See the Present, Future of CT Surgery at the STS Annual Meeting

For the first time since 1973, the STS Annual Meeting will be held in Houston, home to award-winning restaurants, nightlife, museums, and NASA’s Johnson Space Center.

The meeting will be held January 21-25 at the George R. Brown Convention Center. It kicks off with a full day of new and exciting technology at STS/AATS Tech-Con on Saturday, followed by Annual Meeting programming from Sunday through Wednesday.

“The STS Annual Meeting is the epicenter of cardiothoracic surgery,” said STS President Joseph E. Bavaria, MD. “The meeting will be packed with interactive learning on hot topics. We’ll also explore practice management, work-life balance, and quality improvement issues that impact STS members on a daily basis.”

HOT TOPICS IN EACH SUBSPECIALTY
All members of the cardiothoracic surgery team will find educational programming relevant to everyday practice. Invited speakers and debates will be woven among scientific abstracts and surgical videos.

The offerings for adult cardiac surgery include sessions on arrhythmias, mechanical circulatory support devices, the thoracic aorta, coronary artery disease, and mitral valve and aortic valve diseases.

“We have multiple abstracts on catheter-based therapy for aortic valve and mitral valve surgery, open and endovascular management of the aortic arch, and the ascending as well as the descending aorta,” said Workforce on Annual Meeting Chair Wilson Y. Szeto, MD. “New technology on rapid deployment aortic valve replacement platforms also is on the program.”

For general thoracic surgeons, expect several presentations about minimally invasive surgery, long-term outcomes for cancer patients, and real-world tips that you can take home and apply in your practice.

“Something that’s going to be a major focus at the meeting is the question of robotic surgery versus other types of minimally invasive surgery—does it really provide any benefits, or

“There are a lot of things flying under the radar in terms of development, and you’re not going to hear about them anywhere else.”
—Mark F. Berry, MD

Survey Shows High Career Satisfaction

Professional satisfaction is high among cardiothoracic surgeons. A recent survey of STS members found that 73% of practicing cardiothoracic surgeons are satisfied, very satisfied, or extremely satisfied with their careers.

The findings come from the 2014 STS Practice Survey, the latest installment of surveys conducted approximately every 5 years since the early 1970s to provide the specialty with a better understanding of demographics, practice patterns, caseloads, and other trends in cardiothoracic surgery practice.

The 63-question survey was sent to 4,343 STS Active and Senior Members between October 1 and November 5, 2014. A total of 1,262 (29.1%) responded. The results will be published in the November issue of The Annals of Thoracic Surgery; an article in press is now available on annalsthoracicsurgery.org.

“This survey found that CT surgeons are pleased with their jobs and are managing to maintain stable operative volumes,” said John S. Ikonomidis, MD, PhD, who wrote the Annals paper. “We are expanding our armamentarium of surgical techniques and becoming very outcome and quality savvy.”

SHIFT TO EMPLOYMENT MODEL SEEN

A much higher percentage of surgeons than in past surveys (76%) reported being employed by a third party in some fashion.

continued on page 12 ➔

continued on page 11 ➔
Cardiothoracic Surgeons Speak the Same Language

Joseph E. Bavaria, MD, President

I’ve been traveling the world nearly my entire life, and I’ve had the good fortune of meeting with cardiothoracic surgeons on six continents.

As I think about these meetings and my colleagues around the world, what strikes me the most is not our differences, but our commonalities. Whether you’re working in Jamaica or Japan, Italy or Iceland, once we make an incision, we see the same things. The anatomy is the same; an aorta in Belgium is the same as an aorta in Brazil.

COMMON QUESTIONS
No matter where I travel, I am asked many of the same questions. My colleagues want to know what’s new—what’s new in technology, what’s new in my health care system, what’s new in my OR, and what’s new at STS.

I always am eager to exchange information about the latest medical technology and clinical trials in cardiothoracic surgery, especially when it comes to transcatheter aortic valve replacement, aortic dissection, and rapidly developing technology (e.g., LVADs).

I also enjoy conversations about the STS National Database. Cardiothoracic surgeons around the world are realizing that patient outcomes are pivotal to their populations and their governments. We talk about how recent improvements in the Database make the data more representative and statistically significant and are a more sophisticated measure of how we help our patients.

DESIRE FOR COLLABORATION
Cardiothoracic surgeons belong to a tightknit global community that craves collaboration.

One of the Society’s strategic plan goals is to foster collaboration and connection worldwide. As part of this initiative, STS surgeon leaders routinely attend national and international cardiothoracic surgery meetings in Europe and Asia, and we’re taking steps to increase the Society’s presence in Latin America. Some of the articles in The Annals of Thoracic Surgery recently were published in Chinese. The Society also is working with other organizations on collaborative clinical practice guidelines and efforts to harmonize database definitions and standards to further optimize and standardize patient care.

In addition, the STS foundation is looking for cardiothoracic surgeons who can provide their time and expertise to previously underdeveloped countries that are building cardiothoracic surgery programs of their own.

Dave Fullerton told us during his Presidential Address at the 2015 STS Annual Meeting that the burden of noncommunicable diseases—such as cardiovascular disease and lung cancer—is growing astronomically, especially in the developing world.

The global cardiothoracic surgery community needs to come together and help out these countries and their populations. Every time I have visited a developing or emerging nation, I have been impressed by how the health care teams do more with less. We can all learn lessons about being more efficient with fewer resources; I have never left a country without learning something new.

ACCESS TO TRAINING
Despite our intense willingness to collaborate, we have stumbling blocks that will be hard to surmount.

One of the biggest challenges is in surgeon training. Many young cardiothoracic surgeons outside the United States want to spend 6 months or a year in the US as part of a fellowship or training program. Visa requirements and the regulatory environment make that difficult. We need to work on this as a global community; we need to provide more training opportunities for energetic young cardiothoracic surgeons.

Increased use of the internet has helped ease some of the problems with access to education. STS recently expanded its online educational platform to include a robust Learning Management System, offering the entire Thoracic Surgery Curriculum, textbooks, videos, and case presentations (see page 6).

The Society also is considering new in-person educational programs that will be conducted outside of the United States in collaboration with our regional partners. Although the STS Annual Meeting offers an unparalleled opportunity for interactive education and scholarly debate (see cover story), we realize that not all cardiothoracic surgeons have the time or the means to attend the meeting in person.

Nevertheless, it’s vital that we find ways to learn from each other. Cardiothoracic diseases are not confined within borders, and cardiothoracic surgery is not a sovereign state. Our treatments and solutions are transferrable across continents and countries. We all need to take steps that will increase our exchange of information.

Cardiothoracic surgeons speak the same language, and our patients will benefit from our remembering that.
As health care reimbursement continues to shift from fee-for-service to a value-based model, organizations must continually evolve to ensure their success. Providing care in a value-based framework essentially requires delivering evidence-based, high-quality care in an efficient, cost-effective manner and being transparent about outcomes. In a 2010 article in *The New England Journal of Medicine*, Michael E. Porter, PhD suggested that value should be defined around the customer, set the framework for performance improvement, and be measured by outcomes and cost.

The cardiovascular service line (CVSL) is well-suited to optimize success within this newer reimbursement system. The CVSL model focuses on organizing care of the cardiovascular patient collaboratively across disciplines. It has helped to change the care model from one where disciplines worked side-by-side but independently, to one where they work in close partnership. It consolidates operations, marketing, finances, quality, and strategic planning into this focus on a single patient population.

The CVSL creates value by optimizing performance. It does this by guiding the development of evidence-based, standardized protocols by collaborating physicians. The CVSL can define and measure outcomes and cost and share the information across disciplines, rather than in silos, thereby influencing more of the care provided to patients. Because the CVSL also oversees marketing and strategic development activity, it also can strategically use its outcomes and cost data to attract and retain referring physicians and patients.

**HOW TO ADOPT THE CVSL**

Changes to an organizational structure can challenge any organization. Creating a mission statement may seem unnecessary when groups have been providing care for a long time. However, a mission statement can help bring the team together around the change and unify the move to better care. Role clarity improves performance, so it is important to ensure roles are defined and clear to individuals and their coworkers.

Collaborating to create standardized protocols, establishing quality goals, creating clear, comprehensive, but concise dashboards, and ensuring clear communication across a widespread and large group can be difficult. Knowing the potential challenges and quickly addressing those that arise is important. The ability of the CVSL to focus on quality and cost of care will be rewarded as payment systems shift to reimbursing for value, rather than volume.
On the Road to a Bigger and Better STS Research Enterprise

Robert A. Wynbrandt, Executive Director & General Counsel
Robert H. Habib, Director of the STS Research Center

As we prepare to launch an exciting new initiative that will enhance the value of the STS National Database for our members and their patients, the following is the latest installment in our series of guest columns by other members of the STS management team – this one from Robert Habib, who joined us earlier this year as the new Director of the STS Research Center. Robert comes to us from the American University of Beirut, where he was a Professor in the Department of Internal Medicine, the Director of the Clinical Research Institute’s Outcomes Research Unit, Co-Director of the Vascular Medicine Program, and Director of the Scholars in Health Research Program. Robert earned a PhD in interdisciplinary studies (engineering and physiology) and a master of science degree in biomedical engineering from Boston University; as reflected below, he is making no small plans to take the STS Research Center into new and promising directions.

For nearly three decades, STS and its members have led the way with an unparalleled commitment to collect comprehensive patient data in the STS National Database and analyze these data as a means of measuring quality and providing better care to patients. The Society is again poised to lead its peers in a different, albeit related way.

STS surgeon leaders and senior staff are developing a high-quality clinical research infrastructure that would increase the options and opportunities for STS members to conduct research based on the Database. It certainly makes sense. Much like a great quarterback needs receivers capable of catching passes, a standout clinical database such as the STS National Database needs a commensurate standout research program that appropriately leverages its rich and comprehensive data.

STS is fully committed to building a bigger and better research enterprise for the specialty. Surgeon leaders are aiming to profoundly transform STS research with a year 2020 vision featuring a forward-looking research agenda. The Society is developing a new business plan for the STS Research Center that will provide a roadmap for future investment and new research opportunities. We anticipate that many of these new research initiatives could be game-changers that increase productivity and expand research capacity to previously unavailable areas.

A DIFFERENT KIND OF PUF!

By the time STS members read this article, the STS Participant User File (PUF) Research Program likely will have been announced. The PUF Program will allow—for the first time—analysis of national-scale de-identified data from the Database at investigators’ institutions.

This STS initiative will be steered by a PUF Task Force and will be guided by three primary principles: 1) facilitating STS National Database participant research, 2) ensuring research output of the highest quality, and 3) protecting STS and participant data, as well as patient privacy. The Society was purposely deliberate in its planning because it wanted to present members with a truly different kind of PUF!

The STS PUF Program (www.sts.org/PUF) will be rolled out in three stages, starting with the Adult Cardiac Surgery Database in the fourth quarter of this year, followed by the General Thoracic Surgery Database and the Congenital Heart Surgery Database in the first and second quarters of 2017, respectively. The STS PUF Program is unique in many respects and was designed primarily as an option for investigators to pose research questions, quickly obtain quality data, analyze these data themselves given appropriate biostatistics resources, receive feedback, and develop their efforts into abstracts and manuscripts. Key features that distinguish the STS PUF Program from similar programs offered by other medical societies include:

• PUF Task Force review of the submission materials (application and proposal) for scientific merit and appropriate analytic capacity of the investigative team;

• Data ready for analysis—investigators will receive quality-checked data for variables that are relevant to the research question only after study inclusion and exclusion criteria have been applied;

• Valuable feedback from the PUF Task Force on the quality and completeness of an investigative team’s analysis and interpretation of the results, as well as the ensuing abstract and/or manuscript derived from the study; and

• Affordable research fees—these fees will be used to offset the technical and scientific support needed for sustained high-quality PUF research productivity.

MORE STS RESEARCH INITIATIVES ON THE HORIZON

STS PUF is only the beginning. Several other new research-related initiatives currently are being developed.

Many of these new research initiatives could be game-changers.

In 2017, STS will launch in-house analytics capabilities that will contribute to all forms of STS research. Such new data analytics services promise to be a meaningful addition to the STS Research Center, particularly for investigators interested in PUF research who do not have statistical resources at their own institutions.

Another major near-term focus of the STS Research Center is to acquire long-term follow-up data for patients in the STS National Database. This need is well recognized, and success on this front would be transformational, providing a whole new dimension to STS research. Long-term follow-up data would allow investigators to pursue clinical outcomes and comparative effectiveness questions with genuine potential for grant funding success. Please stay tuned!
Member News

GRONDIN HEADS SURGERY AT CALGARY
Sean C. Grondin, MD, MPH has been named Head of the Department of Surgery at the University of Calgary and Calgary Zone Clinical Department Head for Alberta Health Services. Previously, he was a Professor of Surgery at the University of Calgary, where he has worked since 2002. Dr. Grondin serves as the Canadian Director on the STS Board of Directors and has chaired the STS Workforce on General Thoracic Surgery since 2011. He has been an STS member since 2005.

KIRKLIN DIRECTS NEW INSTITUTE FOR OUTCOMES RESEARCH
James K. Kirklin, MD is the inaugural Director of the James and John Kirklin Institute for Research in Surgical Outcomes at the University of Alabama at Birmingham. The new institute was created to honor Dr. Kirklin and his father, John Kirklin, who pioneered UAB’s cardiothoracic surgery program and first started studying surgical outcomes in the 1980s. Previously, Dr. James Kirklin was Director of the Division of Cardiothoracic Surgery at UAB. He has been an STS member since 1985.

BECKLES CHIEF AT SUNY DOWNSTATE
Daniel L. Beckles, MD, PhD has been named Chief of the Division of Cardiothoracic Surgery at State University of New York, Downstate Medical Center in Brooklyn. Previously, he was Director of Minimally Invasive Cardiac and Thoracic Surgery at The University of Texas Medical Branch in Galveston. Dr. Beckles has been an STS member since 2004.

PRASAD IS CHIEF AT UR MEDICINE
Sunil M. Prasad, MD has been appointed Chief of the Division of Cardiac Surgery at the University of Rochester Medicine. He also will lead the cardiac surgery program at Strong Memorial Hospital, which consists of nine cardiac faculty and an integrated 6-year cardiothoracic surgery residency. In addition, he is on the Executive Committee and is Co-Director of the Cardiovascular Service Line at the University of Rochester Medical Center. Previously, Dr. Prasad was on the Cardiovascular Executive Committee and was Director of ECMO/LVAD at Mercy Springfield Hospital in Missouri. He has been an STS member since 2011.

GONCALVES TO LEAD TAVR PROGRAM
John A. Goncalves, MD is now the Director of Cardiac Surgery and Surgical Director for the Transcatheter Aortic Valve Replacement Program at the Valley Heart and Vascular Institute in Ridgewood, N.J. Previously, he was Chief of the Division of Cardiothoracic Surgery at Winthrop-University Hospital in Mineola, N.Y. Dr. Goncalves has been an STS member since 2005.

MARTIN JOINS UVA
Linda W. Martin, MD, MPH is now an Associate Professor of Surgery at the University of Virginia School of Medicine in Charlottesville. Previously, she was Assistant Professor of Surgery at the University of Maryland School of Medicine. Dr. Martin has been an STS member since 2004.

Staff Updates

Derek Steck joined the Society on July 25 as its STS National Database Coordinator after filling the role on a temporary basis since February. He assists with the daily functions of the Society’s quality and patient safety activities, as well as provides ongoing support for the STS National Database. Previously, Derek was the Assistant Chief of Staff to the Lucas County Auditor in Toledo, Ohio. He holds a bachelor’s degree in political science from the University of Toledo and is pursuing a master of public administration degree from DePaul University in Chicago. To contact Derek, e-mail dsteck@sts.org.

Michelle Taylor joined STS on September 6 as its Education Manager. She works to develop and implement the Society’s educational programming, including the Annual Meeting and standalone courses. Previously, Michelle was an Education Manager at the American Society for Dermatologic Surgery and a Learning Management Specialist at the American College of Chest Physicians. She holds a bachelor of fine arts degree from Northern Illinois University. To contact Michelle, e-mail mtaylor@sts.org.
STS Expands Educational Offerings

Members now have more opportunities to fulfill their continuing medical education and maintenance of certification requirements through the Society, which has significantly increased its online educational resources as a result of its merger with the Joint Council on Thoracic Surgery Education (JCTSE).

“This merger will help enhance the education of not just our trainees, but also practicing cardiothoracic surgeons seeking to expand their knowledge base,” said Ara A. Vaporciyan, MD, Chair of the STS Workforce on Thoracic Surgery Resident Issues.

Many former Joint Council activities will fall under the new STS Workforce on E-Learning and Educational Innovation, chaired by STS Past President Mark S. Allen, MD.

“Now that many of the JCTSE functions are within the STS structure, members will soon have new and innovative ways to learn within the CT surgery arena,” said Dr. Allen, who was the most recent Chair of the JCTSE Board of Directors.

ONLINE OFFERINGS

One of the most significant assets that STS acquired as a result of its merger with JCTSE is the Thoracic Surgery Curriculum hosted on a robust Learning Management System (LMS). The Curriculum currently is accessible only by cardiothoracic surgery residency program directors, coordinators, faculty, and residents, but access will be expanded to all STS members in the future.

The LMS houses a wealth of educational materials, including the entire Thoracic Surgical Curriculum and a variety of textbooks, videos, and case presentations. Program directors and coordinators easily can set up a 1-, 2-, or 3-year curriculum, as well as create customized assignments and offer National Benchmarked Quizzes for resident comparison across programs.

“The core benefit of the LMS is the multitenant design of the system. Each program has access to all of the content, but the content can be organized and presented in a way that meets the specific needs of an individual program,” Dr. Vaporciyan said.

In the future, all of the Society’s online educational programs, including the STS Annual Meeting Online and webinars, will be housed in the LMS. “The Society now has an innovative education resource that will serve resident education, STS member education, and individual continuing medical education for years to come,” said Edward D. Verrier, MD, who served as JCTSE Surgical Director of Education and continues to fulfill this function for the Society.

IN-PERSON LEARNING

One of the most popular in-person educational courses developed by JCTSE was the Jeopardy competition for residents. STS will continue organizing the event, with a North American championship competition at the Southern Thoracic Surgical Association Annual Meeting in November and a grand championship competition between the North American and European winners at the STS Annual Meeting in January.

For more information about the LMS, contact Lauren Aloia at laoia@sts.org.

New Features Added to the STS Learning Center

The STS Learning Center recently added two new features that allow for better tracking and completeness of your CME transcript. The first new feature allows you to add any and all CME credits that you have earned—including non-STS approved activities—to your personal transcript. Click “External Certificates” and upload or drag and drop certificates as PDFs or Word documents. The second new feature allows you to view and print your personal transcript by clicking “View Your Transcript.” You can pull from a specific year or time range or from specific certificates that align with certain credits. To check out these new features, visit www.sts.org/learningcenter, log in with your STS member username and password, and click “My Account” in the upper right corner. If you have any questions, contact education@sts.org.
Health Policy Scholarship Encourages Physician Leadership

Cardiothoracic surgeon Daniel Engelman, MD, is the recipient of the 2016 STS/ACS Health Policy Scholarship, a joint offering from STS and the American College of Surgeons that enables a member surgeon to attend the intensive Executive Leadership Program in Health Policy and Management at Brandeis University near Boston.

This past June, Dr. Engelman joined 30 other surgeons from a variety of specialties for a week of lectures and small group discussions on health care policy, health care finance, leadership, operations management, and conflict negotiation.

“From a financial perspective, I learned that clinicians will be moving away from fee-for-service and into alternative payment models. This will require better care coordination, management of post-acute care, and reducing readmissions,” said Dr. Engelman, who is the Medical Director of Heart, Vascular, and Critical Care Surgical Services at Baystate Medical Center in Springfield, Mass. “From a leadership perspective, I learned about the importance of mentoring junior associates and the power of listening and engagement.”

Dr. Engelman said anyone who serves as a medical director, team leader, or board or committee member in his or her organization would benefit from attending such a course.

“It opened my eyes to the various career pathways beyond standard operative clinical work,” he said. “I am considering transitioning my career path into one with a greater leadership role, possibly involving health care quality and finance.”

As a scholarship recipient, Dr. Engelman will be appointed to serve a 3-year term on the STS/AATS Workforce on Health Policy, Reform, and Advocacy, starting in January 2017.

Applications for the 2017 scholarship will be accepted later this year. Applicants must be members of both STS and ACS and between the ages of 30 and 55. Application materials, which include a curriculum vitae and a one-page essay discussing why a candidate wishes to receive the scholarship, are due February 1, 2017. The scholarship will help cover the costs of tuition, travel, and accommodations during the course.

For more information, visit www.sts.org/healthpolicyscholarship or contact Grahame Rush, Director of Information Services, at grush@sts.org or (312) 202-5848.

LETTER TO THE EDITOR

I looked for old medical books in my personal library after Catherine Uecker, Rare Books Librarian at The University of Chicago’s Regenstein Library, had shown me some wonderful books.

In my library, I found a Gray’s Anatomy from 1873 that belonged to the grandfather of a grateful patient, Evarts A. Graham’s Empyema Thoracis from 1925, and Robert Druitt’s Principles and Practice of Modern Surgery from 1847, as well as other books that I thought might be of interest to the library.

I sent a list of my books to the library. After I was told that they were of potential interest, I sent the books to the library, and they accessioned all of them. An appraiser who I retained will assess the value of the books for purposes of a possible income tax deduction.

The process was surprisingly easy! I invite inquiry from any STS member who wishes to consider rare medical book donations.

John R. Benfield, MD
STS President, 1995–1996
j.benfield@ucla.edu
(310) 889-9186
STRENGTHEN YOUR EDUCATIONAL PROGRAM WITH STS ENDORSEMENT

As a service to the specialty and to both industry and non-industry organizations (such as universities and hospitals), STS endorses certain high-quality educational programs that meet rigorous criteria.

The Society’s endorsement can provide numerous benefits; the STS name and logo on program materials add additional credibility, assuring potential participants that the program’s educational content is of significant value to cardiothoracic surgeons and their teams and meets the Society’s high standards. Additionally, programs that are approved for endorsement receive the STS member mailing list for a one-time use and are identified as endorsed programs on the STS website. For an additional fee, the Society will electronically disseminate information about the course to the STS membership.

With input from the Chair of the Council on Education and Member Services, the Workforce on Clinical Education vets activities for which STS endorsement is sought and makes recommendations to the Executive Committee with regard to submitted requests for endorsement.

Programs must meet a number of criteria for receiving endorsement, including:

1. The content of the program must be based upon the best and most updated evidence available in the content area(s) covered.
2. The program should be fair, balanced, and not promotional in nature and content.
3. The content cannot disparage other educational programs.
4. The content must be germane to the work of STS members.
5. The content must ultimately be directed toward the benefit of patients.
6. If CME credit is provided, the program must be approved for AMA PRA Category 1 Credit™ by the sponsoring organization.

Individual STS members also benefit from the Society’s endorsement, as endorsed programs must offer a discount on registration fees for STS members.

For application forms and to view a list of currently endorsed programs, visit www.sts.org/endorsedactivities. If you have questions, contact Michele Rush, Senior Manager of Education, at mrush@sts.org.

Successful AQO Meeting Held This Fall

Data managers, surgeon participants, and others involved in the STS National Database converged in Baltimore, Md., this September for Advances in Quality & Outcomes: A Data Managers Meeting. Attendees received an overview of the new specification upgrade for the Adult Cardiac Surgery Database, learned about rule changes for the Congenital Heart Surgery Database, and networked with their peers. The next AQO conference will be held in Chicago, October 18-20, 2017.

STS TEVAR SYMPOSIUM
Visit www.sts.org/tevar to learn more and register now!

December 2-3, 2016
The Westin Michigan Avenue Chicago Hotel
CHICAGO

COURSE DIRECTORS
T. Brett Fleece, Denver, CO
Eric F. Roselli, Cleveland, OH
Wilson Y. Szeto, Philadelphia, PA
Society Receives ACCME Accreditation with Commendation

The Accreditation Council for Continuing Medical Education (ACCME) has awarded STS Accreditation with Commendation for 6 years as a provider of continuing medical education for physicians. This is the second consecutive time the Society has earned ACCME’s highest accreditation status.

Accreditation with Commendation affirms that the Society’s educational programs provide physicians with relevant, effective, practice-based continuing medical education that supports US health care quality improvement. STS is committed to advancing interprofessional, collaborative practice, addressing public health priorities, and leveraging educational technology, and this commitment is borne out in this accreditation award.

Less than a quarter of ACCME-accredited providers have achieved Accreditation with Commendation. STS volunteers and staff work diligently throughout the accreditation term to ensure that the Society’s educational activities comply with ACCME accreditation criteria, policies, and standards. The re-accreditation process entails supplying ACCME with extensive documentation that demonstrates this compliance, along with a self-study report that describes the Society’s educational endeavors and highlights major achievements throughout the accreditation cycle.

Maximize Your Reimbursement by Attending the STS Coding Workshop

Keep yourself and your office at the forefront of coming changes to physician coding and reimbursement. Register now for the STS Coding Workshop, November 3-5 in New Orleans.

In addition to highlighting new and revised 2017 codes for each subspecialty, the Coding Workshop will feature three new sessions addressing controversial changes proposed by the Centers for Medicare & Medicaid Services (CMS) that could negatively impact coding and reimbursement for cardiothoracic surgeons beginning in January.

• In the MIPS session, learn about the new Merit-Based Incentive Payment System, which replaces the standard Medicare fee-for-service model and combines aspects of three existing Medicare programs—the Physician Quality Reporting System, the Value-Based Payment Modifier Program, and the Electronic Health Records Meaningful Use Program.

• In the Bundled Payments session, hear about a CMS proposal to implement a mandatory coronary artery bypass grafting payment bundle, as well as various Alternative Payment Models that could further impact physician reporting and payments in the coming years.

• In the Global Services session, get an overview of the new CMS reporting requirements for 10- and 90-day global services and tips on how to make sure you are collecting all the required information.

There also will be ample time dedicated to answering questions from the audience and working through problematic coding examples. The Coding Workshop is targeted at surgeons, coders, office managers, billing staff, and anyone else involved in the coding, reimbursement, and compliance efforts for the cardiothoracic surgery office. Register and reserve housing today at www.sts.org/codingworkshop.
As part of its continuing effort to raise public awareness about STS, cardiothoracic surgery, and the role that cardiothoracic surgeons play in the health care arena, the Society issued five press releases June 10–August 25, 2016. Brief recaps can be found below. To read the full press releases, visit www.sts.org/media.

**June 14:** “Rep. Larry Bucshon Recognized for Steadfast Commitment to Cardiothoracic Surgery” described the Congressman’s extraordinary efforts to promote issues of importance to the specialty through legislation. Rep. Bucshon (R-IN), who is a cardiothoracic surgeon and STS member, was named Legislator of the Year by the Society.

**July 14:** “Diabetic Patients Experience Superior Survival with Less Conventional CABG Surgery” described a study in *The Annals of Thoracic Surgery* showing that diabetic patients who undergo heart bypass surgery are living longer and have much better long-term outcomes when cardiothoracic surgeons use arteries rather than veins for the bypasses.

**July 26:** “STS Comments on CMS Plan to Bundle Payments for Heart Bypass Surgery” featured a statement from STS President Joseph E. Bavaria, MD that urged the Centers for Medicare & Medicaid Services to work with the Society in implementing Medicare payment reform that emphasizes quality care and puts patients first.

**August 25:** “Potentially Deadly Heart Condition Plagues Family Members Around Same Age” explained how aortic dissections have the potential to run in families and often occur within 10 years of the same age, according to a study in *The Annals*.

For more information on the Society’s press release program and other public outreach efforts, please contact media@sts.org.
“I think the employment model is becoming more attractive because of the juxtaposition of the declining earning power of the CT surgeon with the need for increased nonsurgical resources to track and report the myriad outcome and quality metrics currently required by CMS and other reimbursement carriers,” Dr. Ikonomidis said.

One way surgeons can track such information is through the STS National Database. Participation in the Database exploded in the 2014 survey—89.9% of respondents said they participated, compared with only 35.4% in the 2009 survey. This may be because participation in a comparative database has essentially become mandatory at many institutions, Dr. Ikonomidis theorized. There also is significant patient and media interest in public reporting of outcomes.

FINANCIAL BURDENS A CONCERN

The length of training for a cardiothoracic surgeon doesn’t come without a financial impact. The percentage of respondents who said they had $60,001 or more of debt has steadily risen over time, from 24.4% in 2005 to 30.0% in 2009 to 34.2% in 2014. This partially may be explained by the fact that many surgeons are spending additional training time developing specialized skills that will give them a competitive edge.

Similar to the 2009 survey, average malpractice insurance premiums ranged between $54,310 and $57,402, and most surgeons (71.7%) reported that their individual premiums had stayed the same over the past 2 years.

WORKFORCE AGING

The survey cemented the fact that the cardiothoracic surgery workforce is getting older. The percentage of surgeons aged 60 years or greater was 29.1%, compared with 25.7% in 2005. As the demographic continues to age and surgeons retire, the remaining workforce may need to perform more surgeries, and patients may need to wait a little longer to have their elective operations performed.

“The primary issue here is surgeon availability. We currently are experiencing a shortage of CT surgeons to fill available jobs,” Dr. Ikonomidis said. “This could result in closure of smaller, rural programs and increased centralization of services to large, urban programs.”

Perhaps unsurprisingly, given the aging workforce and current shortage of surgeons, a majority of respondents (52.3%) said that their institution was planning to hire a new surgeon in the next 2 years. This is a shift from previous surveys in which the majority did not plan to hire. Nearly 40% of these respondents indicated that they would be looking for surgeons with “special skills” to fill these vacancies.

On a positive note, the specialty is becoming more inclusive, with a higher percentage of female respondents (6.9%) than in 2009 (4.6%) or 2005 (3.0%).

OPERATIVE LOAD INCREASING

Clearly, there is demand for the services of cardiothoracic surgeons, as nearly half of the respondents (42.6%) said that their total major operations performed increased in the last 12 months, while previous surveys found that operative load had stayed the same or decreased.

The most commonly performed procedures included Maze (any technique) for atrial fibrillation, off-pump coronary artery bypass grafting surgery, thorascopic lobectomy, and right thoracotomy mitral valve replacement/repair. Only a small percentage of surgeons (7.6%) said that they frequently performed minimally invasive cardiac surgery; less invasive approaches were somewhat more commonly utilized among general thoracic surgeons, with 38.5% reporting that they used them 41% or more of the time.

In addition, a majority of respondents (68.7%) reported that they worked at least 61 hours per week. But despite the increased workload, cardiothoracic surgeons love the job. “Cardiothoracic surgery is a fast-paced, highly technical, very satisfying specialty,” said Dr. Ikonomidis. “The best things are the patients, the cases, teaching opportunities, and the exciting research directions we are taking; I think my colleagues would agree.”

Survey Shows High Career Satisfaction

“We are expanding our armamentarium of surgical techniques and becoming very outcome and quality savvy.”

—John S. Ikonomidis, MD, PhD

Overall, how would you rate your current career satisfaction?

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>2014 Survey</th>
<th>2009 Survey</th>
<th>2005 Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely satisfied</td>
<td>14.9%</td>
<td>17.5%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>28.6%</td>
<td>28.7%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>29.3%</td>
<td>25.8%</td>
<td>27.0%</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>72.8%</td>
<td>72.0%</td>
<td>68.0%</td>
</tr>
<tr>
<td>Somewhat satisfied</td>
<td>21.3%</td>
<td>21.3%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Not at all satisfied</td>
<td>5.9%</td>
<td>6.8%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>
is it just another way of doing things through small incisions?” said Joseph B. Shrager, MD, Co-Chair of the Surgical Symposia Task Force. “Sublobar resection for very small lung nodules also is going to be an important topic.”

For the pediatric congenital heart surgery sessions, three loosely based themes have emerged. “We have a session focusing on issues around newborns and neonatal surgery, one on how patient risk factors, such as chromosomal abnormalities, affect outcomes after surgery, and one on advanced issues facing older children and teenagers,” said Jonathan M. Chen, MD, Co-Chair of the Surgical Symposia Task Force.

TECH-CON MOVES TO ALL DAY SATURDAY
After an extremely positive response in 2016, Tech-Con 2017 is again focusing on cutting-edge technologies and new developments in cardiothoracic surgery. The schedule has been changed for 2017 so as not to compete with Annual Meeting sessions. Tech-Con will begin at 8:00 a.m. on Saturday, January 21, and continue until 5:00 p.m., followed by a reception until 6:30 p.m.

A highlight of the day will be the Shark Tank session, in which entrepreneurs pitch their innovative cardiothoracic surgery products to the audience, as well as a panel of experts in medical device development.

“There are a lot of things flying under the radar in terms of development, and you’re not going to hear about them anywhere else,” said Tech-Con Task Force Co-Chair Mark F. Berry, MD. “Attending Tech-Con is the most efficient way for every cardiothoracic surgeon to know what their practice is going to look like in a couple of years.”

TIPS ON MANAGING YOUR PRACTICE
The Annual Meeting begins at 8:00 a.m. on Sunday with sessions that include the Practice Management Summit, which will help surgeons navigate the shift from individual physician-owned practices to an employment model.

Other sessions offering tips on managing your practice include two on Tuesday—the Early Riser Health Policy Forum, which will explain how to implement the new Merit-Based Incentive Payment System, and the Patient Safety Symposium, which will look at the important topic of physician burnout (see related story on page 14).

You can view the program in more detail by going to www.sts.org/annualmeeting and clicking on Advance Program. A printed version of the publication will be mailed in November.

Register for the meeting and reserve housing today at www.sts.org/annualmeeting or see page 13 for more information.

The Society of Thoracic Surgeons is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

STS 53rd Annual Meeting: The Society of Thoracic Surgeons designates this live activity for a maximum of 27.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
Take Advantage of Early Bird Rates

Registration and housing for the STS 53rd Annual Meeting are available at www.sts.org/annualmeeting. Early bird registration rates will end Tuesday, November 15. Additionally, you must register by Thursday, December 22, to reserve housing at the special Annual Meeting rates.

STS/AATS Tech-Con 2017 and the STS 53rd Annual Meeting require separate registration. Tech-Con registration provides access only to the educational sessions on Saturday, January 21. Annual Meeting registration provides access only to the educational sessions on Sunday, January 22, through Tuesday, January 24. You also will receive complimentary access to Annual Meeting Online with your Annual Meeting registration (see page 12).

Tickets to attend the STS Social Event at the Space Center Houston (Monday, January 23) and STS University courses (Wednesday, January 25) require separate purchases with Annual Meeting registration.

If you have questions about registration, contact the Society’s official registration partner, Experient, at (800) 424-5249 (toll free), 00-1-847-996-5829 (for international callers), or sts@experient-inc.com.

Abstract Notification Letters Sent

If you submitted an abstract and/or surgical video for Annual Meeting presentation consideration, peer-reviewed selection results recently were distributed. Approximately 1,100 abstracts were submitted for the Annual Meeting in the following categories:

- **Adult Cardiac Surgery**: 523
- **General Thoracic Surgery**: 342
- **Congenital Heart Surgery**: 137
- **Basic Science**: 79
- **Other**: 59
- **Critical Care**: 28

**Journey into Outer Space at the STS Social Event**

Join your colleagues at the 2017 STS Social Event, to be held Monday, January 23, at the Space Center Houston, the official visitor’s center of NASA’s Johnson Space Center. In addition to enjoying an extensive buffet and open bar, you’ll be able to check out artifacts documenting the history of space travel, including a collection of spacesuits worn by NASA astronauts, the Apollo 17 Command Module, the giant Skylab Trainer, and more. Don’t miss this opportunity! Purchase a ticket when registering for the Annual Meeting.
Physician Burnout: A Growing Phenomenon, a Call to Arms

Robert Lancey, MD, MBA, Medical Director, Heart and Vascular Institute, Bon Secours Hampton Roads | Portsmouth, VA

The health care industry has undergone historic changes at a precipitous pace over the past two decades. The changes—which include a complete redesign of how we are reimbursed (volume vs. value), how we are employed (private practice vs. hospital-employed), and to whom we are beholden (patients vs. regulators)—have impacted physicians at all levels. This shifting environment has been accompanied by the erosion of many key drivers of physician satisfaction, including the maintenance of clinical autonomy, the sense of personal and professional accomplishment, and feeling aligned with one’s institution in delivering patient-focused care.

The steady decline in professional satisfaction has been accompanied by an increase in occupational burnout. Physicians experience the highest rate of burnout in the US workforce, with the frequency of those reporting at least one symptom rising from 45% in 2011 to 54% in 2014, according to a 2015 article in Mayo Clinic Proceedings by Tait D. Shanafelt, MD and colleagues. This syndrome, characterized by emotional exhaustion, depersonalization, cynicism, and a low sense of personal accomplishment, likewise has been exhibited in up to one-half of medical students and is associated in this population with a higher likelihood of engaging in unprofessional behaviors.

Its prevalence in the physician workforce should come as no surprise when considering the six facets of work life in which a decoupling between the organization and the individual contribute to burnout: workload, control, reward, fairness, values, and the sense of community or collegiality. As cardiothoracic surgeons, we are challenged to varying degrees in each of these areas, whether it be too much (or for some, too little) work, declining reimbursement, lack of alignment with organizational values, and loss of autonomy and control over clinical workflow.

**RECOGNIZING THE SIGNS**

There are well-described warning signs of burnout to watch for in ourselves and our colleagues: deteriorating interpersonal work relationships, difficulties at home or in personal life, absenteeism, or falling behind with record keeping. There may be signs of chronic fatigue, exhaustion of emotional energy, the onset of patient biases, and losing a sense of purpose in one’s professional life.

Physician leaders play critical roles in reducing the frequency of burnout. Shanafelt also demonstrated a strong inverse correlation between physician burnout rates and the strength of leadership exhibited by direct physician supervisors. The most effective physician leaders help their colleagues connect with what is most meaningful in their work and provide the opportunity to reflect on gratifying professional experiences, rather than focusing on the “last worst case.” They share ways that they worked through personally difficult clinical situations and emphasize the value of introspection and resiliency—the latter being the ability to respond to stress in a healthy way with minimal psychological and personal costs, while attaining personal and professional goals.

**HOW TO REDUCE YOUR RISK**

Faced with the growing problem of physician burnout, it is time not only to acknowledge the problem, but also to devise strategies that remove the stigma, provide means of early identification for those at risk, and deal effectively with colleagues already exhibiting signs of burnout that are impacting them, their families, and their patients.

It is important to disseminate information and engage in conversations within our societies and professional working environments about ways to minimize the factors that contribute to burnout. These may take the form of self-regulation (getting regular sleep, keeping nutritionally and physically fit, and setting aside protected time for family or for purely personal, enjoyable activities and hobbies) or developing self-awareness through guided meditation. This latter strategy, which may focus on mindful stress-reduction techniques, is the cornerstone of programs that are available for physicians, such as the Cleveland Clinic’s Stress Free Now program.

Developing wellness programs for employees is recognized by most health care organizations as not only providing intrinsic value for the employees themselves, but also carrying high value for the organization by improving productivity and reducing absences and attrition, while also increasing the quality of care and patient satisfaction and compliance. As physicians, we need to support similar efforts for our colleagues.

**PATIENT SAFETY SYMPOSIUM TO TACKLE BURNOUT ISSUES**

For more on this important topic, attend the Patient Safety Symposium at the STS 53rd Annual Meeting in January. The 2017 Symposium is titled “Resilience or Burnout: Do We Have a Choice?” and speakers will discuss how physicians can develop resilience, what institutions can do about physician burnout, and the use of mindfulness to reduce work-related stress.

The Symposium will be held on Tuesday, January 24, from 1:00 p.m. to 5:30 p.m., and is included with Annual Meeting registration. Register for the meeting today at www.sts.org/annualmeeting.
Change Is Coming: Learn What the New Medicare Payment Policies Mean for Your Practice

A 2015 article in The Annals of Thoracic Surgery by Alan M. Speir, MD cautioned that the devil of post-SCR Medicare physician payment would be in the details.

Those details are now being unveiled, and STS members need to be aware of them. The following information outlines the various payment policies stemming from the Medicare Access and CHIP Reauthorization Act (MACRA) and explains how the Society is working to ensure that cardiothoracic surgeons have the opportunity for success.

**MERIT-BASED INCENTIVE PAYMENT SYSTEM (MIPS)**

The MIPS program will replace the current Medicare fee-for-service infrastructure and consolidate many existing Medicare reporting requirements. Under MIPS, physicians will receive composite scores based on four performance categories. Thresholds will be established annually, with physicians whose scores are in the top tier receiving bonus payments and those in the lowest receiving pay cuts.

The four MIPS performance categories are:

- **Quality:** Physicians will be required to provide the Centers for Medicare & Medicaid Services (CMS) with certain quality metrics. Participants in the STS National Database will be able to report through the Database.

- **Resource Use:** CMS has released patient attribution criteria and other ways it plans to quantify resource use by Medicare providers. STS is working to ensure that cardiothoracic surgeons are not unfairly assigned costs. However, as currently proposed, CMS will calculate the resource use performance score based on claims data, and there will be no data submission requirements under this category.

- **Clinical Practice Improvement Activities:** Physicians will be rewarded for implementing policies and procedures that have been demonstrated to have a positive impact on patient care. Participating in the STS National Database likely will contribute to the score available under this category.

- **Advancing Care Information:** This category incentivizes providers to utilize electronic health records.

Under CMS’s proposed implementation, physicians were to be evaluated starting in January 2017, with the first payments under this model coming in 2019. However, after being pressured by STS and others in the medical community, CMS recently announced plans for a modified rollout of the data reporting requirements.

Under the revised schedule, physicians can avoid penalties by submitting minimal amounts of data to CMS in 2017. Those who choose to report more extensive data for some or all of the year will be eligible for bonus payments. While further details will not be available until CMS issues its Final Rule (anticipated in November 2016), 2017 STS National Database participation may help physicians avoid negative payment adjustments in 2019.

**ALTERNATIVE PAYMENT MODELS (APMs)**

MACRA also incentivizes the development of APMs that demonstrate new and innovative ways to provide, coordinate, and pay for quality health care. Providers participating in certain APMs can receive bonus payments of up to 5%.

MACRA sets a pathway for providers and physician organizations to submit their ideas, and STS is developing an APM that uses the STS National Database to demonstrate how quality improvements and cost reductions are related.

STS also is partnering with the American College of Surgeons and other surgical specialty organizations to make an APM available for surgeons in the near future.

**BUNDLED PAYMENTS FOR CABG**

In addition to the previously mentioned changes, CMS has published a proposed rule aimed at establishing a mandatory bundled payment for coronary artery bypass grafting (CABG) procedures. It is proposed that this mandatory bundle be piloted in certain regions of the country beginning in July 2017 and that surgeons who participate be eligible to receive the APM bonus payment.

**GLOBAL SURGICAL PAYMENTS**

Despite the current policy focus on bundled payment as a mechanism to incentivize improvements in patient care, CMS continues to undermine global surgical payments.

STS led an aggressive campaign in 2015 to preserve global surgical payments. Because of the Society’s leadership, Congress passed legislation requiring CMS to collect data on global services from a “representative sample” of physicians before any changes could take effect. However, CMS has disregarded congressional direction and recently proposed to collect data from all physicians who perform these services.

The proposal would require all surgeons to submit data in 10-minute increments for all 10- and 90-day global surgery code services through the use of eight non-payable G-codes. This would create an undue administrative burden on physician practices, and STS is working with a coalition of surgical subspecialties to prevent this policy from taking effect.

**LEARN MORE AT THE HEALTH POLICY FORUM**

The above programs will be discussed at the Early Riser Health Policy Forum at the STS 53rd Annual Meeting in Houston, Texas, on Tuesday, January 24, 2017. See page 13 for registration information.
THE SOCIETY OF THORACIC SURGEONS
633 N. Saint Clair St., Floor 23
Chicago, IL 60611-3658
Phone (312) 202-5800 | Fax (312) 202-5801
E-mail sts@sts.org | Web www.sts.org

PRESIDENT
Joseph E. Bavaria, MD
joseph.bavaria@uphs.upenn.edu
FIRST VICE PRESIDENT
Richard L. Prager, MD
rprager@umich.edu
SECOND VICE PRESIDENT
& SECRETARY
Keith S. Naunheim, MD
naunheim@slu.edu
SECRETARY-ELECT
Joseph F. Sabik III, MD
sabikj@ccf.org
TREASURER
Robert S.D. Higgins, MD, MSHA
robert.higgins@jhmi.edu
TREASURER-ELECT
Thomas E. MacGillivray, MD
tmacgillivray@partners.org
IMMEDIATE PAST PRESIDENT
Mark S. Allen, MD
allen.mark@mayo.edu
INTERNATIONAL DIRECTORS
Haiquan Chen, MD, PhD
hqchen1@yahoo.com
A. Pieter Kappetein, MD, PhD
a.kappetein@erasmusmc.nl
CANADIAN DIRECTOR
Sean C. Grondin, MD, MPH
sean.grondin@albertahealthservices.ca
RESIDENT DIRECTOR
Damien J. LaPar, MD, MSc
damien.lapar@cardio.chboston.org
PUBLIC DIRECTOR
Tony Coelho
tony@onewharf.com
DIRECTORS-AT-LARGE
Shanda H. Blackmon, MD, MPH
blackmon.shanda@mayo.edu
Joseph C. Cleveland Jr., MD
joseph.cleveland@ucdenver.edu
Joseph A. Dearani, MD
dearani.joseph@mayo.edu
Bryan F. Meyers, MD, MPH
meyersb@wustl.edu
Vind H. Thourani, MD
vthoura@emory.edu
Cameron D. Wright, MD
cdwright@partners.org
EDITOR
G. Alexander Patterson, MD, FRCS(C)
pattersona@wudosis.wustl.edu
HISTORIAN
Nicholas T. Kouchoukos, MD
ntkouch@aol.com
EXECUTIVE DIRECTOR &
GENERAL COUNSEL
Robert A. Wynbrandt
rwynbrandt@sts.org

MARK YOUR CALENDAR
Upcoming STS Educational Events

<table>
<thead>
<tr>
<th>Coding Workshop</th>
<th>TEVAR Symposium</th>
<th>STS/AATS Tech-Con 2017 &amp; STS 53rd Annual Meeting</th>
<th>ECMO Management Symposium</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Orleans, Louisiana</td>
<td>Chicago, Illinois</td>
<td>Houston, Texas</td>
<td>Tampa, Florida</td>
</tr>
</tbody>
</table>

Find out more at www.sts.org/education-meetings.

Thank You!

The Society of Thoracic Surgeons gratefully acknowledges the following Platinum Benefactors for providing educational grants for the STS 52nd Annual Meeting in Phoenix.

Abbott Vascular
Medtronic
Platinum Benefactors
Provided $50,000 or more