HARNESSING DATA TO ADVANCE PATIENT CARE

As part of a multidisciplinary team approach to improve patient care at ProHealth Heart & Vascular Care, James Mangerson, physician assistant, and Jennifer Boyce, RN, review data from the STS National Database. Photo by Heather Gergen, ProHealth Care
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STS News Is Going Exclusively Digital!

STS is pleased to announce that STS News, the Society’s quarterly magazine, is going exclusively digital. Starting with the winter edition coming out in January 2024, the new digital format will give you instant and dependable access to feature stories on hot topics facing the specialty. Regularly published sections will include The President’s Column, Member News, Events and Education, and Washington Scene. As people spend more time with their mobile devices, it’s our way of reaching you where you are 24/7 with highly engaging and visually appealing content.
**Member News**

**Linda Martin, MD, MPH, Named Professor with Tenure and Section Chief of Thoracic Surgery at UVA**

Dr. Linda Martin was promoted to professor with tenure at the University of Virginia and named section chief of thoracic surgery at UVA Health. She also was the recipient of the UVA Dean’s Clinical Excellence Award in 2022, which honors faculty who demonstrate clinical excellence and exemplary service to patients.

**TSF Research Award Recipient Michael Ibrahim, MD, PhD, Earns $1.6M NIH Grant**

Dr. Michael Ibrahim, winner of a 2022 Thoracic Surgery Foundation research award, has gone on to receive the National Institutes of Health Director’s Transition to Independence Award worth $1.6M for his project entitled “Definition of a Cardiomyocyte-Autonomous Form of T-Tubule Mechanical Regulation.” This work was preliminarily funded by TSF, and it is the first time this National Institutes of Health grant has been awarded to a cardiothoracic surgeon.

**Devendra Sakshena, MD, Inducted into the Elite Academy of Master Surgeon Educators**

Dr. Devendra Sakshena, an STS member for more than 40 years, and honorary professor and head of cardiovascular surgery at Bombay Hospital Institute of Medical Science, Mumbai, has been inducted into the Academy of Master Surgeon Educators by the American College of Surgeons. The recognition honors efforts in helping establish several Centers of Excellence in cardiac surgery in India and surrounding countries.

**Lawrence Greiten, MD, Named Recipient of the Chancellor’s Award of Excellence at UAMS**

Dr. Lawrence Greiten, assistant professor of surgery at University of Arkansas for Medical Sciences College of Medicine, has been selected as the 2023 recipient of the Chancellor’s Award of Excellence for Educational Excellence. The appointment recognizes Dr. Greiten’s commitment as a teacher to ensuring the success of his students and mentees. According to Cam Patterson, MD, MBA, chancellor at UAMS, Dr. Greiten “models the type of engaged faculty leader who positions students to excel.”

**Sara Pereira, MD, Selected as a 2023 LMSA Mentor of the Year**

Each year, the Latino Medical Student Association presents the Dr. Phil DeChavez Mentor of the Year Award to honor a physician, faculty member, or other professional who has provided exceptional mentorship and support to members of the organization. Dr. Sara Pereira was named Mentor of the Year for demonstrating a commitment to reducing health disparities in U.S. Latina/Latino/Latinx, Hispanic or other Spanish-origin communities.

**Creighton University School of Medicine Names Erin Gillaspie, MD, MPH, as First Woman Chief of Thoracic Surgery**

Dr. Erin Gillaspie joins Creighton University School of Medicine, CHI Health, as the founding chief of thoracic surgery and first woman chief of thoracic surgery.

**Thomas Varghese Jr, MD, MS, MBA, Named President-Elect of the Society of University Surgeons**

Dr. Thomas Varghese Jr., chief value officer and associate chief medical quality officer at Huntsman Cancer Institute, was appointed 2023-24 president-elect of the Society of University Surgeons. Dr. Varghese’s one-year term will begin in February 2024. He has been recognized widely for his innovative research in perioperative care, mentorship to physician-scientists, and contributions to promoting diversity, equity, and inclusion across the specialty. Dr. Varghese currently serves as chair of the STS Council on Education.

**Omar Jarral, MD, PhD, Appointed Attending Cardiac Surgeon at Lenox Hill Hospital and Northwell Cardiovascular Institute**

Dr. Omar Jarral was named attending cardiac surgeon at Lenox Hill Hospital and Northwell Cardiovascular Institute. He served as an Advanced Aortic and Endovascular Surgery Fellow at Penn Medicine, University of Pennsylvania Health System, and as an Advanced Aortic, Endovascular, and TAVR Fellow at Duke University Health System.

**New York-Presbyterian Queens Announces Iosif Guklarov, MD, as New Chief of Cardiothoracic Surgery**

Dr. Iosif Guklarov was appointed chief of cardiothoracic surgery at New York-Presbyterian Queens. He previously served as the hospital’s vice chief of cardiothoracic surgery. Dr. Guklarov also was appointed associate professor of clinical cardiothoracic surgery at Weill Cornell Medicine.

Send news about yourself or a colleague to stsnews@sts.org. Submissions will be printed based on content, membership status, and space available.
I never cease to be in awe of the workings of The Society of Thoracic Surgeons. We are the largest professional association of cardiothoracic surgeons in the world with more than 7,700 members in 110 countries. Although we are a relatively small specialty, our members have a tremendous impact because of the prevalence and severity of the diseases afflicting the patients we treat. We are an inclusive organization open to all surgeons, researchers, and allied healthcare professionals who are dedicated to ensuring the best possible outcomes for operations on the heart, lungs, and esophagus, as well as other surgical procedures within the chest.

The opportunity to serve as an STS volunteer surgeon leader is a professional honor and a personal privilege. Yet, Society leadership roles are not merely ceremonial positions. It is humbling to know that hundreds of STS members tirelessly volunteer to serve as surgeon leaders on task forces and workforces creating educational content, advocating for the specialty, innovating our outcomes databases, and improving member experiences.

Presidential Nomination Process

Thomas E. MacGillivray, MD
On a weekly basis there are issues that arise, questions that are answered, and challenges that are resolved, which involve our members, our Society, and our profession. The ultimate responsibility for governance of the STS resides with the Board of Directors by whom all major financial and strategic decisions are made. At the Executive Committee level, several hours each day are often needed from senior leaders to participate in conference calls, attend meetings, review documents, draft letters, and return emails. To be an effective STS leader requires a significant commitment of time beyond our “day jobs,” as well as an in-depth understanding of our organization.

“Since our inception in 1964, the STS has benefited from the vision, strategy, and execution by our senior leadership, resulting in our unparalleled outcome databases, educational programs, and advocacy initiatives.”

Since our inception in 1964, the STS has benefited from the vision, strategy, and execution by our senior leadership, resulting in our unparalleled outcome databases, educational programs, and advocacy initiatives. Over the past 60 years, our specialty has evolved and our membership has expanded.

Task force reviews officer and director nominating process
In recent times, we have received some constructive feedback about the perceived lack of transparency and inclusivity in the selection process for STS senior leaders. Earlier this year, I created a Presidential Task Force on the Nominating Process. The charge of that task force was to review and potentially recommend revisions to the processes and procedures that are used to nominate members for senior STS leadership roles (president, first vice president, second vice president, secretary, treasurer, and other members of the Board of Directors).

In addition to the current Nominating Committee comprised of the last five living STS presidents and the current president, I asked each of the chairs of the Workforces on Adult Cardiac and Vascular Surgery, General Thoracic Surgery, Congenital Heart Surgery, and Diversity, Equity and Inclusion for a representative—and the Editor-in-Chief of The Annals of Thoracic Surgery—to serve on the task force. Members of the group were Richard Prager (chair), John Calhoon, Jo Chikwe, Joseph Dearani, Cherie Erkmen, Nathaniel Evans, Stephanie Fuller, Michael Halkos, Robert Higgins, Keith Nauheim, and me. Staff liaisons were Elaine Weiss, Grahame Rush, and Adam Doty.

Historically, the Nominating Committee employed a guidelines and principles document to inform its evaluation of candidates for officer and director nominations. Although rigorous review and diligent debate among the Nominating Committee have been very effective in confidentially identifying and nominating future leaders over the years, the lack of transparency in the process has been viewed by some as generating intrigue and fostering cronyism.

Officer and director nominating process recommendations
After numerous meetings over several months, the Presidential Task Force on the Nominating Process has arrived at several recommendations to revise and improve the transparency and inclusivity of the officer and director selection process. A description of the criteria and responsibilities associated with each director and officer position will be posted on the STS website. We will include an updated version of the Nominating Committee principles and guidelines document so that every member can review the criteria for identifying officer and director nominees, as well as responsibilities associated with all roles on the STS Board. All members will be able to see what the criteria are for each role, how leaders can be nominated, and who will be making the selection for the final nomination slate that will continue to be presented to the membership at large for a final vote at the Business Meeting each year.

Open nomination process
Starting in 2024, we will adopt an open nomination process for director and officer roles. All members will be empowered to either self-nominate or nominate other STS members for these positions. Any nomination will need to be supported by at least three other members. Members will be limited to supporting one candidate per nomination cycle. Only candidates derived through the all-members nomination/self-nomination process will be considered.

Proposed change to nominating committee composition
We also will be proposing a change to the composition of the Nominating Committee. According to the current STS Bylaws Article IX, Section 4, “The Nominating Committee shall consist of the last five consecutive living past presidents, of whom the most senior shall serve as Chair, along with the current president, who shall serve in an ex-officio, non-voting capacity.” At the next Business Meeting on January 29, 2024, in San Antonio, Texas, we are proposing an amendment to the STS Bylaws to expand the Nominating Committee. The vote to change the STS Bylaws, if passed, will re-establish the Nominating Committee to consist of the four most recent living past presidents, the current president, and four non-presidential members (with all nine members having voting privileges). In the next few weeks, all members will be sent information about the proposed changes to the Bylaws to be voted on in San Antonio.

The proposed new Nominating Committee will continue to be chaired by the most senior past president. The Chairs of the four STS Council Operating Boards (Council on Education, Council on Quality and Research, Council on Health Policy and Relationships, and Council on Member Engagement) will each designate one council representative to serve on the Nominating Committee. Each non-presidential member of the committee will serve a two-year term (except that two of the original terms will be one year to facilitate term staggering).

The Nominating Committee will develop and employ a uniform objective process for evaluating director and officer candidates. A “scoring matrix” will be used to screen candidates to choose finalists for each open Board position that will be based upon the key criteria for that specific position. At its discretion, the Nominating Committee will likely interview finalists for officer and perhaps other positions. Based on the outcomes of this process, the Nominating Committee Chair will present a slate of candidates to the membership for a final vote at the business meeting, as has been traditionally done.

“To quote our STS Canadian Director, Dr. Marc Ruel, ‘The STS is about its members, not its leaders.”

With our new changes to the Nominating Committee process, the Society intends to improve the inclusivity and transparency of the process that we use to identify and select future STS leaders. To quote our STS Canadian Director, Dr. Marc Ruel, “The STS is about its members, not its leaders.” To paraphrase President Abraham Lincoln, our goal is to have an organization that is “of the members, by the members, and for the members.”
Before patients decide on surgical treatment for their cardiac or thoracic disease, they want to know how well they will tolerate surgery and how long they will live afterward. The STS National Database™, with data from nearly 10 million cardiothoracic surgery patient records, is helping to answer those questions. STS has continuously updated and analyzed these data over two decades to improve surgical care, especially in the context of a growing number of alternative therapeutic options.

The STS National Database is the world’s largest and most comprehensive clinical registry for cardiothoracic disease and is estimated to include 97% of all cardiac operations performed annually in the U.S. Now, the Database is expanding beyond 30-day outcomes to offer care providers accurate, longitudinal mortality up to 10 years after surgery.

Recognizing the critical importance of data to drive quality of care, STS has made significant investments to expand and modernize the database. Today, the enhanced STS Database platform is a powerful interactive tool in the hands of surgeons, data managers, and hospitals, providing real-time access to real-world data that informs patient care decisions and monitors performance against national and regional benchmarks.

Additional innovations are in development, including enhanced risk calculators with longitudinal data to help surgeons evaluate treatment options based on long-term outcomes. The STS Research and Analytic Center is expanding the utility of the STS Database with data linkages to the Centers for Disease Control and Prevention’s National Death Index, and claims data from the Centers for Medicare and Medicaid Services.

“Connecting the STS Database with these two major databases is a quantum leap forward for the specialty of cardiothoracic surgery and patients,” said Vinay Badhwar, MD, chair of the STS Council on Quality and Research and professor and chairman of the department of cardiovascular and thoracic surgery at West Virginia University. “For example, if a 67-year-old patient in my office asks about the likelihood they will be stroke free and living life, the STS Database soon will be able to provide an answer with a high degree of accuracy.”

The STS Database encompasses four registries geared at specific patient subgroups. These transformative advancements with long-term linkage are being implemented first in the Adult Cardiac Surgery Database and will be followed in the General Thoracic Surgery Database, Congenital Heart Surgery Database, and Intermacs.

Amping up research to improve quality
By striking the right balance of applying best-in-class scientific analytic methods with minimal data management burden, the STS Database is front and center in ambitious work to improve patient outcomes through
Evidence-based science. STS is harnessing the Database for key clinical improvements, and Database participants are sharing best practices to improve quality and optimize resource utilization in these areas. An in-progress multi-year project to reduce ventilation times is having a meaningful impact. Blood transfusion and hospital length-of-stay projects are slated for near-term study.

The availability of long-term outcomes data increases the power of research from the STS Database and is certain to advance the quality of cardiothoracic surgical care. Authors of an October 2023 study in *The Annals of Thoracic Surgery* demonstrated outstanding long-term survival following low-risk isolated surgical aortic valve replacement (SAVR). Using the STS Database, investigators captured and reviewed 42,586 patients who underwent SAVR between 2011 and 2019 at 981 different cardiac surgery programs across the U.S. They found that five-year survival rates were 93% and eight-year rates were nearly 90%, providing an important contribution to the body of research and benchmarks needed to more comprehensively evaluate the comparative effectiveness of SAVR and transcatheter aortic valve replacement (TAVR).

“"This study set the real-world benchmark for outcomes for management of aortic valve stenosis in low-risk patients," said Vinod H. Thourani, MD, treasurer of the STS and chairman of the department of cardiovascular surgery and the Marcus Valve Center of Piedmont Heart Institute, Atlanta, Georgia. "This analysis through the Database was significant because of the longitudinal follow-up with a very large number of patients, and it is an important complement to results from randomized clinical trials that are usually measured with a smaller number of patients and a limited number of enrolling sites."

Another much-anticipated study used the STS Database to identify 10-year outcomes for patients who underwent coronary artery bypass grafting to ascertain the benefit of multiple arterial grafts. That study, which analyzed an astounding one million unique patient records, will be presented at the STS Annual Meeting in January 2024.

**Reducing data burden**

Dedicated hospital data managers who supply the key data elements are at the heart of the success of the STS Database. Many of the platform enhancements focus on helping participants reduce their data collection burden and costs.

The current STS Database platform allows data managers to enter data directly with the Direct Data Entry feature, saving hospitals significant costs. In addition, data managers can now skip the full complement of data fields and only use fields relevant to the specific patient and operation performed. The number of fields in the latest Adult Cardiac Surgery Database data collection form has been reduced by more than one-third.

Accuracy has not been sacrificed for expediency and efficiency. STS remains committed to maintaining accuracy with annual audits of each registry, which recently showed a 98% accuracy rate. Furthermore, STS Database experts have been advancing the exploration of artificial intelligence and other means of automation to extract major portions of data from electronic medical records to make data abstraction easier and more optimized.

**Accurate and reliable longitudinal data**

Through these exciting developments over the next three years, the STS Database will continue to strive to provide the most accurate short- and long-term data that showcase not only the quality of cardiothoracic surgery operations, but their precise value to patients and healthcare. Data burden reductions, potential automation, and linked longitudinal data are helping to transform the established legacy of the STS National Database into a comprehensive and reliable longitudinal instrument of quality and value. ■
ProHealth Heart and Vascular Care in Waukesha, Wis., embarked on a multidisciplinary initiative to reduce ventilation times for isolated Coronary Artery Bypass Grafting patients at Waukesha Memorial Hospital. The goals: Reduce the risk of patient harm associated with mechanical ventilation and achieve significant improvements in teamwork and safety culture.

Using accurate and reliable data from the STS Adult Cardiac Surgery Database (ACSD), ProHealth successfully identified opportunities for improvement and implemented actions that led to positive outcomes.

Background
Mechanical ventilation affects 800,000 hospitalized patients in the U.S. each year. Five to 10 percent of mechanically ventilated patients develop a ventilator-associated event. Historically, ventilator-associated pneumonia (VAP) was considered one of the most lethal healthcare-associated infections with a 35% mortality rate for ventilated patients, 24% for patients 15-19 years old, and 60% for patients 85 years and older.

ProHealth recognized the need to reduce ventilation times after reviewing data related to isolated CABG prolonged intubation, noticing trends, and identifying individual patient events. The health system reports 130 CT surgery cases per year on average to the ACSD. In 2022, the health system performed 81 isolated CABG surgeries.

The plan was to use data to inform new strategies and uncover solutions to get patients off ventilators faster. Doing so could effectively reduce the risk of VAP and other harms associated with mechanical ventilation, as well as reduce costs.

Multidisciplinary approach
ProHealth understands that sustainable quality improvement involves partnerships from multiple stakeholders across the healthcare setting. It requires information-sharing and systematic actions that lead to the enhancement of healthcare services and improvement of health conditions in a target patient group.

To that end, the healthcare system regularly convened a multidisciplinary team made up of hospital leadership, cardiothoracic surgeons, the director of heart and vascular outcomes, CT surgery physician assistants, advanced practice nurse practitioners with direct patient care, and the STS Database manager to review ventilation times data from the ACSD. The team identified trends and fallout events through the quarterly CT surgery dashboard and shared intel with partnering departments, including surgery team staff, ICU staff, and heart care unit managers.
What the data uncovered
Given that the facility had lower patient volumes, even a single fallout could drastically impact the data. Using data to understand the narrow margin of error motivated the team to analyze the entire mechanical ventilation process. They found that some patients were being extubated just outside the STS quality window, leading to frequent fallouts.

The data also led the health system to evaluate the skillsets of their care teams, particularly the advanced practice practitioners responsible for overnight call coverage. Following a thorough skills assessment, ProHealth worked with one of their APPs to develop a learning tool that would arm on-call APPs with a system-based checklist for patient progress assessment, covering hemodynamics, neurologic status, chest tube output, and ventilation data, for hourly RN check-ins. This process not only improved the expertise and practice of the APP team, but also identified areas for improvement for the ICU staff.

A new extubation protocol algorithm
The team at ProHealth also created an extubation protocol algorithm, defining care goals, criteria for weaning and extubation, and guidance for cases where patients failed to wean. They worked closely with critical care providers and RT/RN leaders to launch a 90-day pilot to test the new extubation protocol algorithm and gather feedback.

After refining the protocol, they presented it to the Medical Executive Committee for approval. The protocol was published throughout the ICU and incorporated into the post-op order set.

Results
The results of this initiative show a significant reduction in prolonged intubation cases from 2017 to 2022. The last prolonged intubation case for isolated CABG patients occurred in Q1 of 2021, and this positive trend continued through September 2023.

Isolated CABG Total Post-Op Ventilation Hours from 2020 to 2022
- Initial ventilation hours (mean) from 7.15 to 5.54
- Initial ventilation < six hours from 55.5% to 69.1%
- Total ventilation hours (mean) from 10.17 to 5.54
- Reintubation from 3.7% to 0%
- Prolonged intubation from 3.7% to 0%

Keys to success:
- Communication and transparency: sharing information and collaborating regularly with hospital leaders, surgeons, nurses, critical care, respiratory therapy, and other supporting departments were essential in identifying issues and opportunities, developing buy-in, and improving processes.
- Conducting stepwise and measurable data assessments.
- Using current data to stay ahead of the negative data trends rather than waiting for outcomes to be published.
- Gaining leadership support to provide process improvement assistance.
- Improving staff training and a better understanding of the metrics proved beneficial.
- Being patient, as deploying new processes and protocols can be slow and tedious.

Conclusion
The success of ProHealth’s initiative to reduce ventilation times highlights the importance of accurate and reliable data from the STS National Database, collaboration, and leadership support. The multidisciplinary team’s dedication to ongoing quality improvement and attention to detail have not only improved patient outcomes, but also reinforced the vital role of every team member in achieving success.
By Jo Chikwe, MD, and John Kerpan

“It may be argued that there are already too many societies and too many meetings…and that multiplication of publications and duplication of efforts are not in the best interests of scientific medicine.”1 The words of Paul C. Samson, founding President of The Society of Thoracic Surgeons in the first article of the 1965 inaugural issue of The Annals of Thoracic Surgery, remain true today.

Also true are the words of John D. Steele, founding editor of The Annals of Thoracic Surgery who outlined his plan in the same issue, “to offer accurately and promptly to my colleagues a journal that reflects the trends of our specialty and the needs of our readers. Your comments, criticisms, and contributions as readers are invited – so that The Annals may consistently and successfully combine authoritativeness with vitality.”2

With that in mind, we answer frequently asked questions about The Annals of Thoracic Surgery and its new partner journal The Annals of Thoracic Surgery Short Reports.

What articles does The Annals publish?

We look for articles that will inform or change cardiothoracic surgery for the benefit of our patients. We are particularly interested in high-quality, expert series that seek to address important clinical and operative questions with well-designed studies and comprehensive, long-term clinical follow-up. The best examples are featured on the front cover, such as a recent series of 194 patients with Marfan syndrome who underwent valve sparing root replacement with reimplantation or remodeling techniques by the Toronto group, or a series of 2,651 lobectomies for lung cancer of which 698 were performed without a diagnosis by the Massachusetts General Hospital group.3,4

We also welcome multi-center studies leveraging clinical registries and trials with comprehensive follow-up designed to address clinical questions less suited to single centers, such as the analysis of multi-arterial coronary artery bypass grafting in the U.S., which reported the incidence of sternal wound infection with bilateral versus single internal mammary artery grafting.5

We solicit expert review articles addressing key clinical topics, encouraging authors to engage other experienced surgeons from multiple institutions to provide an informed and balanced article, and occasionally inviting reviews by a single expert. Expert reviews differ from the type of overview provided in a book chapter in purpose, scope, and structure. Importantly, expert review articles are written by experts for surgeons who themselves may be experts, addressing fundamentals and controversies, supported by current literature and author experience. A recent example is the Expert Systematic Review on Choice of Conduits for Coronary Artery Bypass Grafting published in October.6 Authors are welcome to send proposals for expert reviews to the editorial team.

Original research that may not meet criteria for publication in The Annals, but is still of interest to readers, is redirected to The Annals of Thoracic Surgery Short Reports. This includes small single, center series; analyses developing or comparing predictive risk models; administrative database analyses correlating outcomes with non-clinical factors such as case volumes, regional variation or other population characteristics; preliminary experimental data or models; and data confirming previously published work in a more limited dataset.

What is the acceptance rate of The Annals of Thoracic Surgery?

Our acceptance rate currently is 8% for original research. Last year, we received more than 2,000 submissions, of which more than half were original research articles. With a few notable exceptions, such as the recent case report of the first porcine to human cardiac xenotransplant,7 The Annals does not accept case reports; these are now reviewed and published in The Annals of Thoracic Surgery Short Reports.

What articles does The Annals of Thoracic Surgery Short Reports accept?

Short Reports is a home for interesting contributions that may not meet the criteria for publication in The Annals. This includes almost all case reports and most feature articles, which we now publish in Short Reports. Original research is presented in a more concise format (2,500 words compared to 4,500 in The Annals). The acceptance rate is about 30%. This is higher for articles that have been reviewed by The Annals editorial board and redirected to Short Reports, and lower for de novo submissions, which comprise 75% of articles submitted. Short Reports is open access, which means that most authors pay a fee so that articles published will be freely available to any reader. The journal was launched in 2022 and we plan to be PubMed listed in 2024.

Why should I choose The Annals for my best research?

The Annals spotlights your work to the widest specialty readership. According to the publisher Elsevier, The Annals is the most cited cardiothoracic surgery journal with articles cited 16,798 times between 2019 to 2022, compared to 13,823 citations for the next closest cardiothoracic surgery journal.8,9 Other comparisons between the two journals: print circulation of The Annals in 2022 was 6,910 compared to 1,515; more than 1.7M articles were downloaded compared to 1.6M; and the average number of monthly online visits was 81,857 compared to 36,887. The most impactful research is featured on the front cover, summarized in the Editor’s Choice email, posted as visual abstracts or videos on social media, and presented for continuing medical education (CME) credit.

The review process is constructive and usually efficient. Thanks to the extraordinary efforts of a largely volunteer editorial board composed of more than 150 surgeons, physicians, biostatisticians, and administrative support team members, The Annals of Thoracic Surgery and its partner journal The Annals of Thoracic Surgery Short Reports provide authors with...
STS Journals Editor-in-Chief, Joanna Chikwe, MD, and editorial board members are committed to bringing you science that’s both rigorous and relevant.

How do I join the editorial board?

Peer review is a great way to contribute nationally at any career stage and practice setting. You are welcome to volunteer for the editorial board by contacting the editorial team at Annals@sts.org. The main criteria for editorial board membership are expertise and a strong track record of peer review. Editorial board members provide one or two peer reviews a week that are consistently informed, constructive, detailed, and delivered within 10 days of the first request (3 days for expedited review). If you have not previously reviewed much (or at all) for The Annals you can inform the editorial team of your interest on Annals@sts.org and select topics in your personal profile in Editorial Manager that reflect your expertise and interest.

Reviewers that provide high quality peer reviews and respond quickly to most invitations receive more invitations to review. The Annals Reviewers of the Year are selected from all reviewers based on the number and quality of their reviews. Regular reviewers are invited to write editorial commentaries and are nominated for moderator and discussant roles at the Society of Thoracic Surgeons Annual Meeting.

What constitutes an excellent peer review?

The best peer reviews are carefully written, constructive critiques that provide an overview of the importance of the submission, and the strengths, limitations, and opportunities to address these. It is helpful to start with one sentence summarizing the aims, methods, and findings of the manuscript, followed by one or two sentences of the quality, originality, and major limitations. Finally, a good peer review provides a list of 3-10 key issues with constructive suggested revisions, usually in the order they appear in the manuscript. This detailed review is written in the “Comments to the Author” box, and is shared with the authors anonymously, so it should not include a recommendation to publish or reject.

In the “Comments to the Editor” box, instead of copying the same review, one sentence justifying your decision to accept, revise or reject the manuscript is very helpful to the handling editors. These comments are not shared with the author. Any concerns about plagiarism, conflicts of interest, or candid views on the value of the manuscript should be noted here. There is a detailed description of how and why to peer review for The Annals on our website under Instructions to Reviewers.

References

The Society of Thoracic Surgeons 60th Annual Meeting promises groundbreaking research, innovative procedures, hands-on training, plus meaningful networking opportunities.

STS 2024 will take place January 27-29, 2024, in San Antonio, Texas. Renowned surgeons and academics will provide in-depth guidance and actionable strategies to advance the specialty, overcome challenges, and improve quality outcomes for cardiothoracic surgeons at every career level.

A pre-conference Lung Transplant Symposium on January 26 will provide insights into best-practice approaches for surgical and medical care of lung transplant patients, from assessment as candidates through postsurgical care as recipients.

Program offerings include:

**Adult Cardiac**

Despite advances in percutaneous coronary intervention and transcatheter therapies, surgical intervention is still essential. Sessions will emphasize the enduring relevance and importance of surgical intervention—be it CABG, SAVR, mitral and tricuspid valve surgery, or concomitant ablation—and its positive impact on long-term outcomes, while hands-on courses will allow attendees to gain the skills and confidence to perform annular enlargement and mitral repair.

The J. Maxwell Chamberlain Memorial Paper will illustrate how current aortic valve guidelines for TAVR and SAVR, if not followed, could be risky, especially for younger patients. The expanding use of mechanical circulatory support options—no longer just for bridge-to-transplant or bridge-to-decision scenarios, but also to support higher-risk “everyday” cardiac surgery cases—is explored. World-renowned North American and international surgeons will take attendees on an “Odyssey Through the Advanced Aortic Root Universe,” examining aortic valve repair options for severe aortic insufficiency. Surgical videos will highlight TAVR and TEVAR explant, a new category of operations that are the consequence of expanding transcatheter and endovascular therapies, as well as novel procedures such as beating heart endoscopic septal myectomy, endo-Bentall, and robotic AVR.

**Congenital**

Parallel sessions offer high-quality abstracts highlighting the surgical palliation of hypoplastic left heart syndrome, complex neonatal surgery and neurologic outcomes, big data in congenital cardiac surgery, and temporary and durable mechanical support options for heart failure. Attendees will gain insights from “legends and luminaries” on some long-standing, challenging congenital problems, such as MAPCAs, valve-sparing root replacement in pediatric patients, and the double-switch procedure. The James S. Tweddell Memorial Paper reports on an analysis showing that volume alone does not predict quality outcomes in hospitals performing pediatric cardiac surgery.

Fascinating videos will demonstrate repair of a complex unicuspid aortic valve using geometric ring annuloplasty and an Ebstein’s anomaly variant with anterior leaflet displacement.

**General Thoracic**

General thoracic sessions will highlight advances in the treatment of lung and esophageal cancer, with the latest clinical trials and cutting-edge techniques and therapies. The J. Maxwell Chamberlain Memorial Paper will report on a National Cancer Database analysis showing a survival benefit to neoadjuvant chemoimmunotherapy or adjuvant chemoimmunotherapy in stage IB-IIIA non-small cell lung cancer.

Among the dynamic video presentations will be uniportal VATS left upper lobe sleeve lobectomy, robotic tracheobronchoplasty, robotic-assisted thoracoscopic ligation of refractory thoracic duct leak, and robotic lung transplant.

**Perioperative and Critical Care**

Topics will include current strategies for vasoplegic shock, navigating difficult ERAS scenarios, perfusion crisis management, and multidisciplinary team-based approaches to ECMO, whether for shock or pre- and post-
transplant. Attendees will delve into evolving topics such as frailty assessment and failure to rescue. Abstracts presentations using the STS Adult Cardiac Surgery Database will investigate the association between preoperative anemia and intraoperative transfusions with operative outcomes of isolated CABG and assess whether treatment at high-volume centers reverses the adverse impact of area deprivation on outcomes of heart transplantation.

**Wellness, Education, and Quality**

A special Vivien T. Thomas Symposium will mark the 20th anniversary of the first healthcare disparities summit held at the STS Annual Meeting. This symposium will cover topics such as equity in standard of care treatment, minority patients, achieving health equity through tools aimed at quality improvement and patient safety, building workforce equity, as well as panel discussions and audience Q&A.

Career advancement will feature prominently at STS 2024, with a “Let’s Make a Deal” session that navigates the path to finding a job, securing a favorable contract, and exploring how to align incentives to create more equitable and value-based compensation models. Attendees will gain insights on fashioning a successful career from early career surgeons and STS past presidents. There will also be important sessions on “advocacy skills to take to the Hill,” and ergonomic consideration and exercises that help avoid injury and prolong one’s career.

Other discussion topics will include achieving health equity using the STS Congenital Heart Surgery Database, workforce equity in building an environment of belonging, ethical and legal implications of AI in surgery, evaluating real-world results in attracting and retaining diverse and inclusive elite talent into the specialty, and cardiothoracic trends, outcomes, and opportunities in a large military treatment facility.

**Plenary Sessions**

The meeting’s C. Walton Lillehei Lecture will be presented by Mortimer J. Buckley, the chairman and CEO of Vanguard, while the Presidential Address will be given by STS President Thomas E. MacGillivray, MD.

Other keynote events will include:

- The Thomas B. Ferguson Lecture, presented by Rochelle Walensky, MD, former director of the Centers for Disease Control and Prevention
- The Vivien T. Thomas Lecture, presented by Edward M. Barksdale Jr., MD, surgeon in chief, Rainbow Babies & Children's Hospital/University Hospitals of Cleveland
- “Ukraine Experience of Cardiac Care From ‘Cradle to Longevity’ During Russian Invasion,” given by Illya M. Yemets, MD, from the Ukrainian Children’s Cardiac Center, Kyiv, Ukraine

**President's Reception**

At this year’s President’s Reception, STS will honor President MacGillivray as attendees experience the history, culture, and natural artifacts of Texas at the Witte Museum—a beautiful and immersive venue “where nature, science, and culture meet.” Space is limited for this event, so attendees are encouraged to add the reception to their cart during registration.

**Engaging Activities**

The STS Annual Meeting exhibit hall will feature live product demonstrations, as well as more than 130 exhibitors showcasing the latest tools and technologies for surgical practice.

Be sure not to miss the CT Surgery Resident Showdown final, where the North American and European champions will face off against each other in a test of knowledge.

Attendees will also be able to engage in wellbeing activities, which will feature step tracking, wellness-related educational sessions, a golf simulator, and more. Industry symposia, held onsite during lunch and offsite in the mornings and evenings, will offer opportunities to explore new techniques and interventions. Two exhibit hall theaters let attendees to experience e-posters and interactive industry presentations.

For those who can’t travel to San Antonio—or for those who want to do more with their in-person registration—Plenary Livestream-Plus will allow registrants to livestream the President’s Address and five other plenary sessions in real time from anywhere onsite or around the globe. Plenary Livestream-Plus also gives participants access to all session recordings within a few days of presentation.

Early registration guarantees a place—and the best choice of hotel rooms—at the world’s most highly anticipated cardiothoracic surgery event. STS Members enjoy significant discounts, and Resident/Fellow and Medical Student Members register for free. Register at sts.org/annualmeeting.
On October 17-18, STS hosted its annual Advocacy Conference in Washington, DC, where a record 56 advocates from 27 US states banded together to advocate for legislative priorities affecting cardiothoracic surgeons. Attendees collectively participated in more than 100 meetings with legislators and staff to discuss three issues impacting cardiothoracic surgery:

- **Medicare Reimbursements**: Delay or halt the implementation of a new proposed complexity add-on code, G2211. This is a flawed code that will result in an unwarranted cut to cardiothoracic surgeons’ Medicare reimbursements in 2024.

- **Healthcare Workforce**: Prohibit the use of non-compete clauses in employment contracts (H.R. 731/S. 220) and provide significant new investments for additional graduate medical education positions (H.R. 2389/S. 1302).

- **Enhancing Access to Lung Cancer Screenings**: Support the Increasing Access to Lung Cancer Screening Act (H.R. 4286) to ensure that all Medicaid plans cover low-dose CT lung cancer screening, as recommended by the United States Preventive Services Taskforce (USPSTF).

In preparation for their meetings, attendees heard from STS member and cardiothoracic surgeon Congressman Larry Bucshon, MD (R-IN), numerous congressional staff, and several surgeon leaders with health policy expertise. Additionally, STS presented its annual Legislator of the Year Award to Rep. Raul Ruiz, MD (D-CA), an emergency medicine physician, in recognition of his valuable leadership on policies directly impacting cardiothoracic surgeons and the broader healthcare community.

“Much work remains to advance these and other STS policy priorities, but attendees now have the tools and relationships to be effective advocates for cardiothoracic surgery,” said Joseph C. Cleveland Jr., MD, chair of the STS Council on Health
Policy and Relationships. “It is essential that STS members voice their concerns to their lawmakers and share their patient stories, which help illustrate why our issues must be prioritized.”

Members who were unable to attend the Advocacy Conference can send customized messages to their representatives on the issues above through the new STS grassroots site at advocacy.sts.org. If you would like to participate in future advocacy opportunities, contact advocacy@sts.org.

The Centers for Medicare & Medicaid Services (CMS) finalized its Medicare payment cut for 2024. The 3% reduction to physician reimbursement will take effect January 1, unless Congress acts.
For the first time, The Society of Thoracic Surgeons joined the Korean Society for Thoracic & Cardiovascular Surgery (KTCVS) in their presentation of the Heart Valve Disease Forum (HVDF), an annual conference that delivers the latest developments on the basis, cause, diagnosis, treatment, and future of valve disease.

The forum, held September 15-16, 2023, in Dragon City, Yongsan, Seoul, was led by the HVDF President Dr. Kyung Hwan Kim, and organized by co-program directors Dr. Joon Bum Kim of Asan Medical Center of Ulsan College of Medicine and Dr. S. Chris Malaisrie of Northwestern University.

More than 300 surgeons, residents, and medical students who attended the conference heard from leading surgeons and professors on hot topics impacting the specialty, including TAVI, SAVR, and endocarditis, and had the opportunity to train on surgical techniques in wet labs.

“STS was thrilled to partner with KTCVS on this international event,” said Dr. Malaisrie. “The dynamic, case-based discussions and interactive wet labs with skilled faculty inspired the next generation of cardiac surgeons.”

STS President Dr. Thomas MacGillivray delivered several talks, including one on “Crisis Management in the Operating Room and Surgeon Leadership.”

At this year’s conference, emphasis was placed on connecting young surgeons with mentors. It was an exclusive opportunity for early career attendees to gain invaluable guidance from valve surgery experts on navigating their career and overcoming challenges.

“The Heart Valve Disease Forum was a wonderful success and a historical event that stands out among the meeting’s 30-year history,” said Dr. Joon Bum Kim. “Our Korean colleagues agreed that collaborating with STS was the best thing in terms of excellence of lectures, one-to-one teaching in the wet lab, an exciting mentorship program, and beautiful times spent outside of the conference room.”

One of the main features of the Early Career Hub is a new quarterly Early Career Journey webinar on the fundamentals of building a successful career in and out of the operating room. Surgeons from academic, private practice, and hospital settings share practical information and personal insights on a broad range of topics – from negotiating a contract and managing personal finances to coping with second-victim syndrome and collaborating across the healthcare setting.

The following will be presented during the December 7, 2023, webinar on “The Business of Medicine—How to Successfully Transition from Training to Practice:”

- An Academic Perspective, presented by S. Adil Husain, MD, chief of pediatric cardiothoracic surgery, University of Utah Health, and co-director, Heart Center Primary Children’s Hospital
- A Private Practice Perspective, presented by Mark Block, MD, chief of thoracic surgery, Memorial Healthcare System
- A Hospital Perspective: Larry Kaiser, MD, managing director, Alvarez & Marsal’s Healthcare Industry Group

STS and Korean Society for Thoracic & Cardiovascular Surgery Partner on Inaugural International Conference

Introducing the STS Early Career Hub
Supporting a New Generation of CT Surgeons

If you’re in the early stages of your professional journey in CT surgery, STS wants to be your go-to resource for guidance, education, and community.

STS’s Early Career Hub at STS.org is designed intentionally to support your career growth and development, increase diversity and inclusion within the specialty, and create peer-to-peer connections.

There, you’ll find training and education, the latest research affecting the specialty, mentorship opportunities, health and wellness tips, specialized advice on key approaches in those early stages of your career, and more. Every learning opportunity aims to help early careerists land the job they want, deliver the highest quality patient care, develop leadership skills, and make smart, strategic career decisions.

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AQO Event Helps Data Managers Maximize Value of STS National Database

More than 700 surgeons and data managers attended the 2023 Advances in Quality & Outcomes (AQO): A Data Manager’s Meeting on September 26-29, 2023. During the virtual four-day conference, data managers learned from surgeon leaders, database platform experts, and other data managers, expanding their knowledge of new features, functionality, quality improvement initiatives, and research outcomes related to the STS National Database.

The event included in-depth discussions as experts presented four learning tracks to help users master each of the four component registries: Adult Cardiac, Congenital Heart, General Thoracic, and InterMACS/PedIMACS.

Event feedback was overwhelmingly positive. Here are a few highlights:

• “Another very successful online conference! Dr. Moritz Wyler von Ballmoos did an exceptional job with his presentations and his spot-on replies to the Q&A!” – Shari Samevitz, RN, PA, MHP, senior database program manager at Brigham and Women’s Hospital

• “I am a new ACSD abstractor at my facility and found AQO very informative.” – Elizabeth Spreen, RN, clinical quality analyst at Baton Rouge General Medical Center

• “The physician presentations have been excellent. The virtual format is really nice. Great work!” – Cynthia Plotter, MBA, CCP-LP

In December, conference participants will have the opportunity to join a half-day, live AQO Hot Topics webinar for each registry. Speakers who gave presentations at the AQO meeting will return to provide education and answer attendee questions.

Attendees can access the recorded and on-demand sessions from the AQO meeting by visiting the STS Learning Center. To receive continuing education credit, viewers must watch all on-demand and live content, and then evaluate all session presentations by Friday, December 29.

Data managers who were unable to attend can purchase AQO Online, which includes recorded sessions with Q&A, and on-demand presentations.

A Look Back at a Successful 2023 STS Boot Camp

The STS Boot Camp is an intensive, hands-on course to help first-year cardiothoracic surgery residents transition to practicing surgeons.

The live, in-person boot camp experience is designed to provide an experiential foundation in basic cardiothoracic operating skills through expert instruction and simulators that enhance the learning experience by replicating real-world cases and emergency scenarios.

Nearly 60 first-year CT surgery residents gathered in Chicago in August 2023 to work alongside luminary surgeons as mentors and educators. Here’s what attendees had to say about the experience:

• “The atmosphere that we try to create is one of collegiality, respect, and hard work, and I think we’ve been able to retain that same kind of atmosphere through the years,” Jonathan Nesbitt, MD, Vanderbilt University, Boot Camp chair

• “Residents are just so excited to be here. It’s a low-stress, fun environment for them to develop foundational skills for a variety of operations,” Brian Mitzman, MD, University of Utah

• “The Boot Camp experience has been amazing so far, and to be here, I think, is quite important,” Adanna Akujuo, MD, Albany Medical Center

• “It’s definitely high intensity while you’re operating, and I really like the real-world feel of it, which I wasn’t expecting,” Jonathan Decker, DO, resident, Newark Beth Israel Medical Center

• “It’s been a wonderful learning experience to see these leaders from around the country be present at the program — from broad strokes to the little intimate details for each procedure,” Louis Chai, MD, resident, Temple University Hospital

Scan the QR code to check out video highlights of this year’s STS Boot Camp.

STS Teams Up with European Societies for Inaugural Latin America Thoracic Surgery Conference

STS, the European Association for Cardio-Thoracic Surgery (EACTS), and the European Society of Thoracic Surgeons (ESTS) will be co-presenting the first-ever STS/EACTS/ESTS Latin America Thoracic Surgery Conference on December 1-2, 2023, in Rio de Janeiro, Brazil.

A wide range of topics will be covered during the two-day event, including:

• Recent advances in neoadjuvant and adjuvant immunotherapy for resectable lung cancer robotic surgery

• Sublobar anatomic lung resection

• Surgery for advanced thoracic malignancies

• New technologies in thoracic surgery

• Interventional bronchoscopy

In addition to presentations and lectures, the program will include original scientific abstracts in oral and poster sessions, technical videos related to procedural expertise, trials and quality outcomes sessions, and interactive panel discussions. The conference will provide Spanish and Portuguese translation in real time.
Generous Estate Gift Continues
STS Member’s Legacy

The Thoracic Surgery Foundation (TSF) expresses gratitude to the estate of Dr. Graydon Long for a bequest gift valued at approximately $450,000 that will be received in 2023.

Dr. Long joined STS in 1965 and was a Senior Member at the time of his death in 2019. He trained at the University of Michigan Medical School, where he also completed his cardiothoracic surgery residency in 1959, and was a surgeon in the Lexington, Kentucky, area between 1959-1988.

His widow, Virginia B. Long, died in July of this year and the estate gift was initiated at that time. TSF is one of three non-profit organizations to benefit from a planned gift made in their estate plan. This is an unrestricted gift and will make a meaningful impact on TSF’s grant making in the coming years.

Please consider designating TSF as a beneficiary in your estate plan and leave a legacy that will benefit your beloved specialty for years to come. For more information on naming TSF as a beneficiary, contact TSF Executive Director Lee Wiensch at lwiensch@sts.org.

Double Your Impact with the Surgeon Match Challenge

At its October meeting, the STS Board of Directors approved additional matching grant funds for The Thoracic Surgery Foundation. For every dollar donated by surgeons for the remainder of 2023, STS will match contributions up to $250,000.

If you have not given to the Foundation recently, consider a gift at this time when your donation will have double the impact. Gifts to TSF can be made online at thoracicsurgeryfoundation.org.
TSF Award Recipients in Belgium

Past TSF Chair Dr. Joseph Bavaria recently shared this photograph of three TSF awardees enjoying time together in Brussels, Belgium. All three physicians are currently gaining experience in aortic surgery with their mentor, Dr. Laurent de Kerchove, at the Cliniques Universitaires Saint-Luc in Brussels. Pictured left to right are:

• Dr. David Zapata, University of Maryland. Recipient of The Thoracic Surgery Foundation/ Francis Fontan Fund International Traveling Fellowship.

• Dr. Marcio Rufino, Hospital Universitário Cassiano Antônio Moraes, Brazil. Recipient of The Thoracic Surgery Foundation/ Francis Fontan Fund International Traveling Fellowship in partnership with the Latin American Association of Cardiac and Endovascular Surgery.

• Dr. Scott DeRoo, University of Washington. Recipient of the Thoracic Surgery Foundation Nicholas Kouchoukos Award.

Looking to the Future Scholars Reunite at the Cleveland Clinic

At the start of the 2023 academic year, three surgeons working at the Cleveland Clinic cardiac surgery department had an immediate connection. Drs. Frank Cikach, Peter Vo, and Meghan Halub were 2017 Looking to the Future scholarship recipients and now have the unique opportunity to work together at one of the top cardiac surgery programs in the U.S.

Dr. Cikach is currently a chief resident at the Cleveland Clinic, with a focus on aortic surgery. Dr. Vo is a current heart failure, MCS, and transplant fellow with the goal of returning to Canada to practice. And Dr. Halub is a clinical associate, with a focus on adult cardiac surgery.

All three surgeons attribute the Looking to the Future Scholarship as a major factor in pursuing cardiac surgery. The scholarship not only helped them to attend the STS Annual Meeting, but it also gave them opportunities for networking, mentorship, and building collegial relationships that will last their entire careers. This connection at the Cleveland Clinic is just one of many!

This is a just one example of how important it is to support the Looking to the Future Scholarship to help young surgeons establish foundations, build connections, and grow as leaders in the specialty.

All three surgeons are grateful for the support they had early in their careers and the impact it had on their career development. Not only have they found each other again, they have found new friends from all over the world at the Cleveland Clinic. They are extremely grateful for the support received from the STS and their mentors.
Mark Your Calendar
Upcoming STS Educational Events

- **STS/EACTS/ESTS Latin America Thoracic Surgery Conference**
  Rio de Janeiro, Brazil • December 1 – 2, 2023
- **60th STS Annual Meeting**
  San Antonio, Texas • January 27 – 29, 2024

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