EDITOR’S NOTE

The CNS and cnsQ staff wish to welcome Gerald “Rusty” Rodts, Jr. as our newly elected CNS President who provides the foreword to this issue. We anticipate another great year of further growth and prosperity for this organization.

In this issue of the cnsQ, we reflect on the numerous changes and challenges that the neurosurgery community has faced and is enduring, particularly during this period of health care policy reform. It is during these times of change when individuals perceive themselves as alone or isolated. Therefore, this issue highlights individuals and services which the neurosurgical community has to vocalize for neurosurgeons and their patient’s voices. Specifically it attempts to highlight some of the numerous organizations and individuals that are advocates for Neurosurgery. Webster defines advocate as “one that pleads the cause of another; specifically: one that pleads the cause of another before a tribunal or judicial court”; however, due to the negative impact of the legal profession we have opted to exclude legal representatives.

The CNS commitment as an advocate for neurosurgeons is illustrated in every issue of the cnsQ, but is further defined in an article by Alan M. Scarrow and P. David Adelson. Further the CNS committee reports from the Immediate Past-Secretary, Christopher E. Wollfa, and the Resident Committee Report by Zachary N. Litvack and Catherine A. Mazzola are included. Additional articles from the Quality Improvement Work Group by Daniel K. Resnick, two separate articles focused on Women in Neurosurgery (WiNS) by Lauren Schwartz, and the other by Aviva Aboch and Odette Harris and the AANS/CNS Joint Guidelines Committee by Mark E. Linskey and Rachel Groman, Coding and Reimbursement; Advocacy through the CNS by Joseph Cheng and Karin Swartz. Deb Schultz provides insight in how the NERVES organization provides assistance to neurosurgical administrators and R. Patrick Jacob reviews the National Coverage Determinations (NCD) as issued by The Centers for Medicare and Medicaid Services (CMS). The Washington Committee under the direction of Katie Orrico has been extremely busy and illustrates their work as our advocates in the political arena. Lastly, James Ausman further reminds us that we are our own advocates and need to understand our own power.

In the Past President’s article, Joseph C. Maroon reiterates the importance of supplementing your time away from neurosurgery in order to re-exhilarate oneself and obtain maximal productivity. This topic will be further examined in the Summer 2010 issue of the cnsQ. In addition we are fortunate to have a detailed “Vignettes from the CNS Archives: Contributions of the Congress of Neurological Surgeons to Socioeconomic Issues” by CNS Past President and Historian Issam Awad.

As always we hope you enjoy this issue and your feedback is always appreciated.

Editor Contact Information: info@1cns.org or 847.240.2500
This issue of the *CNSQ* is dedicated to the issue of *advocacy*. There is perhaps no other time in the history of neurosurgery as fitting as now to highlight this topic. We are living in an era in which our efforts to provide effective and compassionate care for our patients are hampered by a multitude of critical forces in society. We are in the midst of a battle for reasonable healthcare reform legislation. Our elected officials refuse to take on the plaintiff bar for much needed tort reform. We see increasingly negative images of physicians in print, digital and television media. Non-neurosurgical experts in sleep deprivation and from other medical fields are telling us how to best train future neurosurgeons. We face constant challenges in receiving appropriate reimbursement for accepted neurosurgical procedures and have failed to receive even the standard cost-of-living increases other non-medical professionals enjoy. Furthermore, government regulators and elected officials have turned their scrutiny to physician-corporate relationships, endangering our ability to engage in legitimate technology creation and consulting activities that ultimately improve patient care.

As this journal goes to print, various bills being debated in the U.S. Senate, the House of Representatives and in a Joint Senate-House Conference Committee could dramatically affect patient access to specialty care as well as our ability to care for patients and practice neurosurgery in...
ways that we know are most effective. Organized medicine has become fractionated, and important organizations such as the AMA, the American College of Surgeons and others have been unable to speak fully for our constituency on the important issues now being debated in the halls of Congress. As a result, the Washington Committee (W.C.), made up of officers from the CNS and AANS and other important representatives from the American Board of Neurological Surgery, the Council of State Neurosurgical Societies, the Society of Neurological Surgery, the Joint AANS/CNS Sections, etc., is busier than ever lobbying for the best interests of all neurosurgeons. Our Washington Committee leadership (particularly Past CNS President P. David Adelson, AANS President Troy Tippet and W.C. Chairman Bob Harbaugh) and staff (including key staff Katie Orrico and Rachel Gorman) have made a tremendous effort to have our voice heard during this very busy year of activity surrounding healthcare reform. Our leaders in the Washington Committee have emerged as a guiding force in garnering the support of various specialty societies with similar positions as organized neurosurgery regarding healthcare (and Medicare) reform.

Now more than ever neurosurgeons must assume personal, individual responsibility for advocating for what we believe in. Federal tort reform is unlikely to be accomplished at any time in the near future and undoubtedly will not be part of any major healthcare reform legislation. To quote the Chairman of the Democratic Party, Howard Dean, MD, “...the people who wrote it do not want to take on the plaintiff attorneys...” (August 27, 2009). Thus, we must continue to work harder at the state and local level for a more sensible solution to the problem of rising healthcare costs resulting from defensive medicine and inappropriate litigation. According to the Central Budget Office (August 11, 2009), the cost of malpractice premiums, awards, settlements and administration total at least $35 billion. The cost of defensive medicine and unnecessary diagnostic tests brings that total much higher.

Besides perhaps the banking industry, there is no other profession that has been more scrutinized by the government in recent years than medicine. Government regulators and elected officials have endangered legitimate corporate interactions that are so critical to the development of new devices, drugs and other technologies intended to benefit patients and improve the effectiveness of healthcare. Even many of our universities have invoked new regulatory and economic policies that stifle the interactive entrepreneurial process with industry. The inappropriate actions of a few have swung the pendulum of free-market enterprise far over to the side of oppressive restrictions. Individual neurosurgeons and organizations alike must stand up and defend the American spirit of entrepreneurship that allows us to consult and design in a transparent, legitimate manner with full disclosure.

Adding to our challenges is a sense of distrust and criticism of neurosurgeons and physicians in general that is espoused by newspaper and magazine writers, television media and many of our politicians. There is no better way to combat that sort of bad publicity than to continue to go about our work everyday, providing the most compassionate, advanced, informed and effective neurological care for our own patients. We must maintain and defend the personal bond between neurosurgeon and patient. We must continue to advocate for our patients and for our rights as practicing neurosurgeons. The responsibility lies with the individual, and is furthered by the work of our CNS and AANS advocates at the national level.
The mission of the Congress of Neurological Surgeons (CNS) is to enhance health and improve lives worldwide through the advancement of education and scientific exchange. Among the organization’s means to achieving that mission is political advocacy for the enhancement and programmatic development of quality and safety standards, available access to neurosurgical services, and efficiency in practice. The CNS devotes a significant portion of its financial resources to address these issues through two committees jointly sponsored with the AANS: the Washington Committee (WC) and the Council of State Neurosurgical Societies (CSNS).

The WC and the CSNS are funded equally by the CNS and American Association of Neurological Surgeons (AANS). In FY 2009, the CNS expended $550,000 and $88,360 for the respective activities of the WC and CSNS.

The WC, founded in 1984, serves the CNS and AANS by promoting federal public policy that supports neurological patients and the neurosurgeons who provide their care, and has historically been involved in contemporary health care issues such as medical liability reform, graduate medical education, EMTALA, fraud and abuse, scientific funding, regionalization of emergency care, anti-kickback and the ongoing health care reform debate. The CNS President and President-Elect serve on the WC along with three other appointees from the CNS (Drs. Mark Linskey, Alan Scarrow, and Alex Valadka). The AANS has similar representation. Members of the WC can serve on four subcommittees that address specific strategic goals of the CNS and AANS, including Coding and Reimbursement, Drugs and Devices, Quality Improvement Workgroup, and Guidelines. The Coding and Reimbursement Subcommittee, chaired by Dr. Greg Przybylski, monitors, advocates and responds to specific issues raised by the Center for Medicare and Medicaid Services (CMS). The Drugs and Devices Subcommittee, chaired by Dr. Richard Fessler, works closely with the Food and Drug Commission (FDA) on issues raised by the review of neurosurgical technology. The Quality Improvement Workgroup, chaired by CNS Treasurer Dr. Dan Resnick, organizes efforts to define and report quality in neurosurgery. Dr. Resnick’s group works extensively with groups such as the National Quality Forum (NQF), the Surgical Quality Alliance (SQA), and the National Committee for Quality Assurance (NCQA) to design and promote initiatives that seek to improve the quality of care provided to neurological patients. The Guidelines Committee, chaired by CNS Executive Committee member Dr. Mark Linskey, is charged with producing and reviewing evidence-based and evidence linked clinical practice parameter guidelines. This Guidelines Committee has been very active in coming up with guidelines for degenerative spine disease, metastatic brain cancer, and newly diagnosed glioblastoma multiforme, among others.

Funds from the CNS go towards paying for these and other political activities of the WC. Currently the WC staff, led by Katie Orrico, has six full time employees including the recent addition of a Senior Manager of Communications, Susanne Hartman. Ms. Hartman will be responsible for carrying out external and internal...
communications on health policy and advocacy issues of concern to organized neurosurgery. The CNS Executive Committee and the AANS Board of Directors both felt the addition of a dedicated staff member in the WC office focused on public relations was essential given the intense amount of health care activity on Capitol Hill. The economic and political events of the next few years will affect neurosurgery in profound ways, and it will be in our profession’s best interest to be actively engaged in those events. Of course this ramping up of the WC office staff will require the CNS to provide additional financial resources which the CNS is happy to do on behalf of its members.

The second primary group the CNS funds to carry out its advocacy mission is the CSNS. The CSNS, officially formed in 1978 and growing out of the Joint Socio-Economics Committee, is a grassroots representative body of state neurosurgical society members, CNS and AANS appointees. The CSNS provides a biannual forum on the Friday and Saturday prior to the CNS and AANS meetings for any neurosurgeon to bring forth economic, legal or political issues that are affecting neurosurgical care on a local, regional or national scale. In many ways the CSNS complements the political advocacy work of the WC by emphasizing a “boots on the ground” perspective with regard to local or regional issues, as well as providing a sounding board for federal health care issues that the WC is involved with. Through the CSNS, neurosurgeons may propose resolutions for the CSNS membership to debate and vote on. Typically these resolutions call for a study or data to be collected on a political, legal or economic issue (e.g., a survey of state law regarding the criteria for brain death) or a request for the CNS and AANS to take some type of action (e.g., request the WC to oppose the recent Medicare Payment Advisory Committee (MedPAC) proposal for bundled payments to hospitals and physicians). Three of the officers in the CSNS, chairman Dr. Bill Bingaman, recording secretary Dr. Mark Linskey, and treasurer Dr. Alan Scarrow, are current or former CNS Executive Committee members and CNS appointees chair several of the CSNS’s seven standing committees.

Recently the CSNS has debated and taken action on several political and economic issues first brought forth as resolutions by its members. These include developing criteria for peer reviewers at insurance companies, protecting out of network benefits for patients, educating neurosurgeons about conflict of interest, and developing a white paper on a national medical device registry. Funds from the CNS and AANS go toward organizing and holding the biannual CSNS meeting as well as providing infrastructure and logistical support to the organization.

> THE ECONOMIC AND POLITICAL EVENTS OF THE NEXT FEW YEARS WILL AFFECT NEUROSURGERY IN PROFOUND WAYS, AND IT WILL BE IN OUR PROFESSION’S BEST INTEREST TO BE ACTIVELY ENGAGED IN THOSE EVENTS. <

The CNS has and will continue to provide significant contributions of volunteer time and financial support to carry out its mission to improve the quality of health care and advance the profession of neurosurgery via political advocacy. The activities of the WC and CSNS are central to the CNS mission, and the CNS is very invested in seeing these activities prosper.
One of the most critical functions that the Congress of Neurological Surgeons (CNS) performs on behalf of its members is representing the interests of neurosurgeons before the federal government. The principle mechanisms for carrying out this function are through the Washington Committee for Neurological Surgery and the Washington Office, which are both jointly sponsored and equally funded by the CNS and the American Association of Neurological Surgeons (AANS). The mission of the Washington Committee is to represent, develop and promote organized neurosurgery’s positions on issues affecting the specialty, and the Washington Office staff are charged with carrying out this mission.

A Brief History
In 1975, the CNS and AANS decided to become actively involved in the federal government’s rapidly expanding role in formulating, legislating, implementing and regulating health care policy. Dissatisfied with the representation on a number of issues by the American Medical Association and the American College of Surgeons, the neurosurgical leadership of the AANS and the CNS felt that more direct involvement in Washington would give neurosurgery more influence on important issues affecting the specialty. The pioneer committee consisted of Louis A. Finney, MD; Donald H. Stewart, Jr., MD; Russel H. Patterson, Jr., MD; and Charles A. Fager, MD, who, after an extensive search, contracted with Charles L. Plante, a former Senate aide, to provide part-time Washington representation services. One of Mr. Plante’s requirements in accepting the job was that the CNS and AANS establish a small committee that would consist of senior members of the parent organizations who had an interest and expertise in health policy and federal affairs. Hence, the Washington Committee for Neurosurgery was officially formed in 1976.

In its early years, the committee limited its activities to specialty-specific issues, such as federal funding for neuroscience research, professional liability reform and neurosurgical manpower. Over the past 20 years, however, the committee’s agenda has expanded to include nearly all health policy issues that either directly or indirectly affect neurosurgeons and the profession.

Continued pressures by the federal government and private health insurers on the practice of medicine, particularly in the areas of reimbursement and managed care, heightened the need for a proactive presence in Washington, DC, and in 1996, the CNS and AANS decided to establish a full-time presence. Since 1997, organized neurosurgery has maintained a permanent, full-time Washington, DC office.

Expanding Role
The ever increasing involvement of federal and state governments, health insurers and employers in the practice of medicine has created increased pressure on the CNS and AANS to expand their role in socioeconomic matters. As new issues and challenges have arisen the CNS and AANS have looked to the Washington Committee to serve as the focal point for overseeing and managing new projects to meet these challenges. This has necessitated the expansion of both the Washington Committee and the Washington Office.

The committee continues to have six official appointees – 3 appointed by the CNS and 3 appointed by the AANS – and the presidents and presidents-elect of the CNS and AANS serve as ex-officio members. The current core members of the committee are:

**Appointees:**
- Robert Harbaugh, MD, Chair
- Mark E. Linskey, MD
- Alan Scarrow, MD
- Alex Valadka, MD
- Gary Bloomgarden, MD
- Monica Wehby, MD

**Ex-Officio Members:**
- Gerald E. Rodts, Jr., MD, CNS President
- Christopher G. Getch, MD, CNS President-Elect
- Troy Tippett, MD, AANS President
- James Rutka, MD, AANS President-Elect
The Washington Committee also now has six subcommittees under its auspices.

**Coding and Reimbursement Committee**
Greg Przybylski, MD

**Communications and Public Relations Committee**
Monica Wehby, MD

**Drugs and Devices Committee**
Richard G. Fessler, MD

**Emergency Neurosurgical Care Task Force**
Alex Valadka, MD

**Joint Guidelines Committee**
Mark E. Linskey, MD

**Quality Improvement Workgroup**
Daniel Resnick, MD

In addition, a whole host of representatives from other elements of organized neurosurgery serve as official liaisons to the Washington Committee. These include:

**AMA Delegates/Alternates**
Jeffrey Cozzens, MD
Mark Kubala, MD
John Ratliff, MD
Ann Stroink, MD
Philip Tally, MD
Monica Wehby, MD

**ACSN Advisory Council for Neurosurgery**
John Atkinson, MD

**ACSN-AANS Health Policy Fellow**
Jonathon Friedman, MD

**Cerebrovascular Section**
John Wilson, MD

**Council of State Neurosurgical Societies**
William Bingaman, MD

**CSNS Resident Fellow**
Krystal Tomei, MD

**Doctors for Medical Liability Reform**
John Popp, MD

**Health Policy Fellow**
John Kusske, MD

**NERVES**
Mary Cloninger

**NeurosurgeryPAC**
Rick Boop, MD

**Neurotrauma and Critical Care Section**
Shelly Timmons, MD

**Pain Section**
Christopher Winfree, MD

**Pediatric Section**
Jeffrey Wisoff, MD

**Society of Neurological Surgeons**
Howard Eisenberg, MD

**Spine & Peripheral Nerve Section**
Robert Heary, MD

**Stereotactic & Functional Section**
Kathryn Holloway, MD

**Tumor Section**
Andrew Sloan, MD

**Young Neurosurgeons Committee**
Edward Vates, MD

Finally, to meet the increased workload, the Washington Office has expanded and now has six full-time employees.

**Director, Washington Office**
Katie Orrico

**Senior Manager, Quality Improvement**
Rachel Groman

**Senior Manager, Communications**
Susanne Hartman

**Senior Manager, Regulatory Affairs**
Cathy Hill

**Senior Manager, Legislative Affairs**
Adrienne Roberts

**Administrative Manager & Grassroots Coordinator**
Cynthia Spriggs

**Decision-making Process**
The committee meets three times each year in Washington, DC. At these meetings, the committee considers a wide range of issues and recommends what action, if any, should be taken by the CNS and AANS. Final decisions on these recommendations are made by the leadership of the parent organizations and are then implemented by the committee members and/or staff. Before any action is carried out on a specific piece of legislation or federal regulation, the committee consults with representatives from the Washington Committee Subcommittees, Joint Sections, state societies and other experts within neurosurgery. Because the federal process timetable is unpredictable and sometimes requires rapid decision-making, the Washington Committee and staff have some latitude to act as necessary.
Working For You
The Washington Committee’s agenda is extensive, covering nearly all health policy issues facing neurosurgeons today. Our continued vigilance and presence in Washington, DC has helped neurosurgery attain numerous legislative and regulatory “victories” that otherwise would not have been possible had we not had a “seat at the table.” The following outlines some of the many issues and projects that the Washington Committee and its subcommittees address on an ongoing basis.

Reimbursement and Neurosurgical Practice
• Medicare Payment Reform.
• Medicare Physician Fee Schedule.
• CPT Coding.
• Relative Value Updates.
• Correct Coding Initiative.
• Assistant at Surgery Payment Policy.
• Coverage Policy.
• Hospital Payment.
• Fraud and Abuse.
• Health Plan Consolidation and Antitrust Reform.
• Medical Records Confidentiality.

Medical Liability
• Medical Liability Reform Legislation.
• National Practitioner Data Bank Regulations.
• Federal Rules of Civil Procedure Initiative.

Emergency Neurosurgical Services
• Regionalization of Neurosurgical Emergency Care Project.
• Trauma/Emergency Care Legislation.
• Injury Prevention.
• EMTALA Regulations and Legislation.
• On-Call Reimbursement/Negotiations.
• ACS Committee on Trauma.

Quality Improvement, Guidelines and Research
• Pay for Performance, including Medicare Physician Quality Improvement Initiative.
• Clinical Data Collection Initiatives.
• Comparative Effectiveness Research.
• Health Information Technology.
• Patient Safety Initiatives.
• Practice Guidelines Development.
• Biomedical Research Funding, Programs and Policies.

Drugs and Devices
• Physician-Industry Relations.
• Food and Drug Administration Policy.
• Neurosurgical Forum on Drugs, Devices and Biologics.

Neurosurgical Training and Education
• Resident Duty Hours.
• Graduate Medical Education Funding.
• Physician Workforce.

Keeping Members Informed
In an effort to keep membership informed about the Washington Committee’s activities, its members and staff make frequent reports to the leadership, Joint Sections, state neurosurgical societies and the membership at large. Specifically, the Chairman and Washington Office Director attend and make reports at the meetings of the CNS Executive Committee and AANS Board of Directors, the AANS/CNS Joint Sections and the Council of State Neurosurgical Societies. Committee members and staff also highlight the activities of the Washington Committee during the CNS and AANS Annual Meetings at breakfast and luncheon seminars, practical courses and special symposia. Throughout the year committee members and staff are also frequently invited to speak at state and regional neurosurgical society meetings. Finally, the committee communicates its activities through the CNS, the AANS Neurosurgeon, periodic “e-blasts” and other neurosurgical publications.

Into the Future
Neurosurgery clearly has both a present and future role in the establishment and implementation of healthcare policy. The Washington Committee will continue to evolve to ensure that the CNS and AANS remain effective advocates on behalf of neurosurgeons, their patients and the profession.

Contact the Washington Office:
For more information about the Washington Committee or specific health policy issues, please contact Katie O. Orrico the Director of the AANS/CNS Washington Office at:

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The Quality Improvement Workgroup was organized by the Washington Committee five years ago in order to develop a mechanism to analyze, understand and respond to a myriad of “quality improvement” initiatives. These various initiatives are developed by governmental agencies such as the Center for Medicare Services (CMS) and the Agency for Health Care Research and Quality (AHRQ), the American Medical Association (through the Physician’s Consortium for Practice Improvement (PCPI), quasi-governmental agencies such as the National Quality Forum (NQF), and the insurance industry. The number of such initiatives is staggering and increasing. While these initiatives are always presented as earnest attempts to improve the quality of care delivered to targeted populations, in many cases these are thinly veiled cost containment efforts with little or no potential to improve patient outcomes.

The Washington Committee staff, particularly Rachel Groman, working with Katie Orrico and other allied societies, identifies efforts that may be relevant to the practice of neurosurgery and alerts the QIW to such efforts in order to facilitate review and commentary. Depending upon the nature of the effort, particularly the relevance of the effort to neurosurgery, the QIW advises the leadership of the Washington Committee and hence the leadership of the Congress of Neurological Surgeons (CNS) and American Association of Neurological Surgeons (AANS) with regard to action required. In some cases, the QIW is able to directly influence the characteristics of the program in question. For example, Blue Cross Blue Shield recently unveiled a spine “center of excellence” program. The QIW was able to participate in the development of the program and representatives worked diligently to make the program as inclusive and as reasonable as possible. Similarly, members of the QIW serve as representatives to the PCPI and NQF and work hard to make sure that proposed measures are reasonable, achievable, supported by fact, and applicable to our patient populations. Currently, the QIW is evaluating a proposal from the Surgical Quality Alliance (SQA) regarding the formation of a global surgical outcomes tool. Our representatives to the SQA are charged with understanding the nature of the tool, understanding how the tool could be used by neurosurgeons, and making
recommendations to our parent societies regarding the wisdom of organized neurosurgery participating in the project.

In other situations, the QIW is relatively powerless to influence a project and serves mainly as an educational resource for neurosurgeons who may be affected by the particular effort. For example, the PQRI (Physician Quality Reporting Initiative) program is very difficult for a neurosurgeon to participate in and is not cost effective for the vast majority of private practice neurosurgeons – the cost of implementing the program exceeds the potential “bonus” earned through participation. While the Washington Committee staff and the QIW have been involved in numerous communications with the CMS, we have not been very successful in altering the program. In this case, members of the QIW have gathered information on measures that could be potentially useful for neurosurgeons who wish to participate. The QIW has recruited experts on the nature, benefits and hazards of participation who present at each national meeting in order to help the CNS and AANS members understand and potentially benefit from the program (or limit their participation).

Recently, a legislated shift towards “comparative effectiveness” research has occurred. Participation in such efforts is anticipated to be a cornerstone for federally funded medical care and it is likely that the private insurance industry will follow suit. The QIW is actively involved in the development of mechanisms to perform such research within neurosurgery. The QIW is also reviewing proposals from the SQA and from other allied societies in an attempt to position organized neurosurgery and our member neurosurgeons optimally for the coming decades.

The purpose of the QIW is to promote quality improvement, where quality is defined as better patient care and better patient outcomes. The QIW works tirelessly to limit the inappropriate restriction of practice and to minimize illogical and burdensome reporting requirements. Thus far, we have had some significant successes and with continued financial support from our parent organizations look forward to positively influencing the quality initiative landscape for the foreseeable future.

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**QIW Membership September 2009**

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<tr>
<th>Name</th>
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<tr>
<td>Daniel Resnick, MD</td>
<td>QIW Chair, Data Collection Project Team</td>
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<td>Robert Harbaugh, MD</td>
<td>QIW Past-Chair, NPA representative, Data Collection Project Team</td>
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<td>P. David Adelson, MD</td>
<td>JGC Past-Chair</td>
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<td>Peter Angevine, MD</td>
<td>PCPI Alternate Representative</td>
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<td>H. Hunt Batjer, MD</td>
<td>ABNS Liaison, Data Collection Project Team</td>
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<td>Gary Bloomgarden, MD</td>
<td>SQA Representative, AQA Representative</td>
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<td>Larry Chin, MD</td>
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<td>Kevin Cockroft, MD</td>
<td>JGC Co-Vice Chair, NQF Advisor</td>
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<td>Aaron Cohen-Gadol, MD</td>
<td>NQF Advisor</td>
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<td>John Cowan, MD</td>
<td>NSQIP Liaison</td>
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<td>Jeffrey Cozzens, MD</td>
<td>CPT Liaison, PCPI Representative</td>
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<td>Fernando Diaz, MD</td>
<td>NQF Liaison, PCPI Advisor</td>
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<td>Elana Farace, PhD</td>
<td>SQA Representative</td>
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<td>Zohar Ghogawala, MD</td>
<td>Episodes and Cost of Care Representative</td>
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<td>Bob Heary, MD</td>
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<td>Stacey Schoeck</td>
<td>NERVES liaison</td>
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<td>Michael Kaiser, MD</td>
<td>QIW Vice-Chair</td>
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<td>Jack Knightly, MD</td>
<td>NQF Advisor, Data Collection Project Team</td>
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<td>John Kusske, MD</td>
<td>Health Policy Liaison, NQF Representative, WC Ad Hoc Comparative Effectiveness Subcommittee</td>
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<td>Mark McLaughlin, MD</td>
<td>NPP Overuse Workgroup Representative</td>
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<td>Michael Rutiglano, MD</td>
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<td>Karl Sillay, MD</td>
<td>AAN Parkinson’s Measure Development Workgroup</td>
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<td>Krystal Tomei, MD</td>
<td>CSNS Resident Fellow</td>
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<td>Kevin Walter, MD</td>
<td>WC Ad Hoc Comparative Effectiveness Subcommittee</td>
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<td>Monica Wehby, MD</td>
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<td>Philip Weinstein, MD</td>
<td>Senior Society Liaison</td>
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<td>Rachel Groman, MPH</td>
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The AANS/CNS Joint Guidelines Committee

One of the critical areas of neurosurgery advocacy involves the intersection and overlap between clinical practice parameter guidelines and the generation of healthcare legislation, regulation, reimbursement and policy. Both the healthcare quality and healthcare reform movements have clearly targeted improving the quality of care, reducing unwarranted regional practice variation, and cost containment, as overlapping goals. Guidelines are best suited towards addressing the first two items above. They are a potential source of evidence-based quality process indicators, and promote greater uniformity in care through evidence-based medicine (EBM) codification of best practices. Congress, the Center for Medicare and Medicaid Services (CMS) and the Agency for Healthcare Research and Quality (AHRQ) are all involved in these efforts, with reimbursement now linked to pay-for-performance (P4P) initiatives, clinical guidelines such as appropriateness criteria included in demonstration projects, and calls for studies in cost effectiveness.

Unfortunately, the need, urgency and drive towards policy changes and regulatory implementation are already outstripping the available pool of evidence in the peer review literature. In the absence of available evidence, agencies are more and more turning towards expert consensus statements. This is an alarming and potentially dangerous trend, which threatens physician freedom and autonomy in choosing the best care for their patients in specific clinical circumstances.

The AANS and the CNS both strongly feel that evidence-based clinical practice parameter guidelines written with multidisciplinary input and formulated using the highest, strictest EBM methodology are the best way to ensure neurosurgery autonomy and protect optimal care tailored for each patient. Strict EBM methodology will not allow levels of recommendation to exceed levels of evidence, which often happens with consensus position statements, and can even happen with evidence-based consensus methodologies. Most current “appropriateness criteria” utilize the last two methodologies. In the absence of sufficient evidence to the contrary, reasonable alternative treatment methodologies remain level three recommendations (options), under strict EBM methodology.

In order to promote the development of high quality EBM clinical practice parameter guidelines as rapidly as possible for clinical areas of neurosurgery practice, in April 2006, the AANS and the CNS authorized the AANS/CNS Washington Committee to form a new Joint Guidelines Committee (JGC) within the Quality Division of the Washington Committee. The JGC is a committee composed of representatives from each AANS/CNS Section, the AANS, the CNS, and the CSNS. Each member goes through an in-depth EBM training process after nomination and prior to confirming full membership. We currently have 39 members on the JGC and are always looking out to recruit new interested participants who are interested and want to help. The committee meets face-to-face twice per year, but actually works continuously year-round utilizing conference calls organized by our Washington Office staff liaison, Ms. Rachel Groman.

Now 3.5 years old, the JGC has pursued a vigorous and ambitious agenda of (1) reviewing for differing levels of endorsement guidelines efforts from other societies in areas of clinical overlap, (2) coordinating multidisciplinary guidelines production collaborations with other societies and agencies, (3) assisting and facilitating guidelines production efforts within the AANS/CNS sections, and (4) tasking sections with guidelines development and updates based on a JGC-generated national strategic agenda designed to prioritize and address the greatest areas of clinical, medical-legal and regulatory need as it relates to neurosurgery as a specialty.

The volume of review work completed over the last 3.5 years is outlined in Table 1. This activity includes completion and approval of three brand new neurosurgery-sponsored multidisciplinary EBM guidelines efforts, approval and endorsement of two externally generated EBM guidelines, review of two externally generated formal consensus statements referred forward to the AANS and the CNS, review and rejection of five externally generated EBM guidelines and formal consensus statements. We currently have seven neurosurgery initiated guidelines projects in process, have supplied neurosurgery writing group manpower to 32 externally-generated EBM guidelines or formal consensus initiatives, and have been asked to review six additional externally generated EBM guidelines and formal consensus statements that do not include JGC neurosurgeons in the writing groups.
## TABLE 1

**DOSSIER OF PROJECTS & ACTIVITIES, JOINT GUIDELINES COMMITTEE (JGC) 2006-2009**

<table>
<thead>
<tr>
<th>Completed JGC Tasked Projects with AANS/CNS funding based on JGC AHRQ - Evidence-Based Practice Center Request for Proposal</th>
<th>Guideline for the Treatment of Patients with Metastatic Brain Tumors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Joint Tumor Section/McMasters EPC</td>
<td>• Endorsed by JGC October 2009</td>
</tr>
<tr>
<td>• Endorsed by AANS &amp; CNS October 2009</td>
<td>• Publishing Journal of Neuro-Oncology, November 2009</td>
</tr>
<tr>
<td><strong>Section Initiated and Funded Projects Facilitated, Reviewed &amp; Completed</strong></td>
<td>Guideline for the Surgical Management of Cervical Degenerative Disease</td>
</tr>
<tr>
<td>• Joint Section on Spine and Peripheral Nerves</td>
<td>• Endorsed by JGC August 2008</td>
</tr>
<tr>
<td>• Endorsed by AANS &amp; CNS September 2008</td>
<td>• Published Journal of Neurosurgery, Spine, August 2009</td>
</tr>
<tr>
<td>• Publishing Journal of Neuro-Oncology, November 2009</td>
<td></td>
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<tr>
<td>Guideline for the Management of Newly Diagnosed Glioblastoma Multiforme</td>
<td>Guideline for the Management of Newly Diagnosed Glioblastoma Multiforme</td>
</tr>
<tr>
<td>• Joint Tumor Section</td>
<td>• Endorsed by JGC October 2007</td>
</tr>
<tr>
<td>• Endorsed by AANS &amp; CNS October 2007</td>
<td>• Published Journal of Neuro-Oncology, September 2008</td>
</tr>
<tr>
<td><strong>Externally Generated Guidelines Reviewed by JGC and Recommended for AANS &amp; CNS Endorsement after Adequate response to JGC Comments/Concerns</strong></td>
<td>Guideline for the Management of Newly Diagnosed Glioblastoma Multiforme</td>
</tr>
<tr>
<td>• Brain Trauma Foundation</td>
<td>• Endorsed by JGC January 2007</td>
</tr>
<tr>
<td>• Endorsed by AANS &amp; CNS January 2007</td>
<td>• Published Journal of Neurotrauma, May 2007</td>
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<tr>
<td>• Published Journal of Neuro-Oncology, September 2008</td>
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<tr>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• American Academy of Orthopedic Surgeons</td>
<td>• Endorsed by JGC January 2009</td>
</tr>
<tr>
<td><strong>Externally Generated Guidelines Reviewed by JGC subsequently not endorsed due to failure to adequately respond or inadequate time to respond to JGC concerns/comments</strong></td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>American College of Physicians (ACP) and the American Pain Society (APS)</td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• Low Back Pain Guideline</td>
<td>• American Heart Association/American Stroke Association/American College of Cardiology (Joint Section on Cerebrovascular Disease participating)</td>
</tr>
<tr>
<td>• Reviewed by the JGC 2007</td>
<td>• Reviewed by JGC January 2008</td>
</tr>
<tr>
<td>• JGC decision not to endorse based on inadequate response to JGC concerns/comments</td>
<td>• JGC decision not to endorse based on inadequate response to JGC concerns/comments, February 2008</td>
</tr>
<tr>
<td>• Not endorsed by AANS &amp; CNS</td>
<td>• Not endorsed by AANS &amp; CNS</td>
</tr>
<tr>
<td><strong>Guidelines on the Evaluation and Management of Adult Patients Presenting to the Emergency Department with Acute Headache</strong></td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• American College of Emergency Physicians (ACEP)</td>
<td>• American Heart Association/American Stroke Association/American College of Cardiology (Joint Section on Cerebrovascular Disease participating)</td>
</tr>
<tr>
<td>• Reviewed by the JGC 2007</td>
<td>• Reviewed by JGC January 2008</td>
</tr>
<tr>
<td>• JGC decision not to endorse based on inadequate response to JGC concerns/comments, February 2008</td>
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</tr>
<tr>
<td>• Not endorsed by AANS &amp; CNS</td>
<td>• Not endorsed by AANS &amp; CNS</td>
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<tr>
<td><strong>Guideline for the Management of Aneurysmal Subarachnoid Hemorrhage in Adults</strong></td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• American Heart Association/American Stroke Association/American College of Cardiology (Joint Section on Cerebrovascular Disease participating)</td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• Reviewed by JGC May 2007 and feedback provided</td>
<td>• Reviewed by JGC May 2007 and feedback provided</td>
</tr>
<tr>
<td>• AHA decided not to respond and to withdraw request for endorsement</td>
<td>• AHA decided not to respond and to withdraw request for endorsement</td>
</tr>
<tr>
<td>• Not endorsed by AANS &amp; CNS</td>
<td>• Not endorsed by AANS &amp; CNS</td>
</tr>
<tr>
<td><strong>Guideline for the Management of Spontaneous Intracerebral Hemorrhage in Adults</strong></td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• American Heart Association/American Stroke Association/American College of Cardiology (Joint Section on Cerebrovascular Disease participating)</td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• Cardiology (Joint Section on Cerebrovascular Disease participating)</td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• Reviewed by JGC April 2007 and feedback provided</td>
<td>• Reviewed by JGC April 2007 and feedback provided</td>
</tr>
<tr>
<td>• AHA unable to respond due to time pressure concerns</td>
<td>• AHA unable to respond due to time pressure concerns</td>
</tr>
<tr>
<td>• Not endorsed by AANS &amp; CNS</td>
<td>• Not endorsed by AANS &amp; CNS</td>
</tr>
<tr>
<td><strong>Externally-Generated Consensus Statements/Documents Reviewed by JGC and Forwarded Relevant Section and to AANS &amp; CNS for Independent Decision Regarding Endorsement</strong></td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>Reporting Standards for Endovascular Repair of Saccular Intracranial Aneurysms</td>
<td>Guideline on the Treatment of Carpal Tunnel Syndrome</td>
</tr>
<tr>
<td>• Society of Interventional Radiology</td>
<td>• Reviewed by JGC July/August 2007</td>
</tr>
<tr>
<td>• Reviewed by JGC July/August 2007</td>
<td>• Forwarded to Joint Cerebrovascular Section with comments</td>
</tr>
<tr>
<td>• Forwarded to Joint Cerebrovascular Section with comments September 2007</td>
<td>• Forwarded to Joint Cerebrovascular Section with comments September 2007</td>
</tr>
<tr>
<td>• Reviewed by Joint Cerebrovascular Section November 2007</td>
<td>• Reviewed by Joint Cerebrovascular Section November 2007</td>
</tr>
<tr>
<td>• Endorsed by AANS &amp; CNS November 2007</td>
<td>• Endorsed by AANS &amp; CNS November 2007</td>
</tr>
<tr>
<td>• Published in Stroke, September 2008</td>
<td>• Published in Stroke, September 2008</td>
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</tbody>
</table>
The metastatic brain tumor guidelines in particular represent important new ground for the JGC as well as professional medical society guidelines initiatives in general. This multidisciplinary effort represents the result of a “fast-track” request for application (RFA) process jointly funded by the CNS, AANS and the Joint Tumor Section. Under this new initiative neurosurgery contracted with an Agency for Healthcare Research and Quality (AHRQ) – funded Evidence-Based Practice Center (EPC) to assist and facilitate production of the highest level of EBM quality clinical guideline under a 12-month completion timeline. In this case the winning EPC was the internationally-respected McMaster’s University group, who worked intensely with the multidisciplinary writing group to complete this project in record time. The result is the highest quality and most up-to-date EBM metastatic brain tumor clinical practice guideline ever produced.

When it comes to advocacy for neurosurgery, EBM clinical practice guidelines are an element of increasing importance. The AANS/CNS Joint Guidelines Committee is ready and prepared to meet the challenges we face today and in the future.

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### TABLE 1 - continued

**DOSSIER OF PROJECTS & ACTIVITIES, JOINT GUIDELINES COMMITTEE (JGC) 2006-2009**

<table>
<thead>
<tr>
<th>Externally-Generated Multidisciplinary Projects Supplied Neurosurgery Manpower by JGC (projects ongoing)</th>
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</thead>
<tbody>
<tr>
<td>North American Spine Society (NASS)</td>
</tr>
<tr>
<td>• Lumbar Radiculopathy Guidelines Initiative</td>
</tr>
</tbody>
</table>

| Externally-Generated Consensus Statements/Documents Reviewed by JGC and Still in Review/Response Process |
| ASA/ACC/AHA/AANN/AANS/ACR/ASITN/CNS/SAl/SCAI/SIR/SVM/SVS |
| • 2008 Guideline on the Management of Patients with Extracranial Carotid and Vertebral Artery Disease |

| Ongoing Sponsored Projects Monitored and Facilitated by JGC Which Will be Reviewed for Approval (in process) |
| Council of State Neurosurgical Societies (CSNS) |
| • Multidisciplinary/Multi-Society Brain Death Guidelines Initiative |

| Joint Section on Trauma and Peripheral Nerves |
| • Thoraco-Lumbar Trauma Guideline |
| • Metastatic Spine Tumor Guideline (together with Joint Tumor Section) |
| • Update, Spinal Cord Injury Guidelines |
| • Update, Lumbar Fusion Guideline |
| • Update, Cervical Fusion Guideline |

| Joint Tumor Section |
| • Pituitary Adenoma Guideline |
| • Metastatic Spine Tumor Guideline (together with Joint Spine & PN Section) |

| Externally-Generated Multidisciplinary Projects Supplied Neurosurgery Manpower by JGC (projects ongoing) |
| North American Spine Society (NASS) |
| • Lumbar Radiculopathy Guidelines Initiative |

| Externally-Generated Consensus Statements/Documents Reviewed by JGC and Still in Review/Response Process |
| ASA/ACC/AHA/AANN/AANS/ACR/ASITN/CNS/SAl/SCAI/SIR/SVM/SVS |
| • 2008 Guideline on the Management of Patients with Extracranial Carotid and Vertebral Artery Disease |

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| • Thoraco-Lumbar Trauma Guideline |
| • Metastatic Spine Tumor Guideline (together with Joint Tumor Section) |
| • Update, Spinal Cord Injury Guidelines |
| • Update, Lumbar Fusion Guideline |
| • Update, Cervical Fusion Guideline |

| Joint Tumor Section |
| • Pituitary Adenoma Guideline |
| • Metastatic Spine Tumor Guideline (together with Joint Spine & PN Section) |
Approximately three dozen neurosurgeons and neurosurgical practice administrators gathered in Philadelphia in the fall of 2002. Prior to this inaugural meeting of what was to become the Neurosurgery Executives’ Resource Value and Education Society (NERVES), there was no professional society for neurosurgical practice administrators and executives and the specialty lacked significant benchmarking data specific to neurosurgery. At the initial meeting the organization was named, bylaws were adopted, and the organization was charged with providing neurosurgeons valid benchmarking data. Seven years later, NERVES touts a membership roster of over 280 members, hosts an annual meeting attended by over half its membership, and possesses five consecutive years of benchmarking data.

The NERVES Board and membership are representative of the specialty. Members range from office managers of solo practices to executives of large, multispecialty clinics. Whether the practice is small or large, rural or metropolitan, private, academic or hospital based, many of the problems facing neurosurgeons and their administrators are the same throughout the country. An organized professional society has given practice administrators a structure for networking and sharing knowledge in order to meet the challenges of impending healthcare reform, increased regulation, rising costs and decreasing reimbursement. Members communicate frequently through a listserv, asking questions and sharing ideas, best practices and strategy. This alone provides neurosurgical administrators with a wide variety of resources, making them better equipped to respond to both the internal and external demands placed on practices today.

The NERVES Annual Meeting is unique in that it is large enough to provide first-class educational offerings on current issues in neurosurgery while small enough to offer an intimate environment for networking with colleagues. Sessions on managed care contracting and coding and reimbursement provide administrators with the tools they need to negotiate with payers and maximize revenues. Members learn from each other in break-out sessions focused on pertinent issues such as the use of mid-level providers in neurosurgery and the addition of ancillary services. Roundtable groups based on practice size not only help the practice administrator address problems facing their practice, but also facilitate relationship building.

A NERVES member sits on the Washington Committee and reports to the membership at each annual meeting, increasing both the awareness of current political issues and the need for advocacy in this arena. Members of NERVES leadership represented neurosurgery at the recent subspecialty fly-in in Washington, DC. With healthcare reform on the horizon, NERVES is increasing its efforts to
The NERVES Annual Socio-Economic Survey collects data on physician compensation and productivity, financial indicators and other issues relevant to the practice of neurosurgery today. The availability of benchmarking data has provided practice administrators with the information needed to advocate and negotiate in a variety of situations. For example, the collection and distribution of information regarding fees for Emergency Room coverage has improved neurosurgeons and practice administrators bargaining position when negotiating with hospital administrators. The 2008 NERVES Socio-Economic survey reported that the percentage of practices paid additional fees for trauma coverage has increased from 39% to 57% over the past five years. Level 1 and Level 2 trauma call pay has increased 26% and 23% respectively over the past three years. Additionally, the percentage of practices paid additional fees for non-trauma Emergency Room coverage has increased from 15% to 29% over the past four years, with the average fee per day increasing 93% over the same time period.

The collection of benchmarking data was one of the major charges put forth at the inaugural meeting. NERVES now possesses the only significant data available for neurosurgery, with the 2008 survey results representing 65 practices and 393 neurosurgeons. With five years of data, trends are emerging. However, participation in the survey has remained flat and NERVES hopes to strengthen the data through increased participation in the coming year.

The final element of the NERVES organization is value. For a relatively small membership fee, members may participate in the listserv. Most members find this a very useful resource in the day-to-day management of a practice. Additionally, members who complete the annual Socio-Economic survey receive a copy of the results free of charge, which costs more than the price of NERVES membership to purchase. Finally, the relationships members form with colleagues throughout the country are invaluable in the day-to-day management of neurosurgical practices.

On July 15, 2009 NERVES was shocked and saddened at the sudden passing of their President, Tim Roberts. Tim was one of the few individuals in attendance at the Philadelphia meeting and, ironically, named the organization. At first glance, NERVES seemed a clever acronym for a new professional society for practice administrators. But several years later, it is apparent that Tim captured the essence of the organization – resources, education and value. His contribution will forever be part of a large legacy to the practice of neurosurgery.
National Coverage Determinations (NCD) are issued by The Centers for Medicare and Medicaid Services (CMS) and establish Federal Government policy on reimbursement for identified medical procedures, services and items (http://www.cms.hhs.gov/center/coverage.asp). The effect of these policy decisions can be far reaching and greatly impact patient care, physician reimbursement and access to care. Understanding the processes used in policy generation benefits both neurosurgeons and their patients.

NCDs commonly focus on new or emerging technology or on the new application or expansion of existing services. The impetus for these decisions is to identify medically “reasonable and necessary” items, which will be accepted for coverage by CMS policy. This process seeks to limit the implementation of unnecessary or overly costly medical technologies or techniques that add to an unreasonable increase in the cost of care. Cost effectiveness of a service or device is not a factor in the process used by CMS when considering NCDs. The clear downside of this system is that new, promising technologies may not be reimbursed, limiting patients’ access to improved services.

In 1999 CMS issued updated guidelines for NCDs, defining the process by which the Secretary of Health and Human Services reaches a determination whether a particular item or service is covered nationally by CMS; an NCD is binding on all Medicare carriers including fiscal intermediaries, Quality Improvement Organizations, HMOs, Competitive Medical Plans and Health Care Prepayment Plans. During the NCD review, the determination process does not affect local carrier coverage decisions. However, once a final national policy is generated, local carriers must adhere to the national policy.

Requests for NCDs to be considered by CMS may be generated externally or internally. A number of circumstances may prompt an NCD consideration to be generated internally from CMS or requests can come from a variety of sectors including public entities, private groups, medical device manufacturers, professional societies, health plans or individuals. Aggrieved individuals who are Medicare/Medicaid eligible beneficiaries may also file a request for an NCD, as long as there has been no previous coverage or non-coverage determination on the issue. Internally, NCDs may result from concerns raised about existing covered items and services based on new data or new interpretations of existing data. An NCD review from CMS may also be prompted by situations where various local CMS carriers have different policies regarding items and services that result in disparities in care or detriment to beneficiaries, exhibit significant or wide variation in billing practice not related to clinical need, or if there is the potential for fraud under existing reimbursement policies. CMS may internally generate an NCD if there is evidence for new
technology that “represents a substantial clinical advance and is likely to result in a significant health benefit if it diffuses more rapidly to all patients for whom it is indicated”; or conversely if significant uncertainty arises about the health benefits and risks of a new technology, especially where rapid dissemination is likely. Externally, an NCD may be formally requested of CMS through an established written/electronic process. These requests are categorized (physician services, durable medical equipment, diagnostic testing, etc.) and supporting documentation demonstrating medical benefit submitted. The completed request is then reviewed by the Center for Medicare Management and subsequently sent on to a Coverage and Analysis Group (CAG) for consideration. Additionally, CMS may post notices on their web site and solicit comment from stakeholders.

Preliminary meetings with the CAG then occur to allow additional information transfer and review of the request. The completed and reviewed request is then posted on the CMS NCD Coverage web site for public comment. During this process, disclosure of proprietary data is not required of manufacturers or requesting groups. NCD Requests are prioritized based on the potential impact to the beneficiaries, not necessarily as “first come first served.”

In reviewing requests for NCDs, there are two primary internal CMS resources for the evaluation of new technologies. The Council on Technology and Innovation (CTI) is composed of senior level CMS officials and external experts on clinical and payment issues. This group reviews the evidence for new technologies and cost, then renders an advisory opinion. The Medicare Evidence Development and Coverage Advisory Committee (MEDCAC) assesses the medical literature, technology assessments, data and information on the effectiveness and appropriateness of medical items and services under CMS or that may be eligible for coverage under CMS. The panel is compromised of 100 experts in the areas of medicine, science, public health, healthcare information, economics and ethics. Additionally, 15 members may be added on an ad hoc basis for a specific topic. The MEDCAC judges the strength of the available evidence and makes recommendations to CMS as to acceptance or rejection of the proposed NCD. Additionally, through CTI and MEDCAC review, CMS identifies areas where there are knowledge gaps on relevant clinical topics as a way of communicating to researchers priorities when designing studies for services or item.

Current topics relevant to neurosurgery include cost effectiveness of CT angiography, the potential benefit of neuroimaging modalities for headache, the effectiveness of spinal cord stimulation for chronic pain on health outcomes, and the comparative effectiveness of treatments for carotid artery disease (stenting vs. endarterectomy; best medical vs. interventional management for asymptomatic disease). Published NCDs that have impacted neurosurgery include unfavorable coverage decisions for Blood Brain Barrier Osmotic Disruption for Treatment of Brain Tumors, Lumbar Artificial Disc Replacement, Stereotactic Cingulotomy as a Means of Psychosurgery, and EC-IC Bypass Surgery for ischemic cerebrovascular disease. Past favorable NCDs for neurosurgery include Stereotactic Depth Electrode Implantation and Deep Brain Stimulation for Parkinson’s Disease. Potential NCD Topics of neurosurgical interest currently listed on the CMS web site include artificial cervical disc replacement, bone morphogenic protein (BMP), vertebroplasty and kyphoplasty, and lumbar fusion for degenerative disc disease.

Proactive involvement in the process of coverage determination is important for neurosurgeons and improves patients’ care and access to new services. The requirements for a favorable decision are data driven and demand an adequate demonstration of a reasonable and necessary process of care. The importance of published data supporting the item or procedure under review cannot be overstated. The process of National Coverage Determination is ultimately made by CMS, after review of published data and input from a broad range of sources including CMS, industry, beneficiaries, public interest groups and practitioners. The impact of these decisions and downstream implications for development and expansion of new technologies is of great interest to neurosurgeons, most importantly for the ways in which they can benefit our patients.
As neurosurgeons, caring for patients is our mission, however this would not be possible without sound financial integrity to support our efforts. Hence, coding and reimbursement plays a vital role in ensuring that we are properly remunerated for our work so that we can continue serving our communities. The Congress of Neurological Surgeons (CNS) Coding and Reimbursement committee members provide representation, in conjunction with the American Association of Neurological Surgeons (AANS), to the joint Coding and Reimbursement Committee (CRC) which is chaired by Dr. Greg Przybylski. This joint committee oversees the coding, reimbursement and practice management issues that affect neurosurgeons, and has input from our many AANS/CNS Sections representing the views of our various sub-specialties in neurosurgery.

We have CNS representatives involved in the American Medical Association (AMA) committee on Current Procedural Terminology (CPT), which defines descriptors for our physician work. Currently, the AANS CPT Advisor is Dr. Patrick Jacob and the CNS CPT Advisor is Dr. Joseph Cheng (one of the authors); we are fortunate to have a neurosurgeon on the CPT Editorial Panel as well, Dr. Jeffrey Cozzens. The AMA CPT committee processes a large volume of new code requests and code revisions. In 2009 alone, this included a large number of new code requests that resulted in 293 new codes, 133 revised codes and 92 code deletions. Cathy Hill from our Washington office facilitates our work related to CPT; the AANS and CNS CPT Advisors review and participate in all code proposals that may affect the field of Neurosurgery.

Any of our members may request a new CPT code or code revision through the AANS or the CNS, and we welcome any discussion to determine why a code addition or revision is necessary to enhance the current coding system. There are multiple categories for new codes, but the majority of our current requests for a CPT Category I code are based on new technology. There are AMA standards which need to be considered, and Category I proposals for technology typically require FDA approval and a minimum of two published two-year follow-up studies at least one of which must be conducted by an impartial researcher (that is, not funded by the manufacturer of that particular device or technology). Developing code proposals can be an arduous process, and we are happy to provide you with the needed steps and requirements and help facilitate and support the formal code proposal to the AMA once it has been vetted through the CRC.

We also have CNS representatives to the American Medical Association (AMA) Relative Value Update Committee (RUC), which provides suggested Relative Value Units (RVUs) for new or revised CPT codes to the Center for Medicare/Medicaid Services (CMS) and private
insurance companies. Our current RUC Advisors for the AANS and the CNS are Drs. Rick Boop and John Wilson. Any new or revised Category I code that is identified to need an associated RVU is sent to the RUC. Codes from the CPT committee that are carrier-based, such as Category III codes, do not go to the RUC for valuation as they have no RVUs associated with them. The RVUs for any particular procedure is based on work surveys collected from our members, and then processed by our committee through a mechanism to ensure a fair rank order across the spectrum of medicine and surgery. This is then presented to the multispecialty RUC panel, and we are fortunate to have a neurosurgeon, Dr. Greg Przybylski, on this panel. The panel votes and assigns the RVUs for the new Category I code to be provided under advisement for CMS to review. The CMS accepts over 90% of all RVU recommendations from the RUC.

In addition, through the Coding and Reimbursement committee, the CNS representatives along with those from the Joint Sections work diligently to respond to payment policy requests from private insurance companies. These are both proactive and reactive measures to ensure that private third-party payors have appropriate policies that allow for appropriate remuneration of neurosurgeons for the work we perform. We also research and comment on technical policies and assessments regarding standard of care and medical justification and needs, especially with new technologies and techniques, as many times non-neurosurgeons do not truly understand what we do in our field. Furthermore, these efforts also include working with CMS on a variety of topics. Recent efforts addressed their decisions to bundle our anterior cervical decompression and fusion codes, changes to our stereotactic radiosurgery codes, and the value of such endeavors. Although we will not be able to prevent these changes, we are working hard to ensure that the process remains fair and does not penalize neurosurgeons for providing optimal care for our patients.

Caring for patients with neurosurgical problems remains the mainstay of our mission, but we do have a mantra of “No Margin, No Mission.” Costs are continually rising with increases in our rent, utilities, staff salaries, compliance software and malpractice, among other components needed to sustain a medical practice. A neurosurgeon unable to sustain his/her practice due to these rising costs and sinking reimbursements will no longer provide anyone in their community with the care they need. Our goal is to represent the best interests of our members and specialty in the area of coding and reimbursement, and to strive to provide financial integrity in our field so that we can continue to live in and serve our communities.
More than 30 years ago, the CNS and AANS realized that the decisions made by Congress have a profound effect on neurosurgeons, their patients and their practices. For some of the most important issues facing neurosurgeons, including the need for medical liability reform, stabilization of reimbursement rates, pay-for-performance, clarification of emergency on-call requirements and increased research funding, the road leads through Washington, DC. Like it or not, federal policymakers have a huge impact on how we practice, when we practice, and what we get paid to practice. And this influence is only growing.

Now there are a few realities of our Nation’s political system:

- The system has winners and losers and how much we win or lose often depends on how much we participate in the process.
- Every election creates a new political environment, which creates new opportunities for neurosurgery.
- It is a competitive system and you are either a “player” in the system and participate in the political and policy making process or you are a “victim” of the system.

Thus, to succeed within these political realities, a comprehensive advocacy and health policy program requires three fundamental elements – Washington presence, a political action committee and grassroots advocacy. The CNS and AANS have built such a three-legged stool in order to best represent the interests of neurosurgeons, their patients and the profession in the health policy making process.

Washington Presence
Washington presence is more than just bricks and mortar and the CNS and AANS have a well established and strategic approach to representing neurosurgeons in Washington, DC. Yes, this includes the bricks and mortar, but our strategy is also focused on expanding neurosurgery’s reach in Washington well beyond our small numbers.

Washington Committee and Washington Office
It goes without saying, that maintaining presence in Washington, DC is absolutely essential to advancing organized neurosurgery’s health policy agenda and the CNS and AANS took this step back in 1976 when they hired their own lobbyist and established the Washington Committee for Neurosurgery. The Washington Committee and Washington Office staff serve vital functions in promoting organized neurosurgery’s agenda. The committee, along with CNS and AANS leadership, develops neurosurgery’s health policy positions on key priority issues and determines the strategy and tactics for implementing those positions. The Washington Office provides the “boots on the ground” to represent neurosurgery before the U.S. Congress, federal agencies and other organizations where health policy is made. Washington Committee members and staff monitor legislation and regulations, present the associations’ views on legislation and regulations through letters, testimony and in-person meetings and serve as a resource to policymakers.

Coalition Building
Given the small size of our specialty, it is vital that the CNS and AANS form Washington-based coalitions with likeminded organizations to enhance our ability to promote neurosurgery’s agenda. Over the years, this strategy has worked well and has allowed us to pool our resources with others to give us strength in numbers. Neurosurgeons and Washington Office staff serve in key leadership roles on each of these coalitions, giving us far greater influence than our small numbers would otherwise afford. Some of our key coalition allies include:

- Alliance of Specialty Medicine – The Alliance is a coalition of national medical societies representing specialty physicians in the United States. This non-partisan group is dedicated to the development of sound federal health care policy that fosters patient access to the highest quality specialty care.
- Doctors for Medical Liability Reform – DMLR is a coalition of 230,000 practicing medical specialists who are committed to protecting

ADVOCACY AND HEALTH POLICY – TOOLS OF THE TRADE

Katie O. Orrico, JD
Director, AANS/CNS
Washington Office
patients’ access to healthcare by supporting federal legislation that will reform our nation’s broken medical liability system

• Health Coalition on Liability and Access – HCLA is a national advocacy coalition united in our strong belief that federal health liability laws are needed to bring greater fairness, timeliness and cost-effectiveness to our system of civil justice. HCLA is composed of organizations and individuals representing physicians, hospitals, health care insurers, business, producers of medicines and health care consumers.

• Partnership to Improve Patient Care – PIPC is a diverse group of healthcare organizations representing patients, physicians and other health care providers, researchers and innovators, and other groups that have come together to promote comparative effectiveness research that supports patient access and informed health care decision-making and fosters continued medical progress.

• Physicians for Patient Centered Imaging – PPCI is a coalition of medical specialty societies organized to ensure continued availability of patient-centered in-office imaging services.

• Coalition for American Trauma Care – CATC is a coalition of organizations focused on improving trauma care and increasing funding for trauma system development.

Organized Medicine

Again, given organized neurosurgery’s small size, it is imperative that we influence larger medical organizations to carry our message in Washington, DC. There are two principle groups where we devote the most of our efforts – the American Medical Association and the American College of Surgeons. The AMA has a very organized policymaking process through its House of Delegates. Through this process, CNS and AANS delegates to the AMA regularly bring forth resolutions on important policy matters in an attempt to have the AMA adopt our position. While we are not always successful, over the years, neurosurgery has used the AMA House of Delegates process to leverage our influence in Washington. Neurosurgeons are likewise encouraged to participate in state medical association policymaking processes. Most state associations also have a House of Delegates where resolutions can be debated to shape both state and federal health policy.

The CNS and AANS are also very involved with the American College of Surgeons. Working through neurosurgery’s representatives on the Board of Regents, Board of Governors and Advisory Council for Neurological Surgery, we strive to encourage the ACS and other surgical specialty societies to support our positions on key issues. Most recently, during this year’s debate on healthcare reform, the ACS has also led a coalition of surgical societies, providing neurosurgery with yet another vehicle to leverage our small size.

Political Action Committees

Every Member of Congress follows two basic rules: Rule #1: Make sure I get reelected and Rule #2: Don’t forget Rule #1! With the average U.S. Senate campaign costing over $5 million and the average House race costing nearly $2 million, raising money is a reality in our political system. One effective and efficient way for candidates to raise this much cash is from political action committees, or PACs.

To maximize our effectiveness, the AANS (for legal reasons, NeurosurgeryPAC is solely sponsored by the AANS, although CNS members who are also active AANS members in the U.S. may contribute to NeurosurgeryPAC) added another tool to its neurosurgery’s advocacy arsenal: a political action committee. Established in August 2005, NeurosurgeryPAC is a nonpartisan political action committee, which does not base its decisions on party affiliation, but instead focuses on the voting records, official positions and campaign pledges of the candidates. Simply put, NeurosurgeryPAC supports candidates for federal office who support neurosurgery’s advocacy goals by making direct campaign contributions to candidates for the U.S. Senate and the U.S. House of Representatives who are supportive of the issues important to neurosurgery.
While PAC contributions do not buy votes, they do provide neurosurgery with a number of real benefits. NeurosurgeryPAC:
• Provides us with a mechanism to support candidates who share our views on legislation that affects us.
• Contributions give us access to lawmakers.
• Gives organized neurosurgery political credibility – that is, if politicians support our views, NeurosurgeryPAC may support those lawmakers at election time; if not, we can support their opponents.
• Contributions enhance neurosurgeons’ individual political contributions.
• Helps expand individual influence beyond your district and state by supporting candidates nationwide.

Consider this fact: In the 2008 election cycle, NeurosurgeryPAC raised $493,280 and the trial lawyers raised $6,265,740. Is it any wonder why Congress has yet to pass federal medical liability reform?

Grassroots Advocacy
Elected officials count on, indeed need, constituent input to be effective legislators. Ongoing communication is the only way lawmakers will know and understand how you, the voter, feels about particular issues. Therefore, it is imperative that every neurosurgeon make the effort to be involved in the political process. Members of Congress make decisions every day that affect neurosurgeons and their patients. Only those individuals and groups who actively compete in the political process, however, play a role in determining policy. The key is to be a “player” in our competitive political system.

Grassroots Advocacy Defined
Today, the term “grassroots” has evolved to mean organized efforts by special interest groups, particularly at the local level, to promote support for or against specific issues or political candidates. Thomas P. (Tip) O’Neill’s argument that “all politics is local” emphasizes the need for interest groups, like the CNS and AANS, to organize at the local or “grassroots” level.

Grassroots advocacy can include any of the following: writing letters to your members of Congress, meeting with lawmakers in their district office or in Washington, DC, contributing to a candidate’s political campaign, hosting political fundraising events, contributing to political action committees, and participating in the state medical and/or neurosurgical societies’ policy development processes. The most effective way to be a grassroots advocate is to build a solid rapport with your lawmakers and their staff. By doing so, you will cultivate the legislator’s trust and will be more likely to receive political assistance when a critical issue facing neurosurgery comes before U.S. Congress.

Grassroots Advocacy is Important
Organized neurosurgery, through the AANS/CNS Washington Committee, Washington Office staff and NeurosurgeryPAC, maintains a comprehensive government relations program. And, while these elements are certainly critical to promoting our health policy agenda, none of them can replace the power of constituents. Members of Congress only stay elected by the votes of their constituents; thus, they are acutely attentive to messages delivered from voters.

Today, the importance and power of grassroots advocacy is greater than ever. As more organizations compete for the attention of Congress, it is imperative that organized neurosurgery have a robust network of “grassroots activists.” Experience has taught us that we increase our success rate when every neurosurgeon gets involved. Additional benefits of grassroots action include:
• Elected officials and individual neurosurgeons develop personal relationships.
• The efforts of individual neurosurgeons lend credibility to the messages that the Washington Office staff deliver.
• Neurosurgeons increase their knowledge about the political process and political campaigns.
• Candidates are elected because of neurosurgeons’ efforts.
• The CNS and AANS become more effective in public policy negotiations.
You Can be a Grassroots Advocate

There are many ways in which neurosurgeons can participate in the political process and become effective grassroots advocates. Every neurosurgeon does not have to engage in each advocacy activity; however, every neurosurgeon must do something. Typical responses for inaction include: “I don’t have time between my professional, educational and family activities to get to know my Congressman.” “I’m only one person and my opinion or campaign contribution won’t make a difference.” “The CNS and AANS are representing my interests before Congress, so I don’t have to do anything myself.”

While there is an element of truth to the aforementioned “excuses” for inaction, in today’s competitive healthcare environment, neurosurgeons cannot afford to be ostriches and bury their heads in the sand. With so many other interest groups - trial lawyers, hospitals, insurers and other medical specialties - trying to get the competitive edge and promote their interests above Neurosurgery’s in Congress, you must get involved. Remember: neurosurgeons should be the ones dictating the future of neurosurgery, not some other interest group or uninformed lawmaker.

Neurosurgeons can get involved by joining the CNS and AANS grassroots advocacy program called the “Key Connection Program”. This program is your direct link to your Members of Congress on the many issues that are facing neurosurgeons. It is crucial that organized neurosurgery have a robust and active network of “Neurosurgery Advocates” to aid the Washington Office staff in their lobbying efforts. It is also important for Members of Congress to realize that the messages delivered by the Washington staff genuinely represent the concerns of trusted neurosurgeon-constituents back home. Therefore, neurosurgeons who have a specialty relationship with a Member of Congress are encouraged to contact the Washington Office and join the Key Connection Program. You are neurosurgery’s most important assets on Capitol Hill! To join the AANS/CNS Key Connection Program, go to: http://www.aans.org/legislative/aans/ and download the Program Form.

Even if you do not have a current relationship with your Senators or Representative you can still make a difference. So, when the CNS and AANS send you a “Grassroots Action Alert,” respond by writing a letter, making a phone call or meeting with your lawmaker. When a political candidate you support requests a financial contribution, send them a check. If your lawmaker holds a town hall meeting, attend and speak up. Each of these individual actions take less than one-hour to do, yet if you do them enough, over time you will have built a relationship with your Member of Congress and become an effective grassroots advocate. Go to the AANS/CNS Legislative Action Center to contact Congress and get more information on legislation of interest to neurosurgery at: http://capwiz.com/noc/home/.

Finally, neurosurgeons are encouraged to attend the annual Joint Surgical Advocacy Conference (JSAC), July 25-27, 2010. Sponsored by the CNS, AANS and many other surgical societies including the American College of Surgeons, this 3-day conference in Washington, DC brings together hundreds of surgeons.

Contact the Washington Office:
For more information about the Washington Committee or specific health policy issues, please contact Katie O. Orrico the Director of the AANS/CNS Washington Office at:

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What is Advocacy?
Advocacy is defined as the active support of an idea or a cause, through attempts to influence public policy and resource allocation decisions within political, economic, and social systems and institutions. Advocacy groups consist of individuals working together to promote a common cause. Such groups focus on encouraging social change by influencing government, organizations and/or people’s ideas or actions. Advocacy groups function by giving a voice to those whose interests they seek to represent, by mobilizing people to participate in the process they are attempting to reform, by fostering the development of a culture that promotes the interests of those represented, by assisting in the development of better policies, and by ensuring organizational accountability to those being represented.

Brief History and Mission Statement of WINS
Women In Neurosurgery (WINS) was founded in 1989 by Dr. Deborah Benzil as an advocacy group for women in neurosurgery. The impetus for founding WINS came from the recognition that women represented an alarmingly small proportion of the neurosurgery workforce, with issues in the workplace and at home that distinguished them from their male colleagues, and that a forum was needed in which to address these issues. Over the years, WINS has grown to a membership of 312, of whom 46% are residents, 3% are medical students, and the majority of the remainder are Board certified/Board eligible female neurosurgeons. As WINS has grown, it has become an international organization, with current membership hailing from Europe, Asia, Africa, the Middle East, and the Caribbean, in addition to the Americas. Membership is open to male neurosurgeons as well and dues are collected to support the activities outlined below.

The mission of WINS is “to educate, inspire, and encourage women neurosurgeons to realize their professional and personal goals, and to serve neurosurgery in addressing the issues inherent to training and maintaining a diverse and balanced workforce” (http://www.neurosurgerywins.org). The goals of WINS are to attract women to the profession, and to gain recognition for female neurosurgeons who are bright, competent, and highly committed to our profession. These efforts, in addition to helping women in neurosurgery, should also help to ensure the continued advancement of our specialty.

Why do Female Neurosurgeons Need an Advocacy Group?
Women are under-represented both in neurosurgery residency training programs, and in the profession following completion of residency. Figure 1, reproduced here from a recent white paper compiled by the WINS Executive Body, reproduces a recent white paper compiled by the WINS Executive Body.
shows the percentage of female neurosurgery residents in training programs between 1989 and 2003. Although this percentage has increased slowly over the years, it has lagged well behind the percentage of female graduates in other surgical subspecialties\(^3\), and significantly behind the percentage of women in other professions, such as business or law.

In 2009, 12.9% of all neurosurgery residents are female. This percentage has increased slightly relative to 2003, when 10% of residents were female. Despite this positive trend, the overall percentage remains low, and it should be noted that the attrition rate for female residents is suspected to be greater than for their male counterparts\(^3\).

The statistics are even more concerning following residency: women account for only 6% of full-time faculty members in the US, and only 4.6% of those in private practice. Figure 2\(^3\) shows the number of Board-certified female neurosurgeons in the US, by decade. To date, Dr. Karin Muraszko, at the University of Michigan, is the only female neurosurgeon ever to be appointed Chair of a US Neurosurgery Department, and no female neurosurgeon has ever been President of either the American Association of Neurological Surgeons or Congress of Neurological Surgeons. Neither has a female neurosurgeon ever been editor of either the *Journal of Neurosurgery* or of *NEUROSURGERY*\(^*\), the flagship publications of the AANS and CNS, respectively.

### Why Does Organized Neurosurgery Need a Female Neurosurgery Advocacy Group?

The under-representation of women in neurosurgery represents a workforce issue. In 2007, the WINS Executive Board was asked by the AANS Board of Directors to prepare a position paper on the recruitment and retention of female neurosurgeons. The results were published in the *Journal of Neurosurgery*\(^3\), in 2008. Several statistics from that paper bear reviewing in this context:

Female applicants to medical school have outnumbered male applicants since 1995, and
by 2005, more than 55% of students accepted to medical school were women. In addition, there has been a significant decrease in the overall number of neurosurgeons relative to the general population, amounting in 2000 to one neurosurgeon for every 91,500 people. This statistic suggests a shrinking supply of neurosurgeons relative to the total US population. In other words, more women are entering medicine than ever before, yet female graduates of neurosurgery training programs have not similarly increased in numbers, and the overall neurosurgery workforce is shrinking. In order for neurosurgery to continue to attract the best and the brightest to the profession, active efforts must be taken to attract women to, and promote women within, neurosurgery. The absence of women in leadership positions within the field of neurosurgery in comparison to other professions unfortunately serves to dissuade women from entering our profession.

The findings above suggest the presence of deterrents or barriers to the entry of women into our profession. The attrition rate of women residents from neurosurgery programs suggests that the barriers to training persist even after acceptance to training programs. These barriers persist beyond training, as reflected in the data regarding lack of advancement of women professionally, and as highlighted by the dearth of female full professors, department chairs and presidents of the national neurological organizations.

**What Advocacy Projects is WINS Currently Involved In?**

It is the philosophy of WINS that the current under-representation of women in neurosurgery can and should be remedied by adopting the following broad approach: characterize the barriers to women in our profession; identify and eliminate any discriminatory practices; promote competent women into leadership positions; foster the development of female neurosurgeon role models and mentors.

WINS seeks to foster the development of female neurosurgeon role models and mentors, to support those currently in training, and to attract women into the profession, by sponsoring a variety of projects including the following:

- Lectures: Named lectureships honoring pioneering women in the field of neurosurgery are sponsored annually, including the Louise Eisenhardt, MD Ruth Kerr-Jakoby, MD, and Alexa Canady, MD Lectureships.
- Resident travel scholarships: Two resident travel scholarships are awarded annually for neurosurgery residents to present their work at the national meetings (AANS and CNS), and include the Sherry Apple and the Louise Eisenhardt Resident Travel Scholarships.
- Educational Brochures: In its second edition, “So You Want To Be A Neurosurgeon” is a brochure aimed at undergraduates and medical students considering a career in neurosurgery, and carefully walks the reader through the application process and timeline (http://www.neurosurgerywins.org/career/index.html).
- Mentoring: WINS provides a mentoring program that matches an experienced neurosurgeon with a medical student, to help students achieve their career goals. Matches are made based on level of training or education, potential subspecialty interest and geographic location. Additionally, WINS runs a website that provides virtual mentoring for trainees (http://www.my-wins.org).
- Networking Opportunities: WINS provides opportunities for informal networking at both the AANS and CNS Annual Meetings.

Additionally, WINS collects data on women at various stages of neurological training and professional development, to enable periodic reassessments of the progress of women in our profession.

Despite these activities, there are limits to the changes that WINS can effect through advocacy alone. Change needs to come from within organized neurosurgery, as well.

...and more needs to be done.

**Summary**

Significant strides have been made over the last fifty years, in terms of the number of female neurosurgeons in the US. Nonetheless, the percentage of women in the neurosurgery workforce has not kept pace with the increased percentage of women in other areas of medicine and does not reflect the fact that over half of every graduating medical school class is now female. These observations, combined with the fact that the neurological workforce is contracting, argue for increasing the efforts to attract and retain bright, competent women in our profession. To achieve this goal, organized neurosurgery needs to join the efforts of advocacy groups such as WINS, in order to identify and eliminate any discriminatory practices or barriers, and to promote competent women into leadership positions within our profession.

**References:**

Given the changes in healthcare policy by the government, declining reimbursement rates, rising costs, and malpractice costs that are still uncontained, what can one or a small group of neurosurgeons do?

Plenty.

I have written many times about POWER. Neurosurgeons have it. How? Because of the limited number of neurosurgeons and the rising demand for neurosurgical services, particularly in head and spinal trauma care, which most of us do.

The hospitals need trauma coverage to stay viable and retain income. Also neurosurgery produces the highest income per patient of any service in the hospital. The hospital will try to get you to be an employee, which secures its future. Unless you are very careful, you will lose your bargaining position and POWER. You are dealing with experienced dealmakers, and to them neurosurgeons are neophytes in negotiation. Remember that in any negotiation, if you cannot walk away, you have no negotiating position — you cannot negotiate. Any neurosurgeon can find great opportunities in neurosurgery all over the US. But if you do not want to move, you have lost your negotiating position. This is the problem in California with the “SUN Factor”. In spite of one of the lowest reimbursement rates in the country, California neurosurgeons just do not want to leave the sunny climate. Inevitably, they lose in negotiations unless they band together as a group for POWER. However, many are reluctant to do that also, which is another guaranteed losing strategy. This is your future you are planning for!

In one practice I visited, the neurosurgeons had hired a young neurosurgeon. The hospital CEO tried to attract the young neurosurgeon with promises of money, more than the group could offer, which the neurosurgeon needed to begin his practice life. The group allowed the young neurosurgeon to bargain with the hospital separately while still under contract with the group, a fatal error. The young neurosurgeon did not have a lawyer and the contract offered was to his disadvantage. After getting legal help, which the group provided, a second error, the hospital managed to sign the young neurosurgeon. This move left the remaining neurosurgeons with less POWER as the hospital tried to divide the group and conquer. Yet, the group had POWER as it provided the only neurosurgical coverage for the hospital’s Level 1 trauma unit. The neurosurgeons lost.

In another example in the Midwest, neurosurgeons in a major city were terrified of the healthcare changes and were signing up with hospitals for employment. This action put other neurosur-
> LEARNING HOW TO NEGOTIATE IS LIKE LEARNING HOW TO DO A LAMINECTOMY. IT TAKES SOME EXPERIENCE. SO, IF YOU DO NOT HAVE THE EXPERIENCE, FIND SOMEONE WHO DOES, OR YOU WILL BARGAIN AWAY YOUR FUTURE. <

eurons at a disadvantage as the hospitals used the employed neurosurgeons as leverage against the unemployed ones in case referrals. The neurosurgeons had POWER as a group but were so disorganized that they all lost to the hospitals.

In another city on the West Coast the independent practicing neurosurgeons decided to work together and form a bargaining unit to negotiate with the hospitals for trauma call pay that will be equal for all. The rates paid varied greatly across the city with the hospitals using one group against another to pay less for trauma call. This cooperative effort is the first step on developing a large group that will have market POWER.

In all my consulting across the country and in dealing with physicians and neurosurgeons around the world, I am constantly dismayed to find neurosurgeons behaving as defeated people. They are timid and risk averse. In medicine we have to be risk averse. That thinking is what the patient wants. But, in business, risk averse people lose. In business you must take risks to succeed. Those who take risks have a chance of winning and the thought of losing is a powerful stimulus to succeed.

Remember, your opponents at the negotiating table know your weaknesses and are skilled at taking advantage of them. Learning how to negotiate is like learning how to do a laminectomy. It takes some experience. So, if you do not have the experience, find someone who does, or you will bargain away your future.

Actually, there does not have to be a hospital-doctor confrontation. In the present healthcare environment, both the hospital and doctors are under pressure by the government to reduce costs. Without doctors the hospital cannot survive. We bring them their business. But doctors need the capital and market power of hospitals also. So given the right attitudes of both parties that realize the value in partnership, the relationship with hospitals can be a WIN-WIN.

We live in different times. In the past there was enough money for all physicians. Now, that has changed. Others are fighting to get the money you deserve. Remember, there is one set of thinking for the medical world and another for the business world. In the medical field we do not want to control everything; we did not go into neurosurgery to make millions, and we give much of what we do away. In business, control of the market is key and making millions is called success. Business does not give anything away at an 80% discount as we do with Medicare. That would be called foolish or would be a sign of financial distress. You must understand the difference in mindsets to succeed in business negotiations.

What do you need to do? Understand that you have POWER and use it or get some help using it. We ask for consultants all the time in medicine, to help us in the areas in which we are not experts. Why then, when your future is at stake would you do any differently? ■
W omen In Neurosurgery (WINS) celebrated the 20th Anniversary of our organization at the AANS Annual Meeting this year in San Diego. The history of WINS is more than the highlighting of a list of accomplishments achieved by a minority—it is a story about how a small group of neurosurgeons strove to fulfill their individual potential in an unwelcoming environment. It is about a group of pioneers who brought a wave of change and equality, creating an environment in which they could help patients with neurosurgical disease and advance the field of neurosurgery. It is a story not only about women but also about men, all brave non-conformists who provided the opportunity for women to train and ultimately flourish in this field of medicine.

I. History of Women in Neurosurgery

The first woman to have significant influence on neurosurgery in the United States was Louise Eisenhardt, MD, who is honored each year through a lectureship at the AANS Annual Meeting. Dr. Eisenhardt worked tirelessly side by side with Dr. Harvey Cushing, compiling her meticulous “black book” of surgeries that led to many of Dr. Cushing’s best publications. Dr. Louise Eisenhardt served as President of the Harvey Cushing Society, now the AANS, in 1938 (still to this day the only woman to do so), and then went on to become the first Editor-in-Chief of the Journal of Neurosurgery in 1944—a position she held for 21 years. She was also the first individual to be awarded the Cushing Medal in 1965.

Because neurosurgery itself is such a young specialty, and our “history” as women in neurosurgery is relatively short, there are many “firsts” that women in practice today have experienced. The woman often credited as the first female Neurosurgeon is Sophia Ionesco, who trained and practiced in Romania and passed away last year at the age of 88.

Dr. Dorothy Klinke Nash trained at Bellevue Hospital in Neurology and Neurosurgery in the late 1920s and later practiced at the University of Pittsburgh. Several decades later, Ruth Kerr Jakoby was the first American woman to train in Neurosurgery and also to become Board-certified. Following Dr. Jakoby, Drs. Venes, Miller, Werthan and Conley were the next five women neurosurgeons to become Board-certified. Dr. Carole Miller went on to become president of the Neurosurgical Society of America in 1988, the first woman neurosurgeon to be president of a national neurological organization. Dr. Joan Venes was the first female Van Wagenen Fellow in 1973, the first woman admitted to the Senior Society of Neurosurgeons, and the first woman to chair a AANS/CNS Section (Pediatrics). Dr. Frances Conley was the first woman to become a full professor and went on to write the critically acclaimed book Walking Out on the Boys. One of the greatest achievements during my personal “neurosurgical lifetime” was when Dr. Karin Murasko in 2005 became the first woman Chair of a neurosurgery department with an ACGME-approved residency program. She is also the first woman to be appointed to the American Board of Neurological Surgery, in 2008.

To gain insight into the struggles women faced in starting out in this specialty, and as a gauge to illustrate how far we have advanced in a relatively short time, it is interesting to read
II. History of WINS:

The first formal gathering of WINS occurred November 1, 1989, at the Congress of Neurological Surgeons Annual Meeting in Atlanta, Georgia at Trader Vic’s, with eight founding members. For many women at the time, this was their only exposure to other women neurosurgeons, as the numbers were so few. One goal was to create a directory of all the women in training or practice.

The first official WINS meeting occurred in 1990 in Los Angeles. On October 22, 1990, WINS ratified a charter and bylaws.

Within the first year, the directory had grown from 8 to 33 members, including the first international member, Yoko Kato, MD, of Japan, who has remained an active member of WINS and has formed similar organizations in Japan and throughout Asia. The first of two Resident Travel Scholarships was developed in 1993 to help women residents attend the annual AANS conference to present their papers or talks, and with the permission of her next of kin, this was named in honor of Louise Eisenhardt. The inaugural Ruth Kerr Jakoby Lecture was delivered in 1994 by Dr. Olga Jonasson, the first woman in the United States to chair an academic department of surgery. A second lectureship honoring Dr. Alexa Canady, the first African-American Board-certified female neurosurgeon was funded by WINS, and another Resident Travel Scholarship was added honoring Dr. Sherry Apple. The “Friends of WINS” Award was established to honor a male neurosurgeon who made significant contributions to advancing women in the field of Neurosurgery. Today a list of all the recipients of this award is on the WINS web site.

Within the first 10 years, the WINS Newsletter was developed and mailed bi-annually to all WINS members and all female residents, the WINS web site was developed, and the international program thrived. Official liaison positions were established within the AANS and the CNS Boards, the Scientific Program Committees and the AANS Young Neurosurgeons Committee and the Council of State Neurosurgical Societies — all providing access points to organized neurosurgery that had previously not existed for women.

In honor of WINS 10th Anniversary, and as part of our dedication to the mentoring and recruitment of medical students, WINS developed a brochure entitled, “So You Want to be a Neurosurgeon?” which was distributed to all US and Canadian medical students. This brochure, which has just been updated to reflect changes in the matching system, is now available on the WINS web site.

So, who is WINS now? We are our “sister’s keeper” — we aid, we support and we encourage. Presently in 2009, there are over 200 Board-certified women neurosurgeons in the United States, and WINS now has over 300 members. Today WINS is part of a growing community of neurosurgeons, nurses, physician assistants, spouses and corporate sponsors who contribute to the advancement of both men and women in our specialty.

And, for the young women who follow in our footsteps, we wish you an easier path filled with passion, purpose and love for the work you will do. For all these reasons, I am proud to have been the 20th President of this great organization and hope that WINS continues to adapt and thrive in the next 20 years.
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There are significant gaps in our trauma and emergency health care delivery systems, and trauma is the leading killer of Americans under the age of 44. The AANS and CNS are committed to working with Congress to develop and implement creative approaches to improve the emergency care system, including implementing a system to regionalize emergency care. As recommended by the IOM in its ground-breaking 2006 report, “the objective of regionalization is to improve patient outcomes by directing patients to facilities with optimal capabilities of any given type of illness or injury.” In addition, the AANS and CNS actively support increased funding for the HRSA Trauma-EMS Program, which provides grants to states to improve critically needed state-wide trauma care systems.

Physicians face a 22 percent cut in Medicare reimbursement on January 1, 2010. Congress needs to avoid band-aid solutions for fixing the physician payment system and once-and-for-all replace Medicare’s Sustainable Growth Rate (SGR) formula with a stable mechanism for updating and reimbursing physicians. The new system must be fundamentally fair for all physicians, and any additional payments that are made to primary care physicians must not be budget neutral within the physician payment pool. The AANS and CNS are committed to working with Congress to pass a long-term solution to avert this significant cut and identify innovative approaches for reforming the Medicare payment system.

While Congress has taken the first steps towards implementing informed quality improvement programs, the current Physician Quality Improvement Program (PQRI) is not working and needs to be drastically reworked to better incorporate a system for clinical data collection and reporting. A “one-size-fits-all” approach will not accomplish the lofty goals that we all hope will be the end result of these quality-based initiatives — better patient outcomes. The AANS and CNS support a pay-for-participation system under which data regarding physician quality is collected in a non-punitive environment and analyzed using accurate risk-adjustment mechanisms; public reporting of data only occurs at the aggregate level and not at the individual level; and physicians receive performance feedback continually and in a timely manner.

Neurosurgeons are committed to advancing the public health by fighting diseases, developing treatments, and finding cures through continued medical research. Institutions such as the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC) and the Agency for Healthcare Research and Quality (AHRQ) are leading the way to help improve our nation’s health and save lives. Organized neurosurgery also embraces the need for well-designed clinical comparative effectiveness research (CER), which can be a valuable tool to “learn what works in health care” and support...
good clinical decision making. CER must focus on communicating research results to patients and physicians, and must not be used for determining medical necessity or making centralized coverage and payment decisions. The AANS and CNS urge Congress to provide adequate funding for these vital public health research programs.

**PRESERVE QUALITY RESIDENT TRAINING AND SAFE PATIENT CARE**

Concerns about resident fatigue must be balanced with the need to adequately train neurosurgical residents and ensure quality patient care. The AANS and CNS believe that further reductions in resident work hours will have a negative impact on resident training and education and will produce a generation of neurosurgeons who will not be as skilled or committed as their predecessors and will fall short of public expectations. In addition, adherence to strict work hours can lead to medical errors attributable to more frequent patient handoffs, fragmentation and loss of continuity of care. The Accreditation Council for Graduate Medical Education (ACGME) is effectively addressing these issues and legislation on this matter is therefore unnecessary.

**ALLEViate THE MEDICAL LIABILITY CRISIS**

The AANS and CNS support legislation to provide common sense, proven, comprehensive medical liability reform. Federal legislation modeled after the laws in California or Texas, which includes reasonable limits on non-economic damages, represents the “gold standard,” but other solutions should also be explored. A first step would be to apply the Federal Tort Claims Act to EMTALA-mandated services. EMTALA, the Emergency Medical Treatment and Labor Act, is a federal mandate to provide emergency care and puts neurosurgeons at an increased liability risk. Congress should also study alternatives to civil litigation, including: early disclosure and compensation offer; the administrative determination of compensation model; and health courts.

**ADVANCE MEASURES TO IMPROVE NEUROSURGICAL WORKFORCE**

While neurosurgery continues to fill its residency slots across the nation, the federally funded positions have not kept pace with the growth in U.S. population, particularly the Medicare population. The future supply of all surgical specialists is woefully inadequate to provide the care that our Nation will require. Training a health care workforce to successfully serve the needs of the nation requires stable, long-term predictable funding given the length of time required to educate and train physicians - 6-8 years for neurosurgical training. The AANS and CNS support preserving Medicare funding for Graduate Medical Education (GME) and eliminating the residency funding caps that were established by the Balanced Budget Act of 1997. In addition, Medicare should fully fund residency programs through at least the initial board eligibility — in neurosurgery’s case 6 years.

**SAFEGUARD PATIENT ACCESS TO SPECIALTY CARE IN HEALTH CARE REFORM**

Health care reform must ensure that every patient has access to appropriate quality care, by the appropriate doctor, at the appropriate time. The AANS and CNS believe it is imperative that all health care reform proposals ensure that patients have timely access to the doctor of their choice.

**PROTECT PATIENT-CENTERED HEALTHCARE**

Diagnostic imaging is an integral component of neurosurgical care, and the ability of neurosurgeons to provide in-office diagnostic imaging services to their patients ensures they get the best possible and timely care available. Ambulatory Surgery Centers (ASCs) and physician-owned specialty hospitals provide cost-effective care; have low infection, complication and mortality rates; and produce a marked increase in patient satisfaction. The AANS and CNS urge Congress to protect patient access to these services.

The American Association of Neurological Surgeons was founded in 1931 and is dedicated to advancing the specialty of neurological surgery in order to promote the highest quality of patient care. The Congress of Neurological Surgeons was founded in 1931 and exists to enhance health and improve lives worldwide through the advancement of education and scientific exchange. The AANS and CNS are the two largest scientific and educational associations for neurosurgical professionals in the world and represent approximately 4,000 neurosurgeons in the United States. Neurosurgery is the surgical specialty concerned with the prevention, diagnosis, treatment and rehabilitation of disorders that affect the spinal column, spinal cord, brain and peripheral nerves.

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The last year has seen many opportunities, challenges, and triumphs for the Congress of Neurological Surgeons (CNS). Facilitated by the 2009 leadership including CNS President, P. David Adelson, MD, CNS President-Elect Gerald E. Rodts, MD, Vice-President Joel MacDonald, MD, Secretary, Christopher Wolff, MD and Treasurer, Daniel Resnick, MD the CNS has continued its tradition of education and innovation while delivering unparalleled member services.

The last twelve months have brought tremendous financial challenges to professional organizations worldwide, including the CNS. The CNS has used this time as an opportunity to examine all of its activities in light of their cost and benefit to CNS members. This effort, in combination with a traditionally conservative investment strategy, has allowed the CNS to position itself to respond to future challenges by recognizing the changing environment for funding for professional organizations.

The 2009 CNS Annual Meeting, held October 24-29, 2009, in New Orleans, Louisiana, again proved to be the premier educational event in Neurosurgery. Annual Meeting Committee Chair Nathan R. Selden, MD and Scientific Program Committee Chair Ali Rezai, MD, assembled a worldwide faculty, headlined by CNS Honored Guest Dr. James T. Rutka. In keeping with the theme of the 2009 CNS Annual Meeting, “A Culture of Excellence,” invited speakers included APJ Abdul Kalam, former President of India, current Louisiana Governor Bobby Jindal, tenth annual Walter Dandy Orator Walter Isaacson, the John Thompson Lecturer, Nobel Prize winning molecular biologist Peter Agre, MD, and Terry Orlick, PhD, the Apuzzo Lecturer on Creativity and Innovation. The 2009 meeting again featured CNS educational innovations including Integrated Medical Learning®, Consensus Sessions, Digital Masters, 3-D Live Cadaveric Demonstrations, Resident SANS Challenge, and Neurosurgical Forum. A record number of scientific abstracts were received for the 2009 meeting. A wide variety of Practical Courses, Luncheon Seminars, and Special Courses were offered. The CNS was also proud to sponsor a joint meeting of the AANS/CNS Joint Section on Tumors and the Society of Neurooncology immediately prior to the Annual Meeting.

The CNS remains committed to its international mission. After a very successful collaboration with the Brazilian Society of Neurosurgery in 2008, the CNS proudly partnered with the Neurological Society of India (NSI) and the American Association of South Asian Neurosurgeons (AASAN) for the 2009 CNS Annual Meeting. In order to enhance international neurosurgical resident education, CNS members voted on the creation of an International Vista Resident membership category at the 2009 CNS Annual Business Meeting. Look for the announcement of additional CNS international collaborative meetings, courses, and initiatives over the coming months.

In addition to the Annual Meeting, the CNS continues to develop other educational programs designed to enhance health and improve lives worldwide. The past year has seen the introduction of the very successful CNS Webinar series, allowing neurosurgeons and neurosurgical residents to engage in an interactive and participatory learning environment from widely separated locations. This complements the upgraded CNS University of Neuro-
surgery, NeuroWiki, and Annual 3-D Surgical Anatomy Course for Senior Residents. The Self-Assessment in Neurological Surgery (SANS) program, already an integral part of the ABNS Maintenance of Certification program, has undergone a substantial platform upgrade and soon will include a resident education module, SANS Fundamentals.

The CNS Publications Group has had another eventful year. NEUROSURGERY®, the Official Journal of the CNS, has undergone a major transformation in 2009. Nelson Oyesiku, MD, PhD, has been named the new Editor in Chief and a new Editorial Office has been established in Atlanta, Georgia. The CNS Executive Committee is delighted at his appointment, looks forward to his leadership of the journal, and formally thanks the Long Range Planning Committee for NEUROSURGERY®, under the direction of CNS Past President Anthony Asher, MD, for its exhaustive efforts in the selection process. While there may be slight production delays during this time of transition, all CNS members are assured that NEUROSURGERY®, remains exceptionally vital and committed to the publication of the very best science that our profession has to offer. Clinical Neurosurgery, under the direction of Editor Gerald Grant, MD, remains the peer-reviewed chronicle of the CNS Annual Meeting, while the CNSq, under the direction of Editor James Harrop, MD, continues to be refined as the premier quarterly news magazine in Neurosurgery. Both are now published through the CNS Administrative Office in Schaumburg, Illinois.

The CNS continues its collaboration with the AANS on the Joint Washington Committee. Under the direction of Katie Orrico, this committee issued one of the first formal critiques from organized medicine of the proposed legislation to change the American health care system. The Washington Committee along with its subcommittees continues to be at the forefront of analysis of the political arena and a voice for neurosurgery in health care and medicine.

As of the summer of 2009, CNS Membership remains strong and is at an all-time high. There are currently 6,967 CNS members, including 3,083 Active members, 1,160 Resident members, 495 Active International members and 376 International Vista members. The Fellowships Committee, under the direction of Elad Levy, MD, FACS, FAHA, has expanded the number of offerings for 2009 and has enjoyed a record number of qualified applications. The CNS Administrative Office, under Executive Director Laurie Behncke, artfully supports the myriad of CNS volunteer activities. In addition, the CNS has renewed its three year contract with the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves for management of its Annual Meeting.

In conclusion, the CNS has had a challenging but very successful year. We thank Dr. P. David Adelson for his service and leadership over the last year and welcome Dr. Gerald E. Rodts as the new CNS President. As I complete my term this fall, I would also like to thank the members of the CNS for the privilege of allowing me to serve as the CNS Secretary for the last three years.
The Resident and Medical Student Ad-Hoc Committee for Membership has been working hard behind the scenes to continue to provide unique opportunities and benefits for members in training. Two new membership categories have been introduced this year, Medical Student and International Vista Resident. With these new categories, the CNS welcomes members from around the world at the very beginning of their journey of lifelong learning. A number of resident targeted practical courses and luncheons were held at this year’s Annual Meeting in New Orleans, in addition to the ever popular Resident SANS Challenge and Resident Recruitment Social.

North American Resident and Fellow Membership is at an all-time high, with just over 1,160 resident and fellow members at the end of the 2009 academic year. Member participation within the organization continues to grow, with activities ranging from attending the CNS resident courses to presenting at and attending the Annual Meeting in New Orleans. Members continue to pursue a dizzying array of high quality research and clinical fellowships through the CNS research and training grants.

This year in New Orleans marked the first International SANS Resident Challenge. As in previous years, residents from the US, Canada and Mexico participated in an online qualifying round during the month of July. University of Colorado, last year’s champions, returned to defend their title. Additionally, residents from India, this year’s partner society for the Annual Meeting, participated in their own qualifying round. One team from the All India Institute of Medical Sciences in New Delhi participated against eight North American teams during the live rounds. We hope to continue to expand the international participation at future challenges. Congratulations to the 2009 CNS Resident SANS Challenge winners!

- 1st Place: The Mayo Clinic — Brian Milligan and Jeremy Fogelson
- 2nd Place: University of Miami — Hamad Farhat and Ted Brindle
- 3rd Place: Vanderbilt University Hospital — Adam Reig and Richard Lebow.

In keeping with the CNS strategic plan to increase our international presence, we are pleased to introduce a new membership category. This category, International Vista Resident, is available to all trainees outside of North America (which is defined by the CNS as including the US, Canada and Mexico). International Vista Residents are required to furnish proof of training from their program director, and their membership will expire upon reaching their expected date of graduation. International Vista Residents will receive electronic access to NEUROSURGERY®, CNS®, Clinical Neurosurgery and many other electronic educational resources, including the NeuroWiki and University of Neurosurgery.

If you, or someone you know would like to become a Medical Student, Resident, Fellow or International Vista Resident Member, we encourage you to apply online today at http://mbr.cns.org/Application/SignIn.aspx or e-mail us at info@1cns.org.
Physician re-entry to the workplace after a prolonged absence is a growing phenomenon in all specialties of medicine. There are numerous scenarios which create this trend; including more physicians taking time away to start families, care for ill family members or aging parents; for personal medical reasons; financial hardships following a temporary retirement; or because of time away secondary to drug or alcohol addiction. In addition, the recent medical malpractice crisis has also created another similar scenario where individuals may choose to limit their practices (i.e. neurosurgeons who limit their practice to only spinal surgery) in order to lower malpractice premiums.

An issue then arises when hospitals, medical societies and state medical boards are asked to re-credential these individuals who have been away from medicine or have practiced under a limited scope of practice and wish to resume previous privileges. The number of physicians who fall into this scenario is rapidly increasing and we must reach a consensus on how to reinstate such individuals back into their specialties while at the same time ensuring that quality patient care is delivered.

These issues were explored and discussed during Consensus Session IV – Physician Re-entry to the Workplace – at the 2008 Congress of Neurological Surgeons Annual Meeting in Orlando, Florida. The format of this consensus session mirrored those of the other sessions. A brief introduction was given followed by audience polling to determine their opinion surrounding the subject matter. This was then followed by a presentation by Holly Mulvey, MA from the American Academy of Pediatrics who is a national leader on the subject. Then three neurosurgical positions were discussed followed by a re-polling of the audience and a question and answer session. Comparison of the pre- and post-polling questions revealed that there was a shift in audience opinion regarding the subject matter following the invited speaker’s presentation and discussion of the three possible neurosurgical positions.

Based on the information presented the following changes were observed in the responses from the 21 audience participants:

1. At which point in time away from practice should a physician require recertification or retraining: Never (11% to 6%), 1 year (11% to 6%), 2 years (33 to 56%), 5 years (28 to 33%).

2. What is the best method to recertify a neurosurgeon following an absence from clinical practice: No recertification (6 to 5%), CME courses (29 to 20%), mentoring program (41% to 35%), mini-fellowships (24 to 40%).

3. Whose responsibility should it be to oversee this process: Surgeon (41 to 30%), Hospital (12 to 20%), State Medical Board (12 to 5%), Neurosurgical Organizations i.e. CNS or AANS (18 to 15%), ABNS (18 to 30%).

4. What is the best way to recertify a neurosurgeon who has given up cranial privileges for an extended period and now wishes to resume such privileges: No recertification (6 to 11%), CME courses (22 to 16%), mentoring program (44 to 37%), mini-fellowships (28 to 37%).

Based on the overall audience responses and feedback obtained during this session there was a sentiment that this is no longer a topic of concern for only the primary care fields, such as internal medicine and pediatrics, but is also a significant concern for neurosurgery. While there was no agreement on which manner would be best to oversee or monitor such policy, there seemed to be consensus that the need for such a policy definitely exists.
JOIN US IN ORLANDO, FLORIDA, FOR THE MOST ANTICIPATED SPINE-FOCUSED EDUCATIONAL EVENT, FEATURING:

- Daily Scientific Sessions addressing the future of spinal surgery and how the technological and regulatory developments of today will affect our specialty in the years ahead.

- Nine Special Courses, highlighting:
  - Contemporary Neurosurgical and Non-surgical Approaches.
  - Essential Practice Management Solutions.
  - Critical Patient Advocacy Issues.

- Five Luncheon Symposia available Friday afternoon.

- 18.75 credits in Category 1 CME credit, plus an additional 8 credits are available through optional programming.

- Meritorious Award Recipient – Regis W. Haid, Jr.

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Welcome to the Taiwan Neurospinal Society, 2010 International Society Partner

Advance Registration Deadline: January 11, 2010!
The contributions of the Congress of Neurological Surgeons (CNS) to socioeconomic issues are not widely recognized, yet they were an integral concern of the CNS founders and its first leaders. Documents in the CNS Archives, painstakingly assembled by its third Historian and first and leading Archivist, John Morgan Thompson (Past-President, 1970), chronicle the contributions of the CNS (through its educational debates and committees) to neurosurgical reimbursement, utilization and manpower needs, and professional liability. This activism on behalf of our specialty led to the subsequent coalescence with the American Association of Neurological Surgeons (AANS) into what would later become the Joint Officers structure, the Joint Socio-Economic Committee, the Washington Office for Neurosurgery, and the Joint Council of State Neurosurgical Societies (JCSNS).

The earliest focus of CNS activities mostly involved establishing the credibility and special vision of the new organization. The first meetings strived for rigorous scientific content presented by the world’s leading experts, and increasingly lore-filled social activities and post-meeting travel excursions created fun-filled events of educational value to early attendees. Committee activities focused on membership development, incorporation, finances and bylaws of the fledgling new group. Passionate correspondence among the Founders and CNS strategists, along with early Executive Committee minutes, articulated a populist and inclusive philosophy reflecting aspirations of young neurosurgeons rather than those of physicians who were already accomplished and established. These included exquisite plots of the prevalence of CNS members among practicing neurosurgeons, the rate of recruitment of those completing training, and the age distribution of CNS membership. The third Annual CNS Meeting in New Orleans in 1953, presided over by Dr. Nathaniel Roger Hollister, included the roster of a Survey Committee, chaired by Dr. Averill Stowell, formalizing a democratic tradition of sounding the membership on issues of relevance to their professional life. This represented a departure from the tradition of elitism in that era’s more established professional societies. In 1954, the CNS Meeting in New York presided over by Dr. James Rowland Gay included the first invited lecture on a socioeconomic topic at a CNS meeting. W. Scott Allen, Vice President of the Mutual Life Insurance Company of Boston, addressed the group on “Medico-legal Aspects of Compensation.”

The first Archives reference to the Socio-Economic committee (SEC) is recorded in CNS Executive Committee Meeting minutes of February 9, 1963, held in Chicago, Illinois, noting a presentation by Dr. William H. Mosberg Jr. about “a proposed questionnaire to be sent to the membership regarding the proposed national relative value scale of Blue Shield,” with the “desired goal of ascertaining the fee schedule of the numerous Blue Shield plans in existence in the United States, as well as determining the consensus of neurosurgical opinion on what would constitute a fair relative fee schedule.” A motion by Dr. DeSaussure, seconded by Dr. Welford, authorized the SEC to continue to pursue the investigation. Later that year, CNS Executive Committee minutes from its summer meeting in Point Clear, Alabama on July 27, 1963, record that Dr. Mosberg was disappointed “with the response of Con-
gress members to a request for information regarding fee schedule.” Nevertheless, Dr. Mosberg had apparently succeeded at compiling a list of neurosurgeons throughout the country serving on state fee schedule committees. The Executive Committee “directed Dr. Mosberg and his committee to proceed with its work on relative fee schedules.” The Executive Committee directed Dr. Mosberg and his committee to proceed with its work on relative fee schedules. The SEC Roster that year listed Drs. Edwin W. Amyes, Edward J. Bishop, Shelly N. Chou, Arthur B. Eisenbrey, Jr., Robert J. Imler, Jr., John N. Meagher, Harry Starr, and Joseph A. Witt, in addition to Dr. Mosberg as Chairman (Figure 1).

The Archives do not contain further documents on the subsequent status of Dr. Mosberg’s survey, although Dr. Robert Florin mentions that the actual survey was performed in 1964 and supplemented by additional surveys in 1965, with results sent to all CNS members. Fees for lumbar puncture ranged from $5 to $75, for herniated disc surgery from $250 to $1500, and for craniotomy for clipping of aneurysm from $275 to $2500 (Florin RE, in Fifty Years of Neurosurgery, Editors Barrow, Kondziolka, Laws and Traynelis, Lippincott Williams and Wilkins 2000, page 68). The CNS SEC was chaired by Dr. Edward Bishop from 1964 through 1967, as Dr. Mosberg rose to the Presidency of the CNS. In 1967, the CNS Committees roster mentions Past-President Mosberg and President-Elect Dr. John R. Russell as “Representatives to Liaison Committee to the Harvey Cushing Society,” the first record of formal representation of CNS leadership in the AANS. Subsequent CNS Presidents were often but not always listed as ex officio members of the CNS Board, including in formal presentation to the CNS of a summary of activities of the AANS Board. Also in 1967, the CNS Committees roster includes a new “Ad Hoc Committee for Utilization Guidelines” chaired by Dr. William Lockhart, who led that committee from 1967 through 1969. The SEC was also chaired by Dr. Lockhart in 1968, and co-chaired by Dr. Lockhart and Dr. James T. Robertson in 1969. The 1969 report by the SEC to the CNS Executive Committee “had to do entirely with the problem of malpractice.” The CNS Executive Committee entertained various schemes to facilitate insurance coverage of neurosurgeons.

The year 1969 also witnessed the birth of a new CNS “Ad Hoc Committee on the Health Care Crisis” ensuring CNS representation along with that of other neuroscience professional organizations in a Washington-based professional coalition. Also in 1969, the CNS Utilization Guidelines Committee published a landmark manual on “Neurosurgical Hospital Utilization Guidelines” (Figure 2). In 1970 and 1971, the CNS SEC was chaired by Dr. James Barnes. It is noted to have been authorized to reprint and mail the “Fee Survey” to CNS members.

In 1972, the CNS SEC Committee chaired by Dr. Edwin Amyes joined the AANS to form the Joint Socio-Economic Committee of the AANS and CNS. This newly formed Joint-SEC launched a major subcommittee designated the National Neurosurgical Advisory Group (NNAG), including CNS and AANS appointed representatives from four regional quadrants of the United States. The NNAG held its first meeting in Chicago on June 23, 1973, and its report was presented to the Joint-SEC, in conjunction with the CNS Meeting in Honolulu in October of that same year, and included recommendations for enhanced coordination with State Neurosurgical Societies. In 1973, the roster of the CNS Committees lists the names of 33 members of CNS SEC Committee, the largest ever, chaired by Dr. Amyes. A separate listing includes those same members along with their AANS counterparts and regional appointees under the Joint-SEC-NNAG, with Dr. Russell Patterson, Jr. (AANS) and Dr. Amyes (CNS) as co-Chairmen (Figure 3). Subsequent documents in the CNS Archives never again list the SEC as a separate CNS committee. The CNS Bylaws in use until that year, printed in 1960, 1964 and 1968 respectively, had not mentioned the SEC as a standing CNS Committee. Despite the previously well-documented activities and incredible impact of that committee, and its listing in CNS committee rosters as far back as 1963, the CNS culture of volunteerism had essentially permitted this group to thrive for more than a decade as an ad hoc committee! The CNS Bylaws revised in 1978 finally articulated the charge and procedures of

Figure 2. 1969 CNS Utilization Guidelines
Figure 3. 1979 Joint SEC Roster

Figure 1. 1963 SEC Roster
the SEC as one of the Joint Committees of the AANS and CNS.

The 1974 CNS Annual Meeting in Vancouver, British Columbia, presided over by Dr. George T. Tindall, organized an ambitious Symposium on Socioeconomics in Neurosurgery, including presentations by Drs. I. M. Greenberg on “Neurosurgery’s Constructive Response to the Changing Political Climate;” by F. Wrenn on the “Status of Neurosurgical Societies;” by D. Stewart on “Inter Relationship of Neurosurgery with Other Surgical Specialties in socioeconomics;” by G. Ablin on “Are there too many, too few, or just the right number of Neurosurgeons;” by L. Finney on “the Case for Neurosurgeons as Amicus Curiae;” and by Dr. Amyes “Are Organizational Changes Needed in the structure of Neurosurgery?” This was followed by a Symposium on Neurosurgery Manpower, with participation by Kemp Clark and that year’s Honored Guest, Guy Odom. In follow-up to this intellectual debate, the 1975 CNS Meeting in Atlanta, presided over by J.T. Robertson, hosted a plenary General Scientific Session on Professional Liability, and an “Open Hearing” of the Joint-SEC on neurosurgical manpower on October 19, 1975. The 1976 Report of the Neurosurgical Manpower Monitoring Committee of the AANS acknowledges that open hearing at the previous year’s CNS Meeting, along with discussions with many state neurosurgical societies, in formulating the 40 questions to American Neurosurgi-
geons, representing the first recorded joint AANS/CNS national survey.

In 1976, a joint Committee of the AANS and CNS chaired by Dr. Louis Finnery established a liaison office in Washington, DC for the purpose of offering “guidance and advice concerning our relationship with various government agencies.” Charles A. Plante was designated as consultant at that office. This jointly funded venture has continued to serve our specialty on behalf of the AANS and CNS to this day.

On September 26, 1978, the CNS sponsored the First Annual Meeting of the Presidents of State Neurosurgical Societies from 8:00 to 11:00 AM in the Lincoln Room at the Washington Hilton Hotel, in conjunction with that year’s CNS Meeting, presided over by Dr. Albert L. Rhoton, Jr. That meeting’s agenda chronicles a number of initiatives, including a reference to the “Council of State Neurosurgical Societies,” the “Washington Committee for Neurosurgery,” and progressive discussions on “Categorization and Emergency Health Services,” and “Legislation on Death” (Figure 4B).

In 1986, the CNS Newsletter included a report by Dr. Paul Croissant on the first meeting of the “Joint Council of State Neurosurgical Societies” (JCSNS) in Denver on Friday April 11, through Sunday April 13, 1986, and plans by the JCSNS for dedicated symposia in conjunction with that year’s Annual CNS Meeting in New Orleans the following October (Figure 5). That was the beginning of a tradition of subsequent regular JCSNS meetings in conjunction with Annual Meetings of the AANS and CNS. The CNS has continued to marshal its leadership and volunteerism in the Washington Committee and Office, the JCSNS, and other socioeconomic forums since those pioneering days.

The author acknowledges enlightening discussions with Randy Smith, JCSNS Historian, regarding the NNAG and the early roots of the JCSNS.
In my CNS presidential address “From Icarus to Aequanimitas” I shared a proven formula with the Congress membership guaranteed to result in balance in one’s personal and social life. It is incredibly simple. One simply draws a square and notes on each side work, family/social, spiritual and physical as shown in Figure 1. The next instruction is to draw a line commensurate with the daily time and activity committed to each. Optimally, the subsequent diagram should be “four square” as the first. If not, clearly depicted are the specific areas in one’s life that are deficient and require conscious effort to improve — like mine on several occasions (Figure 2). Balance occurs as a secondary effect of improving the physical, family/social, spiritual and/or work dimensions in our lives.

During my personal and professional life I have experienced failures, depression and even despondency more times than I would like to admit. But by returning to this simple formula, which I chose to ponder and enunciate for the first time at the 1986 CNS Annual Meeting, I have been like Sidney Carton in the Tale of Two Cities, repeatedly “recalled to life” — and, I might add, a very blessed and good life.

Fast forward to the 2005 CNS Annual Meeting in Boston, Massachusetts, for another major personal discovery. There, for the first time, I heard Dr. David Sinclair, a molecular biologist and Director of the Anti-aging Laboratory at Harvard University, inform the CNS membership of the latest concepts of aging and gene activation. He described, in detail, how calorie restriction, the only sure way of increasing longevity and actually reducing the incidence of many diseases of aging by stressing the body, activates the newly discovered sirtuin or longevity genes which prolong survival and health.2,3

He further described the molecular pathways through which sirtuin gene activation reduces inflammation by blocking nuclear factor k B (NF-kB); modulates the production of vasodilators such as nitric oxide, icosonoids and adhesions molecules involved in the atherosclerotic process; helps prevent cancer in experimental models; and protects against the ravages of stress. Most exciting was the discovery that these same genes conserved in virtually all living species can be activated by various polyphenols including Resveratrol found in red wine and the Chinese plant, ho shou wu or polygonum cuspidatum — without calorie restriction.
Sinclair’s cross-disciplinary lecture completely altered my life. The following week he invited me to Boston to observe his work and further explain his concepts. I subsequently became immersed in the study of why we age, the physiological and molecular affects of aging and what, if anything, we can do to prevent or at least slow down the process and compress morbidity into the shortest possible time before, as William Osler stated, “We pass over those flaming ramparts.”

I discovered that the aging process on a molecular level is directly related to the excessive production of free radicals and mitochondrial damage, the accumulation of advanced glycosolated end products (AGEs), the declining activity of genetic regulators like the sirtuin genes, and direct DNA damage from endogenous and exogenous environmental factors. I became so engrossed that I spent the subsequent two years reviewing thousands of papers and books on calorie restriction, nutragenomics, environogenomics, xenohormesis and the many historical and creative attempts — from Ponce de Leon to monkey glands — to enhance longevity.

The culmination and summary of this work was the publishing of The Longevity Factor: How Resveratrol and Red Wine Activate Genes for a Longer and Healthier Life by Simon and Schuster, January 2009, endorsed by Dr. Sanjay Gupta, Dr. Mehmet Oz and Greg Norman.4

I further discovered that although our genes directly control approximately 30% of the diseases we eventually will acquire, 70% of these conditions can be prevented or markedly delayed by direct choices we make in our nutrition, activity level, environmental factors and emotional health. These four entities are called epigenetic factors because they directly influence or activate our genes, which essentially are molecular blueprints, for either healthy or unhealthy outcomes. The science of epigenetics, therefore, provides the missing link between the 70% of diseases environmentally induced and the 30% inherited through our DNA. (Slides 2 and 3).

Through specific signaling and transcription molecules, healthy choices in these four areas activate genes to result in anti-inflammatory, antioxidant and antimutation affects for a longer and healthier life. The corollary, however, is also true. A high fat, high carbohydrate diet, a sedentary lifestyle, a polluted environment and chronic high stress activates signaling and transcription molecules that result in a chronic inflammation, high oxidative stress and DNA damage that may result in cancer, heart disease and neurodegenerative disease of the brain — all diseases of age. From the CNS Annual Meetings in 1986 and 2005 the quintessential point is that to make our lives “four square” and to live longer and healthier through modulation of epigenetic factors is a personal choice. The choice is up to each of us on a daily basis on how we chose to activate our genes — for better or for worse.

**Editor’s Note:**

At age 69, Doctor Maroon has completed over 60 triathlons and 6 ironman events (2.4 mile swim, 112 mile bike, 26.2 mile run), his last being the Hawaiian Ironman in October of 2008 and the Muncie Endurathon in July 2009.

**References:**

A 77-year-old woman with no significant past medical history presented with headache, nausea, and vomiting for two months. At presentation, she also complained of new right facial numbness, dysphagia, and decreased right vision.

Initial CT and MRI images were concerning for a suprasellar tumor, and brain tumor surgeons were contacted for potential surgery.

A CT angiogram was then done which revealed a giant aneurysm.