins with an official application to the Liaison Committee for Specialty Boards, an organization sponsored by the ABMS and the AMA/CME. Six of the 24 members have been approved since 1949, and the last medical specialty board approved was the American Board of Medical Genetics in 1991.

Once a board is approved as a member of the ABMS, it can issue both primary certification certificates and subspecialty certificates.



Currently, the 24 member boards issue certificates in 37 areas of general specialization and certificates of special or added qualifications in 75 areas.

The American Board of Neurological Surgery

The American Board of Neurological Surgery (ABNS) is the recognized ABMS board for neurosurgery. There are 14 directors in the ABNS that represent the following organizations: The American Association of Neurological Surgeons (4); Society of Neurological Surgeons (3); American Medical Association (2); Congress of Neurological Surgeons (2); American Academy of Neurological Surgeons (1); American College of Surgeons (1); and Neurosurgical Society of America (1). Upon successful completion of both the written and oral board exams, applicants are rewarded with specialty certification in neurological surgery. The ABNS does not currently recognize or issue any subspecialty certificates.

Non-ABMS Recognized Boards

Occasionally, a group of physicians create a separate board that is not officially recognized by the ABMS. These types of boards include the American Board of Pediatric Neurosurgery, American Board of Pain Medicine and American Board of Spine Surgery. These boards set their own standards and criteria for certification, and are completely independent, self-designated boards. Certification from these boards is usually not recognized by third-party payers, hospital review committees or the medical community.

“Although some of these boards incorporate testing measures and review of training, they have not demonstrated the program review and quality control integral to the process of the ABMS,” said Sidney L. Tolchin, MD, 1995-96 AANS President, in *Neurosurgical Focus*. “Self-designation can be accomplished, therefore, by listing oneself as such on a name plate, placard or by advertising in a medium such as the Yellow Pages.”

However, the concept of only recognizing ABMS boards has recently been challenged as self-designated boards upgrade and establish strict criteria for certification. The American Board of Pain Medicine recently achieved “ABMS equivalent” status in the state of California.

“I consider myself double-boarded – both by the American Board of Neurological Surgery and the American Board of Pain Medicine,” said Kim Burchiel, MD, former President of the American Board of Pain Medicine.

The American Board of Pain Medicine is made up of pain specialists from neurosurgery, neurology, anesthesiology, and other specialties. The group has officially applied to the ABMS for official recognition, but has not yet received a response.

Levels of Subspecialization

Official recognition of subspecialization can be accomplished at various levels. The highest level is the creation of a separate board for the specialty. A board may offer different primary certificates as a way of distinguishing members with varying backgrounds and interests. These candidates take different initial written and oral board examinations. For example, the American Board of Radiology allows its applicants to choose between four different general certificates: Diagnostic Radiology, Radiation Oncology, Radiological Physics or Radiology.

A board also may offer subcertificates in a specific area. In order to obtain a subcertificate, the applicant must first pass the primary exam in that specialty. There are additional criteria an applicant must meet in order to sit for a subcertificate exam, which in most cases involves additional, officially approved training. For example, radiology offers four subcertificate areas in addition to the nine primary certificates; the American Board of Anesthesiology offers subspecialty certificates in critical care medicine and pain management; and the American Board of Otolaryngology offers subspecialty certificates in otology/neurotology and pediatric otolaryngology. Some of the larger

boards, including Internal Medicine, offer up to 10 different subcertificates.

Different boards may also issue joint subcertificates with other boards. In this case, applicants would first pass their respective board’s general exam and then meet the additional criteria to sit for certification. For example, the American Board of Orthopaedic Surgery, American Board of Plastic and Reconstructive Surgery, and the American Board of Surgery jointly sponsor a subspecialty certificate in hand surgery. Likewise, the sports medicine subcertificate is jointly sponsored by the boards of Family Medicine, Internal Medicine, Emergency Medicine and Pediatrics.

Most Certificates of Added Qualifications are granted after formal post residency training in the form of an Accreditation Council for Graduate Medical Education (ACGME) approved fellowship. The ACGME is made up of the American Medical Association, Association of American Medical Colleges, American Hospital Association, Council of Medical Specialty Societies, and the ABMS. The ACGME works with each ABMS approved board to set up Residency Review Committees (RRC) in each specialty area. RRCs set and monitor the criteria and quality of both residency programs and approved fellowship programs.

“Currently in neurosurgery, there are no ACGME approved fellowships,” said Julian Hoff, MD, Chairman of the AANS/CNS Fellowship Task Force. “There is a lot of inconsistency in the duration and quality of neurosurgery fellowships right now. One of the recommendations of the Task Force is to change this and formalize the fellowship process in neurosurgery.”

The AANS/CNS Sections have been charged with developing fellowship criteria for their respective areas. Pediatric neurosurgery fellowships are currently accredited through the Accreditation Council for Pediatric Neurosurgery Fellowships (ACPNF).

“Pediatric neurosurgeons were concerned with the lack of quality in their educational experience and, therefore, created a mechanism to inspect and establish fellowship guidelines and monitor programs for content and quality,” said Marion L. Walker, MD, Chairman of the AANS/CNS Section on Pediatric Neurological Surgery.

“The ACPNF accreditation process is rigorous and mirrors the parameters set forth by the RRC. It is our hope that one day, councils like the ACPNF will cease to exist and that accredited subspecialty training will fall under the auspices of the ABNS.”



continued on next page

Subspecialization Within Neurosurgery

As medicine evolves and technology progresses, the question of subspecialization within neurosurgery is coming to a head. Should subcertificates be offered, or should the integrity of the general neurosurgeon be supported?

“Subspecialization within neurosurgery is nothing new. It is about time we recognized these doctors for their additional training,” Dr. Walker said. “Subcertification is a simple way to provide neurosurgeons with the appropriate recognition for their current and focused expertise, support continuing medical education and provide the quality of care our patients deserve and demand.”

Presently, the ABNS is discussing four possible options for addressing subspecialization within neurosurgery: 1) Make no changes; 2) maintain accreditation/credentialing as is, but formalize the various subspecialties’ role in the ABNS (ie: examiners, guest examiners, exam questions, etc.); 3) accredit neurosurgery fellowships through the ACGME, but do not offer subcertificates; or 4) accredit and offer subcertificates.

Accrediting neurosurgical fellowships through the ACGME is not an easy task. ACGME requires that there be at least 25 potential programs in the area and the board must

issue statements on the impact the fellowship will have on the core curriculum in the specialty, among other criteria. According to ACGME, fellows involved in an approved program cannot be paid for their work. This, combined with the fact that the grace period for federally issued student loans does not extend into fellowships, puts great financial strain on both the program and the fellow. There are several categories in other specialties where ACGME approval has been awarded, but no fellowship program has applied.

“Fellowship material is not supposed to be a significant part of the core curriculum for that specialty,” Don Quest, MD, ABNS Secretary, said. “If we grant spine fellowships, we are saying that spine is not a significant part of the core curriculum for neurosurgical residents. The proposal also must be reviewed and approved by the entire ABMS, including our competition. We want to help neurosurgeons, not open ourselves up to infringement by orthopedic surgeons.”

Another proposal being considered is to accredit neurosurgical fellowship programs through the Society of Neurological Surgeons, which is comprised of program directors.

“This concept may allow us to recognize neurosurgeons who did additional training, but keep it in house where we have better

control,” Martin H. Weiss, MD, President of the AANS, said.

If the ABNS decides to issue subcertificates, then they must go through the ABMS subcertificate process, which includes comment from other organizations. For example, when the American Board of Otolaryngology proposed its neurotology subcertificate, the ABNS had considerable comment and was successful in altering what procedures would be included for this subcertificate.

Over the past decade, there have been several debates between specialties that have led to joint subcertificates or the denial of subcertificates, including battles between plastic surgery and otolaryngology for reconstructive facial surgery (see page 11 for the highlights of this struggle).

“Our experience in plastic surgery has been, whether you like it or not, in areas where there is direct competition from other specialties. You have to offer a subcertificate or be prepared to lose that area completely,” said Kenna Givens, MD, Chairman of the American Board of Plastic Surgery. “We did not necessarily want to offer subcertificates, but felt it was in the best interest of our specialty.”

Is Subspecialization the Trend?

Is subspecialization the answer to protecting the public against unqualified practitioners, improving patient care, enhancing translational research and advancing the specialty of neurosurgery? Many would say, “Yes,” arguing that healthcare trends toward centers of excellence, reduced length of stay and overall hospital cost emphasize the need for subspecialization.

Others, however, including some managed care organizations that operate with one neurosurgeon for every 50,000 enrollees, believe that the future of medicine rests in the hands of the generalist. They caution against the fragmentation of medical services that results from overspecialization, and argue that the all-purpose, do-everything generalist is more marketable to third-party payers.

With all that is happening in today’s fast-changing healthcare environment, the debate surrounding subspecialization will continue to be a source of controversy for years to come. ■

“Subspecialization within neurosurgery is nothing new. It is about time we recognized these doctors for their additional training.”

—MARION L. WALKER, MD

We Want to Hear From You

The American Association of Neurological Surgeons is interested in hearing your thoughts on subspecialization. Direct your comments, questions, or concerns to the attention of A. John Popp, MD, Editor of the *Bulletin*, and send them via fax to (847) 692-2589, via e-mail at info@aans.org or post your feedback on **NEUROSURGERY://ON-CALL®**.

To access the **N://OC®** site, go to www.neurosurgery.org and click on “Professional Pages.” There, you will find a link for the AANS Bulletin Board, select the link and share with us your views on subspecialization.

The Pros and Cons of Subspecialization

Subspecialization: The Inevitable Road We Must Travel

KIM J. BURCHIEL, MD

YES! We are neurosurgeons because our predecessors chose to develop neurological surgery as a specialty of general surgery. The question before us now is whether further specialization in our field will promote progress and development in neurological surgery, or simply fragment an already small discipline into a series of segmented, “special interest” groups.

I am of the opinion that advancement in our specialty can only be fostered by a concentration of intellectual and creative effort in each of the discrete subspecialties that compromise our field. The trick will be to advance the interests and practice of these subspecialties, while at the same time maintaining the fundamental integrity of neurosurgery as a whole.

Neurosurgery is already very specialized. The average neurosurgeon has a broad range of competencies, including many, if not most,

aspects of intracranial surgery, but is most specialized in spinal surgery. Unfortunately, this degree of specialization has come at the cost of other disciplines previously occupied by neurosurgery, such as peripheral nerve surgery, peripheral vascular surgery (i.e. carotid endarterectomy), and pain surgery. We need to broaden our “specialized” practices to re-incorporate these areas into the practice of neurological surgery.

Broadening the Neurosurgical Horizon

In my opinion, any perception of an “oversupply” of neurosurgeons is based on an unnecessarily limited definition of neurological surgery. Expanding the horizons of neurological surgery will expand the number of neurosurgeons needed. Competition within neurosurgery is largely based on overlapping, and in some cases, identical clinical experience of the competing practices. Specialization of practices may well promote collegial cooperation and cross-practice referral.

Furthermore, as a training program director, I am confident that neurological surgery is simply too broad a discipline for every trainee

to become competent in every aspect of our specialty. There is simply not enough training time available to comprehensively train every resident in every subsdiscipline. To that end, subspecialization may provide our future neurosurgical leaders with an opportunity to expand their clinical and academic skills, as well as provide them with a mechanism to promote scientific advancement within the field of neurosurgery.

The Evolution of Vascular Surgery

BY BARBARA PECK

As medicine has evolved, almost every specialty has been faced with the question of subspecialization. The American Board of Surgery (ABS), which currently offers subcertificates in pediatric surgery, vascular surgery, hand surgery and surgical critical care medicine, has recently struggled with its vascular surgeon members on the role of subcertificates.

“The American Board of Surgery began awarding the vascular subcertificate in 1983, as a way to develop the teachers of the future,” said Wallace Richie, MD, Executive Director of the American Board of Surgery. “However, that is not what ended up happening. We initially allowed surgeons to be grandfathered in to the certificate and it began to be used as an exclusive franchising license.”

By 1989, the situation had become so intense within the ABS that the Board developed an official policy against any other subcertificates.

“It evolved so far that no one could perform vascular surgery unless they had the subcertificate,” Dr. Richie said. “That was not the intent and the Board fully believes that every general surgeon is adequately trained to perform these procedures. We wanted there to be a partnership between general surgeons and vascular subspecialists, not create vascular czars. The decision to subspecialize created a potential tool toward pooling the surgical work force by establishing who can do what procedures.”

In 1996, a group of vascular surgeons broke off from general surgery and applied to become their own American Board of Medical Specialties recognized board. The group argued that 1) Vascular surgery was no longer a pillar within general surgery; 2) only vascular surgeons should do vascular surgery; 3) only vascular surgeons should teach vascular surgery; and 4) vascular surgery is an intellectually and technically unique specialty. The ABS responded with concerns about access to care, considering the uneven distribution of vascular surgeons and the belief that all general surgeons are trained with enough broad knowledge to adequately care for many vascular patients.

“This was a huge crisis within surgery,” Dr. Richie said. “We worked continuously for over a year directly with the vascular surgeons to solve this issue.”

In the end, the ABS was restructured to delegate more of the responsibilities to the subspecializations within the structure of the Board. Sub-boards and advisory councils were created, and more vascular surgeons were added to both the surgery Resident Review Committee (RRC) and as examiners.

“We had to change, evolve and develop as our subspecialties continued to mature,” Dr. Richie said. “My advice for other specialties going through these tough times is to develop a core curriculum that is strong, don’t allow grandfathering, and keep communication at an all-time high.”

Establishing Formal Training Guidelines

Neurosurgery, as a core discipline, can survive and thrive by emphasizing a core curriculum during training, such that fundamental knowledge and skills are imparted in every training program. This core curriculum is already under development by the Society for Neurological Surgeons and by The American Association of Neurological Surgeons and Congress of Neurological Surgeons through

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their Sections. By necessity, the curriculum will be constrained by the five-year training period now accredited by the Resident's Review Committee. Subspecialty training should be reserved for fellowships, broadly defined as a period of postgraduate training of several months to years devoted to one of the component subspecialties of neurological surgery.

Benefits of Subspecialization

We can anticipate both immediate and future benefits to neurological surgery, and to society at large, by further subspecialization in our practices:

- Concentration of experience and expertise, particularly in less common disorders;
- Promotion of excellence in the subspecialty by subspecialized societies and journals, didactic and hands-on special courses, and research awards;
- Promotion of research in the specialized subdisciplines of neurosurgery;
- Maintenance of our leadership in areas where we are currently "sole source" providers (i.e.: surgical neuro-oncology, neurotraumatology, and functional neurosurgery); and
- Enhanced competition with other disciplines for overlap areas (i.e.: spine, pain, peripheral nerves, vascular/endovascular surgery, radiosurgery, and craniofacial surgery).

There is no doubt in my mind that if we allow neurosurgery to fragment into separate component disciplines, we will lose our identity in organized medicine, and cease to be recognized by a public to whom neurosurgery is synonymous with superlative clinical medicine. The problem is that without subspecialization, neurosurgery as a specialty will certainly stagnate both clinically and scientifically. The prospect is surely too dismal to contemplate, particularly as we enter a new millennium that will see a continued acceleration in the growth of our understanding of basic neuroscience and the function of the human nervous system.

Further subspecialization will continue to occur in neurosurgery, with or without the various regulatory bodies of our discipline. The challenge to us is not how to limit subspecialization, but how to

maintain the connections that tie us together as a specialty.



Kim Burchiel, MD, is Chairman of the Department of Neurological Surgery at Oregon Health Sciences University. A 14-year member of the AANS, Dr. Burchiel is the Secretary/Treasurer of the AANS/CNS Section on Pain and a former President of the American Board of Pain Medicine.

Subspecialization – At What Cost?

EDWARD R. LAWS JR., MD

NO! The first disadvantage of subspecialization is the threat of fragmentation within our specialty. Neurosurgeons really do need to stand together, because there are so few of us, and there are so many people who would like to move into the area of neurosurgery without having received the necessary training to do so. The fewer voices that we have to combat these threats, the more vulnerable we are to attack.

Excessive subspecialization also may lead to a loss of perspective, meaning that individuals who are devoted to a narrow window of the field may lose interest and their ability to contribute to organized neurosurgery as a whole. This, of course, is an intellectual disadvantage that we cannot afford. And, one would hope that neurosurgeons who decide early in their careers to concentrate on a particular aspect of the field might remain vitally interested in neurosurgery and clinical neuroscience in general.

This loss of perspective can be translated into a loss of versatility, if individuals completely abandon segments of neurosurgical practice. In such cases, a superspecialized neurosurgeon may not function very well in a group when it comes to taking a call or handling an emergency. Once again, a certain amount of expertise and a broad knowledge base need to be maintained by us all.

Impact of Subspecialization

There certainly is an impact from subspecialization on the training of neurosurgical residents and fellows, and on the shaping of the neurosurgeon's career. Because we see a perceived need to become an expert in a certain area and to obtain additional credentials, both for career building and in some instances to find a job, pressures exist that have led to an increased training period. There is a growing desire on the part of trainees for fellowship experiences following ordinary neurosurgical training, and for early decisions on the part of our residents, which may in some cases preclude a broad-based education and residency experience.

One aspect of subspecialization that is apparent in some of our colleagues who do coronary bypass surgery is the phenomenon of boredom and burnout. Although everything we do involving the nervous system is exciting, if one works in too narrow of a field the risks of becoming humdrum and commonplace do exist. In individuals who are working extraordinarily hard in a very narrow area, the phenomenon of burnout can readily occur.

Neurosurgery is a great profession and it should be for all of us. Part of the fun is the daily challenge of confronting difficult disorders affecting the nervous system. If subspecialization limits the experiences that produce so much in the way of professional rewards, then we need to look at the costs that we pay for a subspecialty career.

Edward R. Laws Jr., MD, is Professor of Neurological Surgery and Medicine at the University of Virginia. A 24-year member of the AANS, Dr. Laws served as the 1997-98 President of the AANS and is the current Chair of the AANS Nominating Committee.

How One Specialty Experienced Subspecialization and Certification

Interview with the President of the American Board of Facial Plastic and Reconstructive Surgery.

While the debate continues over whether it is in the best interest of medicine for specialties to develop their own self-appointed boards, recent developments indicate that a growing number of them are nevertheless choosing to do so, hoping to gain recognition for their highly specialized skills and enhance their specialty's ability to meet the growing needs of the medical consumer.

Supporters of this trend argue that certifying subspecialty boards are integral to their particular, dynamic subspecialty and that they are the inevitable result of an expanding knowledge base, technological advancements and biomedical developments. They firmly believe that such boards provide them with a mechanism for recognition, as well as give third-party payers a means to identify those physicians with reimbursable expertise.

Those opposed to subspecialty boards disagree. They argue that such boards will result in the fragmentation of too many medical disciplines and may actually limit a patient's access to care. They fear that certified subspecialty boards will negate the role of the generalist and, in turn, place those who choose not to subspecialize at an unfair market advantage.

Following are some highlights from a recent interview conducted with Peter A. Adamson, MD, President of the American Board of Facial Plastic and Reconstructive Surgery (ABFPRS). The ABFPRS is an ex-

ample of a medical specialty that reluctantly, but for compelling reasons, chose to establish its own specialty certifying board to provide its colleagues and the public with a recognizable landmark for identifying surgeons with particular training and experience in facial plastic surgery.

*Peter A. Adamson,
MD, President of the
American Board of
Facial Plastic and
Reconstructive Surgery.*



Q: What do you view as the driving force behind subspecialty boards?

A: Subspecialty boards are a natural outgrowth of rapidly expanding medical technology and knowledge. To deliver the benefits of new medical technology and knowledge to patients, doctors often find they must focus their practices in narrower, deeper areas of their primary training. Although their primary training is certified by member boards of the American Board of Medical Specialties (ABMS), doctors who further focus their training and practice often desire to undergo examinations to verify their additional training and experience. They understandably reason that subcertification will enable patients to identify more

readily the subspecialists who frequently perform the procedures patients want and need, with good result.

For example, otolaryngologists, whose residencies include as much or more training than do plastic surgery residencies in facial plastic surgery, for years had difficulty explaining to patients and colleagues the true nature of that training. Language often compounded the problem, since older certifying boards have Greek names and younger boards have English names. Surveys have shown that patients have no idea what a certificant of the American Board of Otolaryngology actually does, and the ABMS has prevented the certification board from adding "Head-and-Neck Surgery" to its name.

Emerging specialties typically take some years to become ABMS members. They grow up, meanwhile, outside the ABMS. They may be perfectly legitimate boards, but for a variety of reasons, they are not initially welcome under the ABMS umbrella. They may not fit the ABMS technical definition of a subspecialty. They may be opposed by some in the parent specialty board who fear the splintering of the medical specialty. Or, an incumbent ABMS board may feel its "turf" is threatened.

All of these factors, at one time or another, stalled the development of an ABMS pathway for subcertification of otolaryngology-trained facial plastic surgeons. In response, these surgeons established their own subspecialty board, the American Board of Facial Plastic and Reconstructive Surgery.

Since the ABFPRS's establishment in 1986, the board has earned universal recognition as a board equivalent to the ABMS primary boards. Although this action has prompted the ABMS into trying to develop an alternative subcertification pathway, the ABFPRS continues to be the only board that certifies surgeons exclusively in facial plastic and reconstructive surgery. Although outside the ABMS fold, the ABFPRS has become, *de facto*, the con-

continued on next page

continued from page 11

joint board for the two primary ABMS specialties that have long competed for the same “medical turf” — plastic surgery and otolaryngology.

Q: Who wants subspecialty boards and why?

A: This question might better be phrased, “Who doesn’t want subspecialty boards and why?” After all, what could possibly be objectionable about subspecialty boards, if they give patients an easier way to identify doctors who perform procedures they need, and give third-party payers a means of more readily recognizing reimbursable expertise?

Those who don’t want subspecialty boards include some within the ABMS. Although the ABMS has carried out its task of defining specialties, facial plastic surgery’s experience has suggested that ABMS’s policies may not have kept up with

the plastic surgery board (which was formed in 1937, but did not earn approval until 1941).

In the case of otolaryngology, all the specialty societies have actively supported subspecialization for the reasons I have stated above. Fragmentation has not been a real problem.

Q: What do you see as the competitive effects of subspecialty boards in the medical community?

A: If science develops the technology for a new specialty or subspecialty, it will happen and any “competitive effects” will be inevitable. We ought to be about providing useful, truthful information to patients about such specialties in terms they can understand. If consumers gain such information about subspecialization, they will cast their economic ballots in the marketplace more efficiently. Who could legitimately be opposed to that?

every state that has reviewed it for such equivalence.

Hospitals, like many other medical institutions, will also have to recognize those specialties. If the ABMS lags behind or is held back by the politics of its incumbent boards, hospitals will have to make their decisions without ABMS definition. Science will move on with or without the ABMS.

Legitimate boards, whether in or out of the ABMS, are easily recognizable. All require accredited residencies and a rigorous psychometrically validated examination. Hospital staffs should have no problem recognizing legitimate boards. ■

“What could possibly be objectionable about subspecialty boards, if they give patients an easier way to identify doctors who perform procedures they need, and give third-party payers a means of more readily recognizing reimbursable expertise?”

the rapid growth of emerging specialties.

Because the strong forces driving subspecialization continue whether the ABMS chooses to recognize them or not, many physicians practicing non-ABMS subspecialties, like facial plastic surgeons, have been forced to establish their own boards. The ABMS disapproves of these competing boards, but we should remember that many ABMS boards began their life as “self-designated” boards, including the otolaryngology board (which was formed before there was an ABMS) and

Q: What does the growth of “self-designated” boards mean at the state level and on hospital credentialing?

A: Because the ABMS has not dealt effectively with legitimate new boards in some emerging specialties like facial plastic surgery and pain medicine, state medical regulators have been forced to adopt regulations to determine which are “legitimate” or “equivalent” to ABMS boards.

The ABFPRS has been found equivalent to primary boards of the ABMS in

For more information on the ABFPRS’s journey toward subspecialization, please contact:

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Neurosurgical Fellowships

Recognizing the Need for Improved Post-Residency Training Programs.

Specialization of labor and skills has been part of human culture throughout history. Acquisition of new ideas and concepts has led to an ever expanding knowledge base which, in turn, leads to the compartmentalization of much of that knowledge. An example of that process occurred in general surgery in the early 20th century, when neurological surgery established itself as a unique and separate entity. The very process that created neurosurgery continues to affect our surgical specialty today. As research and clinical investigations continue to evolve, so too has the need to subspecialize.

This evolutionary concept has been corroborated by a recent survey of 141 neurosurgeons who have finished residency training during the last five years. Survey results (84.3 percent response rate) indicated that, during the past five years, between 24 and 28 percent of respondents had pursued post residency training in the form of a formal fellowship.

Currently, there are 126 U.S. and 12 Canadian programs offering fellowships in 10 different areas (Table 1). Spinal surgery is the most common fellowship offered with 27 established programs in the U.S. Others include cerebrovascular, pediatrics, trauma/critical care, and most recently, endovascular neurosurgery.

Variance in Neurosurgical Fellowship Programs

Although the first formal fellowships were established in the late 1960s and early 1970s, there has not been any formal mechanism established by organized neurosurgery to standardize length of training, quality of training or the ultimate goals of these fellowships.

According to the survey, neurosurgical fellowships vary in length from two months

to 24 months, with the majority being approximately 12 months in length, thereby demonstrating the wide variance between programs.

This lack of standardization also is evidenced by the significant variance in the total number of cases performed per year by the fellows in the different subspecialties. Respondents indicated that the total number of cases done per year by specialty ranged between 150 for oncology, to as much as 10,371 for pediatrics and 9,585 for spine. More importantly, the median number of yearly cases performed by each fellow also varies significantly, with as little as 18 cases for peripheral nerve fellows to as high as 550 for spine, and from 313 cases for endovascular fellows to 300 cases for pediatric fellows.

Impact of Fellowships

In order to ascertain the impact of doing a fellowship on the current practice of the surveyed neurosurgeons, they were asked what percentage of their practice comprised their area of post residency training. Interestingly, spine and pediatrics are the two areas that made up the majority of the neurosurgeons' practices.

This appears to indicate that, currently, there is room for continued growth in these fields. In contrast, epilepsy and peripheral nerve accounted for the least percentage of their practices (Table 2). Another finding was that, of the fellows surveyed, 74.8 percent were not in favor of subspecialty board certification, but 73 percent did favor the concept of establishing a subspecialty certificate of added qualifications (CAQ).

A resolution was passed at a recent meeting of the Council of State Neurosurgical Societies, which called for the creation of an AANS/

CNS Task Force to address the issue of fellowships in the United States. The recommendations of the Task Force were presented in a recent *Bulletin* article (Spring 1998, pages 10-11). Among the Task Force recommendations, was a request for the development of standards for fellowships by the individual Sections. This process is currently taking place.

Whether one agrees with fellowship training in neurosurgery or not, the reality is that post-residency training programs exist and significantly impact our specialty. We have much more to gain by recognizing them, standardizing their curricula and providing appropriate quality assurance for this very important aspect of neurosurgical training. Fortunately, this process has begun. ■

TABLE 1

Number of Fellowships Currently Available in the U.S. and Canada

	U.S.	Canada
Cerebrovascular	16	1
Epilepsy	3	0
Endovascular	16	1
Neuro-oncology	21	2
Trauma/Critical Care	13	2
Pediatrics	13	2
Peripheral Nerve	1	0
Spine	27	2
Skull Base	5	1
Stereotactic Functional	11	1
Totals	126	12

TABLE 2

Percent of Current Neurosurgical Practice Which Involves Area of Fellowship

Pediatrics	82.6
Spine	82.1
Stereotactic	49.0
Endovascular	46.0
Cerebrovascular	42.7
Skull Base	32.5
Epilepsy	32.4
Peripheral Nerve	10.5

David F. Jimenez, MD, FACS, is Associate Professor of Neurosurgery at the University of Missouri School of Medicine. An eight-year AANS member, Dr. Jimenez is Chairman of the AANS Young Neurosurgeons Committee and a member of the AANS/CNS Task Force on Fellowships.

Outcomes Initiatives

Outcomes Studies Now Available on **N://OC**®.

By ROBERT E. HARBAUGH, MD

Whether we like it or not, we are living in the era of outcomes studies. Numerous agencies are involved in measuring the outcomes of neurosurgical care and neurosurgeons are increasingly required to define and document the success of their interventions. Often, those evaluating the value of neurosurgical care have little insight into the issues that arise in the care of our patients and, unfortunately, data from these studies will be used to determine government policy, patient referral and reimbursement. The leadership of the AANS and CNS has recognized both the threat and the opportunity that reliable outcomes studies posed for organized neurosurgery and, in 1997, I was asked to develop this initiative.

The first step was to create a strategic plan for developing a neurosurgical outcomes initiative. The strategic plan included: 1) Organizing an Outcomes Committee with expertise in clinical neurosurgery, outcomes methodology and information technology; 2) initiating educational activities; 3) developing and performing a pilot outcomes study; 4) developing an online outcomes reporting system linked to the official Web site of the AANS and CNS — **NEUROSURGERY://ON-CALL**® (**N://OC**®); and 5) performing online studies using this system.

Over the past two years, we have met these goals. The Outcomes Committee has representatives appointed by the Executive Committees of each of the clinical neurosurgical Sections. The Committee also has members with particular expertise in outcomes methodology and information technology. Consultants from Outcomes Sciences and the AANS Information Services Department also contribute to the overall success of the Committee.

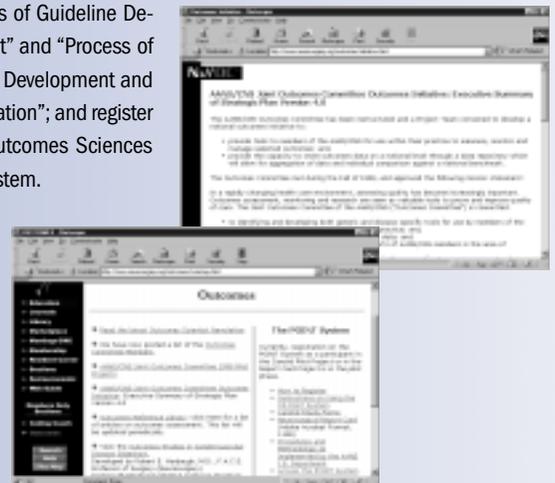
Committee members have developed educational materials for the **N://OC**® Outcomes page and have published articles in the *AANS Bulletin* and in *Neurosurgery*. Outcomes-related topics have been presented at the AANS and CNS Annual Meetings, Section Annual Meetings, and at Professional Development Program (PDP) courses. In fact, a PDP course in Outcomes Methodology is currently being developed, and we plan to continue our educational efforts as the rest of the plan unfolds.

Outcomes Committee Projects

Starting in 1998, our pilot study on the treatment of patients with intracranial aneurysms got underway. The study evaluated patients being treated for ruptured or unruptured intracranial aneurysms by microsurgical or endovascular approaches. Disease-specific data reporting instruments were developed by Issam Awad, MD, and members of the Cerebrovascular Section Outcomes Committee. Pilot centers for the study included academic medical centers and private practice groups. Patient accrual ended on January 31, 1999; however, follow-up on these patients and data analysis will continue through 1999. The aneurysm study will be placed online in an effort to expand the number of neurosurgeons participating in the program.

OUTCOMES INSTRUMENTS AVAILABLE ON **N://OC**®

To access the Outcomes Section of **NEUROSURGERY://ON-CALL**®, visit www.neurosurgery.org and click on "Professional Pages." On the welcome page, select the "Outcomes" text link and type in your user name and password. In this section of **N://OC**®, you can browse through the latest Outcomes Sciences Newsletter, scan the outcomes reference library; view the outcomes studies in cerebrovascular surgery slideshow; access teaching materials including "Principles of Guideline Development" and "Process of Guideline Development and Dissemination"; and register for the Outcomes Sciences POINT System.



The Committee has worked hard to develop a secure, reliable, online outcomes reporting system linked to the **N:/OC®** Web site. We have reached this goal, and are working closely with Outcomes Sciences and the AANS Information Services Department to keep the submission of data safe and confidential. A full discussion of the security systems developed for this outcomes project can be found on the **N:/OC®** outcomes page.

Online Studies Available

At present, there are two online studies available to all members of the AANS and CNS. The first is a simple, one-page outcomes reporting instrument that can be used for any neurosurgical diagnosis or procedure — the neurosurgical report card. The report card allows neurosurgeons to track basic outcomes measures, such as length of hospital stay, mortality, postoperative infection and unplanned readmission or return to the operating room by CPT and ICD-9 codes. Once the database is established, the individual neurosurgeon can compare his or her data to the overall database.

A more in-depth study on the treatment of patients with carotid artery stenosis also is online. The study, which began in January 1999, evaluates the clinical, functional and lesional outcomes of patients with carotid artery stenosis treated by carotid endarterectomy or angioplasty and stenting. The outcomes reporting system allows any member of the AANS or CNS to enter all relevant data online. It is essential that every neurosurgeon submitting data to the study report on all of the patients they treat. There is no cost involved for AANS or CNS members and there are no patient or surgeon identifiers on the database. The identification code is kept at the AANS National Office and can be accessed through the Internet, making submission of data via this system safe and confidential.

The next study to go online will evaluate the treatment of patients with lumbar disc disease. Paul McCormick, MD, and other members of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves have developed the reporting instruments for this study, which should be online this spring. Once again, participation by all AANS and CNS members is strongly encouraged.

Meeting AANS Members Needs

The members of the Outcomes Committee are committed to developing the necessary tools for neurosurgeons to participate in outcomes research in the most cost-effective manner. We are excited about the potential that exists for generating national and international databases, determining the best practices and gaining insight into the value of our neurosurgical interventions. We hope that our neurosurgical colleagues will be as excited as we are and become involved in this venture. If anyone has questions that are not addressed on the **N:/OC®** outcomes page, please contact me via e-mail at robert.e.harbaugh@hitchcock.org. ■

Robert E. Harbaugh, MD, is a neurosurgeon at Dartmouth-Hitchcock Medical Center, nine-year AANS member, and Chairman of the AANS/CNS Outcomes Initiative — a team convened to provide tools to AANS/CNS members for use within their practice to measure, monitor and manage selected outcomes.

HOW TO USE THE OUTCOMES SCIENCES POINT SYSTEM

STEP ONE: Contact the AANS Information Services Department and request a registration form. The form will outline the terms of participation, including your agreement to submit all patient information to the selected study that fits the inclusion criteria.

STEP TWO: Fax back the signed form. Once the form is processed, you will receive your user name and password, which will give you access to the Outcomes Sciences POINT System Web site.

STEP THREE: Access the Outcomes Sciences POINT System Web site, by visiting www.outcomesciences.com/research and typing in your user name and password. Select the study in which you wish to submit patients.

STEP FOUR: To enter a new patient, click on "Enter New Patient," and type in the patient's ID number, history, comorbidities and pre-treatment results. When you are finished entering the information, click "Submit Form."

STEP FIVE: To enter a form for an existing patient, click the appropriate "Next" link on the study grid and a new screen will appear for data entry. Select the text link that best corresponds to the appropriate answer listed on the physician or patient form. Select "Submit Form" when you are finished entering the information.

STEP SIX: To receive a summary and analysis of data from your site and comparisons with other sites, select the "Review Data" text link.

STEP SEVEN: To exit the site, select "Exit" on the file menu of your Web browser.

For questions concerning this system or to receive a registration form, contact the AANS Information Services Department at (847) 692-9500.

Changes in the Marketplace

The Managed Care Organization of the Future.

The flood of defections from the ravaged managed-care business took a significant turn in late December 1998, as Prudential Insurance Co. agreed to sell its ailing health care operations to Aetna Inc. for \$1 billion. The Aetna/Prudential deal will affect about 6.6 million people nationwide and Aetna will become the nation's largest provider of managed care, with about 18.4 million members in HMOs according to a *Los Angeles Times* article (December 11, 1998).

The proposed sale has alarmed doctors and consumer groups, who fear the new company will force patients to accept fewer services and doctors to accept smaller fees. The significance of this merger is related to a sea of change in the health care insurance marketplace, and represents the maturation of the current ascending model of managed care; the multi-product, multi-market health plan.

Simultaneous Eclipse and Expansion

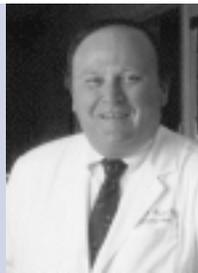
It seems we are observing the simultaneous eclipse and expansion of the managed care organization. HMOs are yielding one function after another to purchasers and providers, thereby evoking questions about their future role and share of the premium dollar. In addition, managed care plans appear to be denying little care, notwithstanding all the well-published horror stories and growing complaints as HMOs become commonplace in America. As a result, the cost savings that HMOs have achieved are in jeopardy.

In the 1990s, many markets have multiple managed care plans and multiple provider organizations, and vertical ownership relationships are disintegrating. Large employers and purchasing alliances are retaining insurance risk and specifying benefit packages, and large provider organizations are accepting global capitation. Pundits daily announce the

dawn of direct contracting and the squeezing out of the insurance middleman. Yet health plans everywhere are in rapid expansion, diversifying into new networks, benefit designs, distribution channels and geographic markets.

In the March/April 1999 issue of *Health Affairs* James C. Robinson explains that neurosurgeons should be aware that although health care might be a local business, managing that care is a national enterprise. Many health plans are eliminating their ownership

John A. Kusske, MD, is Chairman of the AANS Managed Care Advisory Committee.



linkages with provider systems, and almost all of the national plans that plunged into vertical integration during the highmark of managed competition have since divested their staff models.

At the same time, they are expanding rapidly in both scale and scope. According to Robinson, organizational enrollments are up and revenues are pyramiding as leading health plans merge with and acquire their rivals, thereby demonstrating horizontal integration.

The Economics of Organization

Health plans must spread product development and pricing, utilization and quality management, and computer information systems over large numbers of enrollees to hold down the administrative cost per enrollee. High patient volumes also are important for obtaining discounts or attractive capitation rates from providers and suppliers.

Diversification into multiple benefit products and distribution channels is key to the pursuit of these scale economies, since they bring in new volume without adding significantly to the costs of managing care. Robinson states that true network diversification will be an increasingly important comparative advantage in coming years, given the irreducible variation in consumers' and purchasers' preferences.

The Fundamental Feature of Health Care

The main feature of health care is the heterogeneity of consumers' preferences and providers' capabilities. The continual flux in supply and demand creates an enduring role for the multi-product health plan as the nexus of contracts that links, coordinates and gives incentives to the many buyers and sellers of health care. Robinson states, "Health plans have little to fear from the rhetoric of cutting out the middleman. Neither the individual consumer armed with a Medical Savings Account, nor the corporate purchaser armed with a self-insured benefit program, can achieve provider rates and utilization efficiencies comparable to those offered by large health plans."

The heterogeneity among providers also creates an enduring role for health plan networks that cover every ZIP code and are uniformly credentialized, contracted and accredited. Health plans do not need to fear that medical groups and hospital systems will integrate into insurance and marketing, once the regulatory demands for financial solvency and the marketplace demands for network access are understood.

Joint ventures between plans and provider organizations are to be expected, as are long-term relationships between specific plans and purchasers, but the diversified health plan will always participate in more networks, products and markets than even the largest provider or purchaser.

As stated, health care is a local business. But managed care—the development, pricing, and marketing of multiple provider networks and benefit designs through multiple distribution channels in multiple geographic regions—is a national business. ■

Neurosurgery: The Cost of Doing Business

Cost Containment in Neurosurgical Practice.

In the not-too-distant, but receding past, the establishment of a neurosurgical practice in virtually any urban area practically guaranteed a stable and substantial practice income. Competition was limited, payment was generous and growing, health plans were passive payment conduits, fees could be raised with impunity, and most practice income was leveraged off global surgical payments.

In the 1990s, however, the unthinkable occurred: neurosurgeons saw incomes fall, some alarmingly, and managed care struck with remorseless "take it or leave it" indifference. Areas of high managed care concentration saw neurosurgeons pack up and leave. Some decided to retire to escape the hassle of practice, liability threats and diminishing returns. Newly trained neurosurgeons faced the disturbing prospect of a financially insecure future.

No practice anywhere, whether private or academic, urban or rural, general or subspecialty, solo or group, can escape the financial vise of falling reimbursements and rising practice costs. Medicare rates, rather than being lower-end outlier fees, have become the benchmark toward which commercial payers aim. Business expenses, for scheduling battles, billing resubmissions, pre-authorizations, paper processing, and case management communications, among others, have grown exponentially.

Like most doctors, neurosurgeons are working harder for less. And, most find they are now interested in their HMO/PPO contracts, billing and business expenses, where they didn't want to be bothered before.

Cost Reduction Imperative

There is often a feeling of resignation and fatality that follows the resentment, fear or anger of seeing income declines. But for

those who continue to practice, and cannot flee to friendlier economic climates, a change in the way a practice is managed is often the only alternative. Fee reductions are difficult to control; they are externally imposed. But, the other half of the revenue/expense equation is not. Expenses of practice are internal and within the control of the practice manager. There is more reason than ever before to find ways to reduce costs of neurosurgical practice.

Recognizing the importance of expense levels to the success of neurosurgical practice, Edward R. Laws, Jr., MD, 1997-98 AANS President, appointed a Cost Containment Task Force to examine ways of reducing costs in neurosurgical practice. The Task Force, with John Kusske, MD, as Chair, met on several occasions to examine cost containment strategies from three perspectives: 1) Reducing office expenses by making processes more efficient, 2) developing cost-effective clinical pathways to make treatment effective and package pricing profitable, and 3) initiating new clinical and business ventures to expand competitive market share.

Most of the discussion focused on new Medicare resource-based practice expense values and the collection of practice data using Activity-Based Cost Analysis or using an American Medical Association Socioeconomic Monitoring Survey model to challenge low Health Care Financing Administration Medicare Fee Schedule values.

Theoretically, the parallel benefit of this collective practice expense database is a benchmark against which participating practices can compare themselves, looking for ways to cut costs. The data includes the range and average costs for standard processes in the pool of surveyed practices, such as billing and collections, record keeping, management, and so forth. It also would include the minimum

costs that some practices attain, serving as an achievable target toward which to aspire.

The problem with the idea is how to translate comparative cost data into management planning. For instance, Practice A may spend \$30,000/physician/year on medical records, while Practice B spends only \$15,000. Clearly Practice B is better off. Or is it? The unanswered questions are: 1) What does Practice B do differently that makes it more efficient, and 2) are all the costs accurately accounted?

Responding to the Challenge

The AANS is considering several ideas for programs that will help our members respond to these challenges. Two strategies come to mind. First, is to offer, or sponsor, a unique quantitative practice analysis that itemizes internal office processes and assigns an accurate cost to each. When costs exceed expectations, or benchmark goals, the processes can be analyzed in detail, the reasons for cost excess explained, and the process modified. One such method is Activity-Based Cost Management, which uses a computer program to diagram office processes, assign costs, and model alternative designs.

The second strategy is to create comprehensive practice management educational programs for neurosurgeons. This includes basic business theory and practical skills. It encompasses accounting and financial statements, tax issues, integrated operational and financial analysis, human resource management, marketing, contracting, and strategic business planning.

The future success of neurosurgical practice depends upon efficient management and detailed business acumen. These two strategies, if implemented, should help provide the missing link in neurosurgical training and practice. Further, it should do for neurosurgical business management what plenary sessions and practical courses do for professional practice. ■

James R. Bean, MD, is a neurosurgeon in private practice in Lexington, Kentucky. Dr. Bean is a 10-year AANS member, Associate Editor of the *Bulletin*, and Chairman of the Council of State Neurosurgical Societies (CSNS).

Reimbursement Dilemmas

The AANS/CNS Task Force on CPT Coding Responds to Challenging Coding Questions.

Q: Is the microscope charge CPT 69990 now an acceptable charge with CPT 35301 for carotid endarterectomy?

A: Code 69990 can be used with code 35301 as long as microdissection is performed using a surgical microscope (not just magnifying optical loupes). You should dictate in your operative note the reason for microdissection. However, it should be noted that carriers may still not reimburse for this combination since it is somewhat unusual. Alternatively, this combination might trigger a manual review of the operative note by the payer's medical director.

Q: I periodically perform bone and wire fusions, but cannot find an RVU for 22841. Should this code be used with a dollar amount or only for informational purposes?

A: The code 22841 was developed when the wording "including internal fixation" was removed from the former spine arthrodesis codes. Since the values of those arthrodesis codes were not decreased, there were no relative value units attributed to the code 22481. There is no payment for that code under the Medicare fee schedule or for any fee schedule linked to RBRVS. A physician can certainly establish a fee and charge for that code if appropriate, as some insurance companies are willing to pay it.

Q: Is it appropriate for the surgeon to code 20660 for the application of a frame and to code 61793 with a modifier as either a co-surgeon or an assistant surgeon? This, of course, assumes that the radiation therapist would code 61793 as well. It is my understanding that coding

20660, application of frame, is not appropriate to code with 61751 for CT-guided biopsy, as it is considered an integral part of that procedure.

A: Both codes 61751 and 61793 include application of the stereotactic frame (20660). If you put the frame on somewhere else in the hospital at a different time, then you could potentially code for the frame as 20660-59. Coding in conjunction with the radiation therapist depends on the work done by each. Some people do the whole procedure themselves and the radiation therapist accounts for the radiation therapy using different codes. If the radiation therapist does some of the work involved in 61793, then both physicians should decide how to split the work (i.e. one codes as an assistant using the -80 modifier, or both code as co-surgeons using the -62 modifier).

Q: Medicare and Blue Cross are refusing to pay on 63047 and 22630 when they are submitted together. If performed at different levels (eg. L4L5 and L5S1), how should this be coded?

A: The code 22630 was valued to include laminectomy, facetectomy, and discectomy in preparing the disc space for a posterior lumbar interbody fusion. The code 22851 can be additionally used if an intervertebral threaded cage is placed. However, this code should only be used once per interspace rather than per device and, therefore, only applies once in this operation. If a decompression also is performed and it goes beyond that involved in the bony removal necessary to carry out the posterior interbody fusion, then one also could code 63047-51. The additional use of the -59

modifier would help identify that the decompression was performed at a different location. Use of different ICD-9 codes, pairing lumbar stenosis with 63047 and lumbar spondylolisthesis with 22630, should further clarify the separate work performed.

Q: When a procedure is done for lumbar spinal stenosis, such as lumbar laminectomy L2-5, and it is a bilateral procedure, how would you code this operation for Medicare?

A: The operations described by CPT codes 63047 and 63048 are considered to be bilateral procedures. Therefore, neither can be used with a -50 modifier. If the operation includes only a laminectomy of L2, L3, and L4 without any significant foraminotomy or facet joint removal, then the appropriate code would be 63017. If significant foraminotomy and facet joint resection is performed at each level, then the coding would be 63047 for the first interspace and 63048 for each additional interspace decompressed.

Q: What is the proper code for placing an anterior cervical odontoid screw?

A: Currently, there is no code that appropriately describes the use of odontoid screw fixation for treatment of an odontoid fracture. Such a code has been developed and submitted to the AMA CPT Editorial Panel. Although not anticipated until CPT 2000, the most appropriate way to code for this in the interim would be with the unlisted procedure code 22899 or the arthrodesis of the axis through an extraoral approach without odontoid resection 22548. ■

Gregory Przybylski, MD, is a neurosurgeon at Thomas Jefferson University and a faculty member for the AANS PDP course on Reimbursement Foundations.

The coding procedures expressed in this article should not be construed as AANS policy, procedure or standard of care. The AANS disclaims any liability or responsibility for the consequences of any actions taken in reliance on the coding procedure suggested.

Meet Your President

Martin H. Weiss, MD, Prepares to Lead AANS Members Into the Next Millennium.

Martin Harvey Weiss, MD, was elected President of The American Association of Neurological Surgeons (AANS) at the AANS Annual Meeting recently held in New Orleans, Louisiana. Active in the AANS since 1973, Dr. Weiss has served as a member of the Board of Directors (1988-1991) and as Secretary (1994-1997) of the Association, as well as Chairman of the Editorial Board of its official scientific publication—the *Journal of Neurosurgery*.

Dr. Weiss is Professor and Chairman of the Department of Neurological Surgery at the School of Medicine of the University of Southern California. He also serves as Chief of Neurosurgery at the USC Medical Center, as well as attending neurosurgeon at the USC University Hospital. Dr. Weiss is the first to hold *The Martin H. Weiss Chair in Neurological Surgery* at USC, which was established in his honor by an endowment funded by the William Wrigley Family.

After earning his bachelor's degree magna cum laude from Dartmouth College and his medical degree from the Cornell University Medical College, Dr. Weiss served his surgical internship at the University Hospitals of Cleveland. He subsequently spent two years as an associate in general surgery at the United States Military Academy at West Point (New York), following which he returned to complete his residency in neurosurgery at University Hospitals of Cleveland.

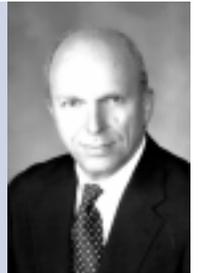
In addition to his involvement with the AANS, Dr. Weiss has served as Chairman of the American Board of Neurological Surgery, Chairman of the Residency Review Committee for Neurological Surgery and Chairman of the Neurology B Study Section of the National Institutes of Health, as well as Vice President of the American Academy of Neurological Surgery, Vice President of The Society of Neurological Surgeons, Vice President of the Congress of Neurological Surgeons and President of the Southern California Neurosurgical Society. He also is a member in the American College of Surgeons (past Chair of the Neurosurgical Advisory Council), the American Medical Association, Western Neurosurgical Society, Neurosurgical Society of America, Research Society of Neurological Surgeons and The Neurosurgical Forum.

A prolific writer and scientific investigator, Dr. Weiss has served as Editor-In-Chief of *Clinical Neurosurgery* and as a founding member of the Editorial Board of *Neurosurgery*. He is presently Associate Editor of *Neurosurgical Focus*, the online version of the *Journal of Neurosurgery*.

Dr. Weiss and his wife of 38 years, Debora, are the parents of three children; Brad, an Associate Professor of Anthropology at the College of William & Mary; Jessica, a former Montessori teacher and now President of YOGAMOMS in suburban Washington, D.C.; and Elisabeth, a cable TV producer in San Francisco. All are married; and Dr. and Mrs. Weiss delight in their two grandchildren, Ezra and Madison (and one on the way).

Following are some brief comments from Dr. Weiss as he embarks upon his year as President of the AANS. If you have questions, e-mail him at: weiss@hsc.usc.edu.

Martin H. Weiss, MD, is President of the AANS and Professor and Chairman of the Department of Neurological Surgery at the School of Medicine of the University of Southern California.



What are some of the key issues facing neurosurgery in the year ahead?

We must advance the discipline of neurosurgery both intellectually and technologically to meet the needs of future medical care. As we face the development of evidence-based medicine permeating medical practice, we must make a valid contribution to the public health of our nation. We will have to do better with intrinsic tumors, learning more about the molecular biology to apply methodologies to their management and to enhance survival far beyond our present capacities. We need to enhance our involvement in evidence-based medicine in order to compete with related disciplines and justify our practices.

If you could accomplish just one thing in your Presidency, what would it be?

I hope to incorporate a better integration of technology and basic neuroscience into our practice to meet the challenges of the future.

As you begin your Presidential year, is there one message that you have for AANS members?

Although we face significant economic challenges to our stability, neurosurgery is more exciting and offers more opportunity for patient service and career satisfaction than ever before.

What have been some of the most significant changes in neurosurgery since you began your career?

In the past 30 years, we have witnessed the development of allied disciplines in neuroradiology (CT, MR and functional imaging), neuroanesthesia and neurology (cortical mapping), in addition to the evolution of neurosurgical techniques for the spine, skull base and deep brain nuclei that have revolutionized our practices.

What advice would you give to a neurosurgeon who is just starting his or her career?

Retain the dedication to your profession that propelled you to your present position, never forget the need for continuing education as our discipline evolves, and don't forget or neglect your family.

What are some of your interests outside of medicine?

My family and fly fishing.

What do you plan to be doing 10 years from today?

Operating with the USC residents (my greatest neurosurgical legacy). ■

New Orleans:

1999 Annual Meeting Draws More Than 5,700 Attendees.

More than 5,700 neurosurgeons, neuroscience nurses, physician assistants, and technical exhibitors gathered in New Orleans, Louisiana, April 24 to 29 for the 67th Annual Meeting of The American Association of Neurological Surgeons (AANS). Packed with clinical skill courses and socioeconomic information, this year's gathering set the standard as one of the premiere gatherings for neurosurgeons in the world.

L.N. Hopkins, MD, Annual Meeting Chairman, and Steven L. Giannotta, MD, Scientific Program Chairman, assembled an outstanding program, which included 8 symposia, 124 research papers, 35 hands-on clinics, 78 educational seminars, and 561 posters. In addition, a record-setting 669 technical and institutional exhibits showcased the latest neurosurgical instrumentation and equipment.

Following is a summary of meeting highlights:

Presidential Address

On Monday, April 26, Russell L. Travis, MD, the 1998-99 President of the AANS, highlighted a myriad of historic and contemporary heroes in his Presidential Address. He focused his remarks on individuals whose actions had a profound influence on the development of our nation.

"Just as there are military heroes, political heroes, cultural heroes and athletic heroes, there are heroes in medicine as well," Dr. Travis said. "To act courageously and be heroes for our patients in this environment of corporate medicine will require more than physical courage; it will require fortitude. Fortitude is the stuff of heroes...it is the kind of tenacity that helps physicians move the powers that be to continue to provide patients appropriate treatment.

"For us as neurosurgeons to be heroes, we must remember that the real heroes in medicine are our patients — the people who literally lay their lives down before us and trust that we will do the right things for them."

Dr. Travis also thanked the membership for their strong support and addressed some of the obstacles organized medicine will face in the next millennium. "The 21st century will strain our healthcare system and bring challenges well beyond the ones we've seen in the 1990s. Given this, our patients, the sick among us and the healthcare system will desperately need our moral leadership

and medical statesmanship. I personally plan on sticking around a while longer to assure the future of the tremendous young talent that I see in neurosurgery, as well as the future of our patients."

The full text of Dr. Travis' address will be published in its entirety in the *Journal of Neurosurgery*.

Cushing Orator

On Tuesday, April 27, former President George Bush delivered the Cushing Oration to a crowd of cheering meeting attendees. In his talk, Mr. Bush shared several light-hearted stories about his life after the White House, and offered his thoughts on foreign policy and the conflict in Yugoslavia.

He said, "Yugoslav President Slobodan Milosevic is a serious threat to the world we seek to build on more peaceful and democratic values. I do believe that he has committed crimes against humanity, and the brutality of this dictator must be stopped.

"But as the airstrikes continue, I am very deeply troubled with what I see over there. If I were to give advice, I would say define the mission. If you need military force, let them fight it with plenty of overwhelming military power...and then come home."

He said he relied on those same principles when defending the United States' policy not to invade Baghdad in the Gulf War. "My decision to move forward with Operation Desert Storm was in an effort to drive Iraq out of Kuwait, not Saddam Hussein out of power." He explained, "Driving Saddam out of power would have been impractical because the United States would have been alone in that job and become an occupying force with no easy way out."

Concluding his presentation, Mr. Bush noted, "As the sole remaining superpower, if you want your children to live prosperously in the 21st century, the United States must lead. American leadership is an absolutely indispensable ingredient for extending the promise of democratic capitalism and freedom into the next millennium."

Honors and Awards

In addition to the Scientific Program, the following AANS members were recognized with honors:

W. Ben Blackett, MD, JD, received the 1999 Distinguished Service Award. He was recognized for his work as neurosurgery delegate to the AMA House of Delegates and as Chairman of the Professional Conduct Committee.

Thomas B. Flynn, MD, received the 1999 Humanitarian Award in recognition of his extensive volunteer work overseas, providing neurosurgical care to disadvantaged patients in Southeast Asia. Dr. Flynn has made numerous trips to

Thailand, providing patient care and raising funds to establish training fellowships there.

David L. Kelly Jr., MD, received the 1999 Cushing Medal. He was recognized for his many years of outstanding leadership and dedication to the field of neurosurgery. Dr. Kelly, the 1990-91 AANS President, is an active clinician and researcher in such areas as brain tumors and arteriovenous malformations.

Theodore H. Schwartz, MD, was named the 1999 Van Wagenen Fellow. He will use the Fellowship to study under Tobias Bonhoeffer, MD, at the Max-Planck Institute for Neurobiology in Germany.

Consolidation

CSNS Passes Resolution Suggesting Consolidation of AANS and CNS.

The Council of State Neurosurgical Societies (CSNS), composed of delegates from all state neurosurgical societies and appointed representatives from The American Association of Neurological Surgeons and Congress of Neurological Surgeons, has passed a resolution requesting the AANS and CNS to: 1) Develop a joint strategic plan, and 2) consolidate resources. The resolution was developed by the CSNS Executive Committee and approved at the Council's session on April 24, 1999, in New Orleans. The motion comes after more than one year of debate between the AANS and CNS on differences surrounding meeting management, marketing and other issues.

"While it is true that the AANS and CNS have become focused on the same mission," H. Hunt Batjer, MD, President of the CNS, said at the CSNS open debate on the resolution, "the two organizations go about conducting their business in two very different ways. Many joint programs, like the Washington Committee, benefit from having both the young, committed, passionate leaders of the CNS mix with the older, more experienced AANS leadership. Competition is also good in some areas."

The resolution must now go to the AANS Board of Directors and the CNS Executive Committee for approval. Prior to the CSNS resolution, both organizations discussed motions of their own to consider a joint strategic plan.

"This needs to happen, but it needs to happen in an evolutionary, not a revolutionary way," Martin H. Weiss, MD, President of the AANS, said at the CSNS open debate. "The message from the CSNS has been heard loud and clear."

Currently, the AANS and CNS are separate organizations with separate boards, annual meetings, journals and committees. They participate in several jointly sponsored projects and committees including: the Washington Committee and Office; the Sections; **NEUROSURGERY://ON-CALL**[®], the official Web site of both organizations; the CSNS; the Outcomes Committee and several others. The Joint Officers, which consists of the Officers of the two groups, was formed several years ago to facilitate communication and planning between the two groups. They meet three times a year and have frequent conference calls.

The AANS runs a National Office in Park Ridge, Illinois, that includes convention planning; continuing medical education tracking and course development; membership services; communications; marketing; and accounting. The CNS maintains a small support staff for its Executive Committee in the office of its Secretary and currently contracts with the AANS for administration of its Annual Meeting, including meeting planning, exhibit sales, promotion, registration and financial tracking.



Recent debate between the two organizations has focused on the CNS' recent decision to move the management of its meeting to an outside vendor.

"This decision was purely a business decision," Daniel Barrow, MD, President-Elect of the CNS, said at the open debate. "Our Annual Meeting is our most important product, and this is the only area where we compete directly with the AANS. It's hard to contract with someone who is your competition. Right now, everyone needs to decide if these two organizations are servicing their members and, if not, stop paying their dues."

The management of the CNS Annual Meeting has often been an issue for debate between the two organizations, with the CNS seeking proposals for outside administration on several occasions, including 1994. The AANS National Office also administers the Annual Meetings of the AANS/CNS Sections on Spine, Pediatrics and Cerebrovascular Surgery and the symposiums of the Pain and Tumor Sections.

"I'm not sure if complete consolidation of the two groups is the answer," Russell L. Travis, MD, Past-President of the AANS, said in the open debate. "But I am sure that having two complete, separate entities who were in direct competition would be the worst for all of neurosurgery."

Dr. Travis continued, "We have made a proposal for the CNS to house any infrastructure needs they may have at the AANS National Office, and to share any resources that we may have in common. We at the AANS are doing everything possible to keep organized neurosurgery under one roof."

Progress by the AANS and CNS on the resolution will be discussed at the CSNS session in Boston on October 29, 1999, prior to the start of the CNS Annual Meeting.

Reaching New Heights

Research Foundation Sets an All-Time Record in 1998 Fundraising Campaign.

The Executive Council of the Research Foundation of the AANS is pleased to report that 1998 was the best year ever for overall financial support to your Foundation. Donations increased to \$488,633 — a 29 percent increase over the 1997 campaign. These results are highlighted by an increase in funds from our membership, up nearly 47 percent from \$120,469 to \$175,448. Also up is support for the Corporate Associates program, which increased 23 percent to \$302,000 and now boasts 22 members. Included in these totals is a significant gift of \$50,000 from an AANS member to endow a scholarship program.

To the right is a list of those donors who cared enough about the future of this specialty that they participated in the 1998 campaign and gave \$100 or more. These visionaries have allowed this Foundation to increase the 1998 grant approvals from four to five, bringing the total number of AANS Research Fellows or Young Clinician Investigators supported over the past 18 years to 56. Please join with us in applauding these individuals, groups and companies who have answered the challenge to maintain our commitment to neuroscience research.

1999 Campaign in Progress

The 1999 campaign is well underway, with the first levels of support already coming in. You can help the Research Foundation to get ahead of last year's record-breaking results by making a tax-deductible gift. Your donations go toward expanding our endowment, which is used to fund key studies in basic and outcomes research.

The Executive Council is committed more than ever to reviewing not only the latest and most promising studies being conducted in the United States today, but the

overall mission of *your* Foundation. As we approach the new millennium, we foresee great strides in the results of our funded studies, and in our ability to review evermore relevant and exciting studies in basic, outcomes, and ultimately translational research.

A major gift and bequest campaign to expand our ability to meet the growing demand for funding is currently being planned. In 1999, a record 45 grant applications were received for funding consideration, but despite the pleasing financial results, the number of members actually

Neurosurgical Group Supporters

The following list recognizes University programs, foundations and organizations that contributed to the Research Foundation of the AANS in 1998:

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American College of Osteopathic Family Physicians, Inc, in memory of Paula Draba
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Louisiana Neurosurgical Society
St. Jude Hospital medical staff, in memory of John Marsh, MD

contributing to the Research Foundation has fallen.

Support Your Foundation

Gifts can be made at anytime during the year. Gifts of appreciated stock can help to avoid certain taxes. A gift through your will, or though a life insurance beneficiary designation can help ensure that this important research is funded long after your death. Give to the future of your specialty by giving back a little to the career that benefited you.

For more information on special ways to support the Research Foundation of the AANS, contact us at (847) 692-9500. ■

Julian T. Hoff, MD, Chairman, AANS Research Foundation Executive Council, and John R. O'Connell, AANS Director of Development, contributed to this report.

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The Executive Council of the Research Foundation of the AANS gratefully acknowledges the financial support given by the following companies.

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Meeting Your Needs

The AANS Professional Development Program Offers a Comprehensive Pain Management Course.

Kim J. Burchiel, MD, a recognized expert on the management and treatment of pain, will chair the upcoming AANS Professional Development course, "Advanced Surgical Pain Management: Hands-On." Created in response to AANS members' needs, this in-depth, comprehensive, neurosurgical pain management course is designed specifically for neurosurgeons, nurse practitioners, physician assistants and anesthesiologists.

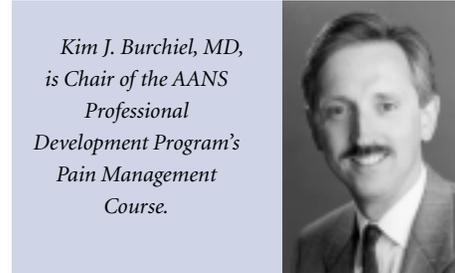
"There are very few neurosurgeons who are interested in the study of pain, and those who are can make a tremendous impact on the quality of a patient's life," said Dr. Burchiel. "Recognizing this, I, along with my colleagues from Oregon Health Sciences University, have designed a course that seeks to progressively increase knowledge on the subject of pain management and provide attendees with the information they need to develop a top-notch multidisciplinary pain clinic in their own communities."

In describing the knowledge and skills taught in the course, he said, "Registrants are motivated to take this course because it goes beyond the surface knowledge gained in other seminars and explores intensive neuroablative procedures. The unique program allows participants to design their own educational experience via a variety of practical, hands-on breakout sessions, with topics ranging from trigeminal neurectomy to DREZ lesions. Attendees will leave the course well-rounded pain specialists armed with the tools to offer their patients more than one avenue of pain treatment."

The Pain Management course, which is slated to take place August 5-7, 1999, in Portland, Oregon, will be held at Oregon

Health Sciences University — site of one of the nation's premiere multidisciplinary pain clinics. The University's support in offering its lab facilities for this course is gratefully acknowledged.

In addition to serving as Chair of the Pain Management course, Dr. Burchiel is Chairman of the Department of Neurological Surgery at Oregon Health Sciences



University, Secretary/Treasurer of the AANS/CNS Section on Pain, and a former President of the American Board of Pain Medicine.

If you would like to learn more about the AANS Pain Management course, please contact the Professional Development Program at (847) 692-9500. ■

Attention Neurosurgeons! Mark your calendar now and register for these upcoming AANS PDP courses

Sharpen your skills in neuroendoscopy and ventral thoracolumbar spine disorders

Hands-on practical instruction in neuroendoscopy

Minimally Invasive Neurosurgery: Neuroendoscopy—Hands-On
October 1-2, 1999
Cleveland, Ohio

A comprehensive review of techniques, instrumentation and surgical decision making

Ventral Surgical Approaches for the Thoracic and Lumbar Spine
September 24-25, 1999
San Antonio, Texas

This course is designed to give neurosurgeons experience with the clinical and surgical aspects of state-of-the-art endoscopy. Expert faculty will assist participants in performing a series of hands-on dissections using different endoscopic and microinstruments.

This course is designed to provide comprehensive, didactic sessions on the latest techniques and instrumentation systems for treating disorders of the ventral thoracolumbar spine. Attendees will participate in in-depth discussions and hands-on sessions on the most common approaches to pedicle cannulation, pedicle screw fixation and anterior fixation.

 **Guarantee your place at these popular courses. Call the AANS Professional Development Program for more information at (847) 692-9500, e-mail us at info@aans.org or visit our Web site at www.neurosurgery.org.**

Membership Opportunities for Residents Abound

Nearly 100 Applicants Approved for Candidate Membership.

Candidate membership in the AANS, which has flourished in recent years, provides an excellent avenue for our future neurosurgical leaders to gain insight into the issues affecting organized neurosurgery, as well as build professional relationships. Since 1993, the total number of Candidate members has risen from 61 to more than 400 members, giving the AANS more resident members than any other neurosurgical society.

Open to all residents who are enrolled in a neurosurgical residency training program recognized by the Accreditation Council for Graduate Medical Education (ACGME), the Royal College of Physicians and Surgeons of Canada, or the Mexican Council of Neurological Surgery, A.C., Candidate membership in the AANS provides young neurosurgeons with a forum for the exchange of issues, ideas, problems, solutions and developments in the field of neurosurgery. In addition, Candidate members

of the AANS are entitled to the following products and services:

- Complimentary *Fellowship Manual for Neurosurgeons*
- Free *Directory of Neurological Surgery: North America*
- Reduced Annual Meeting registration fees
- Reduced Professional Development course fees
- Quarterly *AANS Bulletin*
- Special *Journal of Neurosurgery* subscription rate
- Opportunity to become involved on AANS Committees
- Continuing Medical Education in Neurosurgery

To learn how you, or someone you know, can become a Candidate member of the AANS, or to receive a membership application, contact the AANS Membership Department at (847) 692-9500. ■

Apply for AANS Membership Online

The AANS is pleased to offer a convenient way to apply for AANS membership – via the official Web site of the AANS—**NEUROSURGERY://ON-CALL®**.

To take advantage of this member service, visit www.neurosurgery.org and click on “Professional Pages.” On the welcome page, select the “Membership” text link. To download the application, you will need an Adobe Acrobat plug-in. A free download is available from the Adobe Web site at www.adobe.com.

Once the form is in your computer, just print it, fill it out and fax it to us at (847) 692-6770

CANDIDATE MEMBERS

Mathew T. Alexander
Gordon B. Anderson
Donald P. Atkins
Nathan Avery
Steven Bailey
Kaveh Barami
Christopher J. Barry
Juan Carlos Bartolomei
Andrew V. Beykovsky
Miroslav P. Bobek
Sharyn D. Brekhus
Peter G. Brown
Dhany Charest
Peng Chen
Andrew S. J. Chiou
Sean D. Christie
Aaron A. Cohen-Gadol
Fabrizio Cohn
Amos O. Dare
Phillip G. Esce
James J. Evans
Robert P. Feldman

Allen H. Fergus
Jeffrey E. Florman
Edward R. Flotte
James S. Forage
Jonathan A. Friedman
Victor T. Freund
Jason E. Garber
Ira M. Garonzik
Stephen M. Gutting
Raymond I. Haroun
Jeffrey S. Henn
Johnnie H. Honeycutt, Jr.
John L. Hudson
Omar F. Jimenez
Richard L. Kern, Jr.
Sami Khoshyomn
Deven Khosla
Richard J. Koesel
Adam Kremer
Jae Hong Lee
Peter J. Lennarson
Michael A. Leonard
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Patrice D. McNeely
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Fardad Mobin
Graham J. Mouw
Wai Pui Ng
David B. Niemann
Henry F. Pallatroni, III
John Keum Ratliff
George T. Reiter
Benjamin J. Remington
Dennis J. Rivet, II
Ali Sadrolhefazi
David I. Sandberg
Thomas C. Schermerhorn
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Julian Spears
Caple A. Spence
Carl J. S. Spivak
Richard B. Stovall
Sandeep Teja
Philip V. Theodosopoulos
Daniel J. Tomes
Donald R. Tyler, II
Elizabeth C. Tyler-Kabara
G. Edward Vates
Erol Veznedaroglu
Kenneth P. Vives
Lyndell Y. Wang
Marjorie C. Wang
Michael Y. Wang
Peter M. Ward
Benjamin T. White
Jonathan A. White
Diana B. Wiseman

Secretary's Report

Highlights From the Report Presented at the 1999 AANS Annual Business Meeting in New Orleans.

This has been an especially challenging and difficult year. Internally, the AANS National Office is undergoing a change in leadership with the departure of our Executive Director, Robert Draba, PhD. Although finding Dr. Draba's replacement continues to be a top priority, longtime AANS staffers, Laurie Behncke and Robert Cowan, will serve as exceptional interim directors. Russell Travis, MD, 1998-99 AANS President, has exhibited the incredible strength of character necessary to lead a determined search for the most qualified candidate — this is no easy feat given the vast intellect, expertise and innovation we expect from our Executive Director. We must find someone able to carry us into the next millennium and beyond in a health care environment that is usually hostile and always changeable, but we are confident that our efforts will be successful (see late breaking announcement on the new AANS Executive Director on page 4).

Another challenge we are facing is the recent decision by the Congress of Neurological Surgeons (CNS) to divest themselves from the AANS for their Meeting Planning and Exhibit Management. This divestiture will occur after the 2000 meeting, and is a development that greatly troubles the entire AANS Board. Our Board believes that this schism will benefit neither organization. Despite many efforts to negotiate a mutually acceptable solution, we have been unable to reach a compromise with the CNS. The AANS Board, however, will continue to pursue opportunities to integrate the activities of the two organizations, and we have left an offer on the table that would allow the CNS to share office space and fixed facilities, which would provide savings for both groups. In addition, we are committed to a joint strategic planning process that we believe will best serve our future

membership needs (read more on this issue in an article on page 25).

It is unfortunate that these sorts of issues arise at such a difficult time in the field of medicine, since they distract from more important tasks at hand. Luckily, our committee leaders and members have continued their efforts to influence the future of neurosurgery, and we can thank them for their many accomplishments over the past year.

Membership

The AANS membership has continued to increase, climbing 2.4 percent from last year's count of 5,263 to this year's total of 5,387. Most notable was the increase in our Candidate (Resident) and International Associate categories, up 5 percent and 11 percent, respectively. These increases are particularly encouraging, not only because more members lead to a stronger organization, but because they indicate that we are reaching beyond age and geographical boundaries. Since the average age of our Active member is 49, we seem to be having some success at attracting younger neurosurgeons to the AANS, something that will have to continue if the organization is to survive into the next millennium.

Education

Supporting the continuing education of young neurosurgeons is one of several ongoing initiatives of the Neuroendovascular Task Force, headed by Mark Mayberg, MD. Through the combined financial support of the AANS and CNS, three fellowships will be funded this year, as opposed to the two that were available last year. Members of the Task Force believe that these fellowships have promoted interest in the field, especially among graduating residents pursuing aca-

demetic careers, and hope that the fellowships will be supported for an additional two years. The Task Force also continues to work on establishing training guidelines

Meanwhile, the Neurosurgical Surgery Residency Review Committee (RRC) has successfully revised their program requirements for residency training. Robert Ojemann, MD, and his committee were able to get these revisions accepted by the Accreditation Council for Graduate Medical Education (ACGME), and the revisions will become effective on July 1, 1999. This committee also has worked with the Sections to develop guidelines for fellowship training, and is currently distributing their suggestions to the appropriate organizations for comments. This sort of exchange, inviting new ideas as well as revising old ones, is vital to the improvement of our specialty.

The exchange of ideas and the commitment to excellence are always at the heart of our Annual Meetings. This year's meeting in New Orleans featured a top-notch Scientific Program, showcasing contemporary innovations and research advances from all realms of neurosurgery, as well as a spectacular line up of social activities. Annual Meeting Chair, L.N. Hopkins, MD, and those who comprised his committee, deserve to be applauded and praised for their tremendous efforts on putting together another memorable meeting.

Research

Research is the basis of our specialty, defining where we have been and where we are going. Julian Hoff, MD, one of two neurosurgical representatives to the National Institute of Neurological Disorders and Stroke (NINDS), reports that there has been considerable enthusiasm recently regarding the appointment of NINDS Director, Dr. Gerald Fischbach. Administrative changes initiated by Dr. Fischbach have been well received and should allow for increased involvement of the neuroscience community, especially on the Study Section level. These developments, as well as significant funding increases and internal changes within the National Institutes of Health, led Dr. Hoff to conclude that the environment for

both neuroscience and neurosurgery is highly favorable.

Dr. Hoff also reports that the Executive Council of our own Research Foundation plans a major fund-raising campaign. These plans will consist of focus groups, a survey, and a report, and will assist the Foundation in developing effective fund-raising strategies. The target of the study will be our own membership, who shockingly have donated only 4 percent to the endowment in recent years, and who must be encouraged to contribute much more substantially in the future if we are to expand our grants and fellowships awarded to young neurosurgeons. The Executive Council also is considering co-sponsorship of additional grants with any or all of the Sections.

Finally, research continues in the development of neurosurgical outcomes under the direction of Robert Harbaugh, MD. Studies in carotid endarterectomy and aneurysm surgery are being developed and should ultimately improve the quality of care of these patients. The Outcomes Section on **N//OC**[®] also has been enhanced to include information and links to an online outcomes reporting database.

Communications

Research is of little use if it is not properly disseminated, a fact which makes the *Journal of Neurosurgery* a vital link between neurosurgeons and the cutting edge. To increase readership worldwide, *Journal* editor John Jane, MD, reports that an aggressive marketing campaign continued in Turkey, Germany, Chile, Japan, and Asia during 1998. This, along with the introduction of the *Journal of Neurosurgery: Spine* and the success of *Neurosurgical Focus* on our Web site, represents an exciting expansion of our scope.

To meet the growing needs of our members, **NEUROSURGERY://ON-CALL**[®] plans several new additions in the coming year, including: a new outcomes section; world directory of neurological surgeons; education section; new Web server, which will improve the current search function; expanded Section pages; upgraded online abstract center; site called Young Neurosurgeons Online for residents in training and recent graduates; updated look for the Public Pages; online chat educa-

tional service; and a new socioeconomic section. To make the most of these incredible improvements, a Web site promotion plan also is being developed in order to increase traffic on both the Public and Professional Pages.

In direct response to membership suggestions, the *Bulletin* has become the socioeconomic and professional quarterly for AANS members. New features include a Coding Corner; Practice Management Column; Practice Profiles; and an Editor's Perspective. This shift in direction will help all of us stay abreast of the complicated "business" of neurosurgery.

Communicating with patients is the "business" of the Lumbar Stenosis Getting SMART program, which has been the most successful product in the history of the AANS or CNS. To date, we have distributed 98,550 patient brochures; 52,500 physician brochures; 424 slide sets; and 482 press kits. This successful marketing tool is just one of the many ways to increase the visibility of neurosurgeons while helping our patients better understand their treatments. Phase II of this marketing campaign, "Getting SMART About Cerebrovascular Disease: An Educational Program on Stroke" was unveiled at the 1999 AANS meeting.

Socioeconomic Issues

Because neurosurgical practices have become so complex, it is necessary for us to have a strong presence in Washington capable of defending our specialty in an environment that favors primary care. Art Day, MD, and Katie Orrico continue to fight the battle, along with our Washington Committee and Robert Florin, MD. At issue, among other things, is the current Medicare Fee Schedule determined by the Health Care Financing Administration (HCFA), which we feel grossly miscalculates practice expenses for neurosurgeons. This issue has been, and will remain, a top priority for our Washington Committee, as they collect the data necessary to argue convincingly in our favor.

In addition, the Washington Committee spearheaded a letter to the Department of Justice and the Federal Trade Commission objecting to the impending merger between Aetna and Prudential, a merger which could "pose a threat to patient care by limiting pa-

tient and employer choice, reducing competition and further eroding the ability of physicians to deliver medically necessary care." Russell L. Travis, MD, 1998-99 AANS President, and Hunt Batjer, MD, 1998-99 CNS President, signed the letter.

Professional Conduct

Supporting our committees and one another is critical to our continued success as professionals. There are times, however, when some neurosurgeons step outside the lines of professionalism and when we must take disciplinary action against them. The AANS Professional Conduct Committee, headed by W. Ben Blackett, MD, has the difficult task of conducting hearings in such cases, then making conclusions and recommendations to our Board of Directors.

Summit

Once again, our Annual Meeting was the site of a "summit conference" for the leadership of the AANS, CNS, Senior Society, American Board of Neurological Surgery, and the RRC. At this meeting, discussions continued regarding issues such as neurosurgical fellowships, the timing of board certification, and recertification. This meeting was an excellent opportunity for our leaders to get reacquainted and network.

Other Notable Activities

Following are a few other important developments that are currently underway.

- Bob Page, MD, and A. John Popp, MD, are analyzing and updating our policy manual;
- David Jimenez, MD, and the Young Neurosurgeons Committee have volunteered to help serve the THINK FIRST Program;
- James Ecklund, MD, is revitalizing the Committee of Military Neurosurgeons;
- The AANS National Office has rallied and united even without the direction of an Executive Director, and
- Our Sections are vibrant, alive and functioning well. ■

Stan Pelofsky, MD, is President of the Neuroscience Institute. Dr. Pelofsky, a 23-year member of the AANS, is Past President of the Council of State Neurosurgical Societies and currently serves as AANS Secretary.

NEWS.ORG

Sections Committees Associations Societies

Names in the News

Russell L. Travis, MD, the 1998-99 AANS President, was recently recognized by the U.S. House of Representatives for his lifetime commitment of service to his patients, profession, and community. For nearly three decades, Dr. Travis has responded to the neurosurgical needs of people in Kentucky by volunteering his time and surgical care. Dr. Travis is a 25-year AANS member, the 1998-99 AANS President, and former Chairman of the AANS Physician Reimbursement and Humanitarian Award Committees. He is in private practice in Lexington, Kentucky.

Albert L. Rhoton, MD, Chairman of the Department of Neurosurgery at the University of Florida, was recently honored with the establishment of the Albert Rhoton Professorship in Neurosurgery – a \$4 million endowed professorship to be directed toward the advancement of brain science and surgery. The professorship, offered at Dr. Rhoton's retirement, is the accumulation of \$2 million worth of gifts from neurosurgeons trained under his tutelage, medical/surgical colleagues and the staff at the University of Florida, as well as friends, families and former patients. Dr. Rhoton is a 30-year AANS member, the 1989-90 AANS President and recipient of the 1998 AANS Cushing Medal.

Section News

.....
Section on Cerebrovascular Surgery The AANS/CNS Section on Cerebrovascular Surgery is launching an International Outreach Program. The goals of this program include: 1) Attract international neurosurgeons with a major interest in cerebrovascular surgery to become participating members; 2) promote the active participation of international members at the Section Annual Meeting; 3) foster an exchange of scientific, educational, cultural and socioeconomic information related to cerebrovascular surgery; and 4) promote international activities of the Section.

.....
Section on Neurotrauma and Critical Care The Surgical Trial in Acute Spinal Cord Injury Studies (STASCIS), sponsored by the AANS/CNS Section on Neurotrauma and Critical Care and AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, recently completed a series of clinical studies on the management of spinal cord injuries. The studies, which include an evidence based review of the role of decompression after spinal cord injury and a retrospective study of spinal cord injury management, were featured in the January 1999 issue of *Neurosurgical Focus*, posted on N://OC®, and will be published in *Journal of Neurosurgery: Spine* later this year. The STASCIS group also has developed a simple, quantitative technique to assess spinal cord compression on sagittal MR images. The technique was validated by conducting a multicenter trial, and results were published in the March issue of *Journal of Neurosurgery: Spine*.

Neurotrauma and Critical Care Fellowship Award

The AANS/CNS Section on Neurotrauma and Critical Care announce the Codman Neurotrauma Fellowship Award

- Up to \$45,000 to Support Specific Research Proposal
- Open to Neurosurgical Residents and Fellows Interested in Clinical or Basic Research Training
- Research Related to Neurotrauma and Critical Care

Contact: Jack Wilberger, MD, Allegheny University of the Health Sciences, Phone: (412) 359-6200, Fax: (412) 359-6615

Section on Pain At this year's AANS Annual Meeting, the AANS/CNS Section on Pain sponsored a Satellite Symposium on Pain Management. The Symposium, organized by Ken Follett, MD, PhD, and Samuel Hassenbusch, MD, PhD, was well-received and included both didactic and practical sessions. Highlights from the presentations, as well as a complete set of digitized slides will be available on CD-ROM. Please watch for more details.

.....
Section on Pediatric Neurological Surgery The AANS/CNS Section on Pediatric Neurological Surgery has established a one-month fellowship intended to cover travel and living expenses for a resident who wishes to broaden his or her exposure to pediatric neurosurgery. Two fellowships are awarded each year on the basis of an evaluation by a committee of the Pediatric Section, and the maximum fellowship stipend is \$2,500. Residents interested in applying should send 1) Statement regarding the purpose of the proposed fellowship and estimated expenses; 2) written permission to apply for the fellowship from the applicant's program director; and 3) letter of acceptance from the institution where the applicant will seek the fellowship to: R. Michael Scott, MD, The Children's Hospital, Department of Neurosurgery, 300 Longwood Avenue, Bader 319, Boston, MA 02115. The deadline for application submission is October 15, 1999.

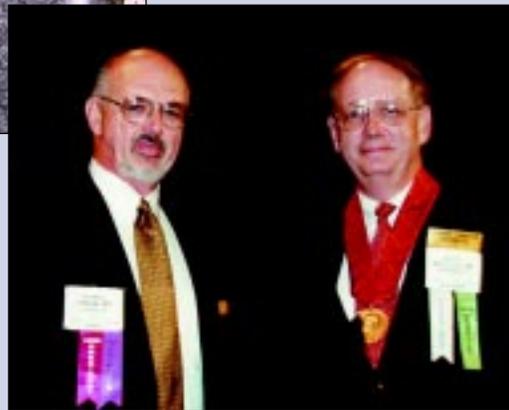
.....
Section on Tumors The Membership Services Committee of the AANS/CNS Section on Tumors has partnered with N://OC® to develop Internet-based resources related to brain tumor research and therapy. The services under development include: 1) Expanded lists of neuro-oncology fellowships, funding sources and meetings of interest; 2) links to related Web sites; 3) online listing of tumor-related publications; 4) online membership directory that allows searches by name, institution or geographic location; 5) national survey on negative brain tumor trials; 6) listing of support resources for brain tumor patients and their families; and 7) multidisciplinary online discussion groups. ■

New Orleans:

1999 Annual Meeting Moments



Former President George Bush delivered the Cushing Oration.



Outgoing President Russell L. Travis, MD, (left) congratulates David L. Kelly, Jr., MD, 1999 recipient of the Cushing Medal.



President-Elect Stewart Dunsker, MD, (left) presents W. Ben Blackett, MD, with the 1999 Distinguished Service Award.



Just as the AANS Annual Meeting was getting underway on one side of the Ernest N. Morial Convention Center in New Orleans, the AANS/CNS neurosurgical marketing booth was the center of attention at the American College of Physicians Annual Meeting, which was being held on the other side of the Convention Center. Neurosurgeons Paul Camarata, MD, (center foreground) and James Bean, MD, (seated, center background) spoke about spine and brain disorders with physicians visiting the AANS/CNS booth.



Stewart Dunsker, MD, presents Russell L. Travis, MD, with his Presidential Portrait.



Incoming President Martin Weiss, MD, (left) congratulates Thomas B. Flynn, MD, 1999 Recipient of the Humanitarian Award.

Getting SMART *about* Neurosurgery: An Educational Program on Stroke

Stroke is a growing threat to the well being and productivity of aging Americans, including those now entering middle age. Each year, more than 700,000 Americans suffer stroke — that's more than all other neurological disorders combined. However, the extent of treatment available to prevent, stop and treat stroke has increased tremendously within the last decade due, in large part, to the neurosurgeon's ability to evaluate, use and recommend aggressive management.

To order your
Getting SMART
program materials,
call (847) 692-9500,
or visit our
Web site at
www.neurosurgery.org

Recognizing this, the AANS and CNS have created the CV SMART program—a marketing communications tool that allows neurosurgeons to use their knowledge in cerebrovascular diseases to position themselves as leaders in stroke care. The program is ready-to-use when you receive it, and includes the following materials aimed at referring physicians as well as patients:

- **Two Comprehensive Presentations**
The presentations, tailored for both professional and patient audiences, use custom images to discuss hemorrhagic and ischemic stroke, including prevention and the role of carotid endarterectomy. The presentations are available on Zip disk in PowerPoint format, on CD-ROM or as 35mm slides.
- **200 Patient Education Brochures**
The easy-to-understand brochure provides a complete discussion of hemorrhagic and ischemic stroke, including the importance of early recognition and treatment of carotid stenosis, TIAs, aneurysms, and vascular malformations.
- **100 Referring Physician Booklets**
Providing a more technical discussion on stroke and related disorders, the physician brochure highlights recommended diagnostic tests, operative and non-operative treatment options, and more.
- **Guidelines for Developing a Stroke Team at Your Medical Center**
The packet includes care path guidelines and stroke scales.
- **Press Releases**
The easy-to-use news releases can be tailored and distributed to your local media.

The cost for the program is \$300, plus \$10 shipping. Selected program materials also can be purchased separately.

Neurosurgeons

Springfield Clinic, located in Springfield, Illinois is seeking **two BC/BE Neurosurgeons**. Springfield Clinic is a 130-physician owned and operated multispecialty group practice.

Springfield is located only 1 ½ hours from St. Louis and 3 ½ hours from Chicago and Indianapolis. Springfield is both the capital of Illinois and the home of Abraham Lincoln. The Springfield area boasts excellence in education, healthcare, arts and entertainment, housing and recreation, which provides a setting for both professional and personal satisfaction.

This position offers a very competitive salary and attractive benefits package. Partnership opportunity available after 18 months of employment.

Interested candidates submit CV by fax to:
Tracy at 217-383-8249
or call 800-528-8286 ext 8224.

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Journal of Neurosurgery
AD

Advocacy and the Standard of Care

AANS Guidelines for Providing Expert Medical Testimony.

Advocacy testimony continues to be one of the most frequent complaints brought before the AANS Professional Development Conduct Committee and is the most frequent basis for sanctions of members by the AANS Board of Directors. The core of the complaint is usually a statement under oath that some action or inaction was “below the standard of care.”

Neurosurgeons obviously differ about the best strategies for diagnosis or treatment, and these differences are the substance of most of our journals. Despite preferences, however, there is general recognition of a range of acceptable management. This range of the standard of care changes over time and must be considered when stating that some past action or omission was outside the standard of care. The margins of acceptable care are not always clear cut and experts may reasonably disagree. In such cases, they should recognize a close call and testify.

A flagrant misstatement of the neurosurgical standard of care is readily recognized by most neurosurgeons but not by lay jurors who must try to decide which of two conflicting statements to believe. Misstatements in discovery depositions may cause defensible cases to be compromised or meritorious cases to be dropped.

The AANS Code of Ethics, Expert Witness Guidelines and Position Statement on Testimony in Professional Liability Cases make clear the role of the neurosurgical expert witness as an educator of the jurors in the art and science of our specialty, and not as a hired teammate of the attorney for one side or the other.

AANS Code of Ethics, Adopted 1981, Section V, Item B:

The neurological surgeon, as an expert witness, shall diligently and thoroughly prepare himself or herself with relative facts so that he or she can, to the best of his or her ability, provide the court with accurate and documentable opinions on the matters at hand.

Expert Witness Guidelines, 16A-1 through 4, Adopted by the AANS Board of Directors in 1983:

A. The following are guidelines for testimony by neurosurgeons acting as expert witnesses:

In our society, it is customary that testimony be given in all adversary proceedings brought before the court system. The AANS has adopted a position advising all neurosurgeons to testify impartially and prudently for both the defendant and plaintiff in matters brought before the courts.

Witnesses are designated as expert witnesses if they have knowledge of any specific topic thought to be beyond the comprehension of the average layman. Expert witnesses are expected to be impartial and should not adopt a position of advocacy, except as spokesman for the field of special knowledge that they represent. The neurosurgical expert witness must testify as to the practice behavior of a prudent neurosurgeon giving differing viewpoints, if there are such.

Prior to offering any testimony, the expert witness should:

- 1) Become familiar with all the pertinent data of the particular matter at hand.
- 2) Review prior and current concepts related to standard neurosurgical practice on the matter at hand.

- 3) Not concern himself with the legal issues of the matter in question.
- 4) Identify as such, personal opinions not generally accepted by other neurosurgeons.

In this manner, the neurosurgical expert witness should be reasonable and commensurate with the time and effort given to preparing for his deposition or court appearance.

Position Statement on Testimony in Professional Liability Cases, Adopted in 1987:

The American legal system requires expert testimony for both plaintiff and defendant. The committee believes it is of central importance that such testimony be truly expert and as impartial as possible. The committee proposes the following guidelines for expert witness:

- 1) “Expert” testimony should reflect not only the opinions of the individual but also honestly describe where such opinions vary from common practice. The expert should not present his or her views as the only correct ones if they differ from what might be done by other neurosurgeons.
- 2) An expert should be a surgeon who is still engaged in the active practice of surgery, or can demonstrate enough familiarity with present practices to warrant designation as an expert.
- 3) The neurosurgeon should champion what he/she believes to be the truth, not the cause of one party or the other.
- 4) The neurosurgeon should not accept a contingency fee as an expert witness. ■

W. Ben Blackett, MD, JD, is a neurosurgeon in private practice in Tacoma, Washington. He is a 31-year member of the AANS, Chairman of the Professional Conduct Committee, and recipient of the 1999 AANS Distinguished Service Award.

Commitment to Quality Patient Care

Puget Sound Practice Prides Itself on Patient Satisfaction.

Name of practice: Neurosurgical Consultants of Washington, Inc. P.S.

Location: Puget Sound Region of Washington

Number of neurosurgeons: Eight in four care centers

Total number of employees: 15

Number of medical centers served: Nine (soon to be 10)

Approximate number of patients cared for in your practice per week: 400

Practice philosophy

In our offices, hospitals and outpatient surgery centers, we are dedicated to providing timely, compassionate and technologically advanced neurosurgical care to our patients. We enjoy a reputation for being among the best in our area, and constantly strive for the highest levels of patient satisfaction.

Most innovative back office management solution

Our office is very high-tech and prides itself on the efficiencies gained through the use of electronic medical records (“paperless office”), teleradiology and online communications with our insurance providers and local hospitals.

Most innovative approach to managing external relationships

Our offices have the ability to perform outpatient spine surgery in several locations, with outcomes tracked using an Internet-based database that allows national benchmarking. We pride ourselves on our quality outcomes, short length of stays, and overall lower costs. The local insurance

companies and referral physicians also profile these parameters, and are aware of the high standard of services provided by our neurosurgeons.

Biggest investment you have made in your practice in recent years

As Vice President of Neurosurgical Consultants of Washington, Inc. P.S., I have invested a great amount of time and energy into my education. Two years ago, I earned a Masters of Business Administration Degree from the University of Washington. Since then, I have become involved in the business of our neurosurgical practice on both a micro and macro level.

Richard N. Wohms, MD, Vice President of Neurosurgical Consultants of Washington, Inc. P.S., and 12-year AANS member.



Advice you would give to neurosurgeons starting their own practice

Don't try to be a “jack of all trades”; instead specialize in three or four areas of neurosurgery, at most, and annually upgrade your skills and techniques. Also, gain economies of scale and marketability by joining forces with neurosurgeons of a high quality, forward thinking philosophy.

Future of neurosurgical private practice

The future of our specialty is in the hands of those neurosurgeons who are learning machines. The neurosurgeon who expects

to practice what he or she was taught as a resident will be left in the dust. Given this, we must stay abreast of the rapidly changing medical technology, and continually advance our technological expertise in spinal, vascular and intracranial neurosurgical procedures. Further, neuronavigational tools must be utilized and mastered to refine our approaches and enhance our surgical results.

Neurosurgery and the next millennium

As we approach the year 2000, we will see a shift in the way we practice medicine. I envision that there will be a stronger emphasis on minimally invasive surgery, stereotactic surgery, and computer-guided or enhanced surgery. Also, I think our future neurosurgeons to come will find a cure for glioblastoma.

Closing thoughts

Neurosurgery is and should remain at the pinnacle of medicine intellectually, technologically and in providing gratification to its practitioners and patients alike. However, neurosurgeons can no longer practice in a void. In order to keep adverse forces from undermining the fundamentals of quality, independent neurosurgical practices, we need to be proactive in the political and socioeconomic arenas, as well as in the growing field of information technology. ■

This is the second in a series of profiles that highlight an AANS member and his or her innovative practice-building techniques.

EVENTS

Calendar of Neurosurgical Events

10th Annual Meeting of the North American Skull Base Society

May 28-31, 1999
Chicago, Illinois
(301) 664-6802

15th Annual Meeting of the German Society of Neurosurgery and Joint Meeting With the Swiss Society of Neurosurgery

June 5-9, 1999
Munich, Germany
89-7095-2590

11th International Symposium of Brain Edema and Mechanisms of Cellular Injury

June 6-10, 1999
Newcastle-upon-Tyne, England
191-2738811

51st Annual Meeting of the Scandinavian Neurosurgical Society

June 10-13, 1999
Goteborg, Sweden
46-31-342-10-00

2nd Symposium of the International Society for Neuroemergencies

July 4-9, 1999
Albano-Terme, Italy
39-49-8213090

Quadrennial Meeting for the American Society of Stereotactic and Functional Neurosurgery

July 7-10, 1999
Snowbird, Utah

15th Mexican Congress of Neurological Surgery

July 25-31, 1999
Cancun, Mexico
52-5-5430013

Brazilian Academy of Neurosurgery and World Federation of Neurosurgical Societies

September 1-7, 1999
Rio Grande do Sul, Brazil
55-51-2225

Western Neurosurgical Society Annual Meeting

September 18-21, 1999
Coeur d'Alene, Idaho
(619) 268-0562

11th European Congress of Neurosurgery

September 19-24, 1999
Copenhagen, Denmark
45-3452390

Review and Update in Neurobiology for Neurosurgeons

October 9-16, 1999
Madison, Connecticut
(203) 421-5886

Congress of Neurological Surgeons Annual Meeting

October 30-November 4, 1999
Boston, Massachusetts
(847) 692-9500

Skull Base Surgery 2000

March 17-20, 2000
Scottsdale, Arizona
(301) 654-6802

American Association of Neurological Surgeons Annual Meeting

April 8-13, 2000
San Francisco, California
(847) 692-9500

World Spine 1: First Interdisciplinary World Congress on Spinal Surgery

August 27-September 1, 2000
Berlin, Germany
49-30-857903-0

15th International Congress of Head and Neck Radiology

October 18-21, 2000
Kumamoto, Japan
81-96-373-5258

4th World Stroke Congress

November 25-29, 2000
Melbourne, Australia
61-3-9682-0288

Japan Neurosurgery

Subspecialization Certification

Examining the Issues Facing Neurosurgery.

In this issue of the *AANS Bulletin*, our featured subject explores the ramifications of subspecialty certification in neurosurgery. While the subject of this review may appear innocuous to the practicing neurosurgeon, aspects of this topic are explosive and evoke great passion in a substantial proportion of the AANS membership. The mere process of certification brings with it differentiation and, hence, an implication about quality of care delivered by two groups of neurosurgical practitioners—those with subspecialty certification and those without.

A Brief History

As our knowledge base grows and as we refine patient care delivery, the trend toward subspecialization seems inevitable. For example, as medicine evolved it became apparent that mastery in surgery required focus on progressively smaller segments of the surgical universe.

Indeed, the specialty of neurosurgery was born out of that evolution driven by a realization that research and patient care for problems of the nervous system were quite different from those in other areas of surgery. From this historical perspective, it would appear that those who wish to sub-divide the specialty of neurosurgery by subspecialty certification have legitimate historical support and patient care focus that lend credibility to their argument. Indeed, when one moves from the facts of history to a theoretical plane the argument becomes even more persuasive. Would it not be better, for example, to have all pediatric neurosurgical care rendered by individuals whose sole interest and experience focused on caring for children with neurosurgical disorders? Furthermore, would this concentration on a specialty area not lead to greater advances

in the field if most of the experience accrues to a relatively small group of physicians specializing in that area?

Realities of Neurosurgical Practice

Despite the apparent rectitude of this theoretical stance, when one contemplates the realities of neurosurgical practice the propriety of such thinking becomes less cer-

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tain. While no one doubts the need for referral to specialty centers for certain rare disorders or for some complex operative procedures that are beyond the experience or ability of an individual practitioner, what happens to those patients with less complicated but equally emergent problems who are often distant from the tertiary care centers that offer subspecialty care?

Despite having approximately 4,500 neurosurgical practitioners in the United States, a significant portion of our population is remote from subspecialty care and even the most sophisticated medical centers may have only one or two individuals subspecializing in a particular area of neurosurgery. What happens, then, when the pediatric patient with shunt failure arrives in the emergency room of the tertiary care center on Saturday night and the staff pediatric neurosurgeon is not on call? Generally, care is rendered by a neurosurgical colleague of the pediatric neurosurgeon who is on call that night. Hopefully that individual will have had the

proper experience during neurosurgical residency to deliver superb care to that child; I believe that is what occurs most of the time. Yet that same practitioner may be viewed with suspicion by the very family of the child to whom care has been rendered since care was rendered by a “non certified” surgeon.

From my personal perspective, I believe that the move toward subspecialty certification must take into account the realities of neurosurgical practice. Residency training should educate residents to deliver care to the spectrum of patients with surgically treatable problems of the nervous system and when to refer patients requiring care beyond their abilities.

I believe that the ABNS and RRC do an excellent job in assuring that training programs meet these goals and that certification in neurosurgery denotes competence in the entire field. Furthermore, the AANS, as an association that exists for the betterment of its membership, recognizes that continuing education in the form of meetings, publications and CME courses is essential to maintain competency after residency training.

Value of Subspecialization

We owe gratitude to those individuals that have led neurosurgery by specialization. They have advanced our speciality by broadening our scope of practice. Recall the advances in spinal surgery—a field extended and preserved for all neurosurgeons by a few who chose to subspecialize.

We must not rush to judgment about the best approach to answer these questions about subspecialty certification, but we must develop a strategy. As H.L. Mencken wrote, “For every complex problem there is a solution that is simple, neat and wrong”.

Fully airing this complex topic may help the neurosurgical community come closer to consensus. Continuing the debate without a conclusion merely prolongs the life of a fractious dispute at a time when unity in neurosurgery is necessary. Neurosurgery must continue to evolve. Will the process of subcertification facilitate this evolution, enhance our field, and assure excellence? The answers to these questions are critical to the future of our speciality. ■