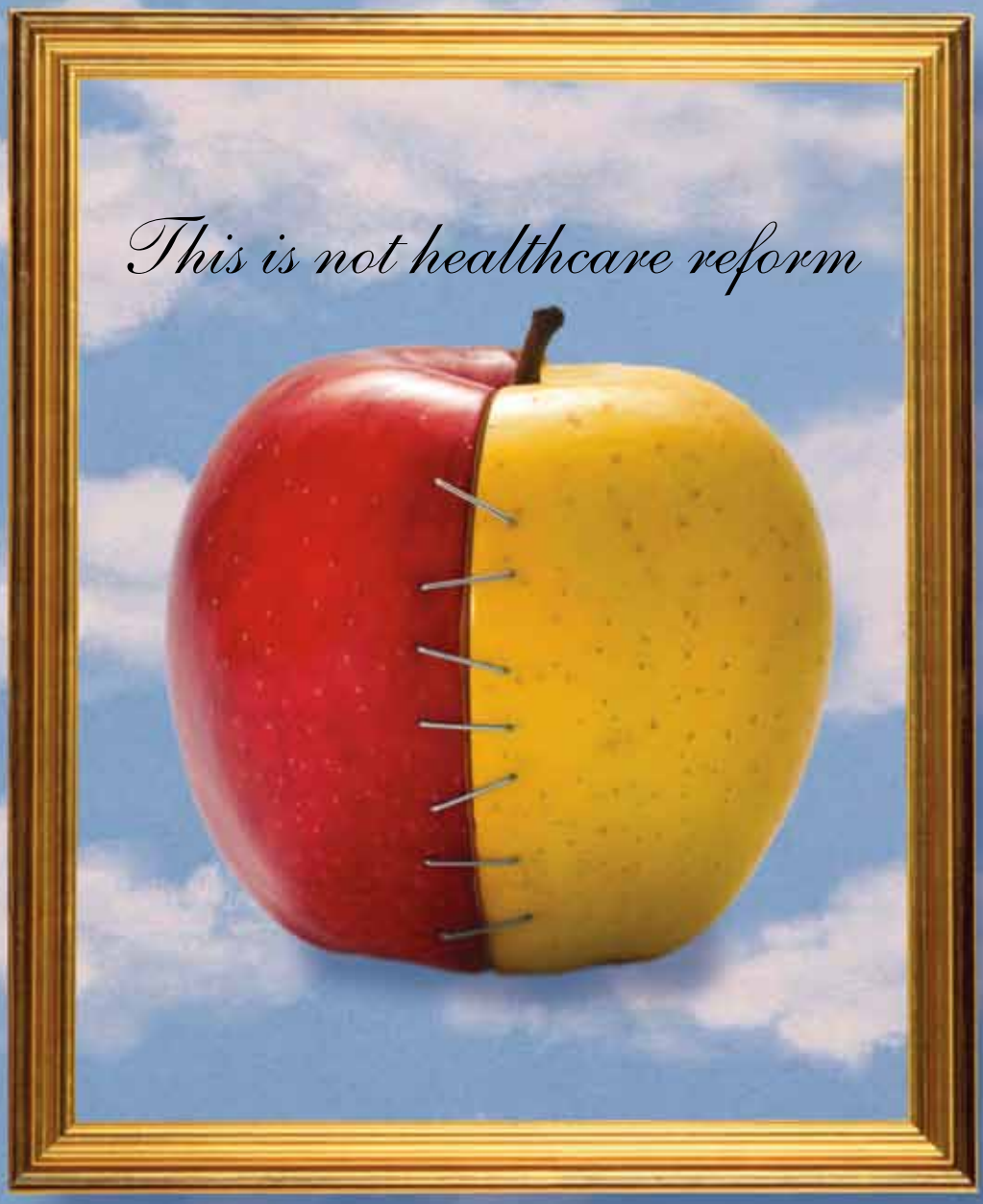
AANS
NEUROSURGEON
Information and Analysis for Contemporary Neurosurgical Practice • Volume 18 No. 2



What Do Neurosurgeons Need to Know About Healthcare Reform?

VOLUME 18, NUMBER 2

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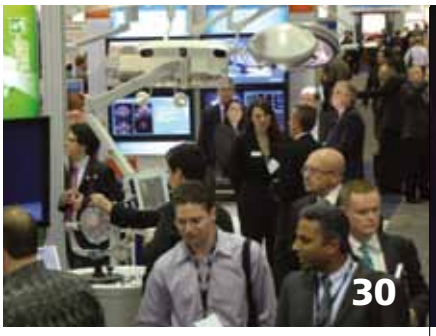

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American Association of Neurological Surgeons

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

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The official socioeconomic publication of the AANS, *AANS Neurosurgeon* (formerly *AANS Bulletin*) features information and analysis for contemporary neurosurgical practice.

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AANS Neurosurgeon seeks submissions of rigorously researched, hypothesis-driven articles concerning socioeconomic topics related to neurosurgery. Selected articles are reviewed by peer-review panelists. Papers must comport with the appropriate instructions for authors.

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www.aansneurosurgeon.org

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The advanced search of *AANS Neurosurgeon* and *AANS Bulletin* archives since 1995, subscription to the RSS feed and table of contents alert, and more are available at www.aansneurosurgeon.org.

PUBLICATION INFORMATION
AANS Neurosurgeon®, ISSN 1934-645X, is published four times a year by the AANS, 5550 Meadowbrook Drive, Rolling Meadows, Ill., 60008, and distributed without charge to the neurosurgical community. Unless specifically stated otherwise, the opinions expressed and statements made in this publication are the authors' and do not imply endorsement by the AANS.

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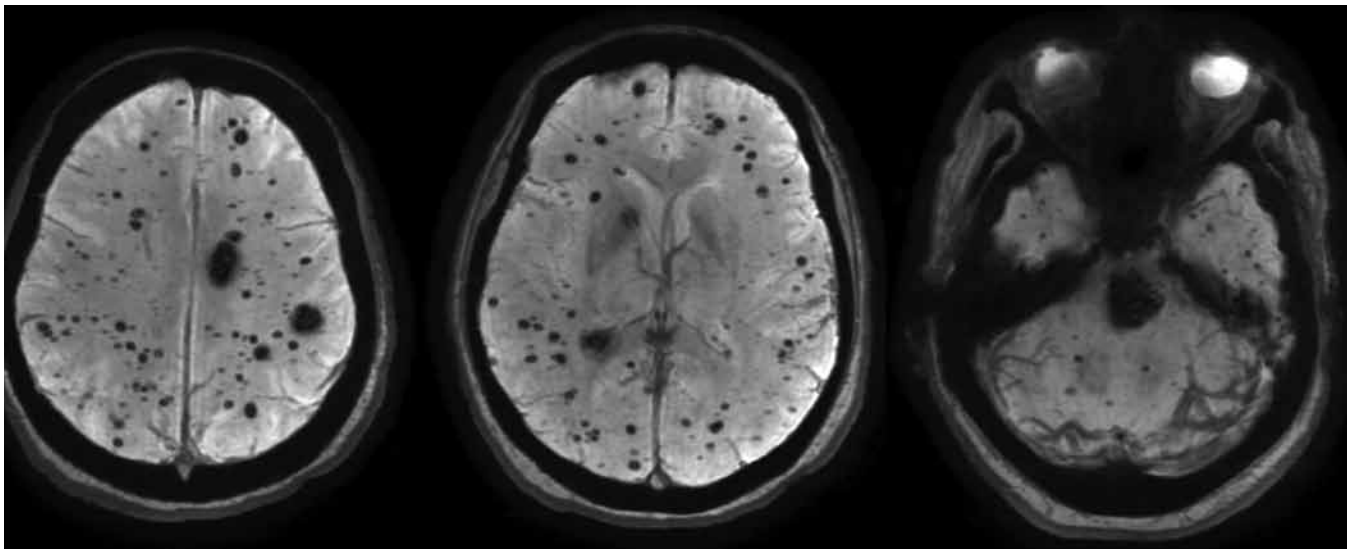


IN THE LOUPE

This susceptibility-weighted image in a 58-year-old woman with familial cerebral cavernous malformations demonstrates dozens of lesions. Previous MRIs with conventional sequences had revealed only the four largest cavernomas. Contributed by R. Webster Crowley, MD, Charlottesville, Va., and Arnold Bok, Auckland, New Zealand. They reported no conflicts for disclosure.

Proposed 2010 Medicare Fee Schedule May Mean Net Gains for Neurosurgery

Early analysis of the proposed regulation for the 2010 Medicare physician fee schedule, which was published in the Federal Register on July 13, indicates a 2 percent overall gain for neurosurgery. This estimation excludes possible changes in the sustainable growth rate formula—such as the proposed removal of physician-administered drugs from the "physician services" portion of the physician update formula—and bonuses through the Physician Quality Reporting Initiative. Proposal highlights include: an update of practice expense relative value units resulting in a 3 percent gain in reimbursement in this area; a change in the utilization rate assumption for imaging equipment from the current 50 percent utilization rate to a 90 percent utilization rate for equipment costing over $1 million; revisions to the methodology for calculating malpractice relative value units; Physician Quality Reporting Initiative incentive payments of 2 percent of estimated allowed charges for those who report data on PQRI quality measures through claims, to a qualified registry, or through a qualified EHR product; and 2 percent bonuses to participants in the e-Prescribing program.

www.gpoaccess.gov/fr/index.html
www.aans.org/legislative/aans/medical.asp

▲ GET IN THE LOUPE

Compelling digital photos that depict a contemporary event, clinical topic or technique in neurosurgery are sought for the In the Loupe photographic feature. Submission instructions are accessible by selecting the link in the Write for AANS Neurosurgeon section of www.aansneurosurgeon.org.

Pain Improves With Both Real and Simulated Vertebroplasty

Relief of pain from vertebral compression fractures and improvement in pain-related dysfunction are similar in osteoporotic patients treated with vertebroplasty and those treated with simulated vertebroplasty without cement injections, according to a double-blinded study by Kallmes and colleagues published in the New England Journal of Medicine. Researchers from eight medical centers in the U.S., U.K. and Australia studied 131 patients whose baseline characteristics of pain and function were similar. Within days of treatment, both the vertebroplasty group and the control group showed similar improvements in function and pain. "We aren't saying the vertebroplasty doesn't work, because it somehow does," stated Dr. Kallmes in a press release. "But both sets of patients experienced significant improvements in pain and function a month following the procedure, whether they received cement injections or not. Improvements may be the result of local anesthesia, sedation, patient expectations, or other factors."
www.nejm.org

'Red Flags' Rule Enforcement Begins Nov. 1

The Federal Trade Commission is delaying enforcement of the so-called red flags rule until Nov. 1. The rule requires physicians and hospitals to adopt written plans for tracking and responding to indicators of identity theft in their billing operations. The FTC considers hospitals and physicians creditors under the rule because they accept deferred payment for services.
www.ftc.gov/opa/2009/07/redflag.shtm
www.ftc.gov/bcp/edu/microsites/redflagsrule
www.ama-assn.org/ama/no-index/physician-resources/red-flags-rule.shtml

Neurosurgeon Tapped for CMS Advisory Panel

Neurosurgeon Gregory J. Przybylski is one of five new members appointed to the Advisory Panel on Ambulatory Payment Classification Groups. All five appointments are for four-year terms beginning on Oct. 1. The panel reviews the APC groups and their associated weights for their clinical integrity and offers advice to the Department of Health and Human Services and the Centers for Medicare and Medicaid Services for consideration in the annual updates of the hospital outpatient prospective payment system.
www.gpoaccess.gov/fr/index.html

Better Microsurgical Skills by Neurofeedback Training

Neurofeedback training results in significant improvement in surgical technique and reduces surgical time, according to a study of trainee ophthalmic microsurgeons in the U.K. published in BMC Neuroscience. Ros and colleagues assessed whether two different EEG neurofeedback protocols could develop surgical skills. The surgeons were randomly assigned to one of three groups, sensory motor rhythm-theta; alpha-theta; or a control group. The neurofeedback groups received eight 30-minute sessions of EEG training followed by a posttest, which showed significant improvements in both groups. The authors concluded that neurofeedback training holds promise for optimizing surgical training.
www.biomedcentral.com/bmcneurosci

Neurosurgeon Tells Congress: 'Adequate Physician Workforce' Includes Neurosurgeons

That Congress must strive to maintain patient access to vital specialty care such as neurosurgery was the message that neurosurgeon Robert E. Harbaugh, speaking for the AANS and the Congress of Neurological Surgeons, delivered to the U.S. House of Representatives Committee on Small Business in July. He described the current problems with patient access to neurosurgical care as acute and said that the situation will be compounded by an aging surgical workforce, fewer medical students choosing a surgical career and a growing elderly population that will require more interventional, rather than primary care, services. He urged Congress to consider the following measures in healthcare reform legislation:

- Establish a pediatric subspecialty scholarship and loan repayment program to encourage more physicians to choose pediatric neurosurgery and other pediatric subspecialties in short supply.
- Fund demonstration programs to develop models for regionalizing emergency/trauma care.
- Enact medical liability reforms.
- Repeal Medicare's sustainable growth rate formula and refrain from adopting payment policies that enhance reimbursement for primary care physicians at the expense of specialty physician reimbursement in a budget neutral model.
- Preserve Medicare funding for graduate medical education, eliminating the cap on Medicare's support and refraining from redistribution of any unused residency training slots solely to primary care.

This is not healthcare reform

While there is widespread acknowledgement that the U.S. healthcare system is not economically viable for much longer without some sort of change, there remains little consensus on what healthcare reform should entail. The genuine window of opportunity for massive health system reform has forced public officials and private citizens alike to examine their individual views of healthcare rights and responsibilities in the context of American life. Many have floundered when trying to articulate exactly what it is they want the U.S. health system to look like. In this high stakes contest of idealism versus pragmatism, the easier course is to identify and decry proposals with which one does not agree. The more difficult course, as stakeholder organizations and Congress can attest, is that of envisioning how an optimal system would look and function, building it proposal by proposal, and enacting legislation that embodies the vision.

At press time Congress had offered two proposals, one in the U.S. House of Representatives and one in the Senate. Our cover story reviews these proposals with a focus on aspects of interest to neurosurgeons. In related articles, a neurosurgeon reviews healthcare reform enacted in Massachusetts and proposed in California, and another scales Capitol Hill to make the case for meaningful medical liability reform.

Healthcare Reform

What Neurosurgeons Need to Know

KATIE O. ORRICO, JD

We now face an opportunity—and an obligation—to turn the page on the failed politics of yesterday's healthcare debates. … My plan begins by covering every American. If you already have health insurance, the only thing that will change for you under this plan is the amount of money you will spend on premiums. That will be less. If you are one of the 45 million Americans who don't have health insurance, you will have it after this plan becomes law. No one will be turned away because of a preexisting condition or illness.

— Barack Obama, Speech in Iowa City, Iowa, May 29, 2007

Cost, coverage and choice. The debate over healthcare reform largely boils down to these three topics, although within each there are complicated and controversial issues under consideration as Congress and the White House attempt to move healthcare reform legislation forward.

The Obama administration has identified the following fundamental goals for comprehensive health reform:

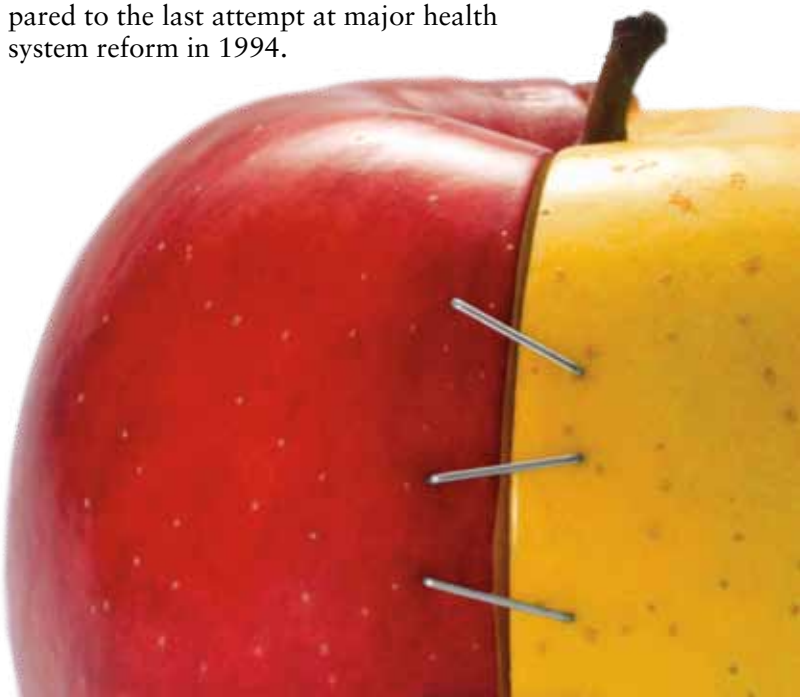
- Reduce long-term growth of healthcare costs for businesses and government.
- Protect families from bankruptcy or debt because of healthcare costs.
- Guarantee choice of doctors and health plans.
- Invest in prevention and wellness.
- Improve patient safety and quality of care.
- Ensure affordable, quality health coverage for all Americans.
- Maintain coverage for those who change or lose their jobs.
- End barriers to coverage for people with preexisting medical conditions.

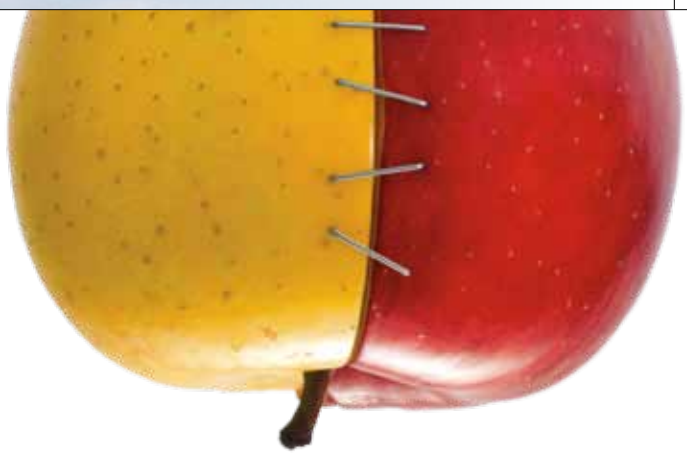
Clearly, these are laudable goals and most would agree necessary elements of meaningful health system reform. But as history and the legislative process this year in Congress can attest, they are more easily proposed than achieved. Even as the support of the American public for some kind of healthcare reform remains fairly solid, opinion polls suggest increasing skepticism about the details of the effort to overhaul the nation's healthcare system.

For neurosurgeons, the legislation proposed thus far can be reduced to two basic themes: First, specialists and particularly surgeons are overpaid while primary care doctors are underpaid; therefore healthcare reform legislation must increase fees paid to primary care physicians and focus more resources on preventive services. Second, the healthcare delivery system must be retooled to focus on quality rather than quantity; therefore tests, procedures and expensive technology should be eliminated in the absence of proven benefit to patient care and health outcomes.

The Environment for Health Reform

Much has been made about past failed attempts at enacting national health system reform, from the days of President Franklin D. Roosevelt through the administration of President Bill Clinton. There have been many reasons cited for these failures, including the complexity of the issues, ideological differences, the lobbying of special interest groups, and the lack of individuals willing to make personal sacrifices. However, it seems that passage of meaningful healthcare reform legislation this year is possible if not probable. From a political standpoint, there are a number of key differences that exist today compared to the last attempt at major health system reform in 1994.





Both then and now, the Democrats controlled the White House, House of Representatives and Senate, and the president made healthcare reform a centerpiece of his domestic agenda. However, in addition to holding a sizable majority in the House, the Democrats now number 60 in the Senate. This is the magic number necessary for a political party to invoke cloture—a procedural device that cuts off debate and prevents a filibuster. Congress also has passed a resolution allowing it to bypass regular order and consider healthcare reform in what is called the budget reconciliation process. This fallback procedural approach would allow reform legislation to pass with only a simple majority in each chamber of Congress.

Policymakers also feel more compelled to move forward this year because the ranks of the uninsured have risen from 37 million in 1994 to nearly 47 million in 2009. In addition, fewer Americans are now covered by employer-sponsored health insurance.

Many people believe that the most important difference between then and now, and what makes health reform a must, is the explosion of healthcare costs. In 1994, health spending was approximately 13 percent of gross domestic product; in 2009 it is nearly 18 percent of GDP. Medicare and Medicaid spending as a percentage of GDP also has risen from 3.5 percent to nearly 5 percent. Costs of employer-provided health benefits have doubled, the unemployment rate stood at 9.7 percent in August compared to 6.5 percent in 1994, and the budget deficit as a percentage of GDP is now over 13 percent compared to 2.9 percent in 1994.

Lastly, the Obama administration reportedly has made a number of "deals" with many key stakeholders to get them to support rather than oppose (as they did in 1994) reform efforts. Groups that have announced some kind of support for the president's efforts include the American Medical Association, American Hospital Association, America's Health Insurance Plans, and Pharmaceutical Research and Manufacturers of America.

Whether altogether these factors will be enough to achieve healthcare reform remains to be seen, but the chances for reform may be better now than at any other time in our nation's history.

Details of the Health Reform Legislation

While the final chapter on healthcare reform is not even close to being written, the details of the legislation that are emerging largely reflect the vision of President Obama and the Democrats in Congress. The list of issues affecting neurosurgeons is long, and organized neurosurgery is working to ensure that the final legislation reflects neurosurgery's position on healthcare reform (see AANS/CNS Position on Healthcare Reform, page 12).

The principal bill under consideration in the House is the America's Affordable Health Choices Act, H.R. 3200. This bill has been amended by the three House committees with jurisdiction over healthcare reform—Ways and Means, Energy and Commerce, and Education and Labor—and now must be reconciled into a final version by the speaker of the House and the House Rules Committee, which is controlled by the speaker.

In the Senate, the Health, Education, Labor and Pensions Committee, known as HELP, amended the aspects of reform under its jurisdiction, including issues related to coverage, health plan standards, quality, and public health, but not issues related to Medicare and Medicaid or financing, which are under the control of the Finance Committee. The Finance Committee has yet to release its version of the bill, and Chairman Max Baucus, a Montana Democrat, and Charles Grassley of Iowa, the senior Republican on the committee, are attempting a bipartisan approach to reform. However, the Finance Committee released three option papers in the spring that signaled the direction it is taking.

Some key reform legislation provisions of particular interest to neurosurgeons follow.

Protections and Standards for Health Plans

■ **Insurance Reforms** Legislation in the House and Senate includes a number of reforms to the health insurance marketplace. It prohibits the application of preexisting condition exclusions; requires guaranteed issue and renewal of insurance policies; ensures the adequacy of provider networks; and limits the variation in health insurance premiums.

■ **Basic Benefits** The House and Senate bills require health plans to cover certain basic benefits. Under the House bill the benefit package would be developed by the Health Benefits Advisory Committee, chaired by the U.S. Surgeon General. At least one practicing physician must be a member of this committee. The Secretary of the Department of Health and Human Services would determine the benefit package under the Senate bill.

■ **Consumer Protections** The House and Senate bills require health plans to meet certain marketing standards. They are required to establish a timely internal grievance and appeals mechanism and establish an external review process for denied claims. Under the House bill claims must be paid on a timely basis, based on Medicare's current rules.

■ **Health Choices Commissioner** The House legislation creates the Health Choices Commissioner role, which is responsible for overseeing and enforcing the health plan rules. The commissioner can collect data for the purpose of promoting healthcare quality and value and may share such data with the federal government.

Health Insurance Exchange and the Public Health Insurance Option

■ **Health Insurance Exchange** The House and Senate legislation creates a nationwide Health Insurance Exchange, or gateway, to give people the ability to choose from a variety of health plans. All individuals are eligible to purchase an exchange plan, as are those whose existing employer coverage is deemed insufficient by the federal government. Once deemed eligible to enroll, individuals would be permitted to remain in the exchange until becoming Medicare-eligible.

■ **Benefits** Under the House bill, the Health Choices Commissioner specifies the benefits to be made available through exchange-participating plans. The commissioner also determines network adequacy and establishes cost-sharing for out-of-network services. Under the Senate bill, the Secretary of HHS undertakes these functions.

■ **Public Health Insurance Option** The House bill authorizes the federal government to operate a low-cost health insurance plan. The plan is capitalized with $2 billion from the federal treasury. Physicians who participate in Medicare will be enrolled automatically as providers in the public plan, but they can opt out. For the first three years, physician reimbursement rates will be based on Medicare plus 5 percent. However, in subsequent years, the U.S. Department of Health and Human Services will have the authority to set rates—higher or lower—and physicians will have no administrative or judicial recourse to challenge payment rates. Furthermore, HHS may use "innovative payment mechanisms and policies" such as bundling, accountable care organizations, pay for performance, and the medical home, to reimburse physicians under the public plan. Medicare balanced-billing limitations apply as do Medicare's fraud and abuse rules. The Senate has not finalized its policy on the public health insurance option.

Tax Code Changes

The House bill makes a number of changes to the current tax code to achieve universal coverage. Employers have certain cost-sharing requirements for health insurance coverage, and those choosing not to provide coverage must pay an excise tax of 8 percent of average employee wages. Individuals who do not have health insurance coverage are required to pay a tax of 2.5 percent. Universal coverage also is paid for, in part, through increased income taxes on those who make over $350,000 per year as follows: $350,000–$500,000, 1 percent; $500,000–$1 million, 1.5 percent; and over $1 million, 5.4 percent.

Medicare Improvements

■ **Sustainable Growth Rate** In the House bill, the $245 billion debt accumulated under the sustainable growth rate formula is erased, and the new target growth rate system replaces the SGR. The TGR is basically identical to the SGR except that there are two expenditure targets—one for primary care and preventive as well as evaluation and management services, and one for all other services. In addition, the physician spending growth rate is slightly higher. Spending for primary care services is permitted to grow at the rate of gross domestic product plus 2 percent, and all other services are allowed a growth target of GDP plus 1 percent. The details of the Senate proposal are not known at this time, but it is expected that the Senate will neither repeal the SGR nor forgive the debt. Rather, the Finance Committee proposal is likely to include only another temporary "fix" to prevent the 22 percent physician payment cut in 2010, replacing it with a modest increase in physician reimbursement.

■ **Misvalued Codes Under the Medicare Physician Fee Schedule** The House bill requires the HHS secretary to periodically identify "misvalued" codes used under the physician fee schedule. It further calls for appropriate adjustments to the relative values associated with those codes by identifying the codes that have the fastest growth or substantial changes in practice expense, codes for new technologies, and multiple codes that frequently are billed for a single service. The bill also requires the HHS secretary to establish a process to validate relative value units under the physician fee schedule. This "shadow RUC" is in addition to the American Medical Association's Relative Value Update Committee, which currently values physician work. Similarly, the Senate Finance Committee released an options paper that demonstrates its interest in establishing an expert panel to assist the Centers for Medicare and Medicaid Services in evaluating and adjusting payment for potentially misvalued physician services.

■ **Payment for Efficient Areas** The House legislation provides a 5 percent incentive payment for physicians practicing in areas that are identified as being the most cost-efficient areas of the country. The Senate is considering options that would cut payments to those physicians in areas that are deemed cost-inefficient.

■ **Physician Quality Reporting Initiative** The House bill extends through 2012 the current 2 percent bonus paid under the Physician Quality Reporting Initiative. The Senate is considering options that would extend the bonus payment through 2010, but after that physicians would be required to participate in PQRI or have their fees cut to a maximum of 5 percent.

■ **Payment for Imaging Services** The House bill decreases reimbursement for the technical component of imaging services, which would affect those physicians who own and operate imaging equipment. The Senate is considering development and utilization of appropriateness criteria for ordering diagnostic imaging services and requiring physicians to report utilization data on designated imaging procedures, including those for low back pain, musculoskeletal

The Healthcare Reform Players

While there are many policymakers involved in the healthcare reform debate, these are the key political players in Washington, D.C.

OBAMA ADMINISTRATION

President – Barack Obama, www.whitehouse.gov

- Director of the White House Office of Health Reform – Nancy Ann DeParle, www.healthreform.gov
- Secretary of the Department of Health and Human Services – Kathleen Sebelius, www.hhs.gov

HOUSE OF REPRESENTATIVES

- Speaker of the House – Nancy Pelosi, D-Calif., http://speaker.house.gov/
- Majority Leader – Steny Hoyer, D-Md., www.majorityleader.gov/
- Minority Leader – John Boehner, R-Ohio, http://republicanleader.house.gov/

Key Committees for Healthcare Reform

- Education and Labor Committee, http://edlabor.house.gov
- Chairman – George Miller, D-Calif.
- Ranking Member – John Kline, R-Minn.

- Energy and Commerce Committee, http://energycommerce.house.gov
- Chairman – Henry Waxman, D-Calif.
- Ranking Member – Joe Barton, R-Texas
- Health Subcommittee Chairman – Frank Pallone Jr., D-N.J.
- Health Subcommittee Ranking Member – Nathan Deal, R-Ga.

- Ways and Means Committee, http://waysandmeans.house.gov
- Chairman – Charles Rangel, D-N.Y.
- Ranking Member – Dave Camp, R-Mich.
- Health Subcommittee Chairman – Pete Stark, D-Calif.
- Health Subcommittee Ranking Member – Wally Herger, R-Calif.

SENATE

- Majority Leader – Harry Reid, D-Nev., http://reid.senate.gov
- Minority Leader – Mitch McConnell, R-Ky., http://mcconnell.senate.gov

Key Committees for Healthcare Reform

- Finance Committee, http://finance.senate.gov
- Chairman – Max Baucus, D-Mont.
- Ranking Member – Chuck Grassley, R-Iowa

- Health, Education, Labor and Pensions Committee, http://help.senate.gov
- Chairman – Edward Kennedy, D-Mass. (During Sen. Kennedy's illness, Christopher Dodd, D-Conn., oversaw the HELP committee. Following Sen. Kennedy's death in August, a new chairman has not been named.)
- Ranking Member – Michael Enzi, R-Wyo.

disease and headaches. Physicians identified as ordering too many tests to treat these conditions would then face a 5 percent cut in Medicare payment.

■ **Specialty Hospitals** The House legislation prohibits physician ownership of new specialty hospitals, but grandfathers the ownership of all physician-owned hospitals existing prior to 2009. Existing hospitals are permitted to expand in a limited fashion. The Senate is likewise considering this option.

Promoting Primary Care and Coordinated Care

■ **Accountable Care Organizations** The House legislation authorizes pilot programs to develop alternative payment models based on the concept of accountable care organizations. ACOs can include groups of physicians organized around a common delivery system (e.g., a hospital), an independent practice association, a group practice or other common practice organizations. ACOs that reduce overall costs and meet certain quality targets will be financially rewarded. HHS is authorized to implement ACOs on a permanent basis if the HHS secretary determines that they result in less spending. The Senate also is likely to include a provision aimed at moving more physicians into ACOs.

■ **Medical Home** Legislation in the House and Senate expands the current medical home pilot projects under which primary care physicians are paid additional money to coordinate patient care.

President Obama has called on Congress to send him a bill to sign by October, but most observers believe that is impossible.

■ **Increased Payments to Primary Care Physicians** The House bill gives primary care physicians a 5 percent bonus payment. The Senate is considering an option that would give them a 10 percent bonus payment, of which 5 percent would be budget neutral. That is, 5 percent would be reallocated from the pool of funds paid to nonprimary-care physicians.

Quality Improvement

■ **Comparative-Effectiveness Research** The House bill establishes the Center for Comparative Effectiveness Research within the Agency for Healthcare Research and Quality to conduct, support and synthesize research that compares the effectiveness of healthcare items and services. The legislation calls for a 15-member commission to govern the center and prohibits the center and the commission from mandating coverage, reimbursement or other policies to any public or private payer. The Senate is considering establishment of an independent CER entity outside of the federal government and more protections to ensure that the research focuses on clinical effectiveness, not cost effectiveness, and is guided by expert advisory panels subject to a peer-review process, with adequate opportunity for public comment. The Senate also supports appropriate firewalls to ensure that the CER institute could not mandate coverage or reimbursement policies.

■ **Quality Measures** The House and Senate legislation requires HHS to establish national priorities for performance improvement and to develop new quality measures that reflect these priorities and assess the efficiency and resources used in providing medical care.

■ **Best Practices** The House bill creates the Center for Quality Improvement and charges it with identifying, developing, evaluating, disseminating, and implementing best practices in the delivery of healthcare services.

Physician Payments Sunshine

Both the House and Senate bills contain provisions requiring manufacturers and distributors of drugs, devices, biological products or medical supplies to report to the government any payments or other transfers of value to physicians that exceed $5.

Fraud and Abuse

The House and Senate bills contain increased penalties for Medicare fraud and abuse and give the Centers for Medicare and Medicaid Services increased

Advantages and Disadvantages of Potential Medical Liability Reforms

REFORM	ADVANTAGES	DISADVANTAGES
Disclosure-and-offer programs	• Would promote transparency regarding medical errors • Are reportedly effective at the institutional level in reducing volume and costs of lawsuits • Would reduce length and adversarial nature of claiming process • Are unlikely to be opposed by patients' groups because patients' participation would be voluntary	• Might be opposed by trial attorneys because their role would be somewhat reduced • Involve risk for healthcare providers because patients would be told of medical errors and might choose to sue • Evidence base for effectiveness in reducing costs consists solely of programs' self-reports
Administrative or specialized tribunals	• Would improve predictability of litigation outcomes through greater use of decision guidelines and enterprise • Would replace "battles of the experts" with use of neutral experts or expert adjudicators • Might promote physicians' uptake of comparative-effectiveness research and adherence to practice guidelines • Might reduce length and adversarial nature of litigation process	• Would probably be opposed by trial attorneys because their role would be reduced • Might be opposed by patients' groups because access to court would be restricted and awards might be lower • Might face fights over constitutionality • Evidence base for effectiveness in reducing costs is small
"Safe harbors" for adherence to evidence-based practice	• Would probably reduce costs if guidelines for damages awards were adopted • Would promote physicians' update of comparative-effectiveness research and practice of evidence-based care • Might streamline adjudication of some cases • Might control costs by reducing the proportion of cases in which plaintiffs prevailed	• State-level experiments showed that cases in which physicians could invoke safe harbors were infrequent • Unclear how many lawsuits would be prevented • Would not affect size of damages awards

Source: Mello MM, Brennan TA: The role of medical liability reform in federal healthcare reform. N Engl J Med 361:1–3, 2009;

The House and Senate bills available at press time did not include measures that could be characterized as meaningful liability reform. Some of the measures under discussion are analyzed above. Disclosure-and-offer programs also are known as "early disclosure" or "early offer" programs. Administrative or specialized tribunals are frequently called health courts.

authority to implement programs to prohibit waste, fraud and abuse.

Physician Workforce

The House and Senate legislation implements a number of policies to encourage more medical students to go into primary care. It allocates unused residency positions funded by Medicare to primary care and funnels graduate medical education funds to residency training programs in nonhospital settings. In addition, the bills in both the House and Senate establish medical student loan repayment programs for those in identified health professional shortage areas, including primary care and general surgery. The legislation also provides grant funding to establish pilot projects for the regionalization of trauma and emergency care.

Prevention and Wellness

The House and Senate bills also contain extensive

Continues on page 13 ▶

AANS/CNS Position on Healthcare Reform

The American Association of Neurological Surgeons and the Congress of Neurological Surgeons strongly support reforming our nation's healthcare system. The AANS and CNS believe that Congress should enact a carefully targeted set of reforms that are based on organized medicine's longstanding principles and policies. The fundamental tenets of reform include those outlined in the American Medical Association's vision of health system reform:

- Protect the sacred relationship between patients and their physicians, without interference by insurance companies or the government.
- Provide affordable health insurance for all through a choice of plans.
- Eliminate denials for preexisting conditions.
- Promote quality, prevention and wellness initiatives.
- Repeal the Medicare physician payment system that harms seniors' access to care.
- Ease the crushing weight of medical liability and insurance company bureaucracy.

In addition, the AANS and CNS are pursuing reforms that allow patients and physicians to take a more direct role in their healthcare decisions, and believe that a patient-centered healthcare system should adhere to the following principles:

- Every person in the United States should have the ability to choose his or her health plan.
- Patients should have the right to choose their doctors and to enter into agreements as to the fees for those services.
- The determination of quality medical care must be made by the profession of medicine, not by the government.

In evaluating the House bill (which at press time was the only "comprehensive" reform bill unveiled), unlike other major physician organizations, the AANS and CNS did not believe that a false promise of reform of the sustainable growth rate formula was worth the long-term detrimental effects of H.R. 3200, the America's Affordable Health Choices Act. The AANS and CNS opposed this bill because as currently constructed it goes far beyond what is necessary to fix what is broken with our healthcare system, it is riddled with provisions that are detrimental to physicians and patients and, if enacted, this legislation could amount to a complete government takeover of healthcare. The following underscores some of the reasons for the AANS/CNS course of action:

- No effective medical liability reforms are included in the bill.
- The government will determine standards of medical care by identifying, developing, evaluating, disseminating, and implementing best practices in the delivery of healthcare services.
- Ultimately, the public health insurance option will lead to a single-payer, government-run healthcare system.
- Under the public health insurance option, the government is empowered to implement rules that would restrict a patient's choice of physician and limit timely access to quality specialty care.
- The bill fails to recognize the looming workforce shortages in surgery in its requirement that all unused medical residency training slots be allocated to primary care and in its placement of the emphasis on national workforce policy on primary care to the exclusion of surgical and other specialty care.
- The bill inappropriately expands the government's involvement in determining the quality of medical care and residency training programs.
- The bill permits the government to arbitrarily reduce reimbursement for valuable, lifesaving specialty care for elderly patients, threatening to limit their treatment options.
- Patient-centered healthcare is threatened by provisions related to comparative-effectiveness research, changes to office-based imaging and limitations on development of physician-owned specialty hospitals.
- The bill potentially stifles medical innovation and valuable continuing medical education programs.

The AANS and CNS are active players in the healthcare reform debate, working closely with the Alliance of Specialty Medicine, the Surgical Coalition, Doctors for Medical Liability Reform, the Partnership to Improve Patient Care and a loose confederation of state medical associations, to achieve meaningful, but reasonable, health system reform legislation. NS

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sections focusing on wellness and prevention and create a number of new programs aimed and improving the nation's overall health.

Medical Liability Reform Left out of the Legislation

From the perspective of most physicians, the House and Senate bills cannot be considered comprehensive healthcare reform because they do not include any meaningful medical liability reform. It is well documented that medical liability reform is crucial to protecting patients' access to quality care and slowing the rising cost of healthcare. The inefficiencies of the current medical liability system, escalating and unpredictable awards, and the high cost of defending against lawsuits, even those without merit, contribute to the increase in medical liability insurance premiums, which are at or near all-time highs. As insurance becomes unaffordable or unavailable, physicians must make tough decisions, including altering or limiting their services because of liability concerns, which impedes patient access to care. In addition, the cost of the liability system is borne by everyone as defensive medicine adds billions of dollars to the cost of healthcare each year, which means higher health insurance premiums for patients.

Last October, then-candidate Barack Obama wrote in the New England Journal of Medicine that he would be "open to additional measures to curb malpractice suits and reduce the cost of malpractice insurance. We must make the practice of medicine rewarding again." The AANS, with the Congress of Neurological Surgeons and other coalition partners, are pressing Congress and President Obama to heed these words and include effective medical liability reform in the final healthcare reform bill.

Outlook for Reform

As of press time, it is hard to predict the outcome of the healthcare debate. The three House committees with jurisdiction over healthcare reform have completed their work, and a final version of the House bill likely will be drafted and voted on by the House of Representatives sometime between late September and mid-October. In the Senate the HELP Committee finalized its version of health reform legislation, but the critical Finance Committee has yet to produce a bill, although, as previously noted, this committee has done quite a bit of preliminary work on various policy options for inclusion in its version of reform legislation. Once the Finance Committee completes its work, a final bill must be drafted for consideration by the full Senate. President Obama has called on Congress to send him a bill to sign by October, but most observers believe that it is impossible to meet this deadline and that it is more realistic to look at passage just before or after Thanksgiving—assuming Congress can pass a bill at all.

Given the politics, particularly on such wedge issues as the public health insurance option, individual and employer coverage mandates and increased taxes, plus the trillion dollar price tag, odds for passing "comprehensive" reform are probably 50–50 at best. Despite these steep odds, it is virtually certain that Congress will pass some form of healthcare legislation this year. One of the key incentives to act is the looming 22 percent Medicare physician pay cut scheduled to go into effect on Jan. 1, 2010. Few members of Congress would want to go home for the December holidays without having fixed this problem. There also are other issues on which Congress and the president are likely to reach bipartisan consensus, including improvements for primary care and the implementation of some health system reforms, such as the creation of the health insurance exchange and eliminating preexisting conditions exclusions.

In the end, especially if the majority of Americans are basically happy with their current health coverage, as most polls demonstrate, any reform legislation that achieves passage is likely to fall short of the president's proposed fundamental goals. However, neurosurgeons can expect that the interest in and emphasis on physician payment and healthcare quality will intensify and that there are sure to be changes in these areas. NS

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

HEALTHCARE REFORM RESOURCES

The following Web sites offer key information on the policy options under consideration from a variety of perspectives:

- AANS Neurosurgery and Healthcare Reform, www.aans.org/legislative/aans/Neuro_HealthCareReform.asp
- American Medical Association Vision for Healthcare Reform, www.ama-assn.org/ama/pub/advocacy/health-system-reform.shtml
- Congressional Budget Office, www.cbo.gov
- Kaiser Family Foundation, http://healthreform.kff.org
- New England Journal of Medicine Health Care Reform Center, http://healthcarereform.nejm.org/?query=rthome
- U.S. Department of Health and Human Services Health Reform, www.healthreform.gov/
- U.S. House of Representatives—House Republican Conference, www.gop.gov/solutions/healthcare/resources
- U.S. House of Representatives—Office of the Majority Leader, www.majorityleader.gov/members/health_care.cfm
- U.S. Senate Finance Committee, http://finance.senate.gov/healthreform2009/home.html
- U.S. Senate Republican Congress, http://src.senate.gov/public

Medical Liability Reform

A Critical Component of Patient Access to Care

A Digest of the Statement of James R. Bean, MD, to the U.S. House of Representatives Energy and Commerce Subcommittee on Health

Thank you for giving me this opportunity to address you on the critical issue of patient access to medical care.

Access to effective medical care depends on a number of factors, but one that's too often neglected is the barrier to access created by a malfunctioning medical liability system.

I think we can safely say that there is near universal agreement among physicians, patients, policy experts, opinion leaders, and policymakers on both sides of the aisle that our current medical liability system is broken and does not best serve the needs of patients or physicians.

It is also widely recognized that we will never be able to control costs if we don't do something about the constantly overhanging fear of lawsuits that drives physicians and hospitals to increasingly practice defensive medicine.

According to Elliot Fisher of the Dartmouth Institute for Health Policy, the overuse of imaging services driven by medical liability fears was associated with an increase in total Medicare spending of more than $15 billion between 2000 and 2003. Updated figures for the findings of a 2003 HHS report on the overall costs of defensive medicine put it at an astounding $170 billion per year.

Lawsuit abuse has gotten so out-of-control that about one-third of orthopedists, obstetricians, trauma surgeons, emergency room doctors and plastic surgeons can expect to be sued in any given year. Practicing neurosurgeons can expect to be sued even more often—every two years, on average.

Most of these cases are meritless: Data for 2006 show that some 71 percent of cases are dropped or dismissed, and only 1 percent of cases result in a verdict for the plaintiff. Nevertheless, the cost is staggering, with even those cases that result in no payment to the plaintiff costing an average of $25,000 to defend against. Meanwhile, the average jury award escalated from about $347,000 in 1997 to $637,000 in 2006.

The effect on patient access to care and the physician population has been so severe that many doctors have been forced to retire early, move out of those states where the crisis is most acute, and cut back on the kinds of life-saving and life-enhancing medical procedures that expose them to greater risk of lawsuit abuse.

While the immediate shortages of physician care caused by the liability crisis are severe, the outlook for the future is even more troubling. Fears of exposure to lawsuit abuse are causing medical students and residents to avoid high-risk specialties and more litigious states.

As rates began to slow their rapid climb and level off in 2006, some were tempted to say that the crisis had passed. In fact, while rates have declined somewhat, they remain at or near historically high levels. According to the Medical Liability Monitor for 2008, more than 50 percent of rates did not change between 2007 and 2008. Some seven percent of premiums increased. While the remaining 43 percent of rates decreased, most of those decreases were small—less than 10 percent. This is after premium increases over 100 percent a year in some states without comprehensive medical liability reforms in place.

For the years 2000 to 2008:

- Premiums rose 221 percent for OB-GYNs in Philadelphia, Pa.
- Premiums rose 149 percent for general surgeons in New Jersey.
- Premiums rose 348 percent for internists in Connecticut.

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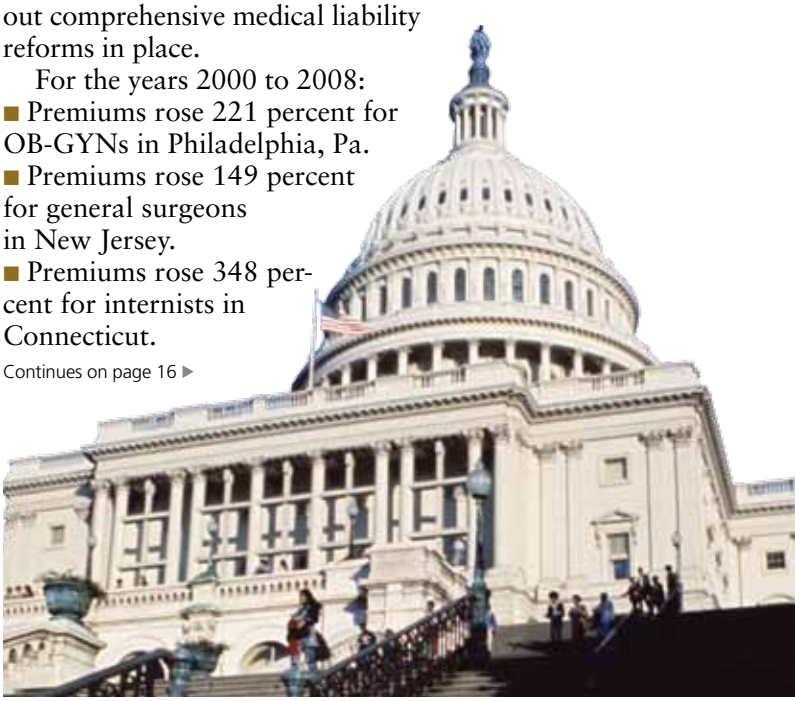

AANS ON CAPITOL HILL: A Personal Perspective

MICHAEL SCHULDER, MD

"Access to quality care must come first in overall healthcare reform. That is what it is all about, after all. And ensuring patient access to care means acting now to fix our critically ill medical liability system."

With these words James R. Bean, the 2008–2009 AANS president, concluded his testimony on March 24 before the House Energy and Commerce Subcommittee on Health. It was the last of three hearings on "Making Health Care Work for American Families."

Most hearings of Congressional committees are not heavily publicized, broadcast or webcast. They can go on seemingly forever as a series of speakers hold forth before their bored audience of elected officials and public observers. In other words, they resemble committee meetings anywhere. When Congressmen are there at all they may use the occasion to posture for their constituents. Yet this is where much of the business of governing happens, where bit by bit information is gathered and where it is possible to influence the creation of policy that affects us all.

The date of this hearing coincided with the 2nd Joint Surgical Advocacy Conference, during which surgeons from various specialties converged on Capitol Hill to advance our common interests. Conference attendees were visiting with Congressmen or staffers while the hearing was being held. For much of the hearing there was a standing-room-only crowd. Chairman Frank Pallone opened the meeting and laid out the goal of hearing the speakers propose ways to improve patient access to care.

Of the speakers, Dr. Bean was the only surgeon. Others were internists, healthcare economists, a pediatrician, and a neurologist. They addressed such issues as training more primary care physicians and paying them better, increasing the number of doctors in rural America, and eliminating disparities in healthcare delivery among different ethnic groups.

Dr. Bean spoke on the need for medical liability reform, and he was the only speaker to address this issue. He explained, with supportive evidence, that the defensive medicine that arises out of the fear of being sued costs as much as $170 billion a year. The example of Texas, which experienced a dramatic improvement in physician recruitment and access after voters passed an amendment that limited noneconomic damages in malpractice cases, was made plain. Dr. Bean noted other potential reforms, including use of an "early offer" model, under which plaintiffs are held to a higher burden of proof after rejecting a settlement that pays economic damages and lawyers' fees; specialized health courts with real authority to issue binding judgments; and the protection from legal action by practitioners who follow evidence-based guidelines.

> It is vital to state your case clearly, briefly, and forcefully.

The presentation by Dr. Bean was compelling, especially in comparison to some of the other speakers, in ways that are instructive to anyone planning to make their case with Congress. Stay focused on your message. If your goal is to discuss liability reform, don't dilute the presentation by bringing up other topics, however worthy (such as avoiding surgical fee reductions to pay for other needs in the healthcare system). Be concise—don't take 20 minutes to state your case if you can do it in half the time. Keep graphs and charts simple and easy to read. Know your audience and stay clear of jargon: for instance, after one speaker discussed the "GME" (graduate medical education) system for some time, one of the representatives made clear his confusion between medical student and resident education. And back up your assertions and your proposals with facts.

Members of Congress are busy dealing with many people with many different concerns, and with their own ambitions and lives. Even the whole of healthcare reform is only a part of the Congressional agenda, and to be sure the territory occupied by neurosurgery is a very small fraction of that. That is why it is vital to state your case clearly, briefly, and forcefully before Congress, as Dr. Bean did so well. NS

Michael Schulder, MD, is co-associate editor of the *AANS Neurosurgeon*. He is vice chair of the Department of Neurosurgery and director of the Harvey Cushing Brain Tumor Institute at the North Shore Long Island Jewish Health System, Manhassett, N.Y. The author reported no conflicts for disclosure.

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In other words, the modest improvement in rates looks more like a temporary "market correction" rather than a reversal of ongoing trends.

The continuing crisis persists despite a clear record of successful reform in some states. Perhaps the most dramatic—because its condition was so dire before reforms were enacted—is Texas.

In 2003, voters passed Proposition 12, a constitutional amendment locking in the limits on noneconomic damages passed earlier by the legislature. The first effect is that so many doctors have come flooding back into the state that its biggest problem became a backlog in the state's ability to license them.

Since medical liability reform, the six largest insurers have cut their rates, with Texas Medical Liability Trust clocking a full 31.3 percent decrease, and many other private firms have entered the market. Seventy-six counties have experienced a net gain in emergency physicians since the passage of medical liability reforms in 2003, including 39 medically underserved counties and 30 counties that are partially medically underserved.

We strongly believe that comprehensive reforms of the kind passed in Texas should be applied nationwide. At the same time, we understand the political realities of the current Congress and believe that other reform measures may help to ameliorate the current crisis in access to care and should be considered.

Among these is an "early disclosure" or "early offer" model, such as that contained in the Baucus Report. The early-offer process would allow defendants to make a financial offer covering the claimant's economic damages and attorneys' fees. If the offer were accepted, further legal action would be foreclosed. If the early offer were rejected, the claimant's burden of proof at any subsequent trial would be increased. Savings to the system come from the elimination of noneconomic damages and the lower attorney's fees that result from the speedier resolution of the case.

In a report prepared for the Department of Health and Human Services, an analysis of cases between 1988 and 2002 found that an early offers system would reduce claim costs by an average of approximately $556,000 per claim and by more than $1 million per claim for severe injuries.

The Baucus Report also called for the consideration of specialized health courts. As in so many other proposals, health courts carry a certain promise if the details are done right. If the court's findings are not binding and further appeals are not foreclosed, it will be critical that—as with early offers—the claimant's burden of proof at any subsequent trial would be increased. Otherwise, such courts will just add one more venue in which doctors can be sued, and will do little to improve the current situation.

The American Recovery and Reinvestment Act of 2009 contained $1.1 billion in funding to coordinate comparative clinical-effectiveness research. Clearly, such research may have the potential to yield useful information. An ideal outcome for doctors who practice "evidence-based medicine" would be immunity from liability lawsuits or, at a minimum, a greater increase in the burden of proof for the plaintiff.

President Obama endorsed just such an approach in the New England Journal of Medicine. Then-candidate Obama stated, "I will also support legislation dictating that if you practice care in line with your medical societies' recommendations, you cannot be sued."

We strongly support the president's announced position here, and look forward to its implementation as policy. At the same time, we believe that such guidelines should not be interpreted as a "one-size-fits-all" solution that implies negligence has occurred anytime a healthcare provider uses his or her independent judgment and expertise to offer treatments outside those boundaries.

Lastly, we strongly support legislation designed to protect healthcare professionals from being held liable when they volunteer their services to the victims of a declared disaster or national emergency.

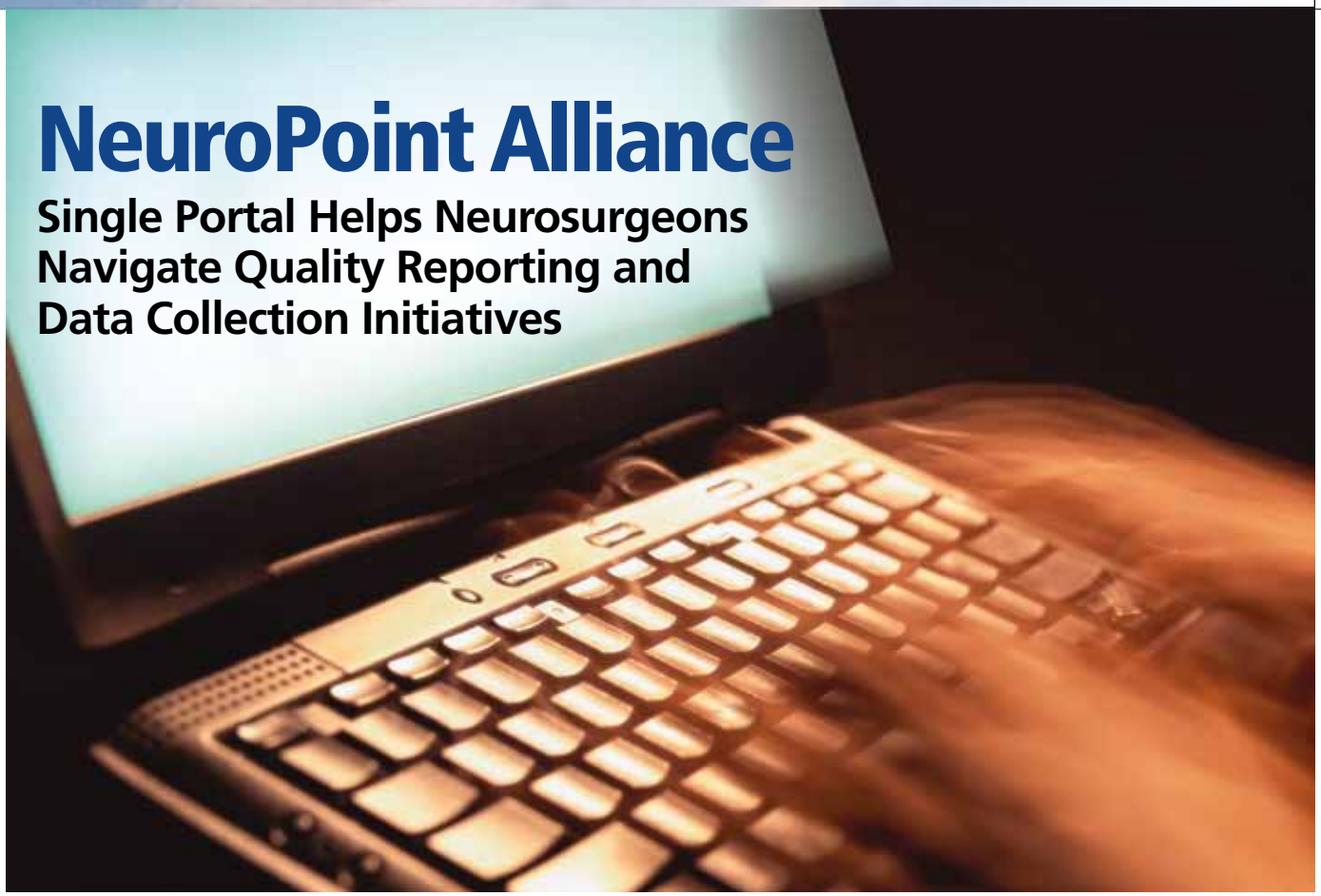
In conclusion, allow me to simply restate what we all know: The problem will not go away unless Congress takes effective action, and until it does, patient access to care will continue to be threatened by a broken medical liability system.

Our president and this Congress are dedicated to reforming our healthcare system. No other action we undertake as a nation can be so vital. But we know as well that no overall reform of our healthcare delivery system can be effective if the heart of the system—the physicians who care for patients—are constantly under siege and being driven from practice by an abusive system.

Nor will the future of reform be very bright if our best students, as we have seen, are increasingly becoming discouraged from taking up the arduous calling of medicine.

Access to quality care must come first in overall healthcare reform. That is what it is all about, after all. And ensuring patient access to care means acting now to fix our critically ill medical liability system. NS

Dr. Bean spoke on March 24 as a representative of Doctors for Medical Liability Reform, of which the AANS is a coalition member. The full text of his speech will be available in the online version of this article.



NeuroPoint Alliance

Single Portal Helps Neurosurgeons Navigate Quality Reporting and Data Collection Initiatives

MANDA J. SEAVER

While the specific content of national healthcare reform legislation and even its ultimate passage remain uncertain, several related initiatives that affect neurosurgeons have been well under way for some time. PQRI, MOC and CER are among the alphabet soup of initialisms related to healthcare quality improvement as a high-profile component of reform.

"A common feature of all healthcare reform initiatives is the focus on how to improve quality," said Robert E. Harbaugh, MD. "For surgical specialties the only reliable way to do it is to track individual outcomes."

Dr. Harbaugh is in a unique position to know. He chairs the AANS/CNS Washington Committee, which spearheads neurosurgery's advocacy efforts in the nation's capital, serves on that committee's Quality Improvement Workgroup, which he previously chaired, and is a veteran of numerous efforts within neurosurgery and related disciplines to track outcomes and improve quality. He is the director of the Penn State Institute of the Neurosciences, chair of the Penn State Department of Neurosurgery and a professor in the Department of Engineering Science and Mechanics at Penn State University. He also serves as a director of the American Board of Neurological Surgery. For many years he has tracked the surgical outcomes of his own patients with a database he developed, a practice he has found valuable in a personal quest for achieving professional excellence.

Now he is leading a new endeavor, development of a single data portal for neurosurgeons to use in meeting all of the reporting requirements associated with the various quality initiatives. The project is led by NeuroPoint Alliance Inc., a nonprofit company established by the AANS in early 2009. Dr. Harbaugh serves as the company's president, Tony Asher, MD, as secretary, and Paul McCormick, MD, as treasurer. David Adelson, MD, Kevin Cockroft, MD, Anil Nanda, MD, and Eric Woodard, MD, serve as directors.

NeuroPoint Alliance contracted with Outcome Sciences Inc. to manage data collection and to collaborate in neurosurgical outcomes research. Outcome has more than 10 years of experience in study design and management, biostatistics, opinion research and survey methodology, and Internet and wireless data collection. The AANS previously contracted with Outcome to handle recent projects such as NeuroKnowledge and the lumbar spine outcomes pilot study. Outcome principals Richard Gliklich, MD, and Nancy Dreyer, MPH, PhD, literally wrote the

manual on patient outcomes registries for the U.S. Agency for Healthcare Research and Quality.

"The timing is right for NPA," said Dr. Harbaugh. "Past efforts in this vein haven't attracted neurosurgeons' widespread participation, primarily because there weren't sufficient incentives to participate or penalties for lack of participation, but the climate has changed dramatically."

Quality Initiatives

Maintenance of Certification exemplifies a quality initiative led by neurosurgeons. The American Board of Neurological Surgery requires its diplomates holding time-limited certificates to participate in MOC "to foster excellence in patient care," according to the ABNS Web site. For these diplomates, failure to participate in MOC would mean no less than loss of certification. The ABNS site also notes that the program "provides an avenue for compliance with future state, hospital, and third party payers since these are expected to require either participation in an MOC process or periodic reexamination by state medical boards"; thus, participation in MOC offers the incentive of potentially meeting additional requirements simultaneously with fulfillment of MOC requirements. MOC participants submit operative data on key cases, and similarly applicants for initial ABNS certification submit data on operative procedures. NeuroPoint Alliance is working with the ABNS on streamlined data entry and data sharing measures that will build on the MOC process to increase the value of participation for neurosurgeons.

Another example is Medicare's Physician Quality Reporting Initiative. Physician participation in PQRI has been voluntary, but it is widely expected to be required in the near future.

"Only about 1 percent of neurosurgeons have participated in PQRI, but the bonuses for participation are becoming more attractive," Dr. Harbaugh said. "The new PQRI requirements will allow reporting of 30 consecutive cases, only two of which need to be Medicare patients. This will qualify the surgeon for a 2 percent bonus on all Medicare patients for the year. Streamlining participation through NPA tips the balance in favor of participation."

Comparative-effectiveness research, while a familiar concept, is the new kid on the block in terms of quality initiatives. The American Recovery and Reinvestment Act of 2009 included $400 million for CER "to evaluate the relative effectiveness of different healthcare services and treatment options" and "to encourage the development and use of clinical registries, clinical data networks, and other forms of electronic data to generate outcomes data." It designated the Institute of Medicine to advise how the funds should be spent, and the IOM report, Initial National Priorities for Comparative Effectiveness Research, strongly supports development of prospective registries and sets forth CEC priorities. The priority areas of particular interest to neurosurgeons are spine and imaging.

"These are the types of data requirements the NeuroPoint Alliance software is being designed to handle," said Dr. Harbaugh. "NPA will make meeting all of these requirements a painless process with tangible benefit to neurosurgeons."

Interoperability With EMRs

Another change from the past is that now many neurosurgical practices are equipped with sophisticated coding and billing software. Dr. Harbaugh noted that a key feature of the NeuroPoint Alliance software is its interoperability with doctors' electronic medical records systems.

"The interoperability built into NPA means that participation will simply require a data upload from a neurosurgeon's local institution or office EMR," said Dr. Harbaugh. "We'll be looking closely at EMRs that are widely used by neurosurgeons such as NextGen, a 'partner program' of the AANS, to ensure broad-based interoperability."

He cited the experience of Outcome Sciences as an advantage in establishing and maintaining interoperability. "Outcome not only has the infrastructure in place now, it also has a solid track record of continuous upgrades over the years," he said. "We can move forward with confidence that interoperability is a mutually paramount concern from the project's inception through the years to come."

Long-Term Viability

Besides the demonstrated need for a data portal and the caveat that it be easy for neurosurgeons to use, it is clear that the company must be viable financially to be sustainable over time. Dr. Harbaugh described how the project will generate income and promote reliable, outcomes-based research.

"We want to be the main source for clinical data," said Dr. Harbaugh. "The data itself is valuable and more so when we know, and can demonstrate, that it's truly representative of neurosurgery as well as reliably collected."

As such, the data can be generated for third parties for use in their research. NeuroPoint Alliance can ensure that the data is aggregated and that individual patients and neurosurgeons are not iden-

tified. In addition, it will be able to perform data collection and analysis for clinical trials and serve as a clinical trials organization for investigators from academia and industry.

"We would like NPA to become 'the' organization for neurosurgical trials," said Dr. Harbaugh. "A distinct advantage is that the money comes back into neurosurgery."

Recent reports in the media and in scientific journals alike have focused on inappropriate industry influence in clinical trials and bias toward publication of results favorable to pharmaceuticals or devices. Whether such conflict is real or perceived, the resulting climate change has paved the way for industry interest in a service like NPA to independently collect data, perform trials and publish results.

"We will do the trials that industry has previously done," said Dr. Harbaugh. "We can build into the contracts that all results—positive or negative—will be published. Neurosurgeons who participate in such trials will contract with NPA, not with an industry sponsor, and will be vetted for any conflict of interest. Neurosurgeons who participate in an industry-sponsored NPA trial will be paid, by NPA, for their participation."

Similarly, NeuroPoint Alliance could serve the needs of a company that must perform postmarket surveillance for a device or biological over several years or a surgeon who has a patent on a device and needs an unbiased evaluation of its merits.

True Quality Improvement

The incentives for participation, the ease of use, and a business plan that ensures sustainability might mask the underlying purpose of NeuroPoint Alliance.

"To truly measure quality, you need good data," said Dr. Harbaugh. "Through NPA neurosurgeons can drive and achieve vigorous quality improvement, and that's really what we all want for our profession and for our patients." NS

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

FOR FURTHER INFORMATION

- AANS Partner Programs, www.aans.org/membership/mem_services.asp
- CER, Comparative Effectiveness Research; Institute of Medicine Report: Initial National Priorities for Comparative Effectiveness Research, www.iom.edu
- MOC, Maintenance of Certification, www.abns.org
- Outcome Sciences Inc., www.outcome.com
- PQRI, Medicare Physician Quality Reporting Initiative, www.cms.hhs.gov/pqri
- Registries for Evaluating Patient Outcomes: A User's Guide, www.ahrq.gov (AHRQ Pub. No. 07-EHC001-1)

Massachusetts, California Test Reform

Toward Viable Universal Health Insurance

PATRICK W. McCORMICK, MD

States serve as potential innovators for redesigning healthcare delivery in the United States to achieve universal insurance coverage and to ensure sustainability of that coverage without compromising quality. The heterogeneity of the states in terms of population, employer base, uninsured population and economic vulnerability make it unlikely that a solution generalizable to the nation will emerge at the state level.

Massachusetts has the most influential program to date, and California has a failed plan. The experiences of each state offer insights into the complexities of achieving the important goal of universal healthcare coverage and funding it over time.

The Massachusetts Plan

Crafting a politically viable plan for universal healthcare coverage and having it voted into law were only the initial hurdles in healthcare delivery reform in Massachusetts. Transforming the legislative initiative into a working system in a relatively short time frame was perhaps a greater challenge. Healthcare reform implementation in Massachusetts is based on the concept of "shared responsibilities" among major stakeholders. It required a change in business practices for insurance underwriters and employers and mandated that individuals obtain healthcare coverage. Both hospitals and physicians face new cost and quality pressures. As costs escalate, the state government is working to secure funding, and most recently a state commission proposed changing from a fee-for-service payment system to bundled payments to hospitals and physicians.

Insurance Industry Responsibility Mandated healthcare insurance industry reforms include combining individual coverage rating with group coverage rating so that non-group premiums became dramatically lower than otherwise possible. Insurance products must meet the "minimal credible coverage" standards and the pay-for-performance program standards. Additional regulatory initiatives that substantially impact the market include: guaranteed issue of healthcare insurance, automatic renewability, standardization of benefits and prohibitions on caps for preexisting conditions.

The legislation requires insurers to pay assessments to the Health Safety Net Trust Fund. Insurers also must remain actively involved in disseminating pricing data so that individuals can compare health insurance products and obtain an "apples to apples" comparison of costs based on product attributes across the market.

Employer Responsibility Companies that offer their employees healthcare benefits are mandated to comply with the minimal credible coverage standards. If an employer has more than 11 full-time equivalent employees, then the employer must make a "fair and reasonable contribution" to the employees' health insurance benefits or pay a "fair share contribution" of $295 per employee annually to the Commonwealth Care Trust Fund. The fair and reasonable contribution at a minimum should represent 33 percent of the premium cost. They also must create a payroll deduction plan that allows employees to purchase health insurance with pretax dollars; employers with fewer than 11 FTEs can voluntarily offer this plan to their workers.

Employers are required to file an Employer Fair Share Health Insurance Responsibility Disclosure statement. The 2007 data suggest that 97 percent of employers that have more than 11 FTEs made fair share contributions to their employees' healthcare benefits rather than the alternative fair and reasonable contributions.

Individual Responsibility The Massachusetts law requires individuals to purchase credible insurance, provided it is affordable. Implementation of this directive led to the creation of an "affordability schedule" that relates affordability to personal income by delineating the percent of income one would be expected to pay for healthcare coverage. This percentage varies from 2 percent for an individual who is at 150 percent of the federal poverty level up to 9 percent for those at 500 percent of the federal poverty level. The schedule levels off at an individual

income equal to the state average income, the level at which health insurance is deemed affordable regardless of cost. The credibility provision of the insurance purchase guidance was implemented by establishing minimal credible coverage standards. These standards require that health insurance plans include comprehensive benefits for care, including drugs, as well as no "per-sickness" benefit maximums. Furthermore, a credible plan was defined as having a deductible no more than $2,000 per year per individual or $4,000 per year per family.

Individuals are allowed to choose healthcare coverage offered by their employers if available or through state-sponsored plans if they are eligible. In the event that neither of these conditions applies, the intention is for the individual to shop for coverage using an innovative Web site for the most appropriate plan to meet their needs. All individuals must report their insurance coverage on their annual tax returns and are penalized financially on their tax calculation if they are unable to do so.

Government Responsibility Financing for the program has required federal funding under the state's Medicaid wavier and the use of state general funds which together accounted for approximately 75 percent of the budget in 2007. In 2008 the federal funding jumped 50 percent to $889 million and is projected to increase by another 25 percent for 2009. The contribution of the state's general fund was $416 million in 2007, grew by 80 percent to $751 million for 2008 and is projected to increase another 20 percent for 2009. The top priority of government is to secure ongoing financing of the program and work to achieve cost reductions. Without sustainable funding this model of universal coverage cannot succeed.

Hospital and Physician Responsibilities Hospitals as well as insurers pay assessments to the Health Safety Net Trust Fund. Furthermore, quality and cost measures of healthcare delivery and serious reportable events related to hospitalization are to be made public. The intent is to encourage use of objective quality and safety rankings in consumer decision-making, thus generating incentives for hospitals, physicians and midlevel healthcare providers to aggressively address these matters.

Physician payment within publicly funded health insurance programs is likely to continue to experience downward pressure. With respect to private insurance plans, the impact of competitive pricing has the potential to impact physicians by concentrating the market, allowing insurers to leverage payment rates for network access. Physicians also will have increased reporting requirements under the Massachusetts pay-for-performance requirements. These disincentives could discourage some physicians from practicing in Massachusetts, especially those in specialties or practice areas that are in short supply nationally.

The California Plan

The California plan failed passage into law. It was a high-profile proposal because of the size and political makeup of the state: If universal coverage could be implemented in California then it could possibly evolve into a national program, or so conventional wisdom claimed. The analysis of the failure focuses on the cost. There was no practical way to match the revenue needed to fund universal coverage to the expense of an individual mandate in California. The sources of revenue such as taxes, employer mandate, subsidies from physicians, hospitals, and insurers would be so onerous that cooperation among stakeholders and between stakeholder groups and the government was not possible.

To make health insurance affordable, the plan called for subsidies to those with incomes less than 250 percent of the federal poverty level. Those between 250 percent and 400 percent of the federal poverty level were to receive tax credits with a goal of keeping premium cost no more than 5.5 percent of gross income. Insurers faced regulations preventing denial of coverage but not capping their prices. Employers were to cover healthcare benefits for their employees by contributing a percentage of payroll, based on a sliding scale. Hospitals and physicians were to pay fees to support the program, and new taxes such as those on cigarettes were to be levied.

Despite the similar themes to the Massachusetts plan, for which implementation was at least a viable proposition, the California plan was expected to generate dramatic revenue shortfalls in a state that had no reserves for new economic stressors. The political will to endorse the plan disappeared almost overnight when the predicted revenue shortfalls topped $1 billion within a few years of implementation.

Lessons Learned

Proposals for universal healthcare plans in other states such as Vermont, Pennsylvania and Illinois also offer insights on the process and pitfalls of crafting, implementing, paying for and sustaining universal coverage without compromising quality. The common themes of individual mandate and shared responsibility among the key stakeholders have emerged, and the political experience to date

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FACETIME

An Economist's View of Healthcare Reform

Uwe Reinhardt

The *AANS Neurosurgeon* asked Cushing orator Uwe Reinhardt, the James Madison Professor of Political Economy at Princeton University, for his insight into healthcare reform. The interview on May 4, during the 2009 AANS Annual Meeting, delves into his ideas on bias, physician payment systems, universal healthcare implementation, the insurance industry and more. The following is an edited transcript.

AANS Neurosurgeon: The headline in the issue of Business Week in our hotel rooms is What Good Are Economists Anyway? Last January you asked a related question—can economists be trusted?—in the New York Times Economix blog, and you gave an example of an economist's "flexibility," which you called siffing (structuring information felicitously). How would you say you "sif" with respect to discussion of healthcare topics?

Reinhardt: Well, that's an interesting question. First of all there was one article that went ahead—an economist's mea culpa to say that we don't see things that we should see. But on the other question, I always tell my students that the arrogant idea that we can be objective scientists and not have our life experience enter—particularly in social science; maybe if you're a physicist, I could see where that's true—is crazy. I once said in an article that I should reveal my bias, which is that I am a strong advocate for universal coverage. And I doubt that I can exclude it from what I'm about to tell you; somehow there will be a coloration. Some people called me, and they asked why I said that. I wanted to say it to warn people that I cannot be totally objective about things. It will come out in adjectives, it will come in just the way I structure a sentence.

That's one level—that our beliefs really dictate what we see. So the first thing is, we are not unbiased. In addition, of course, there are some economists who will essentially become slaves to interest groups and power.

When the Clintons wanted to have health reform, they essentially wanted an employer mandate. To a properly trained economist, that's just a payroll tax. And then the question is, what is the effect of this payroll tax on employment and on the wages people get. Economists known to be Democrats came out and said there won't be much of an employment effect. But they didn't say that wages would go way down. The Republicans came out with an article that said that there would be a huge employment effect, and they didn't say much about the wages. It broke down, not randomly, which is what you would hope would happen, it broke down by party. So, I believe we economists are by and large intensely political, deep down. Why else would it be that whenever the Congress changes hands, the Congressional Budget Office gets a different director? You never see a Republican House appoint an economist who is a Democrat to head that, or vice versa. It's been on both sides, and it's unfortunate.

AANS Neurosurgeon: In a 2003 article in Health Affairs, you said that the U.S. was unlikely ever to move toward a system that could warrant the "universal coverage" label. In the current economic and political climate, do you think universal coverage is possible?

Reinhardt: It's not a done deal. First of all, there was an article by Victor Fuchs, who's a dean of health economics, who said we won't have universal coverage unless World War III breaks out or we have a truly deep depression or we have a major pandemic. So, we are skidding toward a depression.

And then look at demand and supply. There will be a strong demand for health insurance coverage. Very strong. And I think the insurance industry will be so desperate because they're losing half their base. They're losing now thousands of people who are unemployed. The insurance industry is willing this time to play and to take considerable regulation, as long as there isn't a public plan. I think if there isn't a public health plan, Obama will extract a huge pound of flesh from them in the form of regulation. But ultimately it will work in their favor because they have trillions going through their book of business and they have a little spoon and take 5 percent.

Uwe Reinhardt delivers the Cushing oration on May 4. Professor Reinhardt spoke with the *AANS Neurosurgeon* after his address.

AANS Neurosurgeon: Let's say that would happen, that we don't have a national plan but we have insurance that's highly regulated. How would that reduce cost enough?

Reinhardt: I think by itself that wouldn't reduce cost at all because for the first few years it's business as usual. I think to really have cost control, you ultimately have to address those Wennberg variations and figure out why that is. How can you explain that the cost of the Medicare beneficiary in the last two years of life in northern New Jersey hospitals is three times what it is in the south? That's not malpractice—it's the same damn state—so there's something else going on. We do need to really understand this volume business a little bit better. What part of it really passes the cost-effectiveness test and what doesn't. And ultimately I believe that you will have an all-payer system.

You could go at that in stages. They are now talking about bundling. An organization that actually is trying to do it—Prometheus Payment Inc.—if you read their literature you say, my God is that complicated! Because what you need is teams of doctors and hospitals and pharmacists agreeing to specialize around one type of illness and quote one price for it and then be re-upped the money somehow. The political dimensions of that are horrendous. So I don't think that will happen, but you could say every hospital must price itself on the DRG, which really is just their relative value scale. But a hospital can set its own conversion factor. Actually, I proposed that for doctors. It was considered a flaky idea, but I said hey, we have the RBRVS, it's a relative-value scale, why doesn't every doctor set their own conversion factor. That way doctors can set their own fees, but it has to be the same fee schedule so that you can use electronic billing.

AANS Neurosurgeon: How is President Obama going to rationalize implementing universal healthcare without putting more money in the system? In Canada, Britain and Germany there is rationing of care.

Reinhardt: I said in testimony to Congress that this notion that life is priceless is actually romantic and silly. And this congressman from Georgia was just really angry at me and said, Who gives you the right to tell other people how to value their life. And I said that's not what I'm talking about at all. What I'm talking about is to what extent can a person who is very sick, terminally ill, demand that the rest of society buy additional life years or weeks for him at an enormous cost. Is there some understanding that, if it's collectively financed, you can't have it because there is some limit to what you do collectively? These decisions do get made. Canadians will not do a coronary bypass on a 90-year-old person. At some point when you look at the expenditure line and all the other things we need to do, I think there ought to be a dialogue.

AANS Neurosurgeon: President Obama has tied healthcare reform into any kind of economic recovery in the country. Do you believe there's a chance to reform healthcare as a way of getting economic recovery?

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Jacob Alant, MD, and Rajiv Midha, MD

Antibiotics, Burr Hole Drainage, Craniotomy Washout?

Parafalcine Subdural Empyema

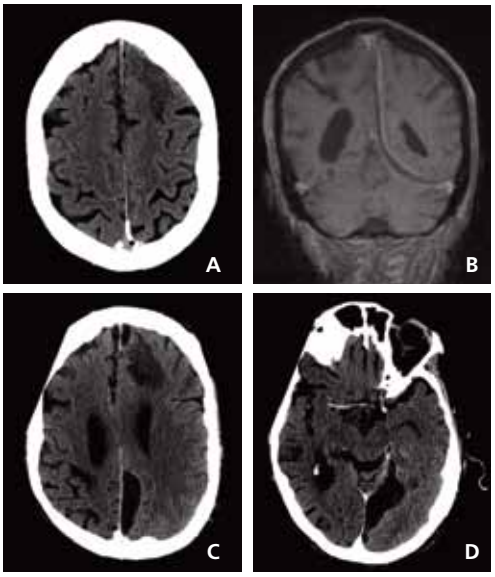
The following case presentation is intended to assess current practice habits for common neurosurgical challenges when class I evidence is not available.

The Case

An 84-year-old recently healthy and independently functioning man developed right-sided weakness and speech difficulty over a few hours, followed by a brief, generalized seizure. In the emergency department he was alert and had a low-grade fever, expressive dysphasia, leukocytosis, and right hemiparesis that affected his leg more than his arm.

A CT scan of his brain and sinuses revealed chronic pansinusitis with opacification of his frontal sinuses. It also showed intracranial air collections along his sagittal sinus on the left side, with left frontal cortical low-density areas. A CT venogram confirmed thrombosis of the anterior portion of his sagittal sinus, and MRI studies were consistent with left frontal cortical venous infarction along with a small parafalcine subdural collection. He was started on broad-spectrum intravenous antibiotics as well as anticonvulsants, and his sinuses were surgically drained under general anesthesia.

Enterobacter aerogenes was cultured from specimens taken from his sinuses, and the intravenous antibiotics were adjusted according to the sensitivity. He was anticoagulated with heparin sulphate at one day postoperatively. Over the next week his dysphasia and right arm strength gradually improved with normalization of the leukocytosis. The left-sided parafalcine collection enlarged, however, and was localized maximally to parietal and occipital areas, extending also to the left supratentorial surface.



(A) Initial unenhanced CT scan demonstrating left frontal low-density area and free parasagittal air. (B) Subsequent T1 enhanced MRI demonstrating a small parafalcine rim and increased collection. (C,D) Subsequent enhanced CT images demonstrating enlarged parafalcine and supratentorial collections.

Discussion

The optimal surgical approach to subdural empyema is a topic that remains controversial despite the publication of results from related studies of large series of patients (2, 4, 5, 6). Subdural empyema is infrequently encountered in developed countries, possibly due to earlier and more aggressive management of sinusitis and middle ear infections. The regional inflammatory reaction to subdural purulent collections tends to persist beyond the intense systemic inflammatory response, which is frequently accompanied by superficial cerebritis that may lead to profound but often reversible neurological deficits. Venous thrombosis with its sequelae is also a common complicating factor (1). Affected patients require extended courses of antibiotics and frequently show reaccumulation of these inflammatory collections, necessitating more than one surgical intervention (4).

Craniotomy provides the opportunity for extensive exposure and irrigation of the subdural space and is especially helpful for locular empyemas. The CT-scan-guided, multiple burr hole procedures favored by some (2, 3) can effectively decompress and drain the collections early in the disease with minimal effect on the frail hyperemic brain and meninges, although repeat procedures likely would be required once the general-

Responses: Subdural Hematoma in a Patient With a VP Shunt

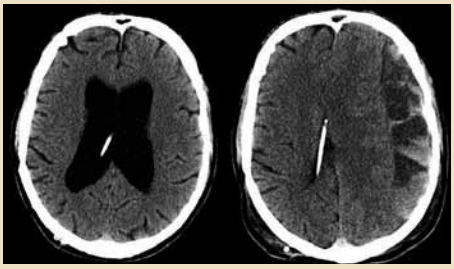
This case was published in the *AANS Neurosurgeon* 17(4):46–47, 2009. Review the case at www.aansneurosurgeon.org.

THE CASE

Subdural Hematoma in a Patient With a VP Shunt: What's Your Diagnosis, Treatment Plan?

SURVEY RESULTS SUMMARY

This case generated a lot of interest with more than 100 neurosurgeons and residents participating in the survey. An equal number of respondents (40 percent each) stated that the diagnosis was acute-on-chronic subdural hematoma and membranous/trabecular chronic subdural hematoma, while 15 percent said that a subacute subdural hematoma was the likely diagnosis. Most (80 percent) would have offered immediate surgical intervention directed at the hematoma. A delayed hematoma evacuation (12 percent) and initial intervention on the ventriculoperitoneal shunt alone (8 percent) were less popular choices. Respondents preferred craniotomy over either one or two burr holes, but notwithstanding the type of cranial opening, the majority (more than 65 percent) would have left a drain in place. Over three quarters of the respondents would have adjusted the valve to a higher setting, while a minority (15 percent) would have tied off the shunt or left it alone (5 percent). Based on the survey responses and the narrative comments, the overall consensus that emerged was to do both a subdural hematoma drainage procedure (with a subdural drain left in place) and to increase the valve setting. This recommendation is reflected in the narrative comments reproduced below.



Baseline CT before emergency presentation (left) and CT at emergency presentation (right).

–Rajiv Midha, MD, Calgary, Canada

CASE COMMENTARY

Sometimes even the highest pressure setting, on current adjustable shunts, is insufficient to allow the subdural hematoma to resolve. There are higher pressure adjustable shunts in development that will help. As with most conditions there are several methods of management that will correct the condition, but we don't know the single most effective method yet. I hope the studies will be done so true evidence-based medicine can be practiced, instead of edict from the powers that be based on their unproven conclusions.

–Hunt Bobo, MD, Tupelo, Miss.

I would not leave the drain for more than 24 hours. I would repeat the CT scan and then increase the shunt pressure in a step-wise manner and monitor the result with CT.

–Kambiz Kamian, MD, Ancaster, Canada

ized inflammatory responses have subsided. Some proponents of craniotomy for subdural empyema advise against craniotomy for parafalcine collections (5). Little has been published on the optimal surgical strategy for this less common scenario. An interhemispheric approach in the presence of a swollen hyperemic brain with inflammatory adhesions and phlebitic vessels is no small undertaking in an acutely ill patient. With stereotactic techniques, these collections alternatively and effectively can be managed like deep-seated abscesses with transcortical drainage (7). When antibiotic treatment fails, the merits of each case should be weighed and a logical approach selected to evacuate these pernicious collections promptly and sufficiently. NS

Jacob Alant, MD, is a clinical fellow, and **Rajiv Midha, MD**, is professor and deputy head of the Department of Clinical Neurosciences at the University of Calgary in Canada. Dr. Midha is a member of the AANS Neurosurgeon Editorial Board. The authors reported no conflicts for disclosure.

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7. Stephanov S, Sidani AH, Amacker JJ: Interhemispheric subdural empyema—case report. Swiss Surg 7:229–232, 2001

Take the Gray Matters Survey

- Web address: www.aansneurosurgeon.org
- Select the Surveys link in the *AANS Neurosurgeon* toolbar.
- Take the survey Parafalcine Subdural Empyema.

A synopsis of all results will be published in an upcoming issue.

William T. Couldwell, MD

CAHPS Patient Survey to Gauge Neurosurgeon Communication Skills

ABMS Adopts New MOC Requirements

Four measures intended to further enhance physician qualifications assessed through the Maintenance of Certification program were adopted by the American Board of Medical Specialties on March 16. They are:

1. Documentation that physicians are meeting requirements for self-assessment and continued medical education.

2. Evidence of participation every two to five years in practice-based assessment and quality improvement.

3. Completion of a patient safety self-assessment program at least once during each MOC cycle.

4. Assessment of communication skills for all physicians with direct patient care.

The communication skills assessment requirement will become a core tenet of physician assessment and MOC. A pilot study involving two or more ABMS member boards will take place in 2009 with reporting to physicians for reflection in 2010. Physicians who provide direct patient care must participate in communication skills assessments starting with patients in 2010 and with peers in 2012, while those without direct patient contact are exempt; other exemptions may be defined during the 2009 pilot year. Public reporting is expected to begin in 2011.

Physician communication skills will be evaluated using surveys approved by the ABMS Committee on Oversight and Monitoring of Maintenance of Certification. One such survey was developed by the Consumer Assessment of Healthcare Providers and Systems program, known as CAHPS, which is funded and administered by the U.S. Agency for Healthcare Research and Quality; AHRQ works closely with a consortium of public and private organizations.

The CAHPS patient survey initially is expected to be a validated, standardized instrument consisting of approximately seven items. For the first three years, it will be a paper survey distributed in-office and returned by mail.

ABMS member boards, including the American Board of Neurological Surgery, may offer the survey as a part of the Practice Performance Assessment requirement. Each member board has been encouraged to add CAHPS supplemental items to the communication core or additional tools for assessing professionalism and communication skills to fulfill requirements for other MOC components.

The implementation of the CAHPS survey as proposed by the ABMS provoked controversy among its member boards. The primary opposition to the survey instrument relates to the implementation of a "one size fits all" survey for different specialties, which may not be reflective of the practice of some specialists. The American Board of Neurological Surgery is actively involved in these discussions and will be integrally involved in the development of a neurosurgery-specific survey instrument.

The four new MOC requirements grew out of the ABMS' 2008–2011 Enhanced Public Trust Initiative, which is intended to increase commitment to quality healthcare and transparency in physician accountability. The ABMS Committee on Oversight and Monitoring of Maintenance of Certification outlined this uniform set of standards and set timelines for officially adopting the new MOC program elements.

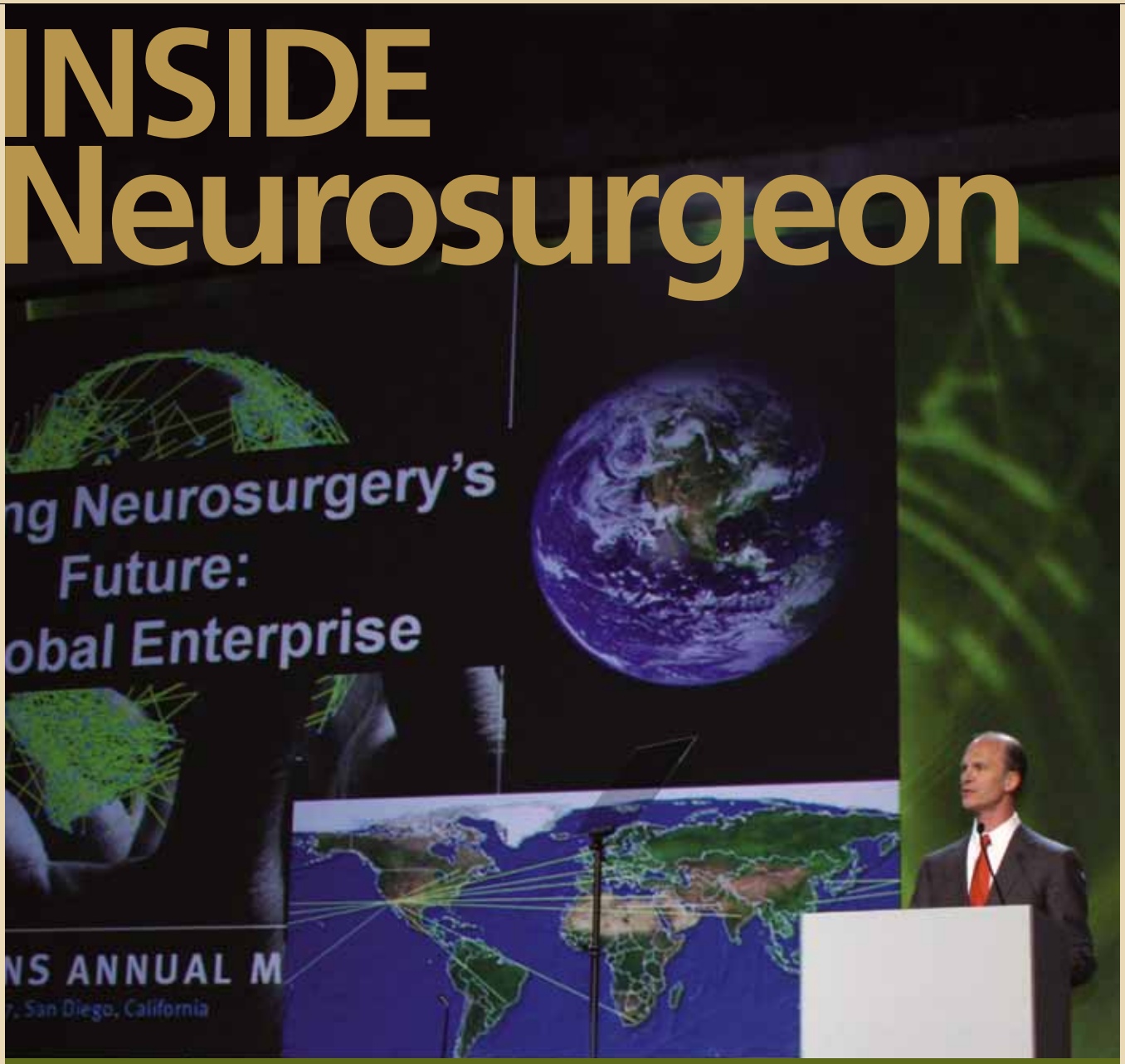
The ABMS is the medical organization that oversees physician certification in the United States. It assists its 24 member boards in their efforts to develop and implement educational and professional standards for the evaluation and certification of physician specialists. The ABMS is recognized by the key healthcare credentialing accreditation entities as a primary equivalent source of board-certification data for medical specialists. NS

Willam T. Couldwell, MD, PhD, is a director of the American Board of Neurological Surgery, and an ABNS delegate to and voting member of the American Board of Medical Specialties. Dr. Couldwell is editor of the *AANS Neurosurgeon* and secretary of the AANS. The author reported no conflicts for disclosure.

FOR FURTHER INFORMATION

- American Board of Medical Specialties, www.abms.org
- American Board of Neurological Surgery, www.abns.org
- Consumer Assessment of Healthcare Providers and Systems, www.cahps.ahrq.gov

INSIDE Neurosurgeon



News of Neurosurgical Organizations

Inside Neurosurgeon focuses on the news and views of the AANS and other neurosurgical organizations. A sampling of this section's content is listed at right. The *AANS Neurosurgeon* invites submissions of news briefs and bylined articles to Inside Neurosurgeon. Instructions for all types of submissions are accessible by selecting the link in the Write for AANS Neurosurgeon section of www.aansneurosurgeon.org.

James R. Bean, MD, the 2008–2009 AANS president, opens the 77th AANS Annual Meeting in San Diego.

AANS President's Perspective

Healthcare Reform and the SGR "Fix": Addiction and Cure

Troy Tippett, MD

For the past several years organized medicine has found itself addicted to the annual attempt to fix Medicare's sustainable growth rate formula. The SGR is defined in the business world as a measure of how much a firm can grow without borrowing money. After the firm has passed this rate, it must borrow funds to grow. However, this is not what the SGR means when it comes to Medicare.

The Balanced Budget Act of 1997 defined the SGR for Medicare, and henceforward it has been the bane of physicians participating in the program. The SGR is basically a formula for establishing an annual expenditure target for physician payments. If actual spending is less than the target, then payments are raised for physicians in the next year. Conversely, if the target is exceeded, then Medicare payments for physicians are reduced the following year. All seemed well with this formula until 2002, when physicians received a 5.4 percent cut in Medicare reimbursement with significant cuts to come. So began the long, sad saga of the annual "stop-the-SGR-cut" physician pilgrimage to Capitol Hill.

The scenario plays out as follows: At the beginning of each year, physicians begin asking Congress to "pretty please" not allow the upcoming automatic SGR cut to take place. This game continues through the spring, summer and into the fall, when finally, sometime in December, a deal is struck and Congress swoops in and prevents the cuts. Rather than getting a cost-of-living raise, however, physicians settle for a payment freeze or at most a 1 percent to 2 percent increase in Medicare reimbursement. As our overhead continues to rise at 2 percent to 4 percent, we are actually accepting a net payment loss each year. To add insult to injury, this reprieve is not really a reprieve at all because Congress never actually pays for these annual payment increases, instead using an accounting gimmick to prevent the immediate cut while at the same time deferring full payback to a future year. Thus, the SGR debt continues to accumulate and compound over time, leaving physicians with cuts in excess of 40 percent over the next decade and a huge budgetary hole to plug.

But wait! It gets even worse because in order for medicine to win these great "victories," we typically also receive a bag full of "goodies" (for example, pay for performance, public reporting of physician quality performance data, mandatory electronic prescribing with penalties for those doctors who fail to comply, expansion of the medical home and limits on ordering diagnostic imaging) that we did not want and would never have accepted without the SGR extortion. Members of Congress love this game because it keeps physicians beholden to them and contributing money to their never ending congressional reelection campaigns. Even a country boy like me can see why Congress would never want the SGR to go away entirely.

So we fast-forward to the healthcare reform debate of 2009. The House of Representatives bill, the America's Affordable Health Choices Act of 2009, H.R. 3200, supposedly would fix the SGR and eliminate our "debt" for approximately $245 billion. Unfortunately, this legislation doesn't really fix the problem; it

merely eliminates the "debt" and restarts the same old debt clock.

The bill was released in its entirety—1,018 pages—on a Tuesday afternoon, and some leading medical organizations had fully endorsed the bill by the next day! The two principal reasons cited to me by the leadership of some of these groups were that by signing on they would have a "seat at the table" and that since the healthcare reform bill being drafted in the Senate does not eliminate the SGR debt and fix the formula for the long term, medicine had to back all of H.R. 3200 to help ensure that the bill's SGR provisions prevail in the final healthcare reform bill.

The AANS did not support this approach. With the Congress of Neurological Surgeons we had suggested that rather than providing an unqualified endorsement of this legislation, a more measured course would have been to delineate what physicians liked (a short list) and disliked (a much longer list) about the bill.

So, in my opinion, medicine needs to stop playing this annual game where Congress hangs us all over the cliff, merely to pull us back at the last minute with another handful of IOUs. It is time physicians stand up and say, "You can't do this to me any more!" Congress can't afford to allow a 22 percent cut in Medicare payments this next year or any other year, not because they love us, but because they know they would lose their jobs if that happened. Unless we collectively say NO!, this addiction will continue and we, and worst of all our patients, will be the losers. NS

Troy Tippett, MD, the 2009–2010 AANS president, can be reached at: (850) 444-7050, office; (850) 418-1679, cell. He is medical director of the Neurosurgical Group in Pensacola, Fla. The author reported no conflicts for disclosure.

FOR FURTHER INFORMATION

- AANS/CNS 2009 Legislative Agenda, page 36
- Healthcare Reform: What Neurosurgeons Need to Know, page 6
- Peck B: Is the sun setting on Medicare? Grim future, few bright spots without Part B "fixes." AANS Bulletin 13(3):6–13, 2004, www.aansneurosurgeon.org, article ID 25327

AANS MEMBER BENEFIT

TDC Dividend Credit Renewed

Professional Liability Insurance Premiums Reduced Through Member Program

Eligible AANS members insured by The Doctors Company through the AANS Professional Liability Insurance Program receive a dividend credit providing a premium reduction of 5 percent effective with policy renewals on or after July 1, 2009. The program offers an additional 5 percent premium discount for AANS members with favorable claims histories, as well as patient safety programs tailored to the needs of AANS members, claims settlement with the consent of the insured physician, and many other benefits. TDC also offers AANS members the Tribute Plan, which at retirement rewards physicians for their dedication to providing superior patient care. The AANS Professional Liability Committee oversees the AANS Professional Liability Insurance Program. Additional information about the program is available at www.aans.org/membership/practice/doctors.asp. NS

AANS AWARDS

First AANS Leadership Scholarships Awarded

The AANS selected three Active members as the first AANS Leadership Scholarship awardees, concluding a competitive application process. The scholarship recipients are

- Michael Y. Oh, MD, Allegheny General Hospital, Pittsburgh, Pa.;
- G. Edward Vates, MD, PhD, University of Rochester Medical Center, Rochester, N.Y.; and
- Edie Zusman, MD, FACS, Sutter Medical Center, Sacramento, Calif.

The scholarships cover registration fees and other expenses related to their attendance at the Surgeons as Leaders course held by the American College of Surgeons in June 2009. The scholarship recipients are providing evaluations of their experience and recommendations on expansion of leadership development programs. NS

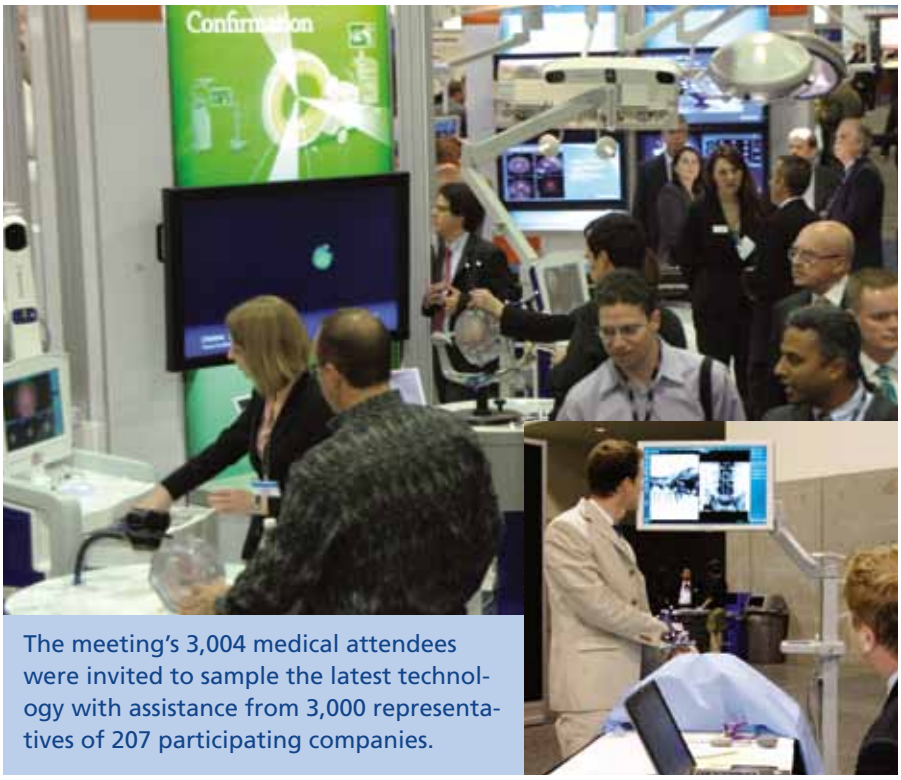
AANS ANNUAL MEETING

77th Event's a Global Enterprise

Scientific Inquiry Helps Shape Neurosurgery's Future

"This is going to be a great week," predicted James R. Bean, the 2009–2010 AANS president, as he officially opened the 2009 AANS Annual Meeting in San Diego on Monday, May 4, and began the first plenary session.

His confidence no doubt was buoyed by the successful presentation over the weekend of 41 practical clinics, including four clinics conducted by "international masters." The Sunday evening opening reception on terraces overlooking San Diego Bay warmly embraced the congenial climate, offering attendees festivity and relaxation with friends and colleagues.



The meeting's 3,004 medical attendees were invited to sample the latest technology with assistance from 3,000 representatives of 207 participating companies.

The 77th AANS Annual Meeting attracted 3,004 medical attendees and 3,000 representatives of 207 exhibiting companies, an excellent turnout in spite of widespread swine flu concerns just before the event. The scientific program featured 17 general scientific sessions, three plenary sessions, an international symposium, 73 breakfast seminars, and 189 oral abstract presentations. The 584 electronic posters were viewable at computer banks throughout the convention center and now are accessible on the AANS Web site. Depending on the extent of their participation, meeting attendees could receive up to 43.25 continuing medical education credits, including 18 credits for the general sessions.

The 14 scientific abstracts selected by the Public Relations Committee for release to media generated significant interest during the meeting, even though swine flu dominated the headlines. Through media coverage the scientific research presented at the meeting garnered more than 1 billion impressions—the number of times someone read, saw or heard the information. The media showed particular interest in the research on cortical brain stimulation for major depression. The resulting 135 articles on this one topic generated 401 million impressions in U.S. media outlets. On a global scale, the research was covered in Australia, Canada, Iran, Lebanon, Mexico, Pakistan, the United Arab Emirates, and the United Kingdom.

To mark 2009 National Neurosurgery Awareness Week, held concurrently with the AANS meeting, Dr. Bean narrated a 60-second public service announcement on head and neck injury prevention that aired on 450 radio stations. His recommendations to wear an approved, properly-fitting helmet, especially for all wheeled sports, and to follow simple safety tips to help prevent injuries, reached 1.9 million listeners across the country, representing 82 percent of the entire United States. Twenty of the top 25 radio markets in the nation aired the announcement,

James R. Bean, MD

including top 10 stations in New York, Chicago, San Francisco, Houston, Atlanta, Philadelphia, the District of Columbia, and Boston.

Landmark events held in conjunction with the 77th AANS Annual Meeting included the 25th anniversary of the AANS/CNS Section on Tumors and the 20th anniversary of Women in Neurosurgery.

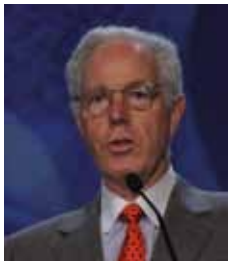
A World of Ideas

Is professionalism still a relevant concern? Whether professionalism can or should survive in a modern commercial healthcare market is the question central to Dr. Bean's presidential address, "A New Professional Paradigm: Whence and Whither." He recounted the development of professionalism during the revolution in medical education at the turn of the 20th century and the transformation in medicine some 50 years ago from powerful guild to competitive business. He described the inherent tension in a system in which physicians "serve under ethical standards but reward and pay are under entrepreneurial standards." Recognizing that "some business interests are incompatible with professionalism," Dr. Bean stated that "commercial interest must not distort our commitment to patient welfare. It's our duty to recognize and remedy any conflict." He encouraged doctors' participation in shaping healthcare policy but warned that "lobbying must be based on principles, not expediency and not on partisan politics." The complete presidential address, including the introduction of Dr. Bean by A. John Popp, MD, can be heard on the AANS Web site.

Edward R. Laws, MD

In keeping with the meeting theme, Edward R. Laws, MD, focused the Richard C. Schneider lecture on the topic "Global Neurosurgery." Dr. Laws estimated the number of neurosurgeons worldwide at about 30,000, although he noted that the actual number is far from certain. He recounted the great influence of travel and intellectual exchange on early 20th century neurosurgeons, a tradition that continues. However, licensing and visa requirements and duty hour restrictions are among several obstacles which he said impede such exchange today. He particularly emphasized the importance of neurosurgery in the public health plans of developing countries. After describing the role of organizations like the World Federation of Neurosurgical Societies and the Foundation for International Education in Neurological Surgery in providing resources and training, he encouraged international participation. "I'm really confident that you're going to find this of value," said Dr. Laws. "I'm also confident that generosity of spirit … is going to help us lead the way."

Economist Uwe E. Reinhardt, PhD, presented a particularly timely Cushing oration in which he provided perspective on the recession, delved into the economics of healthcare delivery as it exists currently, and offered insight into the Obama administration's vision for healthcare reform. He asserted that the U.S. would have experienced a "deep recession even if the banks had behaved" had American consumers started saving, and he explained the underlying reasons for his view. Regarding the cost of healthcare, he predicted that, assuming no change in the current system, healthcare spending would grow 2.5 percent faster than the gross domestic product, taking the U.S. from about 16 percent of GDP on healthcare spending to 40 percent in 2050. On a relatively positive note, he said that from 2001 to 2006 the healthcare sector was the biggest creator of jobs, but he termed the practice of financing healthcare through employment the "ugly side of spending" because the "wage base is chewed up by healthcare." Regarding the uninsured, he said, "We are already rationing healthcare in America—no doubt about that." As one possibility for increasing access to healthcare, he mentioned reference pricing, whereby "society covers the basics and the patient pays the difference for more [care]."After outlining the Obama plan, he illustrated one of the reasons for the intractability associated with healthcare reform with a closing anecdote: When he suggested that his military friend become the Health Department secretary "as that's the only way we'll get the public piece of the plan given [the special interest lobbyists on] K Street,"



Uwe E. Reinhardt, PhD

John C. Reed, MD

Geraldine Brooks

Continues ▶

▶ Continued

he said his friend responded, "Baghdad was one thing, but K Street, no thanks."

In the Theodore Kurze lecture, John C. Reed, MD, addressed "Advancing Discovery and Translational Research Through Chemical Genomics." He reviewed the mechanisms of cell death and discussed the association between stress in the endoplasmic reticulum and disease. With a better understanding of these mechanisms, new therapeutic interventions are emerging, he said.

Sails, a setting sun and San Diego accompanied the Neurosurgical Jazz Quintet (above) at the opening reception.

Author Geraldine Brooks delivered the Louise Eisenhardt lecture on the topic "Making Fiction From Fact: The Art of Historical Fiction." Calling journalism the "first rough draft of history" and the historical novelist a "filler of voids," she discussed how she generates ideas for her books and fleshes out characters such as the neurosurgeon in "People of the Book." "That's what gets me up in the morning, thinking my way into other lives," she said.

In the Hunt-Wilson lecture, Evan Y. Snyder, MD, PhD, offered a glimpse of the therapies that current stem cell research may present for neurosurgeons very soon. "I'm influencing what you're going to be doing in the next one to two years, and I'll try to emphasize those things," he said. He described stem cell biology as a "continuum from those that do not yet know their address to those that do and are functioning" and spoke of the "unimagined plasticity" of stem cells. He sees neurosurgeons using stem cells to "reinvoke developmental programs" in neural repair strategies and to deliver a drug that inhibits tumor growth, among other therapies. A caveat for creating stem cell therapies is to "harness and exploit what a stem cell wants to do rather than try to make it do what we want it to do," he said.

As the Rhoton Family lecturer, Adm. William Joseph Fallon offered an overview of military hotspots the world over. He concentrated on the Middle East and neighboring countries—Iran, Iraq, Afghanistan, Pakistan, India, Palestine, Israel—but his "tour" also stopped in Russia, North Korea, Singapore and China. "None of the problems in any of these areas will be solved by military action alone," he said. He named education, medical help, and understanding among the things which, together with military underpinnings, will deliver the best outcomes. "Work-

A Program in Your Pocket

Something will be missing from the 2010 AANS Annual Meeting in Philadelphia: that ubiquitous shoulder bag containing the familiar inch-thick meeting program and myriad printed materials related to the meeting experience.

"We're going to go paperless," said Troy Tippett, the 2009–2010 AANS president, announcing in San Diego the most visible of the initiatives being planned for the 2010 meeting.

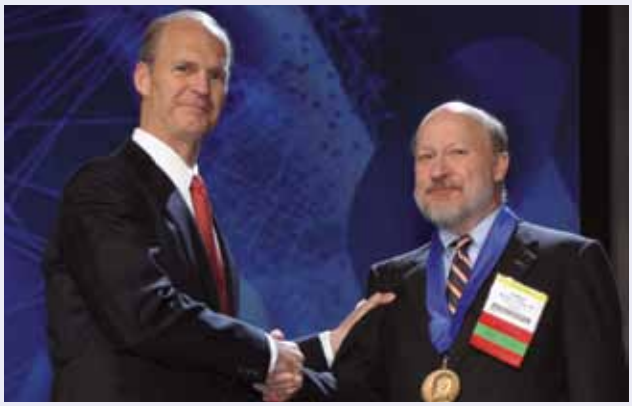
At registration medical attendees instead will receive the iPod Touch, a pocket-sized electronic device that will provide them with interactive access to the meeting program and all other aspects of the meeting. The 2010 meeting is expected to be the first paperless meeting in the history of the AANS, and the first paperless scientific meeting of a North American medical association.

Those who also desire a paper version of the program will be able to download and print it from the AANS Web site, where additional information about the 2010 meeting is available.

2009 Annual Meeting Awardees

CUSHING MEDAL

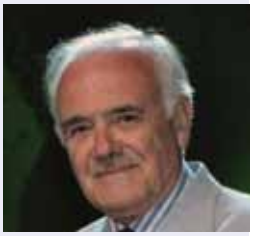
Honored as an individual who has set the standard for integrity in research, Edward R. Oldfield, MD, (right) is the 2009 Cushing medalist. Dr. Oldfield credited the generosity of others, and particularly the encouragement from and the example set by William Brooks, MD, for encouraging his participation in research. "I wanted to see patients and had never spent a day of my life in a scientific lab, had never written a paper," he said. "Bill introduced me to the NIH, which I had never heard of, against his own self-interest. That selfless and generous act altered the path of my career in ways unimaginable at the time." James R. Bean, the 2008–2009 AANS president, presented the award.



DISTINGUISHED SERVICE AWARD

Rhonda Hassenbusch accepted the Distinguished Service Award, presented by Dr. Bean, on behalf of her husband, Samuel Hassenbusch, MD, PhD. Dr. Hassenbusch was posthumously honored for his long and impressive legacy of service to neurosurgery. She described how her husband, after being diagnosed four years earlier with glioblastoma multiforme, decided to take a positive course, participating in research as a subject and influencing patients. "Thank you for honoring him," she said. "Sam would be so proud."

HUMANITARIAN AWARD



Armando Basso, MD, of Buenos Aires, Argentina, was recognized as a force in furthering the core mission of the World Federation of Neurosurgical Societies, among other accomplishments. "I accept this award if I can share it with all those who participate in the activities of the WFNS," said Dr. Basso.

INTERNATIONAL LIFETIME AWARD

Albino P. Bricolo, MD, of Verona, Italy, was honored at the international reception for his lifetime of accomplishment. Also at the reception, Sang-Hyung Lee, MD, PhD (not pictured), of Seoul, South Korea, received a plaque commemorating his receipt of the International Travel Scholarship award.

BEST INTERNATIONAL ABSTRACT

Jizong Zhao of Beijing, China, was honored for his paper, Surgical Treatment for Hypertensive Intracerebral Hemorrhage in 2,464 Patients: A Multicenter, Single-Blind, Controlled Trial in China Mainland. He presented the paper in the first plenary session.

ing with others in the world is the solution—sounds pretty simple, doesn't it," he said.

These and additional lectures as well as scientific presentations in plenary sessions, scientific sessions and section sessions can be purchased from the AANS Online Marketplace either for online access or on DVD-ROM. The complete series offers up to 10 continuing medical education credits.

Next May: The First Paperless AANS Annual Meeting

The 78th AANS Annual Meeting will be held May 1–5, 2010, in Philadelphia, Pa. The abstract center is open through Sept. 25. Registration information will be available on the AANS Web site this fall.

RELATED INFORMATION

- AANS Governance, page 34
- Archived Presentations, http://marketplace.aans.org
- Electronic Posters, http://aans.eventmediaonline.com/index.php
- Neurosurgery Awareness Week PSA, www.neurosurgerytoday.org/what/public.asp#
- Photographs, www.lagniappestudio.com/aans2009
- Presidential Address, www.aans.org/annual/address/aans09.html
- Press Kit, www.neurosurgerytoday.org/media/press.asp

AANS GOVERNANCE

Annual Business Meeting

2009–2010 AANS Officers Elected

The AANS officers for 2009–2010 were elected at the annual business meeting on May 4 in San Diego and took office at the conclusion of the 2009 AANS Annual Meeting. Officers comprising the Executive Committee are: Troy M. Tippett, MD, president; James T. Rutka, MD, president-elect; Christopher M. Loftus, MD, vice president; William T. Couldwell, MD, secretary; Paul C. McCormick, MD, treasurer; and James R. Bean, MD, past president. While brief biographical information follows, more extensive information is available in the Library on the AANS Web site. The entire Board of Directors is listed on page 28.

Troy M. Tippett, MD
President

Troy M. Tippett, MD, FACS, a member of the AANS since 1979, just completed his term as president-elect. He previously served a one-year term as vice president and a three-year term as chair of the AANS/CNS Washington Committee. He is a member of the AANS Bylaws, Executive, Finance, and Strategic Planning committees and the Neurosurgery Research and Education Foundation Executive Council. He serves on the NeurosurgeryPAC Board of Directors and was chair of its predecessor, AANSPAC. Dr. Tippett received the Distinguished Service Award from the AANS in 2003 and from the Congress of Neurological Surgeons in 2008. Since 1976 he has been in private practice and a member of the Neurosurgical Group in Pensacola, Fla., and he has served as medical director of this practice since 1988. He completed his undergraduate work at the University of Missouri, Columbia, and received his medical degree in 1969 from the University of Tennessee Center for the Health Sciences in Memphis. He completed his internship at City of Memphis Hospitals and his neurosurgical residency at the University of Tennessee Center for the Health Sciences in Memphis. He was president of the Florida Medical Association from 2005 to 2006.

Troy Tippett, MD (left), the 2009–2010 AANS president, presents James R. Bean, MD, with the flag of Kentucky, which was displayed at the AANS Executive Office during Dr. Bean's presidency.

James T. Rutka, MD
President-Elect

James T. Rutka, MD, PhD, FRCS, a member of the AANS since 1983, has served on the AANS Board of Directors since 2003. He just completed a three-year term as secretary of the AANS. He served as chair of the 2006 AANS Annual Meeting and chair of the Scientific Program Committee in 2005. He is a member of the AANS Executive, Finance, and Nominating committees, the Neurosurgery Research and Education Foundation Executive Council and the NeurosurgeryPAC Board of Directors, as well as chair of the Strategic Planning Committee. Dr. Rutka is director of the Arthur and Sonia Labatt Brain Tumour Research Centre in Toronto. In 1999 he was appointed chair of the Division of Neurosurgery at the University of Toronto and became the Dan Family Chair. He received his medical degree from Queen's University Medical School in 1981. He earned his doctorate from the Graduate School of Experimental Pathology at the University of California at San Francisco in 1987 before returning to the University of Toronto to complete his neurosurgical residency.

Christopher M. Loftus, MD
Vice President

Christopher M. Loftus, MD, FACS, a member of the AANS since 1988, is vice president for a one-year term. He is a chair of the International Outreach Committee and a member of the Bylaws, Executive, Finance,

and Strategic Planning committees as well as the NeurosurgeryPAC Board of Directors. He was a director-at-large from 2004 to 2007. He is professor and chair of the Department of Neurosurgery, Temple University School of Medicine in Philadelphia, where he also is assistant dean for International Affiliations. Previously he was chair of the Department of Neurosurgery at the University of Oklahoma Health Sciences Center in Oklahoma City, Okla. Dr. Loftus received his medical degree from SUNY-Downstate Medical Center in 1979. He completed his residency in neurosurgery at The Neurological Institute of New York, Columbia-Presbyterian Medical Center in 1984. Dr. Loftus is second vice president (North America) of the World Federation of Neurological Societies and serves on the editorial boards of several peer-reviewed journals.

William T. Couldwell, MD
Secretary

William T. Couldwell, MD, PhD, is beginning the first year of a three-year term as secretary. A member of the AANS since 1995, he has served on the AANS Board of Directors since 2006 as a director-at-large. He is chair of both the AANS Neurosurgeon Editorial Board and the Development Committee. He is a member of the Executive, Finance and Strategic Planning committees, the NeurosurgeryPAC Board of Directors and the Neurosurgery Research and Education Foundation Executive Council. He is professor and Joseph J. Yager Chair of the Department of Neurological Surgery at the University of Utah School of Medicine in Salt Lake City. Dr. Couldwell received his medical degree in 1984 from McGill University in Montreal and completed his doctorate in neuroimmunology/molecular biology at McGill in 1991. He is chair of the Oral Examinations Committee of the American Board of Neurological Surgery and vice president of the Society of Neurological Surgeons. He serves on the editorial boards of several peer-reviewed journals and was chair of the Journal of Neurosurgery editorial board from 2007 to 2008.

Paul C. McCormick, MD
Treasurer

Paul C. McCormick, MD, a member of the AANS since 1992, is serving the last year of a three-year term as treasurer. He is chair of the Finance Committee as well as a member of the Development, Executive, Information Technology, Maintenance of Certification and Strategic Planning committees and the NeurosurgeryPAC Board of Directors. He was chair of the 2001 AANS Annual Meeting, chair of the Scientific Program Committee in 2000, and chair of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves from 2000 to 2001. Dr. McCormick has been on the staff at Columbia-Presbyterian Medical Center since 1990. In July 2006, he was appointed the Herbert and Linda Gallen Professor of Clinical Neurological Surgery at Columbia University, College of Physicians and Surgeons. He received his undergraduate degree from Columbia University College in 1978 and his medical degree from Columbia University College of Physicians and Surgeons in 1982. He completed his neurosurgical residency at the Neurological Institute of New York in 1989. He serves on the editorial boards of five peer-reviewed journals.

James R. Bean, MD
Past President

James R. Bean, MD, a member of the AANS since 1988, served for three years as AANS treasurer before becoming president-elect and then president. He was editor of the *AANS Bulletin* (now the *AANS Neurosurgeon)* from 2003 to 2005. He has served as chair of the AANS/CNS Council of State Neurosurgical Societies (1997–1999), the AANS/CNS Coding and Reimbursement Committee (2000–2002), and the AANS/CNS Washington Committee (2002–2004). He is a member of the Executive, Finance, and Strategic Planning committees, the Neurosurgery Research and Education Foundation Executive Council and the NeurosurgeryPAC Board of Directors, and he is chair of the Nominating Committee. Dr. Bean completed his undergraduate work at the University of Virginia in 1970 and received his medical degree from the Tulane University School of Medicine in 1973. He completed his neurosurgical residency at the University of Kentucky Medical Center in 1980. Dr. Bean is president of Neurosurgical Associates, PSC, in Lexington, Ky. NS

FOR FURTHER INFORMATION

- AANS Officer Press Releases, www.neurosurgerytoday.org/media/pressReleases.aspx?TopicId=59&Year=2009

WASHINGTON WATCH

AANS/CNS 2009 Legislative Agenda

Neurosurgery Seeks to Influence Healthcare Reform

The 2009 legislative agenda for organized neurosurgery in the U.S. is summarized below. Additional information is available from Adrienne Roberts, aroberts@neurosurgery.org, in the AANS/CNS Washington office.

■ **Safeguard Patient Access to Specialty Care in Healthcare Reform** Healthcare reform must ensure that every patient has access to appropriate quality care, by the appropriate doctor, at the appropriate time. The AANS and the CNS believe it is imperative that all healthcare 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 that they get the best possible and timely care available. Ambulatory surgery centers 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 the CNS urge Congress to protect patient access to these services.

■ **Alleviate the Medical Liability Crisis** The AANS and the CNS support legislation to provide commonsense, proven, comprehensive medical liability reform. Federal legislation that is modeled after the laws in California or Texas and that includes reasonable limits on noneconomic damages represents the "gold standard," but other solutions also should be explored. A first step would be to apply the Federal Tort Claims Act to services mandated by the Emergency Medical Treatment and Labor Act, which puts neurosurgeons at an increased liability risk. Congress also should study alternatives to civil litigation, including: early disclosure and compensation offer; the administrative determination of compensation model; and health courts.

■ **Champion an Improved Medicare Physician Reimbursement System** Physicians face a 22 percent cut in Medicare reimbursement on Jan. 1, 2010. The AANS and the 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. Congress needs to replace Medicare's sustainable growth rate formula with a new system that is 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.

■ **Advance Measures to Improve Neurosurgical Workforce** While neurosurgery continues to fill its residency slots, the federally funded positions have not kept pace with the growth in the U.S. population, particularly the Medicare population. Training a healthcare workforce to successfully serve the nation's needs requires stable, long-term, predictable funding. The AANS and the CNS support preserving Medicare funding for graduate medical education 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, six years.

■ **Improve Trauma Systems and Access to Neurosurgical Emergency Care** The AANS and the CNS are committed to working with Congress to develop and implement creative approaches that improve the emergency care system, including implementation of a system to regionalize emergency care. As recommended by the Institute of Medicine in its 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 statewide trauma care systems.

■ **Enhance Medicare and Other Quality Improvement Programs** While Congress has taken the first steps toward implementing informed quality improvement programs, the current Physician Quality Improvement Program needs to be drastically reworked to better incorporate a system for clinical data collection and reporting. The AANS and the CNS support a pay-for-participation system under which data regarding physician quality is collected in a nonpunitive 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.

■ **Increase Funding for Healthcare Research** Organized neurosurgery embraces the need for well-designed clinical comparative-effectiveness research, which can be a valuable tool to "learn what works in healthcare" 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 the CNS urge Congress to provide adequate funding for these vital public health research programs.

■ **Preserve Quality Resident Training and Safe Patient Care** The AANS and the CNS believe that further reductions in resident work hours will have a negative impact on resident training and education. In addition, adherence to strict work hours can lead to medical errors attributable to more frequent patient handoffs and loss of continuity of care. The Accreditation Council for Graduate Medical Education is effectively addressing these issues, and legislation on this matter is therefore unnecessary. NS

AANS GOVERNANCE

Two Members Censured

Two members of the AANS lost their appeals to the membership at the AANS business meeting. Censure had been recommended in both cases by the Professional Conduct Committee and had been approved by the Board of Directors; the censures are now final.

Harold D. Segal, MD, of San Luis Obispo, Calif., was censured for failing to represent the full range of the neurosurgical standard of care and for representing his own personal opinions and preferences as being the accepted neurosurgical standard of care during a medical malpractice lawsuit deposition.

George R. Cybulski, MD, of Chicago, Ill., was censured for failing to represent the full range of the neurosurgical standard of care, for failing to review all of the relevant medical records and imaging studies, and for testifying as an advocate for one side rather than as an impartial educator to the court during deposition and during trial in a medical malpractice lawsuit. NS

FOR FURTHER INFORMATION

- AANS Bylaws, www.aans.org/about/membership/aans_bylaws072707.pdf
- Rules for Neurosurgical Medical/Legal Expert Opinion Services, www.aans.org/about/membership/Rulesfor_LegalExpertOpinionServices.pdf

ADVANCING NEURORESEARCH

2009 Research and Medical Student Fellows

Support of Neurosurgical Research Remains a Priority

JULIE A. QUATTROCCHI

While fluctuations in the economy can result in unexpected and disappointing declines in funding for medical research, the Neurosurgery Research and Education Foundation remains firm in its resolve to provide a private, nongovernmental source of funding for research training in the neurosciences. In spite of the current poor economic climate, 25 researchers and medical students are receiving funding through the NREF in 2009 to study at the following institutions.

2009 NREF Research Fellows

The generous support by individuals, groups, practices and corporate partners enables the NREF to fulfill its commitment to support young scientists and their work, reducing reliance on capricious funding through government agencies.

The NREF has continued to receive high-quality applications, but many deserving research proposals remain unfunded. The continued support of the neurosurgical community is needed to provide talented young investigators the financial resources that they need.

This year, the NREF's Scientific Advisory Committee reviewed 42 applications and bestowed research grant and clinician award funding to 10 applicants. The NREF extends its congratulations to the 2009 awardees and looks forward to reviewing the results of these exciting projects.

ACS/AANS-NREF Faculty Career Development Award
Daniel Lim, MD, PhD, University of California, San Francisco
Project: Gene therapy based induction of neurogenesis from adult human neural precursor cells

NREF/American Academy of Neurological Surgery Research Fellow
Demitre Serletis, MD, University of Toronto
Project: The neurodynamical complexity underlying noise in the brain: implications for seizure detection and prediction

NREF/Biomet Microfixation Research Fellow
Michael Sughrue, MD, University of California, San Francisco
Project: The role of complement activation in glioma proliferation

NREF/Cerebrovascular Section Research Fellow
Michael T. Koltz, MD, University of Maryland
Project: SURI-regulated NC(Ca-ATP) channel, a novel therapeutic target in perinatal hypoxia and germinal matrix hemorrhage

NREF/Codman Research Fellow
Shahid Nimjee, MD, Duke University
Project: Antidote-controlled platelet inhibition using RNA aptamer technology

NREF/DePuy Spine Research Fellow
Zeguang Ren, MD, University of Rochester
Project: Antagonism of ephrinB2 in astrocytes to promote spinal cord injury repair in mice

NREF/Medtronic Research Fellow
Joel Bauman, MD, University of Pennsylvania
Project: Motion preservation and dynamic stabilization in port-laminectomy cervical spine: facet joint kinematics and pressures in a human cadaveric model

NREF/Porex Surgical Research Fellow
Kaveh Asadi-Moghaddam, MD, Ohio State University
Project: The role of microRNA-128 in glioma stem cell self-renewal

NREF/Spine and Peripheral Nerves Section Research Fellow
Raqeeb Haque, MD, Columbia-Presbyterian Medical Center
Project: A novel approach for convection enhanced delivery of nerve growth factors in a peripheral nerve bridge model to bypass spinal cord injury

Young Clinician Investigator Award
Michael Lim, MD, Johns Hopkins University
Project: Immune characterization of STAT3 in GBM

2009 Medical Student Summer Research Fellows

Fifteen Medical Student Summer Research Fellowships are awarded annually by the AANS through the NREF. The 2009 fellows, each awarded $2,500, are: Jeffrey Barry, University of California, San Francisco; Yevgeniya Byekova, University of Alabama; Ian Crain, Barrow Neurological Institute; Nihar Gala, University Hospital, UMDNJ; Jasmine Hasselback, University of Ottawa; Francis Huttinger, University of Cincinnati; Cynthia Loder, University of Virginia; Vivek Mehta, Johns Hopkins University; Thomas Noh, Duke University Medical Center; Brenton

IT'S A HIT!

Kids and Brain Tumor Research Win

2009 Annual Neurosurgery Charity Softball Tournament

RICARDO J. KOMOTAR, MD

Twenty teams battled it out June 6 in New York's Central Park at the 6th Annual Neurosurgery Charity Softball Tournament. The benefit for pediatric brain tumor research was hosted by Columbia University.

The Columbia University team took home the J. Lawrence Pool Memorial Trophy as champions of the 2009 Annual Neurosurgery Charity Softball Tournament.

The tournament has rapidly evolved into a national event. This year's competition included teams from the departments of neurosurgery at Albert Einstein College of Medicine, Barrow Neurological Institute, Columbia University, Cornell University, Dartmouth College, Duke University, Emory University, Harvard University, Mt. Sinai School of Medicine, New York University, Northwestern University, Penn State University, Johns Hopkins University, Thomas Jefferson University, University of Alabama, University of Florida, University of Pennsylvania, and Yale University.

Columbia claimed its third overall championship by defeating Emory in the finals, while Harvard and the University of Pennsylvania put on strong showings to tie for third place. Last year Harvard won the tournament in convincing fashion, and in 2006 and 2007 the University of Pennsylvania held the title. Columbia also took home the trophy in 2004 and 2005.

For the sixth consecutive year, George M. Steinbrenner III and the New York Yankees sponsored the tournament. This year's event featured a celebrity team led by captains Andy Samberg of "Saturday Night Live," actors Jason Schwartzman and Danny Masterson, and musician Julian Casablancas of The Strokes. Jeremy Schaap of ESPN threw out the honorary first pitch. Mayor Michael Bloomberg also supported the event by declaring "Neurosurgery Charity Softball Tournament Day" in New York.

Planning for the 7th Annual Neurosurgery Charity Softball Tournament in June 2010 already has begun. The event holds the potential for an expanded field of teams from across the country as well as increased support for pediatric brain tumor research. NS

Ricardo J. Komotar, MD, chief resident at Columbia University, is founder of the Columbia University Pediatric Brain Tumor Research Fund, www.ColumbiaKidsNeuro.org. The author reported no conflicts for disclosure.

Pennicooke, Harvard Medical School; Sandhya Ravichandran, University of Utah; Adam Shen, University of Pennsylvania; Shelly Wang, University of Toronto; Teresa Wojtasiewicz, Columbia University; and Grettel Zamora-Berridi, University of Michigan.

The AANS established the Medical Student Summer Research Fellowship in 2007. The fellowship is open to medical students in the United States or Canada who have completed one or two years of medical school and wish to spend a summer working in a neurosurgical laboratory. The student must be mentored by a neurosurgical investigator who is a member of the AANS and will serve as sponsor to the student. Applications for the 2010 awards are available at www.aans.org/otheresearch and are due Feb. 1, 2010. NS

Julie A. Quattrocchi is NREF development coordinator.

CALENDAR/COURSES

AANS COURSES

Goodman Oral Board Preparation: Neurosurgery Review by Case Management

Nov. 8–10, 2009
Houston, Texas

Weekend Update: Interactive Review of Clinical Neurosurgery by Case Management

Feb. 20–21, 2010
Scottsdale, Ariz.

For information or to register, call (888) 566-AANS or visit www.aans.org/education.

Additional listings are available in the comprehensive and interactive Meetings Calendar at www.aans.org/education/meetings.aspx. Submit new items through the online calendar.

September

10–12
1st ESMINT Congress
Sept. 10–12, 2009, Nice, France
www.esmint-nice09.com

11–12
10th Annual Interventional Neuroradiology Symposium 2009
Sept. 11–12, 2009, Toronto, Canada
www.cepd.utoronto.ca

16–19
1st ISHCSF Annual Meeting: Hydrocephalus 2009
Sept. 16–19, 2009, Baltimore, Md.
www.hydrocephalus2009.com

October

9–12
2009 Annual Meeting of the Society for Minimally Invasive Spine Surgery
Oct. 9–12, 2009, Las Vegas, Nev.
www.smiss.org

11–15
37th Annual Meeting of the International Society for Pediatric Neurosurgery
Oct. 11–15, 2009, Los Angeles, Calif.
www.ispn2009.org

24–29
Congress of Neurological Surgeons 2009 Annual Meeting
Oct. 24–29, 2009, New Orleans, La.
www.cns.org

November

4–7
American Academy of Neurological Surgery 2009 Annual Meeting
Nov. 4–7, 2009, Palm Beach, Fla.
www.americanacademyns.org

10–13
ABNS Oral Board Exam
Nov. 10–13, 2009, Houston, Texas
www.abns.org

20–21
3rd International Congress on Early Onset Scoliosis and Growing Spine
Nov. 20–21, 2009, Istanbul, Turkey
www.growingspine.org

December

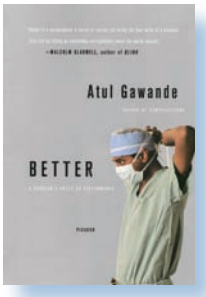
1–4
2009 Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery
Dec. 1–4, 2009, Boston, Mass.
www.pedsneurosurgery.org/meeting.asp

10–12
Indications and Controversies of Minimally Invasive Spine Surgery: Hands-on Symposium
Dec. 10–12, 2009, New York, N.Y.
www.cornellneurosurgery.org

Gary D. VanderArk, MD

Doctors Aren't Perfect

Toward Better Healthcare



Better: A Surgeon's Notes on Performance. Atul Gawande. 2007, Picador, New York, N.Y., 273 pp.

Atul Gawande, a general surgeon at the Brigham and Women's Hospital in Boston, wrote a bestseller in 2002 entitled "Complications." His follow-up book, "Better," is another volume of essays and stories about healthcare quality. Quality in healthcare is the darling of reform gurus because there is widespread agreement that the easiest way to save money in healthcare is to improve quality.

Gawande is a gentle and compelling storyteller who has the wonderful gift of grabbing your attention and not letting go. His argument for quality improvement is divided into three sections: Diligence, Doing Right, and Ingenuity. These sections describe important components for success in medicine, and he fleshes them out with anecdotes. "Diligence" is illustrated by stories of hand-washing, care of wounded soldiers from Iraq and Afghanistan, and the effort to eradicate polio. He defines "doing right" as doing the right thing at the right time for the right patient, actions that, he suggests, often are countered by avarice, arrogance, insecurity and misunderstanding. He holds that "ingenuity" depends more on character than intelligence, and his stories confirm it.

I love the way Gawande frames the problem: "Our decisions and omissions are therefore moral in nature," he writes. "We face daunting expectations. In medicine, our task is to cope with illness and to enable every human being to lead a life as long and free of frailty as science will allow." And then he concludes, "It's not only the stakes but also the complexity of performance in medicine that makes it so interesting and, at the same time, so unsettling."

I particularly appreciate his afterword, in which he makes a plea for each of us to become a "positive deviant."

He asks that we all do these five simple things:

1. Ask an unscripted question. When interacting with patients, find out something trivial that will make your understanding of the patient better.

2. Don't complain. The practice of medicine can be boring and trying but don't let it get you down. Don't let yourself become part of the "ain't it awful" crowd.

3. Count something. Never lose your intent to be a scientist. Document your observations.

4. Write something. Put something on paper or on your computer that you can share.

5. Change. Be an early adapter. Be willing to recognize the inadequacies in what you do and seek out solutions.

Read this book as a reminder: We are not perfect, but we can get better. NS

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▶ Continued from page 21

demonstrates that proposals for funding these plans can easily disrupt the cooperation among stakeholders that is needed for success.

The compelling rationale for achieving universal healthcare coverage in the U.S. will continue to foster innovations in this area, but it is clear that funding is the lynchpin. The state experience shows dependence on a government's ability to raise sufficient revenue to cover increasing costs. In the case of Massachusetts, costs are growing at 20 percent to 25 percent per year. NS

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Practicing Neurosurgery in

Canada

The "Global Experience" analysis of neurosurgeons' practice environments around the world continues with neurosurgery in Canada. A table of comparative data is available from all of the articles in the series at www.aansneurosurgeon.org.

J. MAX FINDLAY, MD

The development of neurosurgery in Canada has closely paralleled that of the neighboring United States. Indeed, K.G. McKenzie, Canada's first neurosurgeon and a student of Harvey Cushing, developed the country's first neurosurgical unit at the University of Toronto, and soon thereafter American-born Wilder Penfield founded the Montreal Neurological Institute at McGill University. Graduates of these two programs established neurosurgical units and training programs associated with major teaching hospitals across Canada. Today most Canadian-trained neurosurgeons are members of not only the Canadian Neurosurgical Society but also of American organizations such as the AANS, the Congress of Neurological Surgeons and the American College of Surgeons.

Neurosurgeons and neurosurgical units in Canada provide all aspects of general and highly subspecialized care, including endovascular surgery, radiosurgery, complex spinal instrumentations and image-guided surgery.

Neurosurgical specialty training is under the purview of the Royal College of Physicians and Surgeons of Canada. The Royal College's committees establish training guidelines and requirements, and accredit programs with regular internal and external reviews; its examination boards administer the annual written and oral certification examinations.

Since 1996 residency program accreditation and the examination processes have been transformed by physician competency guidelines known as the CanMEDS core competencies. In this model, specialist education and training, evaluation, examination and certification must ensure competency in the "core competency" roles of collaborator, communicator, manager, professional, scholar and health advocate; each of these roles contributes to the central role of medical expert.

The 14 training programs in Canada altogether accept approximately 20 new residents yearly. Clinical training requirements include 42 months of neurosurgery as part of either a six- or seven-year training program; these requirements are identical to those set by the American Board of Neurological Surgery in the United States. Residents in Canada are prohibited from taking in-hospital call more frequently than an average of one day in four, and the typical neurosurgical resident works between 80 and 100 hours per week.

Royal College examination and certification in neurosurgery are open to graduates of both Canadian and American training programs that fulfill the training requirements. Two days of written examinations followed by a one-day, six-station oral examination comprise the certification process.

Approximately 210 practicing neurosurgeons work in a total of 25 centers, the majority of which are affiliated with a university and university hospital. Given the large geographic size of Canada and its relatively small population of roughly 33.4 million, most neurosurgery is concentrated in regional centers that serve the surrounding population as well as a larger catchment area. Patients in remote and rural communities often travel long distances to receive neurosurgical care. Based on a 2004 analysis, across Canada there is a ratio of approximately 1 neurosurgeon to 160,000 people. However, there is some variability in the ratio among the provinces, with ranges from 1 neurosurgeon per 140,000 people, to 1 neurosurgeon per 200,000.

The Canada Health Act of 1984 essentially mandates that all Canadians may freely and equally access all necessary medical care in each of the provinces in Canada. The funding of the hospital sector is via provincial governments and their health ministries. This system ensures that all Canadian citizens have access to medical care, including neurosurgical

services, without direct payment from patients, who see neither a hospital bill nor an invoice for services provided from the physician's office.

Neurosurgical practice in Canada cannot in any circumstance be described as "private," since all practices are conducted in government-funded hospitals and clinics. Some neurosurgeons continue to bill their provincial health plan through a "fee-for-service" system, but the majority are now on fixed annual incomes, sometimes referred to as "alternate reimbursement programs." Under these arrangements, neurosurgical services—clinical and emergency services as well as certain teaching, training, academic and administrative services—are supplied by a group of neurosurgeons to a region or territory for a fixed annual sum negotiated with the provincial government and its health ministry. The specifics of these programs vary from center to center. However, several surgical centers in Canada have found loopholes in existing government legislation to allow elective spinal surgery outside of the public system, where the remuneration is from third-party payers such as provincial workers' compensation boards.

In general, the provision of emergency and urgent neurosurgical care is adequate, although in some densely populated jurisdictions such as southern Ontario and southern British Columbia capacity limitations related largely to limited intensive care unit beds have resulted in some patients with emergent neurosurgical conditions being sent to bordering American states for treatment. Given the fixed number of neurosurgeons and the limited capacity for clinic and operating room time, waiting times for elective neurosurgery (such as degenerative spine conditions) can be considerable. In a recent survey of its membership, the Canadian Neurosurgical Society determined that 95 percent of its members strongly believed that more neurosurgeons and neurosurgical services were required in their regions, and the same percentage felt that there were insufficient resources (salaries, hospital beds, operating room time, office space, nursing, etc.) available to accommodate more neurosurgeons.

Overall, the Canadian public is relatively content with the medical delivery system provided within Canada while at the same time persistently anxious about access to medical care for nonemergent, life-threatening medical conditions. Year after year and in poll after poll a leading concern and priority for Canadians is the safeguarding of their publicly funded healthcare system. There is little public interest in the creation of a "two-tiered system" which would allow citizens faster access to private medical care on a "pay your own way" basis outside of the public health system.

Canada is not an overly litigious society, and frivolous lawsuits launched against physicians and surgeons are rare. The malpractice fees in Canada for neurosurgeons vary from approximately $10,000 to $40,000 a year, depending on the region of the country.

One distinct advantage of a single-tier health system is that the costs of medical bureaucracy are greatly decreased. In other words, most of the healthcare expenditures go toward patient care (global budgets for hospitals, pharmaceuticals and physician compensation) rather than to bureaucratic overhead. As such, the gross domestic product in Canada devoted to healthcare remains under 10 percent.

The main challenge with the single-tier, publicly funded system is that all healthcare capacity is controlled by the government. Therefore, while many neurosurgical units and regions require an increase in the number of neurosurgeons, the limited facilities provided by the government preclude such an increase. The resulting limited number of neurosurgeons remains the biggest single challenge overall for neurosurgical care in Canada. NS

FIGURE 1

Health Expenditure by Gross Domestic Product: Comparison of 5 Developed Countries 1965–2005

Country	1965	1975	1985	1995	2005
Canada	5.9	7.0	8.1	9.0	9.8
Germany	n/a*	8.4	8.8	10.1	10.7
Japan	4.4	5.7	6.7	6.9	n/a
United Kingdom	4.1	5.5	5.9	7.0	8.3
United States	5.6	7.9	10.0	13.3	15.3

Source: Health, United States 2008
www.cdc.gov/nchs/data/hus/hus08.pdf
*n/a, not available

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A Neurosurgeon's Perspective

Considering Cracks in the Canadian Healthcare System

There was a time when the percentage of gross domestic product spent on healthcare was roughly the same in the U.S. and Canada. In 1965, the year Medicare was signed into law in the U.S., Canada spent 5.9 percent of its GDP on healthcare compared to 5.6 percent spent in the U.S. By 1985, the year after Canada mandated health coverage for its residents, the health GDP percentage had risen to 8.1 in Canada and 10.0 in the U.S. Over the next 20 years the health GDP expenditure in Canada increased by 21 percent, while in the U.S. it ballooned by a comparatively alarming 53 percent. Judging by healthcare GDP expenditure alone, Canada's health system is quite appealing. Add the benefit of universal health coverage, and its appeal grows. But no system can be perfect. Two widely recognized concerns Canadians have with their health system are overburdened emergency rooms and long waiting periods for patient access to care. The *AANS Neurosurgeon* asked James T. Rutka, a neurosurgeon practicing in Canada, to comment on these issues with respect to neurosurgery. Dr. Rutka is chair of the Neurosurgery Expert Panel, a group that advises the Ontario Ministry of Health and Long-Term Care, as well as chair of the division of neurosurgery at the University of Toronto.

"Twenty years ago, the system was more in balance," said Dr. Rutka. "By and large, Canadians identify themselves with the health plan, but most recognize that it has limitations and problems."

The "health plan" is the Canada Health Act, which since 1984 has mandated health coverage for Canada's residents. Healthcare delivery is controlled by the individual health ministries in Canada's 10 provinces and three territories. The "13 interlocking provincial and territorial health insurance plans … share certain common features and basic standards of coverage" that are based on the "underlying Canadian values of equity and solidarity," according to Health Canada, the federal government's department for healthcare administration.

Dr. Rutka acknowledged that Canada's health system is experiencing problems both in delivery of emergency neurosurgical care and in long wait times for degenerative and elective spinal cases, but his primary concern was for the patients in need of acute neurosurgical care.

"What happens to a patient with a broken neck when all the neurosurgical beds are filled?" he asked.

Photo: Toronto Convention and Visitors Association

He explained the problem as a function of supply and demand. Through the health ministries, the government controls supply, which in this case translates to surgical capacity, intensive care and step-down unit beds, and nurses. While Canada is the second largest country in the world by area, most of its population is concentrated along the border with the U.S. In areas where there is increased demand brought on by population growth, a particular issue along the U.S. border in Ontario and British Columbia, the capacity of the system to deal with the increased volume of patients has remained static.

As in the U.S., when a hospital does not have the capacity to treat an emergency neurosurgical case the patient is transferred to a facility that does. In 2007–2008, 48 percent of urgent neurosurgical cases were transferred, according to a report on neurosurgical care in Ontario released earlier this year by the Neurosurgery Expert Panel, which Dr. Rutka chairs. In 6 percent of those cases, the patients were transferred to U.S. hospitals.

"We have contracts with U.S. facilities to look after these patients," said Dr. Rutka. "The government permits transfer and provides appropriate funding to the U.S. hospitals which care for these patients." He identified Buffalo and Detroit as the sites of most neurosurgical transfers to the U.S. from Ontario.

In Ontario, the patient transfers are handled through the government-funded CritiCall service. A physician or physician designate can call the service. CritiCall staff utilizes a standard protocol for communication of patient information and connects the caller with the "most appropriate consultant." When a patient transfer is indicated, the service handles all of the details. One of CritiCall's goals is to "keep patients as close to home as possible."

Long wait times are comparatively less of a concern for neurosurgeons and their patients, according to Dr. Rutka.

"Neurosurgery just entered the wait time strategy a year ago and is well within the guidelines that are being recommended," he said. "However, degenerative and elective spine cases will undoubtedly fall outside the expected wait times," and patients wait longer for these types of procedures.

The "wait time strategy" is the 10-year plan initiated in 2004 to reduce wait times throughout Canada for specific diagnostic and surgical procedures.

Dr. Rutka said that the majority of Canadians are generally satisfied with their healthcare system. "Most are proud that there is universal coverage, and for more than 90 percent of cases the system works fairly well," he said. "However, there are clinical situations which arise that show the system is strained and needs improvement, especially for patients requiring acute neurosurgical care."

When asked if some privatization is in the future for Canadians, Dr. Rutka noted that there is a minimal amount of privatization now and said it would not surprise him if Canada heads toward a blend of privatization and public healthcare. Some provinces, such as Quebec and British Columbia, already have private clinics that primarily offer diagnostic services, although their legality under the Canada Health Act has been questioned by some. In 2008 Nova Scotia announced a year-long demonstration project whereby the province would pay for minor orthopedic surgeries performed at a private clinic as part of its strategy to reduce wait times.

U.S. Neurosurgeons Near the Ontario Border Care for Canadians

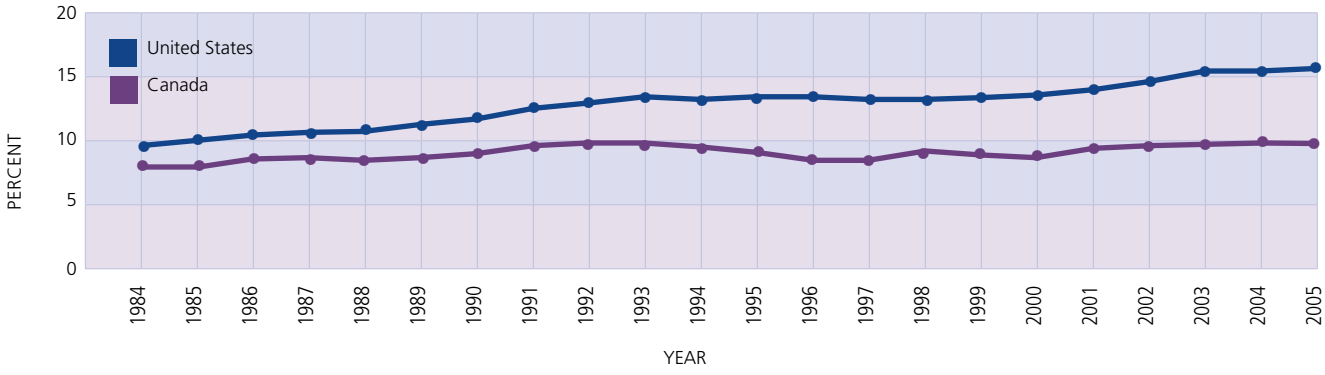
In Rochester, Minn., the percentage of Canadians referred to the Mayo Clinic has remained stable over the last five years compared to total international patients referred, according to Fred Meyer, MD, in the Neurosurgery Department at Mayo. "There isn't an obvious new 'migration' of patients from Canada to our department," stated Dr. Meyer.

Hospitals on the U.S.–Canada border such as those in Buffalo, N.Y., and Detroit, Mich., receive the bulk of emergency neurosurgical cases transferred to the U.S. from Ontario. As a center for neurological and stroke care services, Millard Fillmore Hospital in Buffalo not only is able to deliver emergency neurosurgical care to the Canadian patients it receives, but the care also is well reimbursed, according to Kevin Gibbons, a neurosurgeon at the hospital for more than 10 years. However, Dr. Gibbons said he has been seeing an increasing number of "life and death" emergency transfers for traumatic injury, shunt failure and subarachnoid hemorrhage. He also noted that in clinic he has been seeing more Canadians who are seeking a second opinion: "Because nonemergent care in the U.S. is rarely approved by their government, most of these patients use the second opinion to try to leverage more timely care in Canada." NS

Even so, there is not widespread support in Canada for complete health system reform. "One thing is clear, and it is that there is no utopia in healthcare plans," said Dr. Rutka. "We look at the American system as the one that offers the best healthcare services in the world, and we do not think we should be following the British or the Scandinavian models. All countries around the world will be following the debate on healthcare reform in the U.S. with great interest." NS

FIGURE 1

Health Expenditure as a Percentage of Gross Domestic Product: U.S. and Canada Since 1984



Source: Health, United States 2008, www.cdc.gov/nchs/data/hus/hus08.pdf

Efficacy and Limitations in Providing Online Information for Neurosurgical Residency Applicants: A Review of Nsmatch.com

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The authors reported no conflicts for disclosure.

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Abbreviations:
FREIDA, fellowship and residency electronic interactive database; FTP, file transfer protocol; GB, gigabytes; HTML, hypertext markup language; HTTP, hypertext transfer protocol; IP, Internet protocol; Mbps, megabits per second

ABSTRACT

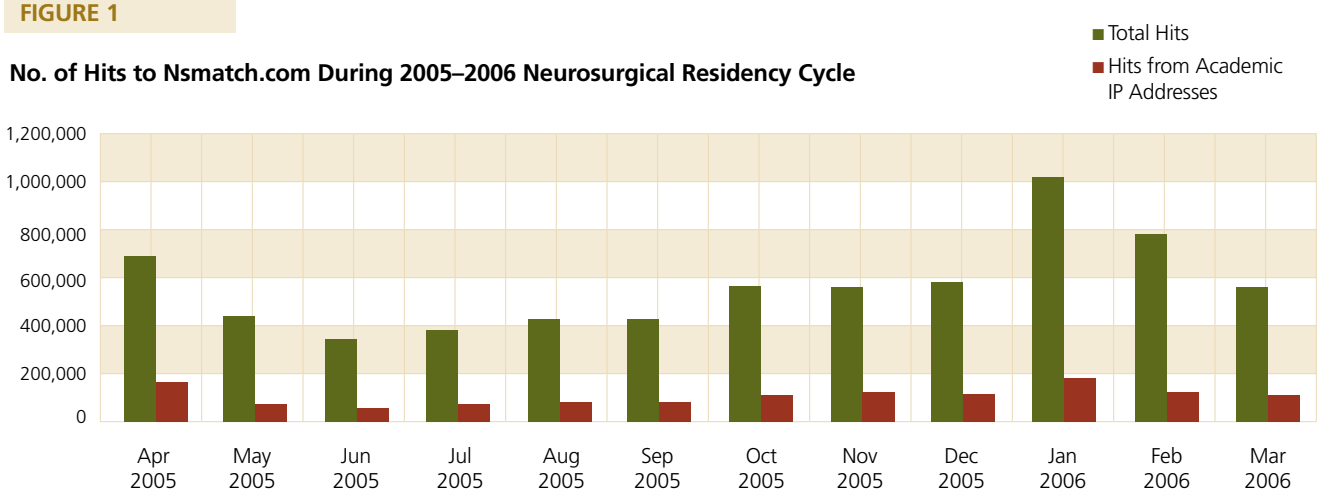
The authors evaluate the effectiveness and limitations of nsmatch.com, a Web site that offered medical students information from peers, residents and practicing neurosurgeons about the neurosurgical residency application process and the field of neurosurgery. Nsmatch.com data were tracked and analyzed by the authors, who were administrators and moderators of the site. Of the 6,901,904 hits during the neurosurgical residency match cycle from April 1, 2005, to March 30, 2006, the most frequently viewed topics were match results, program rankings, and information about residency application or the interview process. From Oct. 23, 2003, to Aug. 7, 2006, site users posted 19,152 messages on 1,579 subjects and accessed the site from all 50 states and 18 countries. Eighteen percent of threads emanated from academic institutions. To evaluate the influence of nsmatch.com in the match process, the authors additionally surveyed 50 randomly selected first-, second- and third-year residents. Eighty-four percent of these residents were aware of nsmatch.com at the time of the match, and 72 percent of them used the site for application information. Fifty-two percent reported that nsmatch.com influenced either where they interviewed or how they ranked residency programs. The authors conclude that nsmatch.com enabled neurosurgical residency applicants to obtain information about the match. However, site inconsistencies and unverified information were common and could lead to the dissemination of misinformation. As possible remedies for these problems, they propose nonanonymous posting and that neurosurgical programs proactively monitor program information on such sites.

Introduction

Despite the ease of information dissemination via the Internet and the increased emphasis on computer-based training in medical school curricula, the amount of online information available to neurosurgical residency applicants remains relatively sparse. Web sites developed by neurosurgical organizations provide some accessible links related to neurosurgical training, but information about specific programs or relating to specific student concerns can be difficult to find. The San Francisco Matching Program (sfmatch.org), which coordinated the neurosurgical residency match during the period studied, offered some information online such as program length of training, contact information and application requirements; however, the information was accessible only after an applicant paid a registration fee, making the site an unrealistic option for the typical applicant shopping around for suitable residency programs.

Other surgical and medical subspecialties have offered online resources for prospective applicants. In 1999 the American Medical Association began FREIDA, which offers residency and fellowship applicants online access to a continuously updated database of pertinent information, including training statistics, affiliated hospitals and curricula (2, 3). This database is maintained by a national organization and updated by program directors within the framework of the National Residency Matching Program. Surgical subspecialties that have utilized online bulletin board services to provide forums for applicants to receive information about residency training

FIGURE 1



include radiology (auntminnie.com) and otolaryngology (otomatch.com).

In October 2003 one of the authors (M.I.) created nsmatch.com to disseminate information to neurosurgical residency applicants. The idea was to provide an uncensored forum through which medical students, residents and neurosurgeons could engage in anonymous discussion of the specialty, the application process and other aspects of neurosurgical training. The site also was intended to allow residency applicants to commiserate with fellow applicants and share their impressions of programs and the application cycle. To determine the trends in usage of nsmatch.com and the site's impact on the dissemination of information to neurosurgical applicants and the application process, we reviewed the site and its effectiveness in delivering information.

Materials and Methods

Site Specifications and Administration Nsmatch.com was hosted by Suresupport.com using servers designed for a continuous Web serving environment: Compaq ProLiant ML370 G3 Xeon 3.06 GHz/512 KB Cache, 2-GB DDR RAM, 146-GB Ultra SCSI hard drive. The platform used for all servers was a highly customized Red Hat Linux. The site's bandwidth was 100 Mbps, and storage space was approximately 10 GB.

A file manager allowed administrators to manage the site using a commercially available Web browser, an FTP program or other third-party HTML program. Files could easily be uploaded, created, deleted, or organized into folders. Site accessibility also could be modified easily. The authors (J.J., M.I., N.S.) served as administrators and moderators. Only the Web site administrators were able to access site information, and all information was kept strictly confidential.

Site Activity Site statistics were compiled using Webalizer (MrUnix Inc., Iowa City, Iowa), a commercially available program. Its purpose is to scan Web server log files and produce usage statistics in HTML format.

We examined site data between April 1, 2005, and March 30, 2006, which was the time frame of one neurosurgical residency application cycle. The number of hits to the site, the addresses of Web pages visited and the IP addresses accessing the site were recorded in the control panel. Webalizer defines the number of hits that a site receives as the number of requests made to the server in a given time period. IP addresses uniquely identify a specific

Received: Nov. 5, 2007
Accepted: Jan. 25, 2008

Key Words: match, medical, neurosurgery, nsmatch.com, residency, student

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computer or other network device.

Webalizer also was capable of performing a reverse lookup to identify the domain name from which an IP address originated. This made it possible to quantify site usage by institutions and individuals and to track the length of site visit by user as well as usage by region.

Content Analysis To determine the type of information posted on nsmatch.com, all threads posted to the nsmatch.com forum between Oct. 23, 2003, and Aug. 7, 2006, were reviewed. On a Web site or online message board, a thread is the topic posted by a user together with the comments posted by participants in response. We categorized topics of discussion, tallied the frequency of page views for each and identified the frequency of posts by unregistered and registered users. No posts were edited or deleted by site administrators.

To determine the consistency of information posted on nsmatch.com, posts that discussed residency program rankings were reviewed. The frequency of each program's mention by different users in "top 10" and "bottom 10" rankings was quantified, and the results were compared.

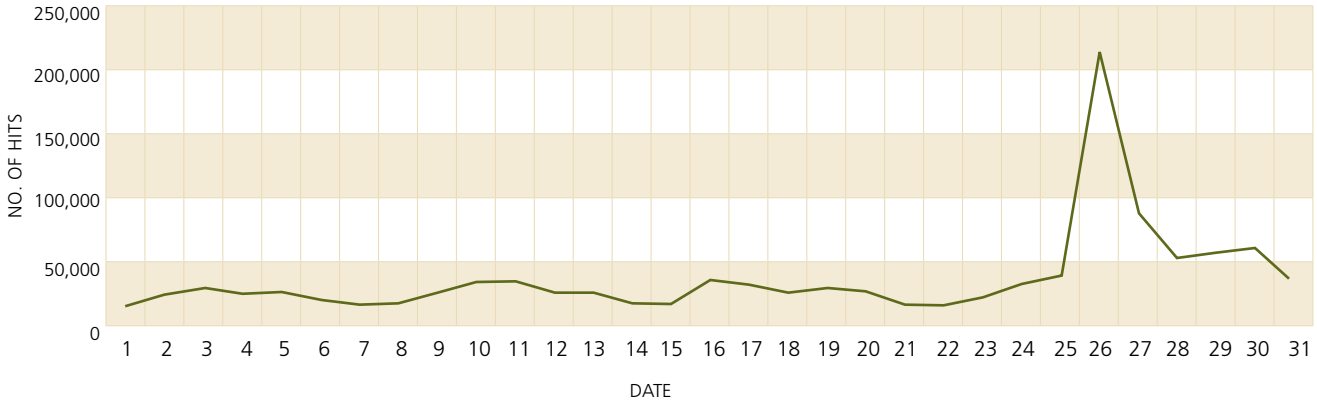
Resident Survey A total of 50 first-, second- and third-year residents in 14 U.S. neurosurgical programs accredited by the American College of Graduate Medical Education and who matched between January 2004 and January 2006 were selected randomly and asked to complete a three-question survey that was administered by an independent third party. Residents were asked if they were aware of nsmatch.com at the time of their residency application; if they used the Web site while they were applying for neurosurgical residency positions; and if the information on the site contributed in any way to where they interviewed or how they ranked programs.

Results

Site Activity Between April 1, 2005, and March 30, 2006, nsmatch.com received 6,901,904 hits, and 1,534,208 visitors opened at least one link on the Web page. Unique visitors (i.e., different IP addresses) accounted for 32,418 hits. The highest level of site activity was during the period of October to April (Figure 1). The day of the week for the heaviest Web site traffic was Thursday, and the most common time span for site usage was between 5 p.m. and 9 p.m. in all time zones. Site volume peaked on Jan. 26, the day residency match results

FIGURE 2

No. of Daily Hits on Nsmatch.com in January 2006



were officially released to programs and applicants (Figure 2).

There were 487 registered users. Of the 125 registered users who specified their sex, 105 (84 percent) were male and 20 (16 percent) were female. Of all registered users, 220 (45 percent) specified their location; of these, 155 (70 percent) were from the United States and 65 users (30 percent) were from elsewhere. The most common U.S. states represented were California (13 users), New York (12 users) and Virginia (10 users). Sixty-nine (14 percent) of the registered users identified themselves as neurosurgical residents and 12 (2.5 percent) identified themselves as having completed residency.

Users from all 50 states accessed the Web site. To assess usage by the target audience of medical students, residents and neurosurgeons interested in neurosurgical training, we looked at the number of hits by academic institution. To preserve anonymity of specific programs, academic facilities were grouped into the regions of Northeast, Midwest, Pacific or South. A total of 1,301,741 hits (18.8 percent) were from academic institutions. Forty percent of the academic usage of the Web site was in the Northeast, 32 percent in the Midwest; 15 percent in the Pacific, and 13 percent in the South (Figure 3). This regional traffic was compared to the regional distribution of medical schools to see if there was any discrepancy between the intended audience and actual usage. There are 118 medical schools in the continental U.S., and 34 percent are in the South, 28 percent are in the Northeast, 25 percent are in the Midwest, and 13 percent are in the Pacific region. The biggest usage discrepancy was seen in the South, which accounts for 34 percent of all medical schools but only represented 13 percent of the Web traffic.

Other indictors of Web site activity are the amount of time people spend on a site and whether they return to it again. The majority of users visited nsmatch.com for brief periods (less than two minutes at a time) (Figure 4). However, 92 percent of users revisited the site within 24 hours of initial use. Forty-six percent of users spent more than two minutes on the site at a given time, and 77 percent of users who posted comments on the Web site were in this category.

Content Analysis Between Oct. 23, 2003, and Aug. 7, 2006, 19,152 messages involving 1,579 topics were posted. Anonymous users posted 1,288 topics (82 percent), including one anonymous user who had 985 posts. Registered users posted 291 topics (18 percent). The most frequently posted topics (approximately 65 percent) fell into four general classifications: neurosurgical residency match; residency application and interview process; residency program rankings; and training at specific programs. Topics involving match results were viewed 59,000 times; topics regarding the residency application and interview process were viewed 24,335 times; topics involving residency program rankings were viewed 14,353 times; and topics

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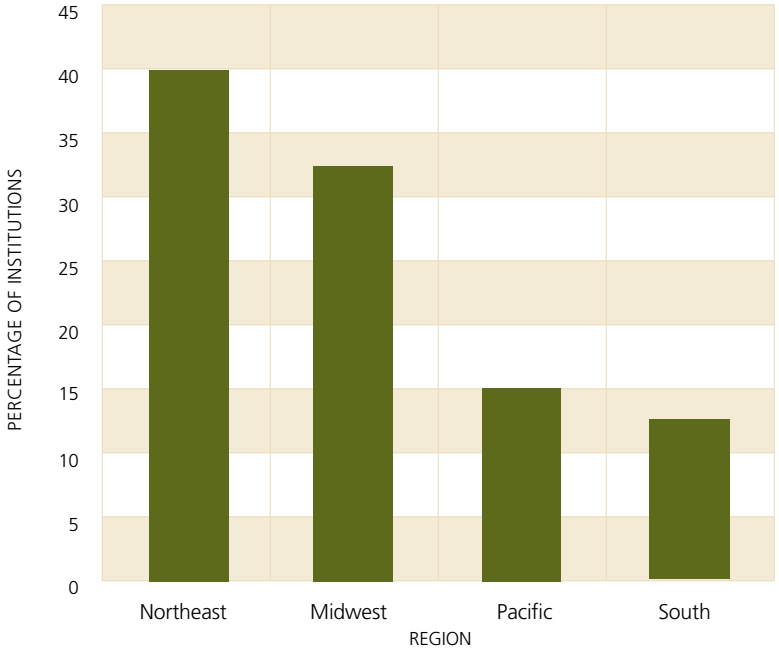
FIGURE 3

Site Usage by IP Address of Academic Institution



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regarding training at specific programs were viewed 12,323 times (Table 1). Topics that could not fit into any of the above categories were categorized as miscellaneous topics, which were viewed 21,324 times. Those threads focused on hirings and firings at programs, information regarding a specific applicant's qualifications, or other topics that sometimes were unrelated to neurosurgery or the residency match. Approximately 24 percent of all posts were attributable to 25 IP addresses (none of which belonged to the site administrators).

To determine the consistency of information posted on nsmatch.com, we identified and analyzed all posts that discussed program rankings, as this was a readily quantifiable topic and the consistency of the responses could be judged. A total of 44 threads were found that were devoted to ranking either the best or worst programs. There were 950 different posts on this subject and these threads were viewed 14,353 times. Users listed 37 different programs among the "top 10" programs. Conversely, 26 different programs were listed as among the "bottom 10" programs. Fourteen of the programs listed as the best also were on the worst program lists. Eight of the 10 top-ranked programs were on both the best and worst lists.

TABLE 1

Topics Most Frequently Viewed

Topics	No. of Views
Match Results	59,000
Residency Application and Interview Process	24,335
Residency Program Ratings	14,353
Training Programs	12,323

TABLE 2

Resident Survey of Experience With Nsmatch.com

Year in Training (Year of match participation)	Aware of Web Site While Applying? No. answering yes	Used the Web Site? No. answering yes	Did Web Site Affect Interview/Rank List? No. answering yes
PGY*-1 (2006) N=15	15 (100%)	14 (93%)	11 (73%)
PGY-2 (2005) N=15	13 (86%)	13 (86%)	9 (60%)
PGY-3 (2004) N=20	14 (70%)	9 (45%)	7 (35%)

*PGY, postgraduate year

Resident Survey Eighty-four percent of residents surveyed were aware of nsmatch.com at the time of the match, and 72 percent of them used the site for application information. Fifty-two percent reported that the Web site influenced either where they interviewed or how they ranked residency programs. All of the first-year residents, participants in the 2006 neurosurgical residency match, were aware of nsmatch.com (Table 2). Seventy-three percent of this group stated that information on the Web site influenced them either in deciding where to interview or in determining their program rankings. In contrast, 70 percent of third-year residents, participants in the 2004 match, stated that they were aware of the Web site at the time of applying for residency, and only 35 percent of them indicated that the site influenced their interview decisions or program rankings.

Discussion

Over the last decade the Internet has grown at a rapid pace. Online commerce has increased, and more medical schools are emphasizing Web-based education (1, 2). However, there remains a paucity of readily available information about neurosurgical training programs, leading many medical students to rely on information handed down from previous applicants or from residents and staff at

their home programs. Using the Internet to provide program information not only increases exposure of training programs to a large number of prospective applicants, but also serves to disseminate reliable (or potentially unreliable) information to applicants and attract new applicants to the field; this dissemination of training program information was the primary impetus for the development of nsmatch.com.

Nsmatch.com was designed so that users who wished to remain anonymous (i.e., unregistered users) would have their privacy protected. The benefit of user registration was the ability to send and receive private e-mail messages that would be of interest to the user but not necessarily to the nsmatch.com community as a whole. Unfortunately, there were instances when registered users were attacked or ridiculed in the public forum. We also noted that several registered users would post anonymously, most likely in an attempt to avoid being victimized for starting or responding to an unpopular thread or for expressing a particular point of view.

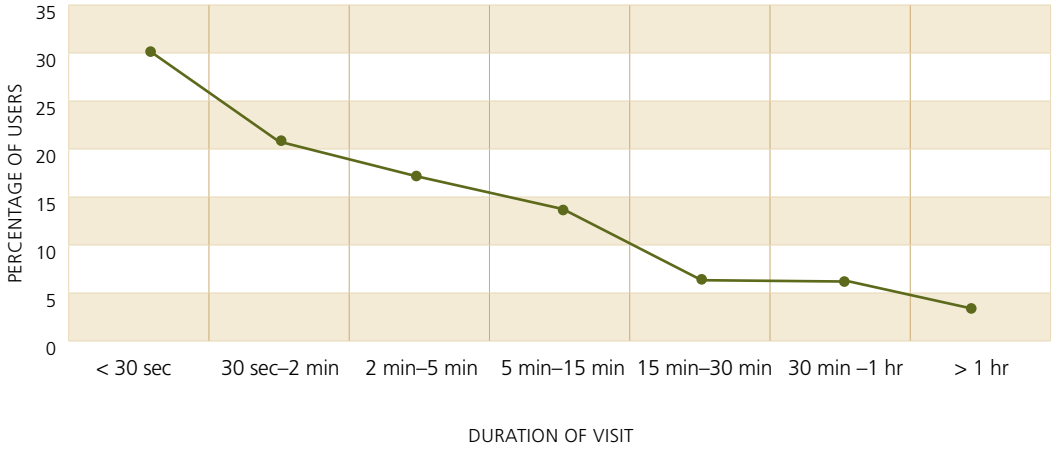
Site Activity No online or print media was used to advertise nsmatch.com. Its popularity, which relied solely on word of mouth, is therefore surprising. The Web site received almost 7 million hits during the 2005–2006 neurosurgical residency application cycle. Web traffic was correlated with important dates in the application process, with increasing traffic during the times applicants were deciding which interviews to attend and again around the dates their lists of program rankings were due. This is indicative of medical students and neurosurgery applicants searching online for updated program information.

The majority of nsmatch.com users were logged into the site for brief periods of time. Half of the users viewed the site for less than two minutes. Although users did not view the site for long, they viewed it often. Ninety-two percent of users revisited the site within 24 hours of their initial visit, indicating that users tended to return to the site for follow-up information. The users who posted messages to the Web site typically were online for longer periods. It is important to note that relatively few contributors were able to influence the content of the forums that were accessed and read by many.

The traffic to the site emanating from universities supports the conclusion that

FIGURE 4

Duration of Visit to Nsmatch.com by Percentage of Users



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the Web site was reaching its intended audience. The hits by university computers most likely represented traffic by medical students, residents or medical staff. It is a concern that the South was so underrepresented on the site, compared to the number of medical schools in this region. Whether this represents fewer neurosurgery applicants coming from the South is unknown. There were private IP addresses that emanated from the region, indicating that users in the South were perhaps more likely to log into the Web site at home than at the hospital.

Content Analysis The four main categories of topics discussed on nsmatch.com reflect information that applicants would want to know when applying to neurosurgery. Although nsmatch.com experienced success in this respect, there also were some failures. The anonymity allowed by the Web site led to abuse by some users. This is shown by the fact that nearly a quarter of all posts come from only 20 IP addresses, allowing a small group of unaccountable individuals the opportunity to control the information received by many. In some instances the same person would pose a question and give a response, indicating a specific agenda.

Our analysis of the top training programs, which showed 37 different programs (more than a third of all U.S. residency programs) listed by users as being among the "top 10" programs, is evidence of the inconsistent information provided on the Web site. The fact that 38 percent of these programs (and 80 percent of the 10 top-ranked programs) also were listed as the worst training programs further underscores this point. While an individual's program rankings are subjective, as is a forum like nsmatch.com, we found the wide variation in user rankings of best and worst programs surprising.

Resident Survey In a two-year period the percentage of applicants who were cognizant of the site and influenced by its content significantly increased (Table 2). Even more significant is the fact that more than half of all residents surveyed indicated that the site did influence where they interviewed and how they ranked programs.

Conclusions

In three years, nsmatch.com was increasingly used by neurosurgical residency applicants, and it influenced a number of them in the match process. Although nsmatch.com managed to reach large numbers of applicants, it fell short with respect to some of its other goals. The Internet can be a major source of information for neurosurgical applicants and others interested in the field, but it is important to verify the accuracy of the online content. The problems encountered by nsmatch.com chiefly were inaccurate posts and lack of consistency, and these limitations led to its closure. A newer Web site, uncleharvey.com, has replaced it, offering a forum with restrictions on anonymous posting and a limited amount of moderation. Careful monitoring of posts as well as proactivity on the part of neurosurgical programs in ensuring accuracy of posted information will be helpful in making this or any such Web site a valuable source of information for future applicants. NS

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Reinhardt: I showed this morning [in the Cushing oration] that healthcare is the biggest employment machine in the country. In fact if you really think about it, it's No. 1. Aside from the way that it has one of the highest value sectors in the economy, it creates more jobs than any other sector at all that there is. The other thing that is often not realized is that ill-health is impoverishing. It kicks you out of the workforce, No. 1, and it makes you broke, and with it comes all the social trauma associated with deep poverty. So I think when Obama says we can't afford to have more middle class Americans slip into poverty on top of the unemployment things—unemployment we can fix—but if they go bankrupt over healthcare then we have even more poor.

AANS Neurosurgeon: In a scenario where we would have universal healthcare coverage, where do you see a procedure-oriented specialty like neurosurgery? The Obama plan emphasizes things like preventive medicine, enhanced primary care—where do proceduralists fit into this?

Reinhardt: I frankly think that they'll just leave it alone. I don't think they have a policy on that. There's no one in the White House who wants a shortage of neurosurgeons.

AANS Neurosurgeon: But we don't see a lot of new money coming into the system. It's a reallocation of money from proceduralists to primary care.

Reinhardt: There's going to be a lot of new money coming in. I always tell people even if we got it down to a 1 percent differential—which will not happen in the next 10 years—it's still going up. There's still more for everyone. It's never going to go down, ever, ever. People are too nervous about it. I don't think anyone is particularly after neurosurgeons. I showed you that there is 30 percent annual growth in imaging. There's a real difference in the minds of policymakers between a radiologist—they're very specialized to be sure—and a neurosurgeon, who is at the other end of the scale. That's the last specialty I would worry about. If I were a radiologist I might worry.

AANS Neurosurgeon: You recently said that cutting physician pay would have a miniscule effect on national health spending.

Reinhardt: Unless you really devastate the doctors. Think of it. Gross billings add up to probably 21 percent of national health spending. And close to half—at least 40 percent—is practice expense, it's where malpractice [insurance] is, so for neurosurgeons it's even more. There's not much you can do about the practice expense, so you really look at net income, and if you were to cut that 20 percent, which would be a huge hit, that saves you 2 percent of national health spending. So there's not much mileage in cutting physician pay.

AANS Neurosurgeon: You've said that a better way to pay physicians would be benchmarking them on the earnings of the American talent pool.

Reinhardt: No, it's not a better way. That is how in fact they are benchmarked. Implicitly the lawyers and physicians and scientists and the top Wall Street guys—the Ivy League supplies them. Everyone who is a physician is smart enough to work for Goldman, but not everyone who went to Goldman is smart enough to get into medical school. But it's still the same sort of talent pool that you're drawing on of highly motivated, type-A, educated people. You cannot pay American physicians the way British physicians are paid and think you're going to have enough of a really high talent pool. I think there has to be an implicit benchmark to the talent pool and ours is just wider.

AANS Neurosurgeon: On the physician autonomy side, neurosurgeons are very concerned about being able to make the right decisions for their patients using their own expertise and education.

Reinhardt: But you see, the Canadian or the German setup is such that they can. Only in America did a managed care company have a nurse call a doctor and say, What are you doing with this patient. That never happens in those countries or Taiwan. To me it's another irony that Americans allowed a far deeper intrusion in the ongoing doctor-patient relationship than is common in those countries. Those countries do it statistically after a quarter, and if you see every patient got an MRI, then you question the practice style, but you do not question how the doctor treated Mrs. Jones. That's only the managed care. They quit this too, because they realized how unproductive it actually was to call up a doctor and have a nurse tell a doctor—who saw the patient and the nurse didn't—what he did wrong. Obviously that's a setup for failure. NS

Let Supervising Neurosurgeons Train, Determine Competence

General Training Maximizes Career Flexibility for PAs

Editor:

It was with great interest that I read Mr. Hlavin's article on postgraduate neurosurgical training for physician extenders [physician assistants and nurse practitioners] in the most recent *AANS Neurosurgeon* (Vol. 18, No. 1). I believe that I can speak about this subject, at least with regard to physician assistants, from the perspective of 29 years' experience as a clinical PA, administrator and academician, including service as a PA program director for 10 years prior to taking my first neurosurgical job in 2007.

Mr. Hlavin treads on a dangerous path for the future of the entire PA profession. He is certainly not without supporters in the specialty ranks of the profession, but I disagree with his premise that PAs are ill-prepared for practice in a neurosurgical specialty. Since the beginning of our profession, PAs have been educated in the general medical model, allowing for broad exposure which can lead to a job in almost any medical specialty. The flexibility to move between specialties without the time and expense of additional formal training is the beauty of our profession and is based on a strong primary care foundation. The ability to perform an excellent history and physical examination and develop a differential diagnosis is foundational for all medical specialists. All other tasks build on this cornerstone, which is the strongest element of any PA's education.

Since graduating from PA school in 1980, I have worked clinically in cardiovascular surgery, primary care, diabetes care, emergency medicine and neurosurgery in addition to time spent as a hospital administrator and academician. I have been successful in all of these endeavors by keeping focused on the fact that every day is a learning process. I have been in neurosurgery for two years and learn something new every day. A formal training program might have sped up the learning curve but would have been totally impractical at any stage of my career. Ultimately, neither I nor my supervising physicians believe it would have made any material difference because my practice style should reflect that of my supervising physician, not that of a postgraduate training program.

PAs are "dependent" practitioners. This is foundational to the success of our profession. We should always have the expertise of our supervising physicians upon which to depend if and when gaps in our education exist. Yes, there will be a steep learning curve for any new neurosurgical PA. Yet, nearly every physician I encounter would prefer that this education take place on the job, where the PA will be trained to practice in the style of the supervising physician. Formal postgraduate education is unnecessary and potentially detrimental to the future of our profession. Less-formal education such as seminars and short courses in conjunction with meetings of the AANS and other organizations seems much more practical.

"Competency-based" is a phrase which is often bantered around the academic world, but who really determines competency? Everyone in medicine knows someone who completed all the training and passed all the exams, but is ultimately incompetent. Neither an educational program nor a standardized test is an adequate reflection of competence. In the case of PAs, competence is best determined at the level of the individual practice by the supervising physician. Adding formalized training programs and examinations will provide a revenue stream to the academic institutions and credentialing bureaucracy but, in my opinion, will do little to protect the public from "incompetent" providers.

—Richard Nenstiel, PA-C, MBA, Mobile, Ala.
The author reported no conflicts for disclosure.

The author responds:

I thank Mr. Nenstiel for his excellent letter concerning my recent article on postgraduate neurosurgical train-

ing for physician extenders. He makes several insightful points based on years of professional experience that included several years as a physician assistant working in a wide range of medical areas. In contrast, I sampled several areas of medicine in the military and developed a strong affinity for neurosurgery during PA school; I was fortunate to be trained in a surgically focused program, of which there are few.

His letter reflects a concern among many in our profession: the fear of being locked into a particular area of medicine, or worse, of being marginalized by insurance and credentialing forces. These concerns are most viable and are a resilient topic at our professional meetings.

While PAs with years of experience would be unlikely to consider the type of training program I described, a new graduate is a different matter. The program is really designed for those PAs who have a strong desire to gain advanced learning and experience. It is not intended to set graduates on one course for the rest of their careers. Although Mr. Nenstiel makes a good point regarding the basic knowledge currently imparted to PAs, basic knowledge is inadequate for handling neurosurgical patients efficiently. In my estimation, it takes seven to 10 years in private practice neurosurgery to manage very complex patients with any confidence.

According to a 2005 AANS survey, neurosurgeons support formal training for new physician extenders who have a desire to work in neurosurgery, although the length of such training and who should pay for it are areas for further development.

I appreciate Mr. Nenstiel's insight and look forward to working with him to further our profession.

—Joseph Hlavin, PA-C, Bryan, Texas
The author reported no conflicts for disclosure.

FOR FURTHER INFORMATION

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Michael Schulder, MD

A Healthcare System After Reform

Talking Turkey

President Barack Obama is determined to reform the American healthcare system this year. The direction of this reform remains unclear, and supporters of various approaches (such as emphasizing public or private solutions) often point to the experiences of other countries as an example for good or ill. Tired of hearing about the Canadian or British health services? Consider the case of Turkey.

The Ottoman Empire was established by Turks who had roamed from central Asia before establishing themselves in the Middle East and southeastern Europe. The Ottomans ruled over a huge territory for more than 500 years. Medical education followed the Islamic tradition of the Middle Ages. Neurosurgical history notes the contributions of Serefeddin Sabuncuoglu, who published his work "Imperial Surgery" (in Turkish) in 1465. The author described and illustrated surgical treatment of such conditions as trauma to the head and spine, seizures and hydrocephalus. In the late 18th century, after English envoys witnessed vaccination for smallpox in Istanbul, the technique was introduced in Great Britain (leading to the safer method of cowpox vaccination invented soon after by Jenner).

Like other nation-states, the Ottoman Empire underwent dynamic shifts throughout its history. Change had been afoot in the Ottoman Empire in the 19th century, hinting at the revolutionary reforms to be completed by Mustafa Kemal Ataturk. A complete break with the past occurred after World War I, in which the Ottomans were allied with Germany. In the war's wake Ataturk created the Republic of Turkey, a modern, democratic state. The scale of the reforms he led is hard to imagine in both magnitude and speed of adoption. They included change from the Arabic to the Roman alphabet, universal education, and complete separation of mosque and state. As in Western Europe, Ottoman medicine began to evolve from a decentralized system to one where the state played an increasingly important role in organizing medical education, licensing and public health.

With the creation of the modern republic, a centralized state healthcare system was established. To encourage competition and improve access to hospital-based care, government reforms in 2003 allowed for an expansion of private hospitals. These facilities contract with government and private health plans, as well as receive direct patient payments, which supply a majority of their income. This system has fostered the growth of modern subspecialized medicine; today there are some 500 Turkish neurosurgeons with access to the latest methods of neuroimaging and operative technology.

When visiting Istanbul's Acibadem Kozyatagi (pictured) and Maslak hospitals the author found them completely up-to-date in medical technology and in such aspects as throughput, patient-centered service and quality assurance.

On a recent trip to Istanbul I visited two hospitals built and run by the private Acibadem Healthcare Group, which owns hospitals and clinics throughout Turkey. These are sparkling facilities, clean and completely up-to-date not just in their medical technology (such as 3-Tesla intraoperative MRI), but in such aspects as throughput, patient-centered service and quality assurance. And they have emergency rooms via which they take all comers.

What will the American healthcare system look like after reform? We all want to eliminate waste and ensure access to all, and eliminate the fear that illness will lead to economic ruin. Perhaps an expanded governmental role will help us achieve these goals. But if we are to learn at all from the experience of others, we should consider that in countries such as Turkey, the private sector plays an increasingly important role in the delivery of patient care. NS

Michael Schulder, MD, is co-associate editor of the *AANS Neurosurgeon*. He is vice chair of the Department of Neurosurgery and director of the Harvey Cushing Brain Tumor Institute at the North Shore Long Island Jewish Health System, Manhassett, N.Y. The author reported no conflicts for disclosure.