<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>PRESIDENT'S MESSAGE</td>
</tr>
<tr>
<td>5</td>
<td>2011 BOARD OF DIRECTORS</td>
</tr>
<tr>
<td>6</td>
<td>MEMBERSHIP STATISTICS</td>
</tr>
<tr>
<td>7</td>
<td>CONTINUING MEDICAL EDUCATION</td>
</tr>
<tr>
<td>12</td>
<td>RESEARCH</td>
</tr>
<tr>
<td>16</td>
<td>ADVOCACY</td>
</tr>
<tr>
<td>18</td>
<td>HEALTH POLICY AND REIMBURSEMENT</td>
</tr>
<tr>
<td>20</td>
<td>DISCLOSURE, ETHICS AND PROFESSIONALISM</td>
</tr>
<tr>
<td>21</td>
<td>PUBLICATIONS</td>
</tr>
<tr>
<td>24</td>
<td>SPINE EDUCATION &amp; RESEARCH CENTER</td>
</tr>
<tr>
<td>25</td>
<td>DONOR RECOGNITION</td>
</tr>
<tr>
<td>28</td>
<td>AWARDS RECOGNITION</td>
</tr>
<tr>
<td>29</td>
<td>2011 NASS COMMITTEE APPOINTMENTS</td>
</tr>
<tr>
<td>35</td>
<td>FINANCIALS</td>
</tr>
</tbody>
</table>
As a leading professional medical association, the North American Spine Society continues to forge ahead in its mission to foster the highest-quality, evidence-based and ethical spine care by promoting education, research and advocacy. I remain deeply honored and humbled to have had the exceptional opportunity to serve as your president in 2011. I would like to take this opportunity to share with you my reflection over the past year, as well as my hopes for our organization as it moves forward.

Education will always remain an essential pillar of NASS. Through the collaboration of our exceptional staff and physician volunteers, we continue to evaluate and improve our educational programs to meet the needs of our membership.

We achieved record attendance at our 2011 Annual Meeting in Chicago, which featured guest speakers Karl Rove and Dr. Louann Brizendine, a hands-on cadaver course focusing on minimally invasive spine surgery, a third concurrent session to extend our goal of providing educational opportunities for all our subspecialists, continuation of our Evidence-based Medicine (EBM) training course, a SIG on Lumbar Spinal Stenosis Guidelines, and health care and socioeconomic updates throughout the meeting. In order to emphasize the importance of value in spine care, as initiated by Past-President Ray Baker, MD, we presented the first Value Abstract Awards.

I must also express my deepest gratitude to my Annual Meeting program co-chairs, Christopher Kaufmann, MD and William Sullivan, MD, who were invaluable in preparing the program you enjoyed in Chicago. They are outstanding physicians who have repeatedly demonstrated a commitment to excellence and a focus on what is best for our patients. I value our friendship and look forward to their growing leadership in our organization.

We unveiled the new electronic Abstract Submission Management System, which manages review, program setting and content as well as resolving conflict of interest issues prior to the meeting. We achieved 100% compliance on disclosures from all authors, presenters and faculty, even while receiving a record 1,135 abstracts.

In 2011, we also collaborated with our colleagues in other professional medical associations, including the NASS/SRS Deformity course, the Japanese Spine Society with our Spine Across the Sea program, the 3rd Annual Spine Summit, and the American Association of Spine Radiology, as well as new collaborations with the American College of Physicians and American Academy of Family Physicians.

Moving beyond the development of clinical guidelines, NASS has demonstrated the importance of collecting and publishing data through its commitment to a spine registry. We also developed our first appropriate use criteria (AUC) on the topic of cervical disease, recognizing the limitation of EBM guidelines. NASS again demonstrated its leadership with our appointment as co-lead organization for the American Medical Association Physician Consortium for Performance Improvement Low Back Pain Measures Work Group. Finally, the Spine Research and Education Fund (SREF) reached its $2 million goal through fundraising and dividend income and can now start to disburse funds to the Annual Research Fund.
Recognizing the importance of our own infrastructure, we embarked on a Leadership Development Program under the guidance of Todd Wetzel, MD. Maintaining our leadership in conflict of interest (COI) and disclosure among professional medical associations, we revised our Leadership COI policy to include *The Spine Journal* Editor in Chief and Evidence & Methods Deputy Editors of the journal, moving them to Level I (strict divestiture) status. Our society also adopted a “Code of Ethics for Industry Interactions with NASS.” Finally, our bio-skills lab and auditorium/classroom, the Spine Education and Research Facility in Burr Ridge, Illinois, surpassed revenue goals and is operating near capacity.

Within our Health Policy and Advocacy Council, NASS continues to demonstrate leadership in CPT and reimbursement issues, regulatory issues such as CMS’ proposed rule on ACOs, proposed revisions to the Medicare e-Prescribing program and device issues such as the reclassification of posterior cervical spinal instrumentation. We continue to collaborate with third-party payers in helping to improve coverage policies.

Our advocacy team communicated with the House Energy and Commerce Committee, including a letter discussing transition from the current SGR payment update system to a new system that incorporates value into physician payments. Finally, we continue to participate and provide leadership to the Alliance of Specialty Medicine, including the annual legislative fly-in on Capitol Hill and meeting with our elected officials in Washington. NASS has expanded our attention to “in-district” meetings with Congressional representatives and identifying local NASS members who can serve as liaisons to them.

We should be particularly proud of *The Spine Journal*, which increased its impressive Impact Factor under the leadership of Editor-in-Chief Eugene Carragee, MD, making *The Spine Journal* the number one spine journal and the 4th highest-rated orthopedic scientific journal. *The Spine Journal* published a thought-provoking and controversial focus issue on the safety profile of rhBMP-2. Media coverage was robust, with nearly 1,300 news stories published worldwide including in *The New York Times*, *Wall Street Journal*, *Associated Press* and *Forbes*. NASS held a point-counterpoint plenary session at the 2011 Annual meeting to encourage scientific debate on the matter. This issue affirmed the importance of maintaining a clear distinction between NASS and *The Spine Journal* to ensure its editorial independence and integrity.

As NASS moves forward under the future leadership of Dr. Michael Heggeness, Dr. Charles Mick and Dr. William Watters, I encourage all of us to continue to focus on improving patient care. It is imperative that we develop and evaluate the evidence for the diagnostic tests and therapeutic treatments that we recommend for our patients and maintain a willingness to acknowledge our failures and limitations while promoting those tests and treatments that truly advance the spine health of the patients we serve. After we complete our pilot registry project, I would like to see membership-wide participation so we can lead the procurement of outcomes data that can be used to guide our future treatments. I also hope we can further our collaborative efforts with the government and insurers to enhance our value as spine care providers.

I am indebted to the support and commitment of the NASS Executive Committee and Board of Directors. I want to again thank the NASS membership for the privilege of serving and representing all of you over the past year. Our organization remains strong and continues to lead the way through the excellent work of our many physician volunteers, Executive Director Eric Muehlbauer and our exceptional Burr Ridge staff who support our organization’s mission to foster the highest quality, evidence-based and ethical spine care through education, research, and advocacy.

Gregory J. Przybylski, MD
The Governance Committee ensures that NASS has an effective governing board. The Committee identifies future leaders of the society and strives to engage them in NASS activities. In addition, the Governance Committee teaches new board and committee members about their duties, roles and responsibilities and oversees new member orientation. The Committee is responsible for recognizing NASS members for their efforts in the spine care field and ensures conditions are favorable for participation in NASS activities.

In 2011, the Governance Committee piloted a Committee Evaluation Improvement Program with three NASS committees. This was a first attempt to measure individual performance in the committee setting, provide feedback to chairs and to individuals and to identify opportunities for individual and group improvement. In 2011, the Governance Committee began work on a Leadership Development Course that will take place at the 2012 Annual Meeting.
MEMBERSHIP STATISTICS

OUR MEMBERS
Primarily based in North America (88%), our unique multidisciplinary membership of more than 7,000 spine care professionals is comprised of 32 specialties from 72 countries. The majority of our members are: orthopedic surgeons (49%), neurosurgeons (24%), physical medicine and rehabilitation specialists (12%) and pain medicine specialists (5%).

It is through the continuing support and contribution of our members that the organization continues to thrive and achieve a tangible and positive impact on spine care around the world. Our worldwide recruitment initiatives over the past year have allowed the organization to welcome 1,000 new members in 2011.

“...In 2011, NASS had the pleasure of welcoming more than 1,000 new members, raising the total membership to more than 7,000. As has been the society’s history, spine surgeons represent the majority of the membership (73%). But true to NASS’ multidisciplinary roots, the society continues to reach out not only to surgeons but also nonsurgeon spine care specialists and researchers from around the globe.

This continually growing and diverse base, with the unifying goal to improve care for patients with spinal problems, provides a unique opportunity for advocacy, collaboration and educational activities.”

—Donna D. Ohnmeiss, PhD, Membership Chair
CONTINUING MEDICAL EDUCATION

26TH ANNUAL MEETING
November 2-5, 2011, Chicago, Illinois

The Annual Meeting continues to be an outstanding educational experience and provides high-quality continuing medical education for its members. A record number of abstracts (more than 1,100) were submitted for consideration. Additional concurrent sessions were added to accommodate the increased volume of abstracts and to provide more educational opportunities. A total of 133 podium presentations, 105 focused paper presentations and 111 electronic posters were featured over the three and a half-day period. Final attendance for the meeting reached more than 4,000 medical education attendees.

Technical Exhibition
The Technical Exhibition featured 305 companies and educated more than 3,400 professionals on the latest developments in equipment, supplies and services available in the spine care field. The Technical Exhibition earned more than $4 million and covered 94,300 square feet. The popular NASS Resource Center allowed members to learn about upcoming NASS education courses, engage in NASS advocacy efforts, check their membership and dues status, stay connected with their office in the Cyber Café and learn new techniques at the exercise demonstration area.

Symposia
NASS 26th Annual Meeting symposia covered various surgical and medical/interventional issues:
• Health Policy Initiatives Impacting Spine Care
• Spinal Emergencies
• Current Controversies in Spine Surgery
• Using Comparative Effectiveness Research to Support Your Spine Care Practice
• Surgical Strategies for Cervical Spondylotic Myelopathy
• Current Techniques in the Management of Spine Tumors
• Biologics: A Critical Review of the Evidence

Allied Health Track Programming
NASS provided multidisciplinary education allied health specialty track breakout sessions focusing specifically on nurse practitioners and physician assistants, registered nurses, and rehabilitation professionals. This included the following topics:
• Spondylolisthesis: Operative and Nonoperative Treatment
• Health Care Reform and Beyond
• Nursing: Minimally Invasive Surgery and Future Therapies
• PA/NP: Failed Back and Cervical Spine
• Rehabilitation: Active Physical Rehabilitation Concepts for Patients with Spondylolysis and/or Spondylolisthesis

Hands-On Cadaver Course and Technique Workshops
A hands-on cadaver course that focused on minimally invasive spine surgery was held at NASS’ Spine Education & Research Center in Burr Ridge, IL.

Two technique workshop topics utilizing sawbones were:
• Cervical Spine Stabilization
• Minimal Access to the Lateral Lumbar Spine

Instructional Courses
NASS also offered a varied selection of instructional courses to serve our multidisciplinary membership:
• Coding Update 2011: Essentials and Controversies of Operative and Nonoperative Spine Care Coding
• Fundamentals of Evidence-Based Medicine Part I: Asking Answerable Questions, Searching the Literature and Rating the Evidence
• Fundamentals of Evidence-Based Medicine Part II: Critically Appraising the Literature
• Section on Spine Biologics and Research: Stem Cells and Other Cell-Based Therapies
• Section on Motion Preservation Technology: Clinical, Scientific and Economic Challenges
• Section on Rehabilitation, Interventional and Medical Spine Care: Thoracic Spine Pain
• MRI of the Spine and Spinal Image Guidance
• Current Techniques for the Treatment of Acute Spine Trauma
The Scientific Program Committee is responsible for the educational development of the meeting.

Gregory J. Przybyski, MD: President
Christopher P. Kaufman, MD; William J. Sullivan, MD: 2011 Program Co-Chairs
Christopher J. Standaert, MD; Alexander R. Vaccaro, MD: 2010 Program Co-Chairs
Joseph S. Cheng, MD; Thomas E. Dreisinger, PhD, FACSM; Heidi Prather, DO; Jeffrey C. Wang, MD: 2012 Program Co-Chairs
Venu Akuthota, MD: Education Council Director
Donna M. Lahey, RNFA: Section on Allied Health

**Scientific Program Reviewers** reviewed and graded 1,135 abstracts for the 26th Annual Meeting.

<table>
<thead>
<tr>
<th>Abstract Category</th>
<th>Submitted</th>
<th>Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Science/Biologics</td>
<td>120</td>
<td>38</td>
</tr>
<tr>
<td>Biomechanics</td>
<td>105</td>
<td>37</td>
</tr>
<tr>
<td>Complications</td>
<td>62</td>
<td>18</td>
</tr>
<tr>
<td>Diagnostics/Imaging</td>
<td>77</td>
<td>8</td>
</tr>
<tr>
<td>Epidemiology/Etiology</td>
<td>40</td>
<td>21</td>
</tr>
<tr>
<td>Exercise Therapies/Functional Restoration</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Injections/Interventions</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>Motion Preservation</td>
<td>85</td>
<td>20</td>
</tr>
<tr>
<td>Socio-Economics/Industrial/ Ergonomics</td>
<td>39</td>
<td>16</td>
</tr>
<tr>
<td>Spinal Deformity</td>
<td>175</td>
<td>53</td>
</tr>
<tr>
<td>Surgery—Cervical</td>
<td>94</td>
<td>35</td>
</tr>
<tr>
<td>Surgery—Thoracolumbar</td>
<td>239</td>
<td>65</td>
</tr>
<tr>
<td>Trauma</td>
<td>55</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1135</strong></td>
<td><strong>349</strong></td>
</tr>
</tbody>
</table>
2011 CME COURSES

Basic Lumbar Spinal Injections
February 25-26, Science Care Training Lab, Phoenix, AZ; 38 attendees

Coding Update 2011 (Winter)
March 4-5, Sundance, UT; 38 attendees

PA/NP Advanced Surgical Skills
March 25-26, Spine Education & Research Center, Chicago, IL; 58 attendees

Basic Lumbar Spinal Injections
April 8-9, Science Care Training Lab, Denver, CO; 23 attendees

Evaluation and Treatment of Adult Spinal Deformity: Skull to Sacrum
April 29-30, Spine Education & Research Center, Chicago, IL; 46 attendees

Advanced Lumbar Spinal Injections
May 6-7, Spine Education & Research Center, Chicago, IL; 16 attendees

Diagnosis and Treatment in Cervical Spine Surgery
May 20-21, Spine Education & Research Center, Chicago, IL; 24 attendees

Coding Update 2011 (Summer)
July 15-16, San Diego, CA; 58 attendees

ONLINE CME

NASS launched its online CME initiatives in late 2009 and currently has the following online courses catering to our diverse multidisciplinary membership. Our curriculum will continue to expand in future years.

Exercise: The Backbone of Spine Treatment
Adapted from 2009 Exercise course
Launched November 1, 2009

Advances in the Surgical Treatment of Acute Spine Trauma
Adapted from 2009 Annual Meeting premeeting course
Launched May 13, 2010

Advanced Rehabilitation for Surgeons and Other Spine Specialists
Adapted from 2009 Annual Meeting premeeting course
Launched July 1, 2010

Advanced Imaging of the Spine: Focus on MRI
Original programming for online learning
Launched August 1, 2010

Trauma Evaluation, Classification, Pathologic Origin and Stabilization Options
Adapted from 2010 Annual Meeting premeeting course
Launched January 11, 2011

Motion Preservation Technology: Clinical, Scientific and Economic Challenges
Adapted from 2010 Annual Meeting premeeting course
Launched April 14, 2011

Minimal Access to the Lateral Lumbar Spine
Adapted from 2010 Annual Meeting premeeting course
Launched May 12, 2011

Section on Spine Biologics and Research
Adapted from 2010 Annual Meeting premeeting course
Launched July 26, 2011
EDUCATION COUNCIL
The Education Council oversaw the development of NASS educational programming including the Annual Meeting, hands-on courses, coding courses, online CME and collaborative education with other societies and organizations. The Council is comprised of various committees, all tasked with developing educational programming.

CME Committee
The CME Committee reviewed evaluations from the Annual Meeting and courses, conducted needs assessment and gap analysis surveys to determine topics to serve its multidisciplinary audience. The Committee also ensured that the Society adhered to the ACCME guidelines and procedures in its program planning and implementation. The CME Committee spent a great deal of time focusing on topic selection for the course schedule and reviewed new collaborative opportunities for education. NASS participated in the AO Spine Congress in March and the CME and International Education Committees worked together to develop a symposium topic. The Committee also researched and thoroughly vetted a proposal to take over the programming of the Evidence and Technology Summit.

Resident & Fellow Education Committee
The Committee oversaw the resident/fellow match and created programming and activities that attracted new members to NASS, as well as served the existing membership through track programming during the Annual Meeting. They also hosted a reception and program directors meeting.

Match results were released on May 12, 2011. There were 110 positions offered, 71 filled and 39 vacancies. There were 76 programs with at least 130 positions. The Match Oversight Committee became a separate committee under NASS (pending Board approval) with members from CSRS and SRS as well. The annual director’s meeting was held in November in Chicago to discuss the results of the program and applicants.

International Education Committee
The International Education Committee facilitated NASS’ participation in the AO Spine Congress this past March by offering a NASS symposium, which was presented in March and focused on the changing landscape of spine care in the US. Symposium topics included: recent progress in the tissue engineering of bone, spinal radiofrequency ablation, lumbar total disc replacement and interface of innovation, regulation/governance in minimally invasive spine surgery. NASS also had a booth and collected more than 50 applications for membership. The Committee reviewed new collaborative opportunities and worked closely with the CME Committee to develop guidelines to help identify and vet new opportunities for educational collaboration.
Section on Allied Health
The section worked to create content for a microsite that is specific to Allied Health practitioners and the popular track sessions held during the Annual Meeting. This past year they had two days of combined education and one day of individual breakout sessions for each practitioner group. The section will begin submitting articles for *SpineLine* that will be of interest to the NASS membership.

Exercise Committee
This multidisciplinary committee is charged with evaluating and consolidating existing NASS exercise-related publications and educating spine care providers and patients about the role exercise can play in promoting spine health and reducing back pain. The Exercise Committee added two new members in 2011, Scott Johnston, MD and Ryan Tauzell, PT. Committee members presented an educational booth at the 2011 Annual Meeting—Functional Assessment. Attendees who stopped by the booth were able to test their grip strength and try a single leg stand. In 2011, the committee began work on an outreach project by producing a cervical exercise video and brochure estimated to be completed by late 2012.

Section on Biologics and Research
The Section discussed creating quarterly webinars on different topics of interest to their constituents. Planning for their instructional course and symposium at the NASS Annual Meeting has been the focus of the Section. The course, “Stem Cells and Other Cell-Based Therapies” and the symposium, “Biologics: A Critical Review of the Evidence,” featured faculty who are current Section members.

Section on Motion Technology
The mission of the Section on Motion Technology is to provide a forum for the discussion and dissemination of information regarding motion preservation and stabilization technologies, including nonfusion and nontraditional methods. The Section may also stimulate or collaborate on position papers and/or educational content. Under the leadership of Chair, Dr. Avinash Patwardhan, the Motion Technology Section held another successful instructional course in Chicago focusing on clinical, scientific and economic challenges.

Section on Rehabilitation, Interventional and Medical Spine (RIMS)
The mission of the Rehabilitation, Interventional and Medical Spine (RIMS) is to develop NASS’ intellectual capabilities in the titled areas by identifying spine physician and allied health education needs. RIMS designs educational efforts to instruct in necessary areas and identifies enduring education materials for physicians and patients that may aid in improving spine treatments or understanding of spine treatments. The goal is to create programming and activities that will attract new members to NASS as well as serve the existing membership. The section held an instructional course during the Annual Meeting focusing on thoracic spine pain.
In 2011, the Research Council was directed by Daniel Resnick, MD, MS with Charles Reitman, MD and Zoher Ghogawala, MD and staffed by the Research Department. The council works to integrate evidence-based medicine into NASS projects and the spine field, analyzes evidence and helps provide relevant and current scientific spine care information and recommendations to NASS members.

The Council conducts ongoing surveillance of the spine field, including information from various government, quality and regulatory sources for issues of relevance, as well as from the American Medical Association (AMA) and other specialty-related groups. The Council also provides evidence-based medicine education and literature searches for the society at large.

Council activities in 2011 included:

» **Advocacy and Health Policy.** The Research Council collaborates with NASS Advocacy and Health Policy efforts, providing input to NASS and the Alliance of Specialty Medicine on issues of comparative effectiveness research, regulation, health care and health care reform issues related to quality.

» **Advocating for Musculoskeletal Research Funding.** As a participant in the American Academy of Orthopaedic Surgeons’ Research Capitol Hill Days, NASS sent a physician and a patient representative to Washington, DC to advocate on behalf of increased musculoskeletal research funding.

» **Government Comment to Support Spine.** The NASS Research Council and its committees support spine care through various projects and comments submitted to government. These comments can be viewed on the NASS website at (http://www.spine.org/Pages/PracticePolicy/ClinicalCare/ScientificPolicyComments/Default.aspx)

» **Centers for Medicare and Medicaid Services (CMS)**
  - **Medicare Imaging Demonstration Project.** At the invitation of CMS and their contractor, NASS developed case scenarios for use in testing decision support systems for the Medicare Imaging Demonstration. These case scenarios operationalize the imaging recommendations made by NASS in its degenerative lumbar spinal stenosis and spondylolisthesis guidelines.
  
  - **Proposed Fee Schedule.** NASS sent comments in response to the physician fee schedule relative to quality issues.
  
  - **Measurement and Data Collection.** NASS submitted comments to the AMA and CMS on opportunities for increasing the effectiveness and lowering the burden of CMS measurement and data collection activities.

» **Accountable Care Organizations.** NASS commented both alone and in conjunction with the Alliance for Specialty Medicine on the proposed rule for accountable care organizations.

» **Food and Drug Administration (FDA).** The Research Council, in conjunction with the Health Policy Council, is responsible for oversight and surveillance of FDA-related issues. Bernard Pfeifer, MD, NASS’ FDA Liaison, and NASS staff provide surveillance and support for these efforts.

» **Letter of Support for Reclassification of Pedicle Screws.** At the request of the Orthopedic Surgical Manufacturer’s Association (OSMA), NASS reviewed its petition and sent a letter of support to the FDA regarding the indication of pedicle screw use in the pediatric population to be Class II, for which special controls would apply.

» **Metal-on-Metal Joints.** In 2011, the FDA published a public notice on issues related to use of metal-on-metal hip joints. With its member expertise in this subject, NASS participated in discussions with the FDA.

» **Future Directions for Research—2011 Revision.** Future Directions for Research documents gaps in the spine evidence base, as identified during evidence analysis for guideline development and other projects for reference and promoting research in those areas. (http://www.spine.org/Documents/Future_Directions_for_Research.pdf)
CLINICAL GUIDELINES
NASS clinical guidelines provide up-to-date treatment information and help define quality spine care. NASS uses a transparent, evidence-based methodology, incorporating levels of evidence and grades of recommendation in the development of clinical guidelines. NASS Evidence-Based Guideline Development Committee members are trained in evidence analysis as a requirement of participation.

Five guidelines are available for free download on the NASS website:

- **Diagnosis and Treatment of Cervical Radiculopathy from Degenerative Disorders** (http://www.spine.org/Documents/Cervical_Radiculopathy.pdf)
- **Diagnosis and Treatment of Degenerative Lumbar Spondylolisthesis** (http://www.spine.org/Documents/Spondylolisthesis_Clinical_Guideline.pdf)
- **Revised 2011: Diagnosis and Treatment of Degenerative Lumbar Spinal Stenosis** (http://www.spine.org/Documents/LumbarStenosis11.pdf)
- **Antithrombotic Therapies in Spine Surgery** (http://www.spine.org/Documents/Antithrombotic_Therapies_ClinicalGuidelines.pdf)

In 2011, the Evidence-Based Guideline Development Committee completed revision of *Diagnosis and Treatment of Degenerative Lumbar Spinal Stenosis*. The committee also began revision of *Antibiotic Prophylaxis in Spine Surgery* and began a new guideline on lumbar disc herniation.

REVIEW AND RECOMMENDATION STATEMENTS
(http://www.spine.org/Pages/PracticePolicy/ClinicalCare/ScientificPolicyComments/Review_Recommendation_Statements.aspx)

On the spectrum of methods, review and recommendation statements are midway between pure consensus papers and formal guidelines. Although a formal guideline process is optimal, issues of practicality, resources and time relative to working within the constraints of a not-for-profit, volunteer environment must be considered, leading to this middle ground option. Given the considerable scrutiny policy statements undergo, the process nonetheless must be rigorous, inclusive, consistent, transparent, and make efficient use of NASS resources.

In review and recommendation statements, the scope and number of questions addressed is generally smaller than that of a formal clinical guideline, allowing review of more limited literature and incorporation of transparently identified consensus where the evidence is lacking. In these statements, a review takes place on a topic and recommendations are made based on the evidence or, when lacking, consensus.

The Cervical Epidural Steroid Injections review and recommendations statement was published in 2011, with the topics Discography, and Transforaminal Epidural Steroid Injections under development. Upon completion of these statements, NASS will no longer publish review and recommendation statements, as it will instead develop appropriateness criteria.

APPROPRIATENESS CRITERIA
NASS began developing its first set of appropriateness criteria in 2011 using a modified version of the RAND method. This method combines the best available scientific evidence with the collective judgment of experts to yield a statement regarding the appropriateness of performing a procedure at the level of patient-specific symptoms, medical history, and test results. The first topic under development is cervical fusion.
PERFORMANCE MEASUREMENT
NASS is a member of the AMA-convened Physicians’ Consortium for Performance Improvement (PCPI)—the primary body developing performance measures for physicians. In this forum, NASS voices its position on issues related to performance measures and pay-for-performance that may affect spine care providers. Staff and NASS’ representatives to the consortium, David Wong, MD and Christopher Kauffman, MD, continue to represent NASS at PCPI.

EVIDENCE-BASED MEDICINE TRAINING
NASS’ online, self-directed evidence-based medicine (EBM) and evidence analysis training program is available to members in conjunction with the University of Alberta’s Centre for Health Evidence (CHE). This program is based on content from the Users’ Guides to the Medical Literature. CHE has consolidated this material into a customized resource for NASS. Users receive continuing medical education credit for completion of the program. The course has been transferred to a web-based format and modified to increase user-friendliness. This training is available to all NASS members. In addition, a one-day EBM course will now be available each spring and as a regular adjunct to the annual meeting, which will also fulfill the EBM training requirement for the committees where this is requisite. Course participants also receive continuing medical education credit. In 2011, the courses were opened to nonmembers as well.

PATIENT SAFETY
The Patient Safety Committee continues to administer the NASS Spine Safety Alert Program, monitoring a variety of government resources for patient safety-related notices that may be useful to NASS members, and distributes them via email and member publications. In 2011, the Committee issued 58 notices relevant to spine care and its providers. (http://www.spine.org/Pages/PracticePolicy/ClinicalCare/SpineSafetyAlerts/Default.aspx)

NASS SPINE REGISTRY
In 2010-2011, multiple societies with an interest in spine were invited to participate in a society coalition, the Multi-Society Spine Registry Collaborative, to develop a registry plan. Six societies agreed to join forces and work with a registry vendor, Outcomes, Inc., to develop a plan for such a project. The collaborative consisted of:

• American Academy of Orthopaedic Surgeons
• American Academy of Neurosurgeons/Congress of Neurological Surgeons Joint Section on Spine
• International Spine Intervention Society
• North American Spine Society
• The SAS-The International Society for the Advancement of Spine Surgery
• Scoliosis Research Society

The collaborative worked in conjunction with Outcomes, Inc., to develop a feasibility study and outline a registry design. After reviewing the final study, the collaborative determined that it had done due diligence as a group and needed to move forward. Each society determined to proceed on its own, while agreeing that common language and structure were important.

NASS developed a request for proposal for vendors and again selected Outcomes, Inc., to work with as its partner in registry development. NASS is designing a diagnosis-based, multidisciplinary registry. Measures have been developed, and design and implementation are underway for a 15-20 month pilot across 15 sites and 1,000 patients.

RESEARCH SURVEY REVIEW
The Research Survey Review Committee was mobilized in 2009 and reviews and processes requests to survey the NASS membership.
RESEARCH GRANTS
Each year NASS awards research grants to applicants with the highest-quality spine-related submissions. Since 1989, NASS has funded more than $2.4 million in grants for spine-related research. Funding is available for general research grants, young investigators and nontraditional, nonsurgical treatment. The 2011 research grant application netted 139 letters of proposal for grant applications. Ultimately, four grants and one fellowship were funded for a total of $187,425.

• **Grant (Translational):** Correlation of Clinical Outcome After Lumbar Fusion with Intradiscal Cytokine Expression and Novel Assay System.
  Primary Investigator: D. Greg Anderson, MD
  Amount: $49,450 One-Year Grant

• **Grant (Clinical):** Transcranial Direct Current Stimulation (tDCS) in the Management of Acute Post-Spine Surgery Pain: A Prospective Randomized Controlled Trial
  Primary Investigator: Jeffrey Borckardt, PhD
  Amount: $35,075 One-Year Grant

• **Grant (Basic):** Biological Repair of intervertebral Disc Degeneration
  Primary Investigator: Fackson Mwale, PhD
  Amount: $45,000 2nd Year of Funding for Two-Year Grant

• **Grant (Basic):** Defining the Role of the Endoplasmic Reticulum (ER) Stress and the UPR in Spinal Cord Injury
  Primary Investigator: Claudio Hetz, PhD
  $52,900 One Year Funding of a Two-Year Proposal

• **Research Traveling Fellowship**
  Hong Joo Moon, MD, PhD
  Ferguson Laboratory of Spine Research at University of Pittsburgh
  Amount: $5,000
ADVOCACY

In 2011, the NASS Advocacy Committee and staff continued to advocate for the improvement of provisions in the Patient Protection and Affordable Care Act (PPACA) and other pieces of proposed legislation which affect patient access to high-quality spine care. NASS Advocacy worked independently and with our colleagues in the Alliance of Specialty Medicine to address provisions that impact spine care providers and their patients. NASS Advocacy finished the year with a successful symposium and SpinePAC reception at the Annual Meeting featuring guest speakers who addressed the myths of health care reform and where NASS members’ practice fits into the integrated care and Accountable Care Organization (ACO) models.

NATIONAL ASSOCIATION OF SPINE SPECIALISTS
The National Association of Spine Specialists—an IRS-designated 501(c)(6) trade organization—is the advocacy arm of the North American Spine Society. The Association was founded in 1999 and continues to be administered by NASS. The Association advocates in the legislative and regulatory arenas for public policies that protect members’ ability to practice medicine and give patients access to the specialists, technologies and treatments they require for quality spine care. The Association is governed by the NASS Executive Committee, with the NASS Advocacy Committee overseeing NASS’ advocacy efforts. All members of NASS are members of the association (unless they opt out), with a portion of member dues allocated to advocacy efforts. The association relies on its members to advocate on behalf of the spine care field and patients.

GOVERNMENT RELATIONS
Since the inception of the NASS advocacy program, members and staff have worked to develop and support policies that preserve patient access to high-quality, evidence-based specialty care. The NASS Advocacy Committee and staff strive to address each public policy issue that arises. NASS Advocacy spent much of 2011 addressing provisions contained in the health care reform law that could impact spine care providers and patients. These issues include the lack of provisions addressing a long-term fix to the flawed Sustainable Growth Rate (SGR) formula or comprehensive medical liability reform, the creation of the Independent Payment Advisory Board (IPAB) and quality provisions such as Comparative Effectiveness Research (CER), the Physician Quality Reporting Initiative (PQRI) and Health Information Technology (HIT) language.

Advocacy Committee members and staff attended meetings and other relevant events on behalf of the Association to establish NASS’ brand and to advocate for spine care providers on Capitol Hill. NASS leaders and staff met with more than 80 members of Congress and their staff to discuss issues of importance to spine care providers and their patients.

NASS Advocacy developed and the NASS Board approved position statements on physician ownership of facilities and physician-industry relations in 2011. NASS Advocacy is in the process of drafting papers on geographic variation, physician workforce issues and ACOs. These papers will go to the full NASS Board for final approval in 2012.

The Advocacy staff continued to track a select number of state health policy issues. NASS continued to work with the AMA’s Scope of Practice Partnership to remain on top of state-level scope issues affecting the delivery of spine care and with other medical societies to ensure patients receive high-quality care from only those practitioners adequately trained to provide specialty care.

In order to maximize NASS resources, Advocacy staff met regularly with government relations staff from other medical societies and attended state legislative meetings held by the AMA to share information on state-level developments.
NASS continued to operate the Legislative Action Center (www.spineadvocate.org), an online tool designed to facilitate communication between policymakers and the public. NASS Advocacy used this tool to provide frequent updates on its work in Washington, DC. The Advocacy Committee also included regular pieces in the NASS Health Policy Review and E-News, providing education on health care reform and other important policy issues, including the status of key legislation. NASS members received numerous action alerts on issues being debated in their state or federal legislatures in 2011. These alerts prompted members to contact their lawmakers and provided talking points to educate elected officials on how these issues impact physicians and patients in their district.

ALLIANCE OF SPECIALTY MEDICINE
NASS’ Advocacy work in Washington, DC, was augmented by its membership in the Alliance of Specialty Medicine, a nonpartisan coalition of medical societies representing more than 100,000 specialty physicians. In 2011, the Alliance expanded to 12 members when two new specialty societies, the American Society of Echocardiography and the American Society of Plastic Surgeons, joined the Alliance. The Alliance provides Congress, government agencies and other key stakeholders with surveys, white papers, statistics, testimony, briefing materials, letters of support and other resources on key health care issues. NASS continues to be a leading organization in the Alliance, working tirelessly to influence positions taken by the coalition.

NASS once again had the largest contingent of attendees at the Alliance annual fly-in event. In addition to the Issues Panel of experts who discussed a variety of issues which affect specialists, ten members of Congress addressed the Alliance at the 2011 fly-in. Attendees also attended a fundraiser for House Ways and Means Chairman Dave Camp (R-MI) and met with their representatives in Congress. In order to give volunteers a stronger voice in strategic planning efforts, the Alliance launched the Physician Advisory Council in 2011. The inaugural meeting of the council was held during the Alliance fly-in and was chaired by NASS Advocacy Chairman Raj Rao, MD.

2011 ANNUAL MEETING
Attendees at the 2011 NASS Annual Meeting in Chicago, Illinois had the opportunity to hear from two leading voices on the changing landscape of our nation’s health care system. Richard (Buz) Cooper, MD, a professor of medicine and Senior Fellow in the Leonard Davis Institute of Health Economics at the University of Pennsylvania, discussed the underlying conceptual framework of health care reform, which sees physicians as the drivers of health care spending; the fallacies that flow from it and the resulting workforce and practice structures that physicians will have to cope with in the coming years. Mark Shields, MD, MBA, Senior Medical Director for Advocate Physician Partners and Vice President of Medical Management for Advocate Health Care, addressed why it is in the interest of doctors and hospitals to work together to better integrate care to drive quality, safety and cost-effectiveness. Dr. Shields also discussed some early models of such integration that allow independent doctors to jointly negotiate and more advanced models such as ACOs.

NASS members who made a contribution to SpinePAC in 2011 had the opportunity to visit with former presidential advisor and Annual Meeting guest speaker Karl Rove at a reception.

SPINEPAC
SpinePAC is the Political Action Committee fund through which the Association supports federal legislative candidates who champion policies that benefit spine care patients and the professionals who treat them. SpinePAC is funded through contributions from individuals in the spine care field, specifically Association members. SpinePAC raised more than $64,000 in 2011. SpinePAC contributed more than $38,000 to candidates who support spine care providers and their patients. Contributions to SpinePAC were used to support candidates for federal office—79% Republican and 21% Democrat—who are congressional leaders and support sound health care policies; most served on committees with jurisdiction over health care issues, including physician reimbursement, quality improvement and medical liability reform. SpinePAC hosted events for several members of Congress, including House Ways and Means Chairman Dave Camp (R-MI), Rep. Geoff Davis (R-KY), Rep. Jeb Hensarling (R-TX), Rep. Richard Neal (D-MA) and Senate candidate Tommy Thompson (R-WI).
AMA CPT AND RUC ACTIVITIES
NASS’ Health Policy Council continued to actively participate in the CPT/RUC process to protect and grow reasonable reimbursement for services provided by spine care physicians. William Sullivan, MD, continued in the role of NASS’ Advisor to the AMA Specialty Society RVS Update Committee (RUC). William Mitchell, MD, continued to serve as the CPT Advisor for NASS. Collectively, Drs. Sullivan and Mitchell were highly effective in representing the interests of NASS members.

In conjunction with several other specialty societies, NASS presented the following to the CPT Editorial Panel:

- Proposals to delete codes 64622, 64623, 64626, and 64627 and create four new codes for neurolysis per joint with fluoroscopic or CT guidance;
- A proposal to revise code 27096 for SI joint injection to bundle image guidance; and
- A proposal to editorially revise the descriptor for code 72052 to clarify the number of views included.

NASS presented relative value recommendations at the RUC on the following codes in conjunction with several other specialty societies:

- Two new CPT codes that combined previous arthrodesis codes 22612 and 22630;
- Two new codes for electronic analysis of programmable implanted pumps and revisions to two existing codes for refilling and maintenance of implantable pumps;
- Two revised codes for spine x-rays;
- Four new codes for neurolysis per joint with fluoroscopic or CT guidance; and
- Revised code for SI joint injection with image guidance.

CODING COMMITTEE
The Coding Committee continued to monitor, review and comment on spine-related coding and reimbursement issues, effectively representing the concerns of NASS members. The Coding Committee took on many activities throughout 2011, including Coding Q&A columns for each issue of SpineLine. Additionally, the Committee assisted with reviewing and responding to member inquires relating to correct coding. The Committee reviewed and updated the 2012 NASS Common Coding Scenarios for Comprehensive Spine Care. Proposed coding applications for presentation to the CPT Editorial Panel were considered and developed. The Committee also evaluated and drafted comments on spine-related polices and regulations developed by CMS and private insurers.

Coding Question Submissions
The Coding Committee continued to field a high volume of coding question submissions from members in 2011. The questions were distributed to Coding Committee members, where a comprehensive response was formulated and forwarded to the NASS member. This bank of questions has been compiled and uploaded onto the NASS web site and is searchable by the NASS membership.
PROFESSIONAL, ECONOMIC AND REGULATORY COMMITTEE
Under the direction of Chair Christopher Bono, MD, the Professional, Economic and Regulatory (PERC) reviews and comments on medical coverage policies. In 2011, the PERC commented on the following policies:

- Epiduroscopy, Epidural Lysis of Adhesions, and Functional Anesthetic Discography (UnitedHealthcare);
- Lumbar Fusion (WellPoint);
- Spinal Injections (Washington State Health Technology Assessment);
- Lumbar Fusion and Discography (Premera Blue Cross);
- Interspinous Distraction Devices (Spacers) (WellPoint);
- Minimally Invasive Lumbar Interbody Fusion (WellPoint);
- Vertebroplasty (Washington State Health Technology Assessment);
- Percutaneous Endoscopic Spinal Surgery (WellPoint);
- Spinal Surgery Laminectomy & Fusion (Aetna);
- Bone of Soft Tissue Healing and Fusion Enhancement Products (UnitedHealthcare);
- Artificial Total Disc Replacement for the Spine (UnitedHealthcare);
- Vertebroplasty, Vertebral Augmentation; Percutaneous (Noridian);
- Lumbar Fusion (Premera Blue Cross);
- Bundling of Lumbar Laminectomy, Facetectomy, or Foraminotomy with a Lumbar Spinal Fusion (BCBS of North Carolina);
- Percutaneous, Endoscopic, and Minimally Invasive Lumbar Interbody Fusion (WellPoint);
- Lumbar Spinal Fusion for Instability and Degenerative Disc Conditions (First Coast);
- Minimally Invasive Lumbar Interbody Fusion (BCBS of Minnesota); and
- Sacroiliac Joint Fusion (WellPoint)

NOMINATIONS TO CMS COMMITTEES
NASS nominated Christopher Kauffman, MD, and Raj Rao, MD, to the Medicare Evidence Development & Coverage Advisory Committee (MEDCAC), the body that provides expert guidance to CMS on specific clinical coverage topics.

NASS nominated Gregory Przybylski, MD, to CMS’ Medicare Economic Index (MEI) Advisory Panel.

HEALTH POLICY ISSUES
NASS submitted comments on the following issues:
- CMS’ proposed rule on the Medicare Shared Savings Program: Accountable Care Organizations;
- CMS’ proposed rule to make changes to the electronic prescribing (eRx) Incentive Program;
- CMS’ proposed rule on the 2012 Medicare physician fee schedule; and
- CMS’ final rule on the 2012 Medicare physician fee schedule.
ETHICS COMMITTEE
The NASS Ethics Committee advises NASS leadership on the latest research and legislation regarding issues of disclosure, ethics and professionalism, including the regular maintenance and revision of NASS policies in these areas. The Committee distributes information, articles and papers and is available to provide education for the membership on issues of ethics and professionalism in spine care. It also offers symposia at the Annual Meeting and suggests revisions to the NASS bylaws. The Ethics Committee oversees the activities of two subordinate bodies, the Conflict of Interest Review Panel (COIRP) and the Professional Conduct & Ethics Sub-Committee (PCEC).

January 2011 marked the two-year anniversary of the implementation of the comprehensive NASS Disclosure Policy, adopted by the Board of Directors in October 2008. Participants are required to disclose actual, estimated dollar amounts of all relationships held in the twelve months preceding disclosure (note: at the end of 2011, this policy was amended to require conflicts in the previous calendar year, in order to bring NASS policies into line with anticipated Sunshine Act requirements). According to the NASS Ethics Committee, which authored the policy, “the goal [was] to create an environment of scientific validity, in which learners can judge for themselves whether the information they receive is objective and unbiased, and to be sure that our members are current and forthright in their dealings with one another and with their colleagues and patients.”

Now a well-known facet of NASS membership, the module disclosure process has been working smoothly for more than two years, and NASS has been approached for guidance by several organizations wishing to emulate our module. NASS was asked to join the Council of Medical Specialty Societies, based largely on its leadership in disclosure and professionalism.

CONFLICT OF INTEREST REVIEW PANEL
The NASS Board of Directors created the COIRP in October 2008 to assist members and the Board in determining the existence of volunteers’ Conflicts of Interest (COI) and—when conflicts exist—determining whether they would materially interfere with the proposed task or assignment of that member. In the event there is a complaint to the PCEC regarding a COI, the COIRP serves in an advisory capacity to the PCEC.

The COI Review Panel also plays a significant role in the vetting of nominees for the presidential line, Board of Directors, and certain committee chairs, according to stipulations laid out in the “Policy on Conflict of Interest in Leadership Positions.” In cases where material conflicts exist, the COIRP makes recommendations to the Board for management of the conflict.

PROFESSIONAL CONDUCT & ETHICS SUB-COMMITTEE
The NASS Professional Conduct and Ethics Committee continued its mission to review cases of possible ethical misconduct in relation to expert witness testimony, as well as other ethical disputes. Results of all hearings that result in disciplinary action are published in SpineLine. Several cases were addressed in 2011.

SPINE EXECUTIVE FORUM
Formerly the “Leadership Committee,” the mission of the NASS Spine Executive Forum is to coalesce resources from the spine care community to seek ways to provide cost-efficient, evidence-based, ethical care and to promote the awareness, involvement and satisfaction of patients. Composed of current and previous NASS Executive Committee members as well as leaders from the spine industry, the Spine Executive Forum is chaired by each year’s current NASS President. The Forum meets at the NASS Annual Meeting and occasionally at other regional locations.
To help its members learn and practice the highest quality, evidence-based and ethical spine care, NASS publishes a distinguished collection of periodicals, serials, publications and online resources.

**THE SPINE JOURNAL**

The Spine Journal saw its Impact Factor (IF) rise from 2.902 to 3.024 in June 2011, which meant a jump from fifth to fourth in the orthopedic category and the top spot among spine journals.

The successful rankings have had a dramatic effect on manuscript submissions. Since June 2010, the pace of new submissions has jumped by more than 115%, forcing the dedicated editorial board and staff to increase the Journal’s reviewer pool to ensure papers continue to receive rapid reviews and short acceptance-to-publication timeframes.

The Spine Journal continues to strive for excellence, offering TSJ readers the newest clinical research and basic science papers, as well as review articles, technical reports and a number of special features, such as the popular “Images of Spine Care” and “Journal Reports.” Editor in Chief Eugene Carragee, MD, and the deputy editors continue to provide readers with insight on the original research TSJ publishes, offering the most relevant commentaries from experts in varying fields and the established “Evidence & Methods” summaries that accompany each clinical study published in TSJ.

In June, TSJ provided readers with an in-depth look into the evolving safety profile of rhBMP-2, a bone morphogenetic protein used in spine fusion surgeries. This focus issue received a significant amount of international media coverage and helped prompt the manufacturer of the product to fund a $2.5 million review into the product’s original published research.

The TSJ Executive Editorial Board continued to expand its transparency initiatives. Following an August editorial outlining changes for the Journal, TSJ:

- Implemented an expanded disclosure form developed by the International Committee of Medical Journal Editors (ICMJE) which was modified to comply with NASS’ disclosure policy.
- Updated and published its “Instructions to Authors” to explain requirements for stating disclosure and funding sources in the abstract and discussion section of each new manuscript, giving readers clear details on “both the presence and magnitude of potential conflicts that may influence how study data are collected, analyzed, interpreted and reported.”
- Included in its “Instructions to Authors” specific CONSORT guidelines for clinical studies, providing authors with a breakdown of the different types of clinical research and offering corresponding checklists and flowcharts for each type.
- Implemented a three-tier manuscript review process: (1) standard peer review by subject area experts, (2) second-tier review by NASS Level II deputy editors and (3) third-tier review by NASS Level I Evidence and Methods deputy editors. Final review is with the Editor in Chief, who is also vetted at NASS Level I.

In conjunction with the NASS Value Task Force, The Spine Journal added a fourth category to its annual Outstanding Paper Awards—a category on value in spine care research. All four awards were presented at the 26th Annual Meeting, in Chicago, and the winning papers were published in the January 2012 issue of The Spine Journal.

The 2011 Editors’ Choice Award—the top-rated article of 2010—was also presented at the Chicago meeting. The authors of the winning paper, titled “Cost and Utilization of Conservative Management of Lumbar Disc Herniation Prior to Surgical Discectomy,” presented their findings at a Special Interest Group (SIG) meeting.

The Spine Journal welcomed Jeffrey A. Rihn, MD, from the Rothman Institute at Thomas Jefferson University Hospital in Pennsylvania. Dr. Rihn, the Journal’s first Socioeconomic Deputy Editor, focuses largely on value-based research. The Board also welcomed Zoher Ghogawala, MD, from Greenwich Neurosurgery in Connecticut as the new Neurosurgery Deputy Editor, replacing Dan Resnick, MD, who rotated off the board in November after serving two distinguished terms.
Medical Editor, Eric Truumees, MD, and the Editorial Board produced another outstanding volume of SpineLine in 2011, furthering spine care education and generating important discussions among members. Among the Board’s well-received print and digital offerings were several multidisciplinary “Invited Reviews” and “Curve/Countercurve” debates, including:

• “Pseudotumor Formation in Association with Metal-on-Metal Total Disc Replacements”
• “Does Stem Cell Therapy Have a Role in Spine Fusion?”
• “Spinal Injections and Anticoagulants”
• “Vertebral Artery Injury in Blunt Cervical Spine Trauma”
• “Radiofrequency Denervation”

The Editorial Board’s September/October focus issue on BMPs came on the heels of The Spine Journal’s June 2011 BMP issue. Taking into account TSJ’s examination of BMP’s evolving safety profile, SpineLine reviewed providers’ practical concerns with a survey of BMP use among readers, perspectives on off-label use and an imaging case.

Setting the tone with his always engaging, relevant SpineLine “Editor’s Messages,” Dr. Truumees encouraged more commentary voices in 2011. Among them were pieces on recently published studies, personal perspectives, letters to the editor and regular messages “From the Desk of the President.”

SpineLine’s “Radiology and Imaging” content included several interesting cases and images: “Kummell’s Disease,” “Seroma/Bone Overgrowth Associated with the Use of Infuse (rhBMP-2) in Transforaminal Lumbar Interbody Fusion,” and “Preoperative Embolization of Spinal Vascular Metastasis.”

With contributions from NASS’ Value Task Force, SpineLine continued its series on “Value in Spine Care” with: “Measuring Outcomes and Value in Spine Care,” “Comparative Effectiveness Research,” “Structuring a Spine Registry,” “Coverage Policy Decisions for Spinal Care: How Value is Likely to be a Factor” and “Adding Value to Medicare’s Physician Payment System.” Several other NASS Committees contributed regular reports of NASS’ work on behalf of members, ie, “Coding Q&A,” “Regulatory Policy” and “Advocacy” columns, as well as “NASS News.”

Available online at: www.spineline-digital.org, SpineLine online includes all the content of the print edition plus web extras including blogs and comments, related sidebars, figures and tables, and more. Digital edition readers may instantly access: links to citations, email contacts, pertinent websites and advertisers; search, archive, share; a “look inside” preview; and instant web page views instead of lengthy downloading. Traffic to the digital edition shows members like it; we saw a ten-fold increase in visitors during 2011.

Building on the success of its first annual meeting Daily News in 2010, NASS published an expanded daily newspaper in Chicago during the 2011 meeting. In addition to the onsite 12-page printed dailies, NASS also published three monthly digital previews leading up to the meeting, three digital daily editions and a digital post meeting edition. Support from print advertisers covered the cost of this well-received Annual Meeting benefit.

In an effort to educate health care professionals, the public, lawmakers and others about the latest in spine care, research and advocacy, NASS provided background information and expert commentary to the news media. In 2011, NASS issued 20 press releases on topics such as new NASS products, position statements, awards and research. The Spine Journal issued seven press releases to educate the public and spine professionals about studies in the journal, awards and editorial policy changes.

In 2011, NASS was specifically mentioned in more than 2,300 news stories, reaching an estimated audience of more than 841 million people. During that same time period, The Spine Journal was featured in more than 1,600 stories, reaching more than 975 million people.
SOCIAL MEDIA, BLOG & OTHER NASS CHANNELS

On May 30, 2011, NASS began an official LinkedIn group for the organization. By the end of 2011, 60 members had joined. From the time NASS adopted HootSuite Pro (February), NASS tweets were clicked a total of 1001 times.

The top five Twitter posts for the year were:

1. June 29, 2011
   RT @nassspine: New York Times article on upcoming TSJ issue

2. April 26, 2011
   NASSspine: Successful treatment for teacher w/ degenerative disc disease

3. May 2, 2011
   NASSspine: TSJ article: percutaneously placed pedicle screws risk joint violation

4. April 29, 2011
   Study shows that in-office MRI leads to increased back surgeries.

5. May 25, 2011
   NASSspine: TSJ article links bone growth protein to male sterility.

PATIENT EDUCATION


The committee once again met with the Public Affairs Committee at the Annual Meeting to discuss their common project, KnowYourBack.org. Additions to the website in 2011 include: new feature articles, a scrolling newsfeed, videos of NASS members from local media outlets and updates to the spinal conditions, treatments and back prevention sections of the website. In addition, the committee liaison program was formed to give NASS committees with specific areas of expertise the ability to interface directly with the website to add content and suggest changes. Medical and interventional members are encouraged to submit their patient success stories.
The Spine Education & Research Center in Burr Ridge, IL, is home to a technologically advanced bio-skills lab and auditorium/classroom that hosts hundreds of spine care specialists and professionals who seek to enhance their knowledge and skills.

As the result of processes put in place by management during the prior year, 2011 set records for inquiries, revenue and courses. 44 external courses and seven NASS courses were held at SERC.

By maintaining outstanding relationships with existing clients and vendors, SERC’s reputation as the premier, full-service high tech conference center continued to expand. In addition, the flexibility of the design of SERC allowed us to stage events ranging from one-station Development Labs to 20-station Resident Courses.
DONOR RECOGNITION

ANNUAL RESEARCH FUND DONORS

$1,000-$4,999
Alexandre B. De Moura, MD
Stephen E. Heim, MD
Casey K. Lee, MD
Mark Joseph Ruoff, MD, FACS
Patrick J. Sweeney, MD
Clayton E. Turner, MD
Jerald P. Waldman, MD
Thomas R. Walsh, MD

$500-$999
Marc A. Asher, MD
Andrew Cappuccino, MD
Saad Chaudhary, MD
Thomas L. Dopson, MD
David F. Fardon, MD
Ernest M. Found, Jr., MD
Edward J. Goldberg, MD
Michael R. Klein, MD
Michael D. Kornblatt, MD
Sergio Mendoza-Lattes, MD
Christopher B. Michelson, MD
Peter A. Moskovitz, MD
Pierce Dalton Nunley, MD
Frank M. Phillips, MD
Luis P. Sanchez-Caso, MD
Phillip Schneider
William O. Shaffer, MD
Caple A. Spence, MD
Lane D. Spero, MD
Franco E. Vigna, MD
Michael J. Vives, MD
William C. Watters, MD
William C. Welch, MD, FACS, FICS

$1-$499
Edward P. Abraham, MD
Andrew Ackerman
Lloyd C. Adams, MBA
Paulo H. Aguilar, MD
Todd J. Albert, MD
Paul R. Alongi, MD
Claude David Borowsky, MD
Nathaniel P. Brooks, MD
David W. Caldwell, MD
Antonio Cocchiarella, MD
Maurice Collada, MD
Frederic Pierre Collignon, MD
Roberta Antoine Dressen, MBA
Christine Ellet
Maria A. Falleti, RN
David W. Florence, MD
Michael H. Freed, MD
Richard E. Freeman, MD
Hart Phillip Garner, MD
James Jay Harms, MD
Samuel J. Hess, MD
David R. Hicks, MD
Sean P. Hughes, MD
Ho Suk Jang, MD
Kristope J. Karami, DO, MMS
David H. Kim, MD
Charles B. Kime, MD
Phillip R. Lucas, MD
Edilson Silva Machado, MD
Frank W. Maletz, MD
Amir S. Malik, MD
John P. Masciale, MD
Hugh D. McPherson, MD, FRCSC
Richard C. Mendel, MD, FACS
Charles A. Mick, MD
John D. Miles, MD
Geore S. Miz, MD
H. Brooks Morgan, MD
Lisa Mueller
John Gray Phillips, MD
Barry L. Samson, MD
Rick C. Sasso, MD
William A. Sims, MD
Jeffrey M. Sumner, MD
Larry T. Todd, DO
Alexander R. Vaccaro, MD, PhD
Stephen J. Warner, MD
Ahmad Zakeri, MD

SPINE RESEARCH ENDOWMENT FUND

President’s Level Giving Club ($25,000+)
Hazel P. Perkins Trust
Hansen A. Yuan, MD

Founder’s Level ($20,000-$24,999)
Estate of George and Opal Edwards
Volker K.H. Sonntag, MD

Bronze Level ($1-$999)
Kristin Giacopelli
Kirk Hewitt
Denise Mitchell
Rosemary Most
Eric Muehlbauer
Frank M. Phillips, MD
Ronald E. Stoeck
Jeffey C. Wang, MD
PARTNERS IN SPINE: RESEARCH CONTRIBUTORS THROUGH THE ORTHOPAEDIC RESEARCH AND EDUCATION FOUNDATION

Gunnar B. J. Andersson, MD, PhD
Anonymous
Dr. Donald Asmussen, MD
David S. Bradford, MD
Saad Chaudhary, MD
Craig A. Dopf, MD
Thomas L. Dopson, MD
David F. Fardon, MD
Ernest M. Found Jr., MD
Edward J. Goldberg, MD
Gerald Q. Greenfield Jr., MD
Richard D. Guyer, MD
Michael D. Kornblatt, MD
Alan L. Longert, MD
Phillip R. Lucas, MD
Marc I. Malberg, MD
Sergio Mendoza-Lattes, MD
Christopher B. Michelsen, MD
Robert A. Morgan, MD
Mark A. Palumbo, MD
Tom E. Reinsel, MD
Edward Santos, MD
Philip L. Schneider, MD
Arnold M. Schwartz, MD (IMO Daniel Sol Schwartz)
Jonathan N. Sembrano, MD
Richard A. Tallarico, MD
Tony Y. Tannoury, MD
Michael Vives, MD
Jerald P. Waldman, MD, MBA

SPINE EDUCATION & RESEARCH CENTER

$1,000,000
GE Healthcare
Kyphon
Medtronic
Stryker

$250,000-$499,000
Synthes Spine
Zimmer Spine

$50,000-$149,000
Getinge
Life Instruments

$25,000-$49,000
Blackstone Medical
Charles L. Branch Jr., MD
Richard D. Guyer, MD
Protech Eyewear
Freeman

$10,000-$24,999
ABS Med, Inc.
Jean-Jacques Abitbol, MD
Bovie/Aaron Medical
Thomas J. Errico, MD
Tom Faciszewski, MD
Fiddes-Talmadge Family Charitable Fund
Dr. Alexander and Mrs. Patrice Ghanayem
Integra Life Sciences
Hallett H. Mathews, MD
Joel M. Press, MD
Dr. and Mrs. Gregory J. Przybylski
Sontec Instruments

2011 Donors

$1,000-$4,999
Alexander J. Ghanayem, MD

$500-$999
Mark Drzala, MD
Thomas Highland, MD
William O. Shaffer, MD
Clayton E. Turner, MD

$1-$499
John W. Arbuckle, MD
Joseph Henry Arguelles, MD
Gordon R. Bell, MD
James D. Bruffey, MD
Kerry Coman
Sergio Castillo, MD
John H. Drabing, DO
John N. Flood, DO
Richard E. Freeman, MD
Javier Gutierrez, MD
Cassandra Harvey, PhD, DVM
David R. Hicks, MD
David Holt, MD
Ho Suk Jang, MD
A. Jay Khanna, MD
James Mahalek, MD
Frank W. Maletz, MD
John P. Masciale, MD
Steven E. Mather, MD
David Meneses, MD
John D. Miles, MD
Antonio Carlos Montanaro, MD
Timothy A. Moore, MD
Peter A. Moskovitz, MD
Kensei Nagata, MD, PhD
Luis Paulo Oliveira Pereira, MD
Michel Pare, MD, FACS, FRCSC
John Gray Phillips, MD
Mark J. Ruoff, MD
Walter R. Sassard, MD
Charles E. Seibert, MD
Patti Thompson
Ronnie Gonzalo Valverde-Mora, MD
Felipe Wainer, MD
Michael Woods, MD
2011 CORPORATE CONTRIBUTORS

NASS thanks their industry partners in furthering spine care and research.

The Premier Club
($25,000-$49,999)
Zimmer Spine

The Heritage Club
($10,000-$24,999)
Freeman
Spinal Elements

The Century Club
($1,000-$9,999)
Amedica
Life Instrument Corporation
Orthofix
Each year, awards are presented at the NASS Annual Meeting to individuals who were nominated for their outstanding contributions to NASS and the field of spine care. These awards are named for founding members of NASS who not only made outstanding contributions to the field of spine care and research, but also played key roles in the early success of NASS.

2011 AWARD WINNERS

The Leon Wiltse Award, to recognize excellence in leadership and/or clinical research in spine care, was awarded to Kiyoshi Kaneda, MD, of Bibai-shi, Hokkaido, Japan. Dr. Kaneda, an orthopedic surgeon, is a former chair of the Department of Orthopaedic Surgery at the Hokkaido University School of Medicine in Japan.

The David Selby Award, to recognize a member who contributed greatly to the art and science of spinal disorder management through service to NASS, was awarded to Joel Press, MD of Chicago. Dr. Press, a past president of NASS, is a professor of Physical Medicine and Rehabilitation at Northwestern University School of Medicine, and former Chief of Staff at the Rehabilitation Institute of Chicago.

The Henry Farfan Award, to recognize outstanding contributions in spine-related basic science research, was awarded to Gunnar Andersson, MD, PhD, of Chicago. Dr. Andersson, an orthopedic surgeon, is past president of the International Society for the Study of the Lumbar Spine and the Orthopaedic Research Society. He is currently Professor and Chairman Emeritus and The Ronald L. DeWald, MD Chair in Spinal Deformities, Rush University Medical Center.

OUTSTANDING PAPER AWARDS

NASS created the “Outstanding Paper Awards” in 1989 to recognize excellence in unpublished spine care research, taking into consideration three major disciplines: basic science, surgical science and medical and interventional science.

After a year marked by record submissions, unprecedented publicity and an increased Impact Factor, The Spine Journal has selected its winners for the “Outstanding Paper Awards” and the “Editors’ Choice Award,” the top-rated paper published in the Journal in a given year. The winners were announced at the 26th Annual Meeting in Chicago.
2011 NASS COMMITTEE APPOINTMENTS

ADVOCACY COMMITTEE
Chair: John G. Finkenberg, MD
Samy Abdou, MD
Claude M. Borowsky, MD
Alan Brown, MD
Thomas Chen, MD
Robert Dimick, MD
S.B. Kalantar, MD
Rajan Perkash, MD
Greg Przybyski, MD
Alok Sharan, MD
David A. Wong, MD, MSc
Staff Liaison: Nicholas A. Schilligo, MS

ANNUAL MEETING PROGRAM COMMITTEE
Co-chair: Christopher P. Kauffman, MD
Co-chair: William J. Sullivan, MD
Venu Akuthota, MD
Joseph Cheng, MD, MS
Michael DePalma, MD
Michael Heggeness, MD
Charles A. Mick, MD
Eeric Truumees, MD
Jeffrey C. Wang, MD
Way Yin, MD
Staff Liaison: Christina Wolf

AUDIT COMMITTEE
Chair: James B. Reynolds
Aleksandar Curcin, MD, MBA
John Heller, MD
A. Jay Khanna, MD
Mark A. Lorenz, MD
Robert McLain, MD
William C. Watters III, MD
Staff Liaison: Robert Nelson

CLINICAL RESEARCH DEVELOPMENT COMMITTEE
Chair: Zoher Ghogawala, MD, FACS
Louis G. Jenis, MD
Mark A. Lorenz, MD
Donna D. Ohnmeiss, PhD
Daniel K. Resnick, MD, MS
Staff Liaison: Pam Hayden

CODING COMMITTEE
Co-chair: R. Dale Blasier, MD
Co-chair: William Sullivan, MD
Joseph Cheng, MD, MS
Christopher DeWald, MD
Constantine Fotopoulos, MD
Eric Graham, MD
Scott Horn, DO
Christopher Kauffman, MD
Donna Lahey, RN
Eric Mayer, MD
William Mitchell, MD
David O’Brien, MD
Alok Sharan, MD
Christopher Standaert, MD
Karin R. Swartz, MD
Jon J. Wilson, DO
Staff Liaisons: Dawn Brennemann, Kim Kuman, Allison Waxler

CONFLICT OF INTEREST REVIEW PANEL
Chair: Marjorie Eskay-Auerbach, MD, JD
Ron Lehman, MD
Paul Matz, MD
Joel Press, MD
Frederic T. Schwartz, MD
Santhosh Thomas, MD
Staff Liaison: Laura Sawyer

CONTINUING MEDICAL EDUCATION COMMITTEE
Chair: Jeffrey C. Wang, MD
Ali Araghi, DO
Norman Chutkan, MD
Mark B. Dekutoski, MD
Jack Jallo, MD, PhD, FACS
A. Jay Khanna, MD
Scott R. Laker, MD
Lawrence Lenke, MD
Erik P. Moen, PT
Michael L. Reed, DPT, OCS
K. Daniel Riew, MD
Alan Villavicencio, MD
Staff Liaison: Christina Wolf
2010 NASS COMMITTEE APPOINTMENTS

DISCOGRAPHY REVIEW AND RECOMMENDATION TASK FORCE
Co-chair (Research): Christopher M. Bono, MD
Co-chair (Health Policy): Anil K. Sharma, MD
Peleg Ben-Galim, MD
Nikolai Bogduk, MD, PhD
Eugene J. Carragee, MD
David R. O’Brien, MD (Observer)
Conor O’Neill, MD
Staff Liaison: Pam Hayden

ETHICS COMMITTEE
Chair: Jerome Schofferman, MD
Paul Arnold, MD
Michael Heggeness, MD
Stanley A. Herring, MD
Jack Jallo, MD, PhD, FACS
Sohail K. Mirza, MD, MPH
Mitchell F. Reiter, MD
David Rothman, PhD
Sheila Rothman, PhD
Stuart M. Weinstein, MD
Staff Liaison: Laura Sawyer

EVIDENCE COMPILATION & ANALYSIS COMMITTEE
Chair: Charles A. Reitman, MD
Stanley A. Herring, MD
Christopher P. Kauffman, MD
David A. Wong, MD, MSc
Staff Liaison: Pam Hayden

EVIDENCE-BASED GUIDELINE DEVELOPMENT COMMITTEE
R. David Bauer, MD
Peleg Ben-Galim, MD
Sigurd H. Berven, MD
Robert Shay Bess, MD
R. Carter Cassidy, MD
Sean D. Christie, MD
Charles H. Cho, MD, MBA
W. Craig Clark, MD
Bernard A. Cohen, PhD
Michael D. Daubs, MD
Steven C. Dennis, MD
George E. DePhillips, MD
Daniel P. Elskens, MD
Dennis E. Enix, DC, MBA
Gary Ghiselli, MD
S. Raymond Golish MD, PhD
Bryan A. Gunnoe, MD
Amgard S. Hanna, MD
Jack Jallo, MD, PhD, FACS
Bruce E. Katz, MD
Michael R. Klein, MD
Anthony S. Lapinsky, MD
Mark A. Lorenz, MD
Matthew B. Maserati, MD
Timothy A. Moore, MD
Mark E. Myers, MD
Robert C. Nucci, MD
Paul Park, MD
Rakesh D. Patel, MD
Sheeraz A. Qureshi, MD, MBA
Charles A. Reitman, MD
Daniel S. Robbins, MD
Nick A. Shamie, MD
Daniel J. Sullivan, MD, JD
William L. Tontz, MD
Alan Villavicencio, MD
Andrew N. Vo, MD
Keith D. Williams, MD
Michael S. Zeide, MD
Staff Liaison: Belinda Duszynski

EXERCISE COMMITTEE
Chair: Ronald G. Donelson, MD
Venu Akuthota, MD
Stanley Herring, MD
Scott Johnston, MD
Heidi Prather, DO
Joel Press, MD
Michael Reed, DPT, OCS
Joshua Rittenberg, MD
Allison Stout, DO
Ryan Tazzell, PT
F. Todd Wetzel, MD
Ken Yonemura, MD
Ian Young, PT
Staff Liaison: Allison Pintauro

GOVERNANCE COMMITTEE
Chair: Mitchel Harris, MD
Scott Haldeman, MD, PhD, DC
Robert A. Hart, MD
Timothy Holt, MD
Gregory Moore, MD
Stephen Pledger, MD
Richard Skolasky, ScD
F. Todd Wetzel, MD (Ex-Officio)
Staff Liaisons: Allison Pintauro, Eric J. Muehlbauer, MJ, CAE
## 2010 NASS Committee Appointments

### International Education Committee
**Co-Chair:** Michael Daubs, MD  
**Co-Chair:** Jean-Charles Le Huec, MD  
Ahmet Alanay, MD  
Norman Chutkan, MD  
Yong Hai, MD, PhD  
George S. Miz, MD  
Nhat Tran, MD  
Luiz Vialle, MD  
**Staff Liaison:** Christina Wolf

### NASS Registry Subcommittee
**Chair:** William C. Watters III, MD  
Zoher Ghogawala, MD, FACS  
Louis G. Jenis, MD  
Donna D. Ohnmeiss, PhD  
Heidi Prather, DO  
Daniel K. Resnick, MD, MS  
William J. Sullivan, MD  
David A. Wong, MD, MSc  
Way Yin, MD  
**Staff Liaison:** Pam Hayden

### Investment Committee
**Chair:** Aleksandar Curcin, MD, MBA  
Charles Cho, MD, MBA  
Bernard Cohen, PhD  
James B. Reynolds, MD  
F. Todd Wetzel, MD (Ex-Officio)  
**Staff Liaison:** Robert Nelson

### Nominating Committee
**Chair:** Ray Baker, MD  
Michael DePalma, MD  
Mitchell Harris, MD  
Michael Heggeness, MD, PhD  
Charles A. Mick, MD  
Daniel K. Resnick, MD, MS  
**Staff Liaison:** Eric J. Muehlbauer, MJ, CAE

### Lumbar Transforaminal Epidural Steroid Injection Review and Recommendation Task Force
**Chair:** Venu Akuthota, MD  
**Staff Liaison:** Pam Hayden

### Membership Committee
**Chair:** Donna D. Ohnmeiss, PhD  
W. Daniel Bradley, MD  
Bernard A. Cohen, MD, PhD  
Scott D. Daffner, MD  
Russell C. DeMicco, DO  
Todd J. Harbach, MD  
Marla S. Kaufman, MD  
Frank E. Lorch, MD  
Robert McLain, MD  
Jeff Phelps, MD  
Charles S. Theofilos, MD, PA  
**Staff Liaison:** Brian Jones

### Motion Technology Section
**Chair:** Avinash Patwardhan, PhD  
Rolando Garcia, MD, MPH  
Richard D. Guyer, MD  
Yong Hai, MD, PhD  
Roger Hartl, MD  
Isador Lieberman, MD, FRCSC, MBA  
James Lindley, MD  
Dilip Sengupta, MD  
**Staff Liaison:** Colleen O’Brien

### Outcomes Compendium Task Force
**Chair:** Donna D. Ohnmeiss, PhD  
Sigurd Berven, MD  
Andrew R. Block, PhD  
William W. Deardorff, PhD  
Zoher Ghogawala, MD, FACS  
James Lindley Jr., MD  
Heidi Prather, DO (Advisory Member)  
Daniel K. Resnick, MD, MS  
John J. Triano, DC, PhD  
William C. Welch, MD, FACS, FICS  
**Staff Liaison:** Pam Hayden

### Patient Education Committee
**Chair:** Russell C. DeMicco, MD  
Jamie Baisden, MD, FACS  
Frank Bender, MD  
Patrick Bolt, MD  
Simon Chao, MD  
Linda P. D’Andrea, MD  
Olumide Danisa, MD  
Scott Johnston, MD  
Faisal Zaman, MD  
**Staff Liaison:** Kelly Dattilo
2010 NASS COMMITTEE APPOINTMENTS

**PATIENT SAFETY COMMITTEE**
Co-chair: David A. Wong, MD, MSc  
Co-chair: Stanley A. Herring, MD  
Stephen Bartol, MD, MBA, FRCSC  
David R. Chandler, MD  
David B. Cohen, MD, MPH  
Olumide Danisa, MD  
Francis T. Ferraro, MD, FACS  
James M. Graham, MD, PhD  
John J. Han, MD  
Michael S. Hisey, MD  
Zacharia Isaac, MD  
Ajeya P. Joshi, MD  
Thomas M. Mauri, MD  
Rhoderic P. Mirkin, MD  
Charles A. Reitman, MD  
Daniel K. Resnick, MD, MS  
James B. Reynolds, MD  
William Richardson, MD  
Jeffrey M. Spivik, MD  
**Staff Liaisons:** Pam Hayden, Belinda Duszynski

**PERFORMANCE MEASUREMENT COMMITTEE**
Co-chair: David A. Wong, MD, MSc  
Co-chair: Christopher P. Kauffman, MD  
Jamie Baisden, MD, FACS  
David R. Chandler, MD  
Aleksandar Curcin, MD, MBA  
James S. Harrop, MD  
Ajeya Joshi, MD  
Charles A. Reitman, MD  
Daniel K. Resnick, MD, MS  
John A. Seldomridge III, MD, MBA  
Charles H. Wingo, MD  
Way Yin, MD  
**Staff Liaisons:** Pam Hayden, Belinda Duszynski

**PROFESSIONAL CONDUCT & ETHICS SUBCOMMITTEE**
Chair: Ken Yonemura, MD  
Brian Casazza, MD  
Marjorie Eskay-Auerbach, MD, JD  
Tom Faciszewski, MD  
Eric J. Muehlbauer, MJ, CAE  
Joel Press, MD  
Daniel Sullivan, MD  
F. Todd Wetzel, MD  
**Staff Liaison:** Laura Sawyer

**PROFESSIONAL, ECONOMIC & REGULATORY COMMITTEE**
Chair: Christopher Kauffman, MD  
Charles H. Cho, MD, MBA  
Jon D. Donshik, MD  
Mina Foroohar, MD  
James Harrop, MD  
Zacharia Isaac, MD  
Matthew McGirt, MD  
David R. O’Brien, MD  
Lee Riley, MD  
David Russo, DO  
Eeric Truumees, MD  
**Staff Liaisons:** Dawn Brennaman, Kim Kuman, Allison Waxler

**PROFESSIONAL SOCIETY COALITION ON LUMBAR FUSION OUTCOMES**
Co-chair: Daniel K. Resnick, MD, MS  
Co-chair: Steven D. Glassman, MD  
Christopher M. Bono, MD  
Charles L. Branch Jr, MD  
Richard D. Guyer, MD  
Paul C. McCormick, MD, MPH  
David W. Polly Jr, MD  
David A. Wong, MD, MSc  
**Staff Liaison:** Pam Hayden

**PUBLIC AFFAIRS COMMITTEE**
Chair: Joseph S. Cheng, MD  
Simon Chao, MD  
Anthony Guancialle, MD  
Vikas V. Patel, MD  
Michael P. Steinmetz, MD  
**Staff Liaison:** Nicolle Heller

**REHABILITATION, INTERVENTIONAL & MEDICAL SPINE (RIMS)**
Chair: Gerard Malanga  
Jerome Schofferman, MD  
Charles Cresanti-Daknis, MD  
Ronald G. Donelson, MD  
Charles Mick, MD  
Christine L. Munson, MD  
David R. O’Brien, Jr., MD  
Solomon Pearce, DO  
Heidi Prather, DO  
Joel M. Press, MD  
Mark Tyburski, MD  
**Staff Liaison:** Colleen O’Brien
2010 NASS COMMITTEE APPOINTMENTS

RESEARCH PROJECT MANAGEMENT COMMITTEE
Zoher Ghogawala, MD, FACS
Vijay K. Goel, PhD
Siavash S. Haghighi, FACP, PhD, DVM
Mark A. Lorenz, MD
Jeffrey Lotz, PhD
Vikas V. Patel, MD
Daniel K. Resnick, MD, MS
Richard L. Skolasky Jr, ScD
Alan Villavicencio, MD
William C. Welch, MD, FACS, FICS
Staff Liaison: Karen James

RESEARCH SURVEY REVIEW COMMITTEE
Chair: Louis G. Jenis, MD
Steven R. Garfin, MD
Zoher Ghogawala, MD, FACS
Ziya L. Gokaslan, MD, FACS
Ira Goldstein, MD
Ajay Jawahar, MS, MD
Daniel K. Resnick, MD, MS
Staff Liaison: Belinda Duszynski

RESIDENT AND FELLOW EDUCATION COMMITTEE
Chair: Edward J. Dohring, MD
Jason E. Garber, MD
Patrick Hsieh, MD, MS
Scott Johnston, MD
Donna Lahey, RNFA
Rakesh D. Patel, MD
K. Daniel Riew, MD
Alok Sharon, MD
Allison Stout, DO
Staff Liaison: Colleen O’Brien

REVIEW & RECOMMENDATION STATEMENT
OVERSIGHT COMMITTEE
Venu Akuthota, MD (Education Council)
Jacob M. Buchowski, MD (Administration Council)
Joseph S. Cheng, MD (Health Policy Council)
Ralph E. Gay, MD, DC (Education Council)
Alexander J. Ghanayem, MD (Administration Council)
Zoher Ghogawala, MD, FACS (Research Council)
David R. O’Brien, Jr., MD (Health Policy Council)
Charles A. Reitman, MD (Research Council)
Daniel K. Resnick, MD, MS (Research Council)
Christopher J. Standaert, MD (Health Policy Council)

SECTION DEVELOPMENT COMMITTEE
Chair: Eric Truumees, MD
Carol Hartigan, MD
Wellington Hsu, MD
Gerard Malanga, MD
Avinash Patwardhan, PhD
Michael L. Reed, DPT, OCS
Staff Liaison: Laura Sawyer

SECTION ON ALLIED HEALTH
Chair: Michael L. Reed, DPT, OCS
Nicola Hawkinson, DNP, RN
Ray Hines, PA-C
Donna Lahey, RN, PA
Jason Mazza, OPA-C, MSc, CCRC
Robert Pare, PA-C
Rick Placide, MD, PT
Laura Tansey, RN
Gregory Whitcomb, DC
Staff Liaison: Jenni Edsell

SPINE BIOLOGICS RESEARCH SECTION
Chair: Jeffrey C. Wang, MD
Paul A. Anderson, MD
Joshua Auerbach, MD
Hyun W. Bae, MD
Nitin Bhatia, MD
Jacob Buchowski, MD, MS
Scott Daffner, MD
Michael Daubs, MD
Mark Erwin, DC, PhD
Michael Fehlings, MD, PhD, FRCSC
Mark Foster, PhD, MD, FACS
Wellington Hsu, MD
Daniel Leizman, MD
Alpesh Patel, MD, FACS
Vikas V. Patel, MD
Ashraf A. Ragab, MD
Gwendolyn Sowa, MD, PhD
Michael P. Steinmetz, MD
Peter G. Whang, MD
Tim Yoon, MD, PhD
Staff Liaison: Jenni Edsell
2010 NASS COMMITTEE APPOINTMENTS

SPINE EXECUTIVE FORUM
Chair: Greg Przybylski, MD
Ray Baker, MD
Charles Branch, MD
David Fardon, MD
Alexander Ghanayem, MD
Mitchell Harris, MD
Charles Mick, MD
William Mitchell, MD
Daniel Resnick, MD, MS
Christopher Shaffrey, MD
Christopher Standaert, MD
William Watters III, MD
David Wong, MD, MSc
Staff Liaisons: Laura Sawyer and Allison Pintauro

THE SPINE JOURNAL EDITORIAL BOARD
Editor in Chief: Eugene J. Carragee, MD
Deputy Editors:
Paul B. Bishop, DC, MD, PhD
Christopher M. Bono, MD
Conor O’Neill, MD
Daniel K. Resnick, MD, MS
Bradley K. Weiner, MD
Tim Yoon, MD, PhD
Associate, Advisory and Special Consultant Editorial Boards: Please see the January issue of TSJ for a complete listing.
Director of Publications: Pamela Towne
Managing Editor: Robin T. Campbell
Editorial Assistant (Stanford): Heidi McCormick

SPINELINE EDITORIAL BOARD
Medical Editor: Eric Truumees, MD
Section Editors:
Kenan I. Arnaoutovic, MD
W. Jeremy Beckworth, MD
Christopher M. Bono, MD
Anthony V. D’Antoni, DC, PhD
Pierre A. d’Hemecourt, MD
Walter Finnegan, MD, JD
Michael E. Frey, MD
Sanjitpal S. Gill, MD
Ira M. Goldstein, MD
Jonathan N. Grauer, MD
Adam S. Kanter, MD
Ali Moshirfar, MD
Thomas E. Mroz, MD
Heidi Prather, DO
Craig H. Rabb, MD
Jonathan N. Sembrano, MD
Michael J. Vives, MD
Faisel M. Zaman, MD, FAAPMR
Founding Editor: Stuart M. Weinstein, MD
Director of Publications: Pamela Towne
Publications Manager: Kelly Dattilo

TRANSFORAMINAL REVIEW AND RECOMMENDATION TASK FORCE
Chair: Venu Akuthota, MD
Maxwell Boakye, MD
Nikolai Bogdruk, MD, PhD
John E. Easa, MD
Alpesh A. Patel, MD
Heidi Prather, DO
Anil K. Sharma, MD
Jeffrey T. Summers, MD
Staff Liaison: Pam Hayden

VALUE TASK FORCE
Sigurd Berven, MD
Christopher Bono, MD
Bradford Currier, MD
Simon Dagenais, DC, PhD
Matthew F. Gornet, MD
Charles A. Mick, MD
David W. Polly Jr., MD
Heidi Prather, DO
Daniel K. Resnick, MD, MS
Jeffery Rihn, MD
Christopher Standaert, MD
David A. Wong, MD, MSc
Way Yin, MD
## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

<table>
<thead>
<tr>
<th>Assets</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 9,225,036</td>
<td>$ 7,437,140</td>
</tr>
<tr>
<td>Investments—unrestricted</td>
<td>3,529,263</td>
<td>3,511,117</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>181,903</td>
<td>136,625</td>
</tr>
<tr>
<td>Pledges receivable—net</td>
<td>133,304</td>
<td>179,444</td>
</tr>
<tr>
<td>Other receivables</td>
<td>97,953</td>
<td>131,486</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>260,117</td>
<td>175,076</td>
</tr>
<tr>
<td>Inventory</td>
<td>58,532</td>
<td>102,866</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td>13,486,108</td>
<td>11,673,754</td>
</tr>
<tr>
<td><strong>Long-term pledges receivable—net of discount</strong></td>
<td>61,051</td>
<td>263,804</td>
</tr>
<tr>
<td>Net property and equipment</td>
<td>12,177,652</td>
<td>12,969,991</td>
</tr>
<tr>
<td>Bond issue costs—net of amortization</td>
<td>170,004</td>
<td>178,433</td>
</tr>
<tr>
<td>Investments—permanently restricted</td>
<td>1,773,052</td>
<td>1,771,527</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$ 27,667,867</td>
<td>$ 26,857,509</td>
</tr>
</tbody>
</table>

| Liabilities and Net Assets            |           |           |
| Current Liabilities                   |           |           |
| Accounts payable                      | $ 171,271 | $ 215,214 |
| Accrued expenses                      | 505,754   | 828,902   |
| Deferred revenue                      | 1,979,871 | 1,609,291 |
| Current portion of bonds payable      | 560,000   | 700,000   |
| **Total Current Liabilities**         | 3,216,896 | 3,353,407 |

| Long-Term Debt                        |           |           |
| Bonds payable                         | 10,540,000 | 11,100,000 |
| Interest rate swap agreement liability| 58,696     | 478,795    |
| **Total Liabilities**                 | 13,815,592 | 14,932,202 |

| Net Assets                             |           |           |
| Unrestricted                           | 11,093,004 | 9,018,851  |
| Temporarily restricted                 | 986,219    | 1,134,929  |
| Permanently restricted                 | 1,773,052  | 1,771,527  |
| **Total Net Assets**                   | 13,852,275 | 11,925,307 |

| Total Liabilities and Net Assets       | $ 27,667,867 | $ 26,857,509 |
## 2011 FINANCIALS

### CONSOLIDATED STATEMENTS OF ACTIVITIES

<table>
<thead>
<tr>
<th>Income</th>
<th>Unrestricted</th>
<th>Temporarily Restricted</th>
<th>Permanently Restricted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dues and fees</td>
<td>$ 2,486,282</td>
<td>$</td>
<td>$</td>
<td>$ 2,486,282</td>
</tr>
<tr>
<td>Sales of publications and advertising</td>
<td>414,458</td>
<td>–</td>
<td>–</td>
<td>414,458</td>
</tr>
<tr>
<td>Contributions and sponsorships</td>
<td>658,105</td>
<td>175,640</td>
<td>1,525</td>
<td>835,270</td>
</tr>
<tr>
<td>Annual Meeting &amp; educational programs</td>
<td>8,221,241</td>
<td>–</td>
<td>–</td>
<td>8,221,241</td>
</tr>
<tr>
<td>Investment income</td>
<td>39,005</td>
<td>(8,188)</td>
<td>–</td>
<td>30,817</td>
</tr>
<tr>
<td>Rental income</td>
<td>654,562</td>
<td>–</td>
<td>–</td>
<td>654,562</td>
</tr>
<tr>
<td>Royalties</td>
<td>186,369</td>
<td>–</td>
<td>–</td>
<td>186,369</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>6,512</td>
<td>–</td>
<td>–</td>
<td>6,512</td>
</tr>
<tr>
<td>Net assets released from restrictions—satisfaction of program restrictions</td>
<td>316,162</td>
<td>(316,162)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>12,982,696</td>
<td>(148,710)</td>
<td>1,525</td>
<td>12,835,511</td>
</tr>
</tbody>
</table>

### Operating Expenses

<table>
<thead>
<tr>
<th>Program services</th>
<th>Unrestricted</th>
<th>Temporarily Restricted</th>
<th>Permanently Restricted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member services</td>
<td>1,003,085</td>
<td>–</td>
<td>–</td>
<td>1,003,085</td>
</tr>
<tr>
<td>Publications</td>
<td>1,567,619</td>
<td>–</td>
<td>–</td>
<td>1,567,619</td>
</tr>
<tr>
<td>Research and scientific affairs</td>
<td>545,464</td>
<td>–</td>
<td>–</td>
<td>545,464</td>
</tr>
<tr>
<td>Annual meeting and education</td>
<td>4,112,292</td>
<td>–</td>
<td>–</td>
<td>4,112,292</td>
</tr>
<tr>
<td>Advocacy</td>
<td>1,047,819</td>
<td>–</td>
<td>–</td>
<td>1,047,819</td>
</tr>
<tr>
<td>Spine Masters Institute</td>
<td>1,024,159</td>
<td>–</td>
<td>–</td>
<td>1,024,159</td>
</tr>
<tr>
<td><strong>Total program services</strong></td>
<td>9,487,863</td>
<td>–</td>
<td>–</td>
<td>9,487,863</td>
</tr>
<tr>
<td>Management and general</td>
<td>1,687,740</td>
<td>–</td>
<td>–</td>
<td>1,687,740</td>
</tr>
<tr>
<td>Fundraising and development</td>
<td>153,039</td>
<td>–</td>
<td>–</td>
<td>153,039</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>11,328,642</td>
<td>–</td>
<td>–</td>
<td>11,328,642</td>
</tr>
</tbody>
</table>

### Operating income

| Unrestricted | (148,710) | 1,525 | 1,506,869 |

### Unrealized gain on interest rate swap agreement

| Unrestricted | – | – | 420,099 |

### Change in net assets

| Unrestricted | (148,710) | 1,525 | 1,926,968 |

### Net assets, beginning of year

| Unrestricted | 1,134,929 | 1,771,527 | 11,925,307 |

### Net assets, end of year

| Unrestricted | 986,219 | 1,773,052 | 13,852,275 |
### CONSOLIDATED STATEMENTS OF CASH FLOWS

<table>
<thead>
<tr>
<th>Cash flows from operating activities</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in net assets</td>
<td>$ 1,926,968</td>
<td>$ 1,652,171</td>
</tr>
<tr>
<td>Adjustments to reconcile change in net assets to net cash provided by operating activities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>999,554</td>
<td>986,109</td>
</tr>
<tr>
<td>Unrealized gain on investments</td>
<td>166,621</td>
<td>(294,596)</td>
</tr>
<tr>
<td>Gain on Swap interest rate</td>
<td>(420,099)</td>
<td>(235,667)</td>
</tr>
<tr>
<td>Decrease (increase) in assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receivables</td>
<td>237,148</td>
<td>190,540</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>(85,041)</td>
<td>(2,249)</td>
</tr>
<tr>
<td>Inventory</td>
<td>44,334</td>
<td>(8,084)</td>
</tr>
<tr>
<td>Increase (decrease) in liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>(43,943)</td>
<td>(359,049)</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>(323,148)</td>
<td>333,669</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>370,580</td>
<td>205,198</td>
</tr>
<tr>
<td><strong>Net cash provided by operating activities</strong></td>
<td>2,872,974</td>
<td>2,468,042</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash flows from investing activities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Proceeds from sale of investments</td>
<td>2,014,246</td>
<td>1,881,666</td>
</tr>
<tr>
<td>Purchase of investments</td>
<td>(2,200,538)</td>
<td>(2,027,686)</td>
</tr>
<tr>
<td>Purchase of property and equipment</td>
<td>(198,786)</td>
<td>(272,224)</td>
</tr>
<tr>
<td><strong>Net cash used by investing activities</strong></td>
<td>(385,078)</td>
<td>(418,244)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash flows from financing activities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment on bonds</td>
<td>(700,000)</td>
<td>(700,000)</td>
</tr>
<tr>
<td><strong>Net cash used by financing activities</strong></td>
<td>(700,000)</td>
<td>(700,000)</td>
</tr>
</tbody>
</table>

| Net increase in cash and cash equivalents | 1,787,896  | 1,349,798  |
| Cash and cash equivalents, beginning of year | 7,437,140  | 6,087,342  |
| Cash and cash equivalents, end of year   | 9,225,036  | 7,437,140  |

### Supplemental Information

| Unrelated business income taxes paid | 5,000   | 52,903   |
| Interest paid                       | 681,612 | $ 695,347 |