



"What happened to those hundreds if not thousands of patients who didn't seek cardiac surgery during the height of the first wave of the pandemic?"

Vivek Rao, MD



> During the first wave of COVID-19, cardiac surgery volumes in the US substantially declined.

Pandemic Slows Down Heart Surgery, Cuts Volume in Half

In the past year, COVID-19 has altered or halted virtually every aspect of society, and the practice of cardiothoracic surgery has not been immune.

The abrupt cessation of surgery in mid-March 2020 had and will continue to have far-reaching implications, as the negative effects of canceled and postponed procedures emerge.

A recent, comprehensive analysis of data from the STS National Database illustrates the sharp reduction of adult cardiac surgery volumes during the first wave of the pandemic and also shows the resulting consequences on surgical outcomes. This research—the first of its kind, according to study author Tom C. Nguyen, MD, from the University of California San Francisco—was presented during the Society's Annual Meeting in January.

"The study was a true herculean analysis and tour de force," said Dr. Nguyen. "The pandemic has changed the world as we know it, causing a dramatic drop in adult cardiac surgery volume and worsening patient outcomes."

Dr. Nguyen and colleagues queried the STS Adult Cardiac Surgery Database for data from January 1, 2018, to June 30, 2020, and The Johns Hopkins COVID-19 Dashboard from February 1, 2020, to January 1, 2021. The group examined information on 717,103 adult cardiac surgery patients and more than 20 million COVID-19 patients. They found that from December 2018 to December 2019, approximately 24,000 cardiac surgeries were performed per month in the United States. However, in April 2020, the average number of cases dropped to 12,000, representing a 53% decrease nationwide in all adult cardiac surgery volume. Also that month, there were 65% fewer elective cases and 40% fewer non-elective cases in the country.

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The Society's mission is to advance cardiothoracic surgeons' delivery of the highest quality patient care through collaboration, education, research, and advocacy.

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STS News

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New STS officers and directors were elected or reelected during the virtual Annual Membership (Business) Meeting on Sunday, January 31. The meeting was held in conjunction with STS 2021, the Society's 57th Annual Meeting.

Leading the Board and the Society for 2021-2022 is Sean C. Grondin, MD, MPH, FRCSC, from Calgary, Canada, who was elected STS President. John H.



The following also were elected or reelected:

Secretary Joseph F. Sabik III, MD Cleveland, Ohio

Secretary-Elect Wilson Y. Szeto, MD Philadelphia, Pennsylvania

Treasurer-Elect Vinod H. Thourani, MD Atlanta, Georgia

Resident Director Kimberly A. Holst, MD Rochester, Minnesota **Directors-at-Large** Thomas G. Gleason, MD Pittsburgh, Pennsylvania

After being elected 2021-2022 STS President, Sean C. Grondin, MD, MPH, FRCSC, showed off his

Kevin D. Accola, MD Orlando, Florida

STS hockey iersey.

James S. Tweddell, MD Cincinnati, Ohio



See a complete listing of the 2021-2022 STS Board of Directors on page 20. Learn more about the Society's governance structure at sts.org/governance.



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Member News



Conte Appointed System Chair

John V. Conte, MD, is the new system chair of cardiothoracic surgery at Geisinger Health System and vice chair of the Geisinger Heart Institute in Danville, Pennsylvania. Before accepting this role, Dr. Conte served as chief of the Division of Cardiac Surgery at Penn State Health and the associate director of the Penn State Heart and Vascular Institute in Hershey, Pennsylvania. He has been an STS member since 1999.



Cooke Promoted at UC Davis

David Tom Cooke, MD, recently was appointed chief of the newly assembled Division of General Thoracic Surgery at the University of California Davis Health in Sacramento. In addition to this new role, Dr. Cooke will continue to serve as vice chair for faculty development and wellness and director of the general thoracic surgery robotics program. An STS member since 2010, Dr. Cooke leads the STS Workforce on Diversity and Inclusion.



Cox Receives Jacobson Innovation Award

James L. Cox, MD, was honored this past February with the 2020 Jacobson Innovation Award from the American College of Surgeons. This international award recognizes living surgeons who have developed new surgical approaches or techniques. Dr. Cox is best known for the Cox-Maze procedure, which implements a series of incisions that form scar tissue blocking the erratic electrical impulses of atrial fibrillation and has been the "gold standard" for treating the condition since its development in 1987. He has been an STS member since 1985.



Kon Directs Transplant Programs at Northwell

Zachary N. Kon, MD, now serves as surgical director of both the advanced heart failure and cardiac transplantation program and the advanced lung failure and lung transplantation program for Northwell Health in Manhasset, New York. Most recently, he served as surgical director of the lung transplantation program and the pulmonary hypertension and pulmonary thromboendarterectomy program at NYU Langone Health in New York City. Dr. Kon has been an STS member since 2010.



Weyant Leads Team at Inova

Michael J. Weyant, MD, is the new chief of thoracic surgery for Inova Health System in Falls Church, Virginia, and holds the newly created position of Moran Family Endowed Chair in Thoracic Oncology. He also serves as co-director of the Thoracic Oncology Program at the Inova Schar Cancer Institute in Fairfax, Virginia. Prior to this position, Dr. Weyant was a professor of surgery and an associate professor of cardiothoracic surgery at the University of Colorado School of Medicine in Aurora, and a thoracic surgeon at National Jewish Health in Denver, Colorado. He has been an STS member since 2007 and chairs the STS Membership Committee.



Forbess Heads UMD Children's Heart Program

Joseph M. Forbess, MD, MBA, has been named surgical director of the Children's Heart Program at the University of Maryland (UMD) Children's Hospital and appointed professor of surgery in the Division of Cardiac Surgery at the UMD School of Medicine in Baltimore. Previously, he was executive co-director of the Ann & Robert H. Lurie Children's Heart Center in Chicago and professor of surgery at Northwestern University's Feinberg School of Medicine. Dr. Forbess has been an STS member since 2003.



Mullett Chairs Commission on Cancer

Timothy W. Mullett, MD, MBA, from UK HealthCare in Lexington, Kentucky, has been installed by the American College of Surgeons as chair of its Commission on Cancer (CoC). The CoC is one of the largest cancer organizations in the world, with more than 1,500 CoC-accredited cancer programs in the US and Puerto Rico. The CoC also supports the National Cancer Database, which tracks national trends and demographics of cancer incidence. Dr. Mullett is medical director of the Markey Cancer Center Research Network and professor of surgery at the University of Kentucky. He has been an STS member since 2001.



Stiles Is New Chief at Montefiore

Brendon M. Stiles, MD, has joined Montefiore Health System and the Albert Einstein College of Medicine in Bronx, New York, as chief of thoracic surgery and surgical oncology. He also serves as associate director of surgical oncology for the Albert Einstein Cancer Center. Dr. Stiles moved to Montefiore from NewYork-Presbyterian Hospital and Weill Cornell Medical Center in New York City. An STS member since 2010, he serves on the STS Workforce on Media Relations and Communications.



Additional Member News items are available online at sts.org/membernews.



Send news about yourself or a colleague to **stsnews@sts.org**. Submissions will be printed based on content, membership status, and space available.



Moving Forward

Sean C. Grondin, MD, MPH, FRCSC

"I am proud to see STS expand its leadership in physician wellness by creating a new Task Force on Wellness led by Dr. Mike Maddaus."

A hearty congratulations to the Annual Meeting Program Task Force and the STS staff for delivering an exceptional 2021 annual meeting. As well, I want to give a special thank you to Dr. Dearani for his tremendous leadership over the past year.

Becoming STS President is an incredible honor and a major highlight of my professional career. Being the first Canadian general thoracic surgeon to assume the role is a further privilege for which I am grateful. I am very much looking forward to working with STS surgeon leaders, our membership, and the highly capable team of hardworking and supportive STS staff as we represent and advocate for our members and patients around the world.

As your STS President for the coming year, I am committed to undertaking new endeavors as well as continuing to advance several important initiatives that have been championed by my predecessors. Below I have highlighted just a few of the many important activities that I hope to focus on over the next year as we all continue to manage the challenges arising from the pandemic.

Completing the Successful STS National Database Transition

In our pursuit to transition the 8 million records in the STS National Database to a first-of-itskind, interactive, real-time, cloud-based system for all participants, STS Database leaders and staff have made tremendous progress while navigating the many challenges that come with an endeavor of this size and complexity. I want to acknowledge and apologize for any frustration some may have experienced as we have worked through transition issues. Rest assured, the STS team continues to work diligently with our IQVIA partners to ensure that our Database remains the gold standard of clinical registries.

For those who want a glimpse of the new innovative functionality of the Database, see page 7 and follow the link to a short video that describes the recently released Adult Cardiac Surgery Database Longitudinal Outcomes Dashboard.

Maintaining Strong Advocacy Efforts

STS has benefitted from strong representation in Washington, DC, working to promote and support advocacy efforts on behalf of cardiothoracic patients and surgeons. Our Workforce on Health Policy, Reform, and Advocacy and our Washington staff remain very active in lobbying elected officials to ensure awareness of key issues affecting our specialty (see page 18). In the recent past, these efforts have contributed to Medicare coverage of low-dose CT screening for lung cancer, reversing damaging ECMO reimbursement cuts, and protecting children and adults from the harmful effects of tobacco, including limits on vaping flavors and raising the smoking age. 2020 also saw the first increase in Medicare-funded graduate medical education residency positions in 25 years, and the Society's support of research funding continues to pay off, especially in relation to projects under the Agency for Healthcare Research and Quality, the National Institutes of Health, and the Centers for Disease Control and Prevention.

Additionally, during this past year, STS helped form the Surgical Care Coalition to lobby against significant proposed cuts to surgeon Medicare reimbursement. Fortunately, in December 2020, this group's efforts were successful in reversing, at least temporarily, those proposed cuts. With your support, we will work to ensure continued advocacy in this area, as well as other areas that impact cardiothoracic surgeons and our patients.

Implementing Strategic Plan Initiatives

In June 2020, the STS Board approved a new strategic plan that set our organization on the right track to advance the cardiothoracic specialty for all members, no matter their geography, discipline, or practice setting. Although some of our actions related to the strategic planning had to be put on hold temporarily due to the pandemic, STS leadership and management have reestablished the implementation process with a focus on key areas identified in the plan such as member engagement, virtual education, diversity, and advocacy. Stay tuned for further communications updating you on STS initiatives that are focused on improving the lives of patients with cardiothoracic diseases.

Building on Existing Educational Offerings and Opportunities

Because of previous STS investment in educational infrastructure, the Society was able to quickly expand its online educational offerings during the pandemic, providing meaningful and targeted information to audiences globally. These offerings included webinars and podcasts, as well as virtual meetings. To continue making progress and leading in the area of cardiothoracic surgery education, the Society has launched its new Learning Center through which users can access interactive CME-accredited educational programs and material 24/7. As well, the Society recently completed the online *Pearson's* textbook (part of the *STS Cardiothoracic Surgery E-Book*), which serves as a great resource for trainees and staff alike. In 2021, STS leadership will be reviewing and refining the Society's educational programs and resources, and we will continue to actively develop educational offerings with partner societies/associations, especially as they relate to the pandemic.

Advancing DEI Efforts

Although STS has made significant steps in advancing diversity, equity, and inclusion (DEI) efforts, we continue to explore additional opportunities for improvement, including examining our membership and leadership data and selection processes. We will explore making changes that help our leadership team better reflect the world we live in and the members we represent.

Advancing Leadership Development and Physician Wellness Programs

I am excited to build on previous leadership development efforts by Dr. Bob Higgins and the Workforce on Career Development, as he and I co-chair the new STS Leadership Series Task Force. In 2021, I look forward to working with engaged task force members to develop our leadership webinar series culminating in a capstone event at the 2022 Annual Meeting in Miami Beach (see page 10).

I am proud to see STS expand its leadership in physician wellness by creating a new Task Force on Wellness led by Dr. Mike Maddaus. This task force is charged with developing resources that will support STS members especially as we face increased personal and professional stresses that have been exacerbated by the pandemic (see page 11).

I thank you for your trust in me and I look forward with excitement and enthusiasm to the year ahead as your 57th STS President. If at any time you have questions, concerns, or just want to provide feedback on an issue, please reach out to me (sgrondin@sts.org).

Pandemic Slows Down Heart Surgery, Cuts Volume in Half

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In addition, the data showed that no matter the procedure—isolated coronary artery bypass grafting (CABG), isolated aortic valve replacement (AVR), isolated mitral valve replacement (MVR), CABG+AVR, CABG+MVR, isolated MV repair, and CABG+MV repair—there was a significant decline in case volume—54% overall—when compared to 2019.

"Only the STS National Database has the level of granularity, COVID variables, and longitudinal follow-up to answer the questions posed in this important study," said Dr. Nguyen.

While the early stages of the pandemic clearly induced a surge of untreated patients, case volumes did not fully return to baseline after the initial COVID storm. It is unclear if these untreated patients were ever treated, according to Dr. Nguyen.

In Ontario, Canada, Vivek Rao, MD, from the University of Toronto, performed a similar analysis and observed like patterns of dramatic reductions in cardiac surgical procedures. "While we all expected a flood of patients to return as we resumed normal activity in the fall of 2020, this did not occur," he said. "In fact, right through to November 2020, we never quite achieved our prepandemic volume, which begs the question: What happened to those hundreds if not thousands of patients who didn't seek cardiac surgery during the height of the first wave of the pandemic? The sad fact is many of them simply died while avoiding hospital care for their cardiac disease."

Studies like these "highlight the fact that cardiac disease remains an important killer of men and women in North America, which should not be obfuscated by the pandemic that we're currently in," he added.

Most Impacted Regions in the US

Regionally, the Mid-Atlantic area (New York, New Jersey, and Pennsylvania) was among those hardest hit during the first surge of the COVID pandemic, experiencing a 71% decrease in overall cardiac surgery case volume, 75% fewer elective cases, and a 59% reduction in non-elective cases. Another hotspot, the New England region (Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island), showed a 63% reduction in overall case volume. These two regions also had spikes in operative mortality: their observed-to-expected (O/E) ratio for mortality for all cardiac procedures rose from below 1.0 before the pandemic to nearly 1.2 in April 2020 (an increase of 75%). Because CABG is the most common surgery in the specialty, researchers conducted the same analysis for this procedure and found that in the Mid-Atlantic and New England regions, the O/E mortality ratio for isolated CABG surgeries jumped by 148% in that month.

Meanwhile, throughout the entire country, the researchers found a 110% increase in the O/E mortality ratio for all adult cardiac procedures and 167% for isolated CABG.

"We clearly demonstrated that if you have heart surgery during COVID, you have an increased risk of morbidity and mortality," said Dr. Nguyen. "No doubt that COVID hit us hard."

Causes of this COVID Consequence

As for what may be causing the additional mortality risk, Dr. Nguyen explained that it's multifactorial, with COVID-19 infections likely playing a role. In addition, in many cases, surgeons have been limited to operating on only the most urgent coronary bypass cases and patients who tend to be sicker. Robbin G. Cohen, MD, MMM, from the Keck School of Medicine of the University of Southern California in Los Angeles, stressed that research like this should not deter patients from seeking care for chest pain or other cardiac symptoms. "If anything, it is a warning to get into the system as soon as possible," he said.

Additional Studies and Future Revelations

It's important to note that this research included data tallied only through June 2020 and does not include the fall and winter, when the second surge of COVID-19 was—in many parts of the country—even worse than in the spring.

The good news is that anecdotal evidence suggests hospitals managed better the second time around due to factors such as more reliable supplies of protective equipment and established COVID-specific routines, according to Dr. Nguyen.

Moving forward, the researchers plan to further drill down into the data and conduct many more "granular" analyses that will examine trends and outcomes of COVID patients vs. non-COVID patients, as well as delve more deeply into the COVID effect on specific adult cardiac procedures such as aortic dissections.



▶ The Mid-Atlantic and New England regions were among the hardest hit by COVID, experiencing decreased cardiac surgery case volume and increased operative mortality.

New Longitudinal Dashboard Brings 'Years of Data to Your Fingertips'

As part of the Society's ongoing initiatives to facilitate quality measurement, STS has launched a powerful, first-of-its-kind tool for Adult Cardiac Surgery Database (ACSD) participants—the Longitudinal Outcomes Dashboard.

With the dashboard, "surgeons and data managers will be able to track important outcome trends over select timeframes for patient subcohorts in their program in a way never before realized," said Vinay Badhwar, MD, Chair of the STS Council on Quality, Research, and Patient Safety.

The Longitudinal Dashboard allows data managers and surgeons to explore their observed, expected, and risk-adjusted rates for major morbidity and mortality outcomes. They can select the specific type of cardiac procedure, define the data aggregation timeframe—calendar year, quarter, or month and fine-tune the data to specific demographic subcohorts and certain surgical parameters.

ACSD participants also can use the dashboard to display their site's performance longitudinally over time—back to 2017 and up to the most current analyzed data harvest and benchmark against their own outcomes, risk adjust based on STS risk models, and contrast with corresponding national averages. Participants can select 3-year periods corresponding to a specific data harvest or use the cumulative longitudinal dataset that is updated quarterly after each data harvest.

These results are available for nine major outcome measures. "This is a transformative way to bring years of data to your fingertips," said Dr. Badhwar.

"Tools like this punctuate how STS is advancing quality through innovation that leverages the rich data in the STS National Database." Vinay Badhwar, MD

Participants can see, for example, how many patients experienced stroke or renal failure associated with an operation, how many patients required prolonged ventilation, and how many patients stayed in the hospital for more than 14 days for one procedure.



The new ACSD Longitudinal Outcomes Dashboard allows users to display, manipulate, and synthesize data in ways that have never been available before.

Importantly, using the same time parameters and risk models, data managers and surgeons can compare outcomes or their procedurespecific performance to those in the national data, and they can see where they fall on observed versus expected rates for each outcome and overall procedure grouping as well as for specific patient subgroups.

The Longitudinal Dashboard also allows insights into fluctuations in patient volume, enabling a focused perspective on factors—such as the effect of competing treatment options or decreasing numbers of cardiothoracic surgeries as the COVID-19 pandemic peaked—that affect procedures or site operations.

Another noteworthy feature is the flexibility of the display, such as making graphs larger or smaller and displaying numerical values. Using these comprehensive, risk-adjusted data views, participants can pinpoint areas where certain patient or procedure factors may play a role in surgical outcomes and quality measures at their program.

For example, a user might see better outcomes in older versus younger patients for a set time period and can then further drill down by sex to see outcomes in older male versus older female patients. In this way, said Dr. Badhwar, data managers can identify trends, as well as areas needing improvement that could become a quality enhancement initiative. "Tools like this punctuate how STS is advancing quality through innovation that leverages the rich data in the STS National Database," he said.

Participants also can export illustrative charts and customized reports that can be used in quality improvement presentations to help explain performance to stakeholders and demonstrate where improvements have taken place. The dashboard can be adjusted to display broad trends or fine details, as desired, in real time or for preparing quality reports.

Data are displayed in a matter of seconds as users modify filters, and mousing over individual points on the charts displays the corresponding numbers. "STS is committed to delivering innovative, cloud-based access to the STS National Database," said Dr. Badhwar. "This unique tool brings it all together."

The Dashboard is available now to all ACSD participants via "Operational Reports" in the left navigation menu on the STS IQVIA



platform. For training and tips on using the dashboard, a short video demonstration and a recorded webinar are available on the STS YouTube channel. ■

CT Surgeons Rise to Challenge, Lead Way in COVID Clinical Trials

Since its establishment approximately 15 years ago through government funding, the Cardiothoracic Surgical Trials Network (CTSN) has been involved in important research that addresses evidence gaps and answers meaningful questions in cardiothoracic surgery.

With the onset of the pandemic and the related public health emergency in early 2020, its scope of work dramatically changed after CTSN received two calls.

Instead of focusing on research topics such as mitral regurgitation, atrial fibrillation, and coronary artery disease, CTSN pivoted toward critically ill COVID-19 patients. This would be the first time that the Network would become involved in studying areas related to infectious disease.

The first request was from an industry partner that was exploring the possibility of using stem cells for patients with acute respiratory distress syndrome (ARDS) as a result of COVID-19. At the time, the pandemic left large numbers of people suffering with ARDS and requiring ventilation in intensive care units, with dismal outcomes.

The company invited CTSN researchers to help evaluate its allogeneic mesenchymal stem cell product via a randomized, controlled trial. It was thought that this therapy could have immunomodulatory properties capable of counteracting the cytokine storm associated with the inflammatory conditions related to COVID-19.

While there was some initial resistance from CTSN leadership about becoming involved in this trial, Peter K. Smith, MD, from Duke University in Durham, North Carolina, and Michael J. Mack, MD, an STS Past President from Baylor Scott & White Health in Plano, Texas, decided that the trial was in line with CTSN's mandate to rigorously evaluate novel therapies for public health imperatives; thus, they led the charge. Both Drs. Smith and Mack are principal investigators for their respective institutions, which are Core Clinical Centers in CTSN. "The two of us said, 'we'll do this.' So we designed and executed a trial for stem cell infusion in COVID-19 patients who were on ventilators," explained Dr. Smith. "We created teams that were headed by surgeons but also included pulmonologists, critical care experts, hospitalists, and infectious disease specialists."

The trial—designed in 2 weeks and sponsored by industry and the National Heart, Lung, and Blood Institute (NHLBI)—ran from April to September 2020. Results have not yet been published.

"It has been an immensely gratifying experience to be able to mobilize resources so quickly and address the scourge that has overtaken the world," said Annetine C. Gelijns, PhD, a leader in the CTSN Data and Clinical Coordinating Center and also co-director of the International Center for Health Outcomes and Innovation Research at Mount Sinai in New York, New York. "We have been humbled by the generosity of all investigators and coordinators of the Network, who have come together in their selfless efforts to care for patients and advance science."

Operation Warp Speed

Not long after that first call, Operation Warp Speed came along. This program was initiated by the US government to facilitate and accelerate the testing, supply, development, and distribution of safe and effective COVID-19 vaccines, therapeutics, and diagnostics.

Several Operation Warp Speed trials—all backed by the National Institutes of Health (NIH), National Institute of Allergy and Infectious Diseases (NIAID), and NHLBI—were planned to study a number of topics, including the safety and effectiveness of different therapies such as monoclonal antibodies for the treatment of COVID-19 in patients who had been hospitalized. Operation Warp Speed also coordinated with existing efforts such as the NIH Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV) publicprivate partnership. "The NIH asked us to step up as good citizens and become involved in the Operation Warp Speed COVID research trials, even though that wasn't part of our core mission," said Dr. Mack. "Not only did we step up, but we did so in an extremely short period of time. That bespoke the value of having a ready-made infrastructure of sites that was experienced with conducting research."

"We've shown that we can make a contribution to a national effort that's much larger than just cardiothoracic surgery." Peter K. Smith, MD

According to CTSN Program Director Marissa A. Miller, who also is chief of the Advanced Technologies and Surgery Branch at NHLBI, the shift to these critical COVID-19 trials was transformative and elevated the Network "beyond a recognized trial platform within NHLBI to a national resource supporting the collective mission of the ACTIV enterprise."

CTSN was involved in three Operation Warp Speed trials and, notably, of the five networks that participated in these studies, CTSN consistently was the highest enroller of patients, providing at least half of the total number of participants in each trial (50%, 59%, and 67%). In recognition of its substantial involvement, CTSN received a congratulatory letter from NIH Director Francis S. Collins, MD, PhD.

"The performance of the network has been spectacular and has been recognized as the gold standard for performance across all the NIH-sponsored networks," said Dr. Smith. "We've shown that we can make a major contribution to a national effort that's much larger than just cardiothoracic surgery."

Results from one of the trials—on the monoclonal antibody therapy bamlanivimab were published in *The New England Journal of Medicine* in December 2020.

Origin of CTSN

The idea to form CTSN originally was conceived in 2004 after NHLBI challenged a working group of cardiac surgeons to assess the state of cardiac surgery research, identify critical gaps in current knowledge, and determine areas of opportunity.

Based on the group's primary recommendation to form a cardiovascular surgery clinical network, NHLBI, in collaboration with the National Institute of Neurologic Disorders and Stroke and the Canadian Institutes for Health Research, created CTSN in 2007, with the mission to design, conduct, and analyze multiple, collaborative clinical trials that evaluate surgical interventions and related management approaches for the treatment of cardiovascular disease in adult patients.

During that time, Timothy J. Gardner, MD, from ChristianaCare Center for Heart & Vascular Health in Philadelphia, Pennsylvania, was a medical officer in the NHLBI Division of Cardiovascular Diseases and helped drive the program through NIH. Dr. Gardner was the first surgical chair of the CTSN steering committee, which is now led by A. Marc Gillinov, MD, from the Cleveland Clinic in Ohio.

"We want to be bigger, better, faster, stronger."

Michael J. Mack, MD

Importantly, CTSN trials reflect the multidisciplinary partnership of many leading cardiothoracic surgeons, cardiologists, and neurologists; the infrastructure increases the efficiency of clinical research by providing a "clinical laboratory" in which multiple clinical questions can be asked without having to create a new infrastructure for each one.

"The most exciting part of the growth of the Cardiothoracic Surgical Trials Network and the ensuing work was helping a disparate group of investigators and site teams come together as a cohesive whole and answer the most important questions in cardiac surgical practice," said Miller. "In this process, which was slow and challenging, the Network became a powerful clinical trial platform."



Michael J. Mack, MD, is a principal investigator for Baylor Scott & White Research Institute, which is Core Clinical Center in the Cardiothoracic Surgical Trials Network.

Since its inception, CTSN has grown to 95 sites (60 in the US and 35 in Europe and South America) and been involved in approximately 20 trials—which is significant, considering the length of each trial from start to finish averages 3 to 7 years. With the enrollment of more than 2,000 patients in randomized trials and more than 14,000 patients in observational studies, CTSN is among the top performers of NHLBIand NIH-sponsored networks.

Pre-Pandemic Work

While COVID-19 has consumed much of CTSN's time this past year, the group also has been working on other impactful research.

Some of the more prominent topics in the CTSN portfolio include rate control versus rhythm control for postoperative atrial fibrillation, surgical treatment of ischemic mitral regurgitation, surgical ablation of atrial fibrillation during mitral valve surgery, the management of postoperative atrial fibrillation after coronary artery bypass grafting, and neuroprotection in patients undergoing aortic valve replacement. Many of these trials have resulted not only in peer-reviewed articles in high-profile publications, but also in changes to clinical practice recommendations.

For example, trial results focusing on surgical treatment of ischemic mitral regurgitation altered clinical guidelines in the US, Canada, and Europe and, as a result, transformed clinical practice, explained Dr. Gelijns.

Future Plans for CTSN

Described by Dr. Mack as an "inclusive, not exclusive" network, CTSN always is looking to expand and welcome additional sites (US and international) that serve underrepresented patient populations and young investigators who have special interests in diversity, inclusion, and health care disparities. It's important to note that a major secondary purpose of CTSN is to develop qualified clinical investigators from the specialty who are able to design, develop, and execute clinical trials.

"In the early years, there were only a handful of investigators who were cardiothoracic surgeons and able to design and conduct clinical trials," said Dr. Smith. "This was a major deficit and was specifically addressed with CTSN funding. The Network since has served as a training ground for principal investigators, so now there is an abundance of seasoned senior investigators and a large pipeline of formally trained young surgeon scientists."

In addition to expanding the network, Dr. Mack would like to see CTSN enroll more patients, more quickly, in larger trials with longer-term follow up, which ultimately will bode well for cardiothoracic surgery.

"We want to be bigger, better, faster, stronger," he said.

For more information about CTSN or to learn how to become involved, visit **ctsurgerynet.org.** ■

Don't Miss these Popular Podcast Episodes

The STS Surgical Hot Topics podcast generated 33,758 downloads in 2020, helped by the addition of a new series, "Same Surgeon, Different Light," which features biographical interviews that celebrate the men and women behind the surgical masks. The long-range goal of this series is to promote a more diverse specialty.

Of the 39 episodes published last year, the most-downloaded were:

- Beyond the Abstract: The Future is Now (January 16, 2020)
- Same Surgeon, Different Light: Dr. Joanna Chikwe (October 30, 2020)
- Same Surgeon, Different Light: Dr. Doug Mathisen (November 13, 2020)
- Beyond the Abstract: COVID-19 Guidance for Triage of Operations for Thoracic Malignancies (April 13, 2020)
- STS Summer Series: Pulmonary Metastasectomy (July 31, 2020)

Already in 2021, STS has published several new podcast episodes, including "Same Surgeon, Different Light" interviews with Shanda Blackmon, MD, MPH, Douglas E. Wood, MD, Melanie A. Edwards, MD, Sidhu P. Gangadharan, MD, MHCM, Ourania A. Preventza, MD, MBA, Tom C. Nguyen, MD, and Elaine E. Tseng, MD. The final episode in the first season of Same Surgeon, featuring Loretta Erhunmwunsee, MD, will air on April 16.



Also available for listening are powerful keynote lectures from STS 2021. All episodes are available at **sts.org/podcast**.

bruary 12-13 CODING WORKSHOP



New STS Series Hones Leadership Skills

A new course program, the 2021-2022 STS Leadership Series, is available for STS members to develop and fine-tune leadership skills in an evolving specialty.

The series includes three 60-minute webinars and one in-person event adjacent to STS 2022 in Miami Beach, Florida, next January.

The first webinar, scheduled for April 8, is "Leading During Crisis," moderated by Mara B. Antonoff, MD, and Ram Kumar Subramanyan, MD, PhD. It will include discussion on topics that surgeons undoubtedly will encounter at some point in their careers such as financial crises, infrastructure changes, sexual harassment, natural disasters, security threats, regulatory failures, and the COVID pandemic.

More information is available at **sts.org/leadershipseries**.

Virtual Coding Workshop Answers Hundreds of Coding Questions

For the first time, STS Coding Workshop: Best Practices for Cardiothoracic Surgery—held in February— took place completely online.

The 2-day event, which had approximately 230 registrants, featured 13 hours of prerecorded presentations, including a session on 2021 documentation and coding changes. Another session highlighted telehealth practices, detailing services and flexibilities that are available during the COVID-19 pandemic and what will change postpandemic.



▶ Kirk R. Kanter, MD, led the "Coding for Congenital Cardiac Surgery" session during the 2021 Coding Workshop.

More than 6 hours of live Q&A webinar sessions complemented the presentations. Attendees submitted hundreds of questions, which were discussed and answered live via Zoom over the course of the event. These questions and answers, along with supplemental online modules, are available for attendees to review in the STS Learning Center, and those who missed the workshop can purchase it from the Learning Center catalog.

All course content is available until the end of the year, and attendees can claim CME credit or coding CEUs for participation.

New Wellness Task Force Aims to Uplift, Support Colleagues

Cardiothoracic surgeons are notoriously driven, dedicated, and capable—but when it comes to taking care of their own wellness, even this community could use a little help from its friends.

The STS Task Force on Wellness stands ready to create a forum where members can learn strategies to maintain their resilience, encourage each other's healthy habits, and challenge themselves to set new standards for self-compassion.

"One of our goals is to create an intellectual platform of material that comes from a credible community," said Michael Maddaus, MD, chair of the newly formed task force. "We want to organize groups that work together to set new goals and employ real change in their lives." Physical exercise is not enough to maintain wellness, Dr. Maddaus pointed out, citing the principles that he outlined in *The Annals of Thoracic Surgery* article, "The Resilience Bank Account: Skills for Optimal Performance," and discussed in a "Beyond the Abstract" podcast episode (December 2019).

His approach encompasses nine habits that can improve the well-being of all individuals. Among those habits are learning to say no to activities that might be encouraged as beneficial to a career—especially for residents—but that aren't ultimately something the surgeon wants to do or has the resources to do, said Dr. Maddaus. "The mindset among cardiothoracic surgeons is self-sufficiency, discipline, and to be strong, no matter what. But there's only so much bandwidth that a human being has." Dr. Maddaus and his fellow task force members envision opportunities within groups of surgeons to share their goals and help each other stick to them. "The group setting is a very powerful mechanism to foster accountability and change," he said. "Within that framework, we can identify habits that we want to work on, and by the end of the year, we'd like to report on people's experiences—to hear people say, 'This really worked for me.'"

Stay tuned for educational offerings, podcasts, and other platforms from the task force, which will unfold its initiatives in the coming months.

Please send your feedback and suggestions to communications@sts.org.

Annals Readers Seek Articles on Novel Techniques, Evolving Tools

The most-downloaded articles from *The Annals of Thoracic Surgery* varied widely in topic and scope in 2020. Some, like the most-downloaded article, "Surgical Treatment of the Dilated Ascending Aorta: When and How?," from the June 1999 issue, illustrate the continued relevance of the topic. Others, such as "Novel Percutaneous Tracheostomy for Critically III Patients With COVID-19," published in September 2020, reflect a timely need for interventions during a tumultuous year.

A subscription to *The Annals* is a benefit of STS membership. Log in to read any of these articles at **annalsthoracicsurgery.org**.

Title	Number of Downloads in 2020	Date of Publication
Surgical Treatment of the Dilated Ascending Aorta: When and How?	9,644	June 1999
Publication of Unethical Research Studies: The Importance of Informed Consent	9,443	Feb. 2003
Exercise Therapy after Coronary Artery Bypass Graft Surgery: A Randomized Comparison of a High and Low Frequency Exercise Therapy Program	7,382	May 2004
Aortic Valve and Ascending Aorta Guidelines for Management and Quality Measures	6,787	June 2013
Novel Percutaneous Tracheostomy for Critically III Patients with COVID-19	5,084	Sept. 2020
The St. Jude Medical Cardiac Valve Prosthesis: A 25-Year Experience with Single Valve Replacement	4,876	Mar. 2005
The Society of Thoracic Surgeons Intermacs 2019 Annual Report: The Changing Landscape of Devices and Indications	4,862	Mar. 2020
The Society of Thoracic Surgeons Adult Cardiac Surgery Database: 2018 Update on Outcomes and Quality	4,786	Jan. 2018
The Rate of Pleural Fluid Drainage as a Criterion for the Timing of Chest Tube Removal: Theoretical and Practical Considerations	4,427	Dec. 2013
Sternal Metastasis of Breast Cancer: Ex Vivo Hypothermia and Reimplantation	4,262	Feb. 2011

Annual Meeting Highlights

Converging for the first time in an all-virtual format, more than 2,700 professional registrants joined the Society's 57th Annual Meeting, January 29-31. To read articles from the STS Daily Bulletin, visit **sts.org/annual-meeting-archive**.

Keynote Lectures Explored Adversity, Disparities, Innovations, Solutions

Innovation can be viewed as a discipline, one that can be studied, taught, and reproduced, said Paul G. Yock, MD, MA, from Stanford University in California, during the C. Walton Lillehei lecture at STS 2021. Dr. Yock described the challenge facing clinical inventors as appealing to an "eightheaded monster"-patients and physicians, hospital administration, lawmakers, insurance companies and other reimbursement entities, regulating organizations, and the press. He also gave an overview of the program at the Stanford Byers Center for Biodesign, which deploys multidisciplinary teams of students and inventors to evaluate real-world needs in clinical settings, invent new health technology to address those needs, and give that technology the best shot at actually making it to clinical practice.

During the Vivien T. Thomas lecture, Quinn Capers IV, MD, from The University of Texas Southwestern in Dallas, delivered a powerful message—and spurred thoughtful questions and discussions—as he illuminated racial disparities in medicine and demonstrated why those disparities must be challenged.

Dr. Capers provided evidence-based examples of how systemic racial inequality impedes the health care field, and he also confirmed that a more diversified medical workforce improves patient care. Strategies to combat inequality in medicine include engaging "gatekeepers" such as school counselors, admissions faculty, mentors, and role models, Dr. Capers explained. More than 400 participants joined the live lecture and discussion, a sign that the STS community is ready for uncomfortable but necessary conversations that will ultimately benefit the medical field.

The Thomas B. Ferguson lecture was presented by Craig R. Smith Jr., MD, from Columbia University and NewYork-Presbyterian Hospital in New York City; Enrico Ruffini, MD, from the University of Torino in Italy and the European Society of Thoracic Surgeons; and Alan D.L. Sihoe, MD, MA, FRCSEd, from Gleneagles Hospital in Hong Kong. These renowned surgeons, each from their respective large city, described their personal and professional experiences as the COVID-19 pandemic took hold, and they shared lessons learned while they were working on the front lines.

Access STS 57th Annual Meeting Online

If you were unable to attend the virtual Annual Meeting, or if you are looking for online learning opportunities, you now can purchase access to STS 57th Annual Meeting Online. This product offers more than 90 hours of educational sessions-including practicechanging research, thought-provoking lectures, pro/con debates, and cutting-edge techniques and technologies-and the ability to earn up to 89.25 CME credits. Annual Meeting attendees receive free access to Annual Meeting Online. The Immersive Video Experiences series, which offers the opportunity to earn up to an additional 20 CME credits, can be purchased separately. More details are available at sts.org/AMOimmersives.



By the Numbers





60 Countries represented The most registrants came from the United

The most registrants came from the United States, Canada, Japan, Mexico, India





870 Registrants for Immersive Video Experiences



18,557 Parallel and plenary session livestream views



22.8 million Social media impressions for #STS2021 in January

STS President Rallied CT Surgery to Mobilize, Evolve in Year of Extraordinary Challenges

Along with the rest of the world, the cardiothoracic community faced a global pandemic, social injustice, political divide, and natural disaster in the past year, acknowledged Joseph A. Dearani, MD, as he described his own obstacles and heartbreaks in a moving Presidential Address that featured clips of him and his band performing Charlie Chaplin's "Smile."

Standing still and not operating can feel like prison for cardiothoracic surgeons, who are accustomed to a fast-paced work environment and lifestyle, said Dr. Dearani. He echoed the frustration and heartbreak that the specialty faced in the past year, from the millions of COVID-19 deaths worldwide to the systematic horrors of racial disparities that were brought searingly into the public eye. He cited disheartening survey results that suggest more than half of physicians are suffering from burnout and that some are even experiencing career choice regret.

"Physicians around the country have experienced record changes in work hours. Too many for some, and too little for others, as is the case for surgeons who are estranged from operating rooms, due to the forced triage and delay of surgery for non-urgent situations," Dr. Dearani said. "This is a tricky business in cardiothoracic surgery, since nothing is really elective, but rather shades of urgency."



Joseph A. Dearani, MD, celebrated the resilience of cardiothoracic surgery professionals in his Presidential Address, "Resilience. Hope. Unity."

Yet within those challenges are opportunities to find innovative new ways to be a voice for all patients, he offered. The personality of the cardiothoracic surgeon is resilient and gritty, he said, and "our efforts cannot be sidelined because of unexpected challenges like COVID and physician burnout."

Dr. Dearani further observed that, while the specialty has been accustomed to in-person meetings and workshops "with bitter coffee and bad muffins," and while he and his peers miss those days, perhaps those traditions aren't essential for professionals to bond and learn.

Perhaps most importantly, the virtual learning environment has helped to amplify the voices of those who are less likely to speak up, he said. Dr. Dearani noted that he now has learned and remembered the names colleagues who he may not have had a chance to meet previously and has observed that many individuals who wouldn't have come to the microphone in a crowded lecture hall don't hesitate to speak up on virtual chat boards.

In concluding his address, Dr. Dearani offered motivating and inspiring words to the cardiothoracic surgery community: "We are part of one of the most impactful and gratifying specialties in all of medicine. The year 2020 was a very difficult one for all of us; but, I'm certain we've learned some things and we've grown closer together. And, in the end, we'll be better doctors, better nurses, better professionals—we'll be better human beings."

Fun Run, Peloton Rides Brought the Virtual Team Spirit

The Thoracic Surgery Foundation raised more than \$31,000 in pledges and donations for its 5k Fun Run & Walk, which was held in conjunction with STS 2021.

Runners and walkers submitted their best times and competed virtually via a live leaderboard. Amy G. Fiedler, MD, from UW Health in Madison, Wisconsin, and Connor Callahan, MD, from Washington University in St. Louis, Missouri, claimed first place. The 23-runner "Cardinal Chest Cutters" team from Stanford University in California, led by captain Leah M. Backhus, MD, MPH, was presented with the Team Spirit Award. Each day of the meeting also kicked off with a group Peloton ride, and participants personally challenged and supported one another and contended fiercely for time and distance.

Douglas E. Wood, MD, from UW Medicine in Seattle, Washington, emerged atop the leaderboard for two of the rides during STS 2021, though he was unseated on Day 2 by Nate Airhart, MD, from UCLA Health in Los Angeles, California. More than 70 participants joined the Peloton competition, with riders sharing how they were inspired by colleagues across the world via the #STSPelotoners hashtag.



► Douglas E. Wood, MD, dominated the leaderboard during the #STSPelotoners group cycling rides.

Annual Meeting Research Makes Headlines

During STS 2021, the Society released four recorded press briefings featuring some of the top research from the meeting:

COVID Effect' Leads to Fewer Heart Surgeries, More Patient Deaths

Researchers: Tom C. Nguyen, MD, from the University of California San Francisco, and colleagues

Main finding: COVID-19 resulted in a substantial decline in overall heart surgery volume and an unexplained increase in deaths after coronary artery bypass grafting.

ERAS Program Expedites Recovery for Congenital Heart Surgery Patients

Researchers: Nathalie Roy, MD, and colleagues from Boston Children's Hospital in Massachusetts

Main finding: Select patients born with heart defects and who undergo congenital heart surgery recover with few complications and reduced opioid use when a comprehensive, evidence-based enhanced recovery after surgery program is used. Women Undergo Less Aggressive Open Heart Surgery, Experience Worse Outcomes than Men Researchers: Oliver K. Jawitz, MD, from Duke University in Durham, North Carolina, and colleagues from Duke and The Johns Hopkins University School of Medicine in Baltimore, Maryland

Main finding: Women are significantly less likely than men to undergo coronary artery bypass grafting using guideline-recommended approaches, which may result in worse outcomes after surgery.

Black Lung Cancer Patients Die Sooner than White Counterparts

Researchers: Chandler Annesi, from Boston University School of Medicine in Massachusetts, and Michael Poulson, MD, and colleagues from Boston Medical Center in Massachusetts

Main finding: Residential segregation and its socioeconomic effects prevent a large proportion of black patients from receiving appropriate lung cancer care, resulting in worse outcomes and shorter lifespans than white patients with the disease.

These studies generated interest from media outlets such as *The Washington Post, US News & World Report,* the *Philadelphia Inquirer,* United Press International, HealthDay, TCTMD, and the Pulmonology Show on SiriusXM Doctor Radio.

For more information on the Society's media relations efforts, **visit sts.org/media**.



The virtual "Bourbon with a Surgeon" event showed attendees how to master the art of cocktail making from home.

STS 2021 Stayed Social in a Virtual Environment

In addition to outstanding science, education, and technology, one of the most beloved aspects of the STS Annual Meeting is the ability to connect with colleagues, so STS treated attendees to a well-deserved weekend of social activity with live virtual events.

Each morning began with wellness activities, including bodyweight high-intensity interval training workouts, a mindfulness lounge, yoga, and tips on relieving stress and getting a good night's sleep.

Friday and Saturday evenings offered a stellar lineup of entertainment and inspiration—an improv show by the famed Chicago comedy troupe The Second City, discussion with the first woman to kayak the Amazon, and the epicurean sessions "Bourbon with a Surgeon" and "Guac with a Doc." And "Team Mackdizzle"—the family of Ryan A. Macke, MD, from Banner Health in Gilbert, Arizona—dominated the family-friendly trivia competition.

Shark Tank Delivered Excitement of Live Competition with Front-Couch Seating

The STS 2021 Shark Tank was a fast-paced competition, featuring technologies from seven different representatives, including a left atrial appendage occlusion device, an endovascular net prosthesis, augmented reality and artificial intelligence software for the operating room, a detachable-head aortic cross clamp, and a mobile communication app that can help improve referral, retention, and recovery for organ transplantation. The session was moderated by T. Sloane Guy, MD, MBA, of Thomas Jefferson University Hospital in Philadelphia, Pennsylvania, and Usman Ahmad, MD, of the Cleveland Clinic in Ohio. William E. Cohn, MD, from Johnson & Johnson Medical Devices Companies, and Sidharta (Sidhu) P. Gangadharan, MD, from Beth Israel Deaconess Medical Center in Boston, Massachusetts, served as "sharks," asking tough questions about potential competition and marketing challenges. The live audience submitted questions about the products and voted on whether they would purchase them for their practice. The winning technology, earning a 42% vote, was the Breethe Oxy-1 system, presented by Bartley P. Griffith, MD. This compact cardiopulmonary support system features an integrated oxygen concentrator that provides an independent oxygen source to help patients move around during therapy.

Immersive Video Experiences Provided 360° Views of Master Surgeons' ORs

On the meeting's opening day, registrants who purchased Immersive Video Experiences were treated to panoramic and up-close views of five challenging cardiothoracic procedures from beginning to end.

Surgeons and advanced practice providers walked participants through each case and provided live feedback for an experience that was nearly like standing beside the team in the operating room.

The sessions demonstrated how surgical procedures are a "team sport," said Robert J. Cerfolio, MD, MBA, from NYU Langone Health in New York City. During the robotic-assisted segmentectomy, viewers were able to see

how intravenous access was optimized safely with a peripheral line, how the anesthesiologist handled assembly and placement of the double lumen tubing, how the team worked together to identify and extract lymph nodes, how robotic instruments and camera angles were maneuvered for precise viewing angles, and how the team saved valuable moments when repositioning the patient.

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The series also featured "deep dive" sessions on 11 adult cardiac, congenital, and general thoracic topics, including transseptal puncture for surgeons, atrioventricular replacement strategies in neonates and infants, minimally invasive esophagectomy, Ross and Ross-Konno procedures preventing neoaortic root dilatation, and navigating initial nights on call as a resident.

If you already purchased the Immersive Video Experiences with registration, all 16 videos are available in the STS Learning Center. They also are available for purchase separately or in a bundle with Annual Meeting Online (see page 12).





Thank You!

The Society of Thoracic Surgeons gratefully acknowledges the following companies for providing educational grants for STS 2021.

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Provided \$50,000 or more

Edwards Lifesciences Medtronic

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Provided \$25,000-\$49,999
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Award Winners Honored for Remarkable Achievements



Distinguished Service Award

The Distinguished Service Award recognizes individuals who have made significant and farreaching contributions to STS and the specialty. This year, Alan M. Speir, MD, was honored for his steadfast leadership and commitment to cardiothoracic surgery advocacy.



Earl Bakken Scientific Achievement Award An innovator and influencer in the field of pediatric congenital heart surgery, Edward L. Bove, MD, was presented with the Earl Bakken Scientific Achievement Award. The Bakken Award honors individuals who have made outstanding scientific contributions that have enhanced the practice of cardiothoracic surgery and patients' quality of life.



President's Award

Rodrigo A. Zea-Vera, MD, from Baylor College of Medicine in Houston, Texas, received the 2021 President's Award, for his paper, "Artificial Intelligence Reliably Predicts Outcomes and Cost after Isolated Coronary Artery Bypass Grafting." Selected by the STS President, this award recognizes an outstanding scientific abstract by a lead author who is either a resident or a surgeon 5 years or less in practice. THE THORACIC SURGERY FOUNDATION

New TSF Awards Offer Support for Underrepresented, Traveling Surgeons

The Society's charitable arm, The Thoracic Surgery Foundation (TSF), soon will accept applications for two new awards: the Underrepresented Robotic General Thoracic (URGT) Surgeon Development Award and the TSF/Francis Fontan Fund (FFF) International Traveling Fellowship.

The URGT award will be available to general thoracic surgeons who are either underrepresented, rurally located, or working with medically underserved populations and wish to establish a robotic general thoracic surgery practice. This unique educational opportunity will provide participants with skills to help create and grow a robotic general thoracic surgical practice through mentorship from an established surgeon who also is from an underrepresented group in medicine.

Recipients may receive up to \$10,000 in travel-related support for themselves and their mentors. Prerequisite training will be required before the award recipient and his/her surgical assistant travel to the mentor's institution for up to 1 week of observation and guidance.



► Melanie A. Edwards, MD, helped conceptualize the new TSF robotic general thoracic award.

"This is not only an opportunity for surgeons to gain robotic skills, but also an opportunity to expand the pool of underrepresented mentors," said Melanie A. Edwards, MD, from Integrated Health Associates Cardiovascular and Thoracic Surgery in Ypsilanti, Michigan.

Dr. Edwards, along with David Tom Cooke, MD, from the University of California Davis Health in Sacramento, conceptualized the award to help combat the difficulty that some surgeons encounter in finding mentorship. "The adoption and dissemination of new technology is unfortunately uneven as a result, and patients in underserved and rural practices do not have equal access to robotic thoracic surgery," explained Dr. Edwards.

The URGT award presents opportunities to close that mentorship gap, and the founders envision an expanding network of robotic thoracic surgeons who can collaborate to develop basic and advanced operative skills, she said.

International Traveling Fellowship

For young faculty surgeons wishing to continue their education outside of their home countries, the TSF/FFF International Traveling Fellowship, supported by the European Association for Cardio-Thoracic Surgery (EACTS) and the Society, will be an exciting new option. FFF is the charitable arm of EACTS.

"This fellowship is the first collaborative effort between The Thoracic Surgery Foundation and the Francis Fontan Fund with the aim to build a global community of thoracic surgeons and give surgeons from Europe and North America the opportunity to learn from surgeons dedicated to the highest standards of cardiothoracic care," said J. Rafael Sádaba, MD, PhD, EACTS interim secretary general and chair of the Fund.

The award—\$20,000 for up to 16 weeks—is to be used for international travel to learn a novel technique, adapt innovative technology, and/or foster collaboration among surgical investigators in order to further the progress of cardiothoracic surgery at the recipient's home institution.

Successful applicants will demonstrate a record of excellence in training and academic achievement, and they will have secured a position at a host institution and with a mentor capable of fostering their continued growth and development in the realm of cardiothoracic surgery. In addition, applicants must be cardiothoracic surgeons who are certified by the American Board of Thoracic Surgery or its equivalent in a country outside of the United States and within 7 years of their first faculty appointment. Mentors are required to be members of STS or EACTS.

Applications for both the URGT and TSF/FFF awards open July 1 and must be submitted by September 15. More details are available at **thoracicsurgeryfoundation.org/awards.**

Thank You to 2020 STS-PAC Contributors

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WASHINGTON SCENE

New Lung Cancer Screening Guidelines Expand Eligibility

The US Preventive Services Task Force (USPSTF) in March revised recommendations for lung cancer screening, which more than doubles the number of US adults eligible for annual scans.

The modified guidelines included two significant changes: Screening with low-dose computed tomography now may begin at age 50, instead of 55, and "heavy smoker" was redefined as a 20 pack-year history—a reduction of 10 pack-years.

With this more inclusive criteria, eligibility is expected to increase from 6.4 million adults to 14.5 million and open the door for screening more women and blacks—both of whom tend to develop lung cancer earlier than white men and after less tobacco exposure.

The Society supports these changes; however, it recognizes that most people who qualify and could be helped by the screening do not take advantage of it; very often, it is because they cannot afford it.

The Affordable Care Act requires private insurers to begin covering screenings within a year, according to the new guidelines, but half of those eligible do not have insurance or Medicaid, and not all Medicaid plans cover the screening.

STS, in collaboration with the GO2 Foundation for Lung Cancer and the American College of Radiology, is urging the Centers for Medicare & Medicaid Services (CMS) to revise its coverage policies quickly. The Society will continue to share updates.

Patient Access, Health Equity Lead Advocacy Priorities for 2021



For more information about getting involved in advocacy and health policy, visit **sts.org/keycontact**.



Scan the QR code for the full list of STS 2021 Advocacy Priorities.

The Society has released its 2021 advocacy priorities, which provide the framework for discussions with legislators and other stakeholders, as well as help focus additional advocacy efforts.

Maintaining Patient Access to Cardiothoracic Surgery

In 2020, proposed cuts to Medicare reimbursement threatened the financial viability of cardiothoracic surgeons' clinical practices and patient access to care. A temporary fix spared cardiothoracic surgery, but is set to expire on January 1, 2022.

Key Contact of the Year Offers Reminder that 'Knowledge Is Power'



The Society's Key Contact of the Year Award recognizes those STS members who have gone above and beyond to advocate for the specialty. 2020 recipient Aaron W. Eckhauser, MD, MS, a pediatric cardiothoracic surgeon and associate professor at the University of Utah in Salt Lake City, shared his thoughts on the importance of grassroots advocacy, his experience working with legislators, and why he believes his STS colleagues must become involved in advocating for the specialty.

Why are you involved in STS advocacy? Why is it so important?

As an early attending, I was awarded the STS/ ACS Health Policy Scholarship and was able to attend the Brandeis University Leadership Program in Health Policy and Management. As a result of that experience, I was offered the opportunity to become involved in STS advocacy, and I've spent 6 years contributing and learning. I was so focused on the daily grind of surgery that I was completely unaware of all of the important topics affecting our field. Knowledge really is power. In addition, at press time, the House of Representatives was expected to reconvene and pass the Senate version of a bill that further delays implementation of a mandated 2% cut in Medicare reimbursement until December 31. STS will continue fighting hard to permanently reverse the pending reimbursement cuts.

Improving Health Equity

The Society is deeply committed to the elimination of racial bias and disparities in access to health care and health outcomes across races, socioeconomic status, and gender.

As a part of its advocacy efforts, STS will support legislation and funding for research that advances racial and socioeconomic equity in access to health care and maintains high-quality care for patients. In addition, it will encourage diversity, equity, and inclusion in the health care system and help educate policymakers on how the STS National Database can be used to facilitate better health outcomes across various groups.

Obtaining Medicare Claims Data

The robust clinical information in the STS National Database, when combined with Medicare claims data, helps paint a full picture of patient care and facilitate meaningful health research and quality improvement. In order for that to happen, CMS must share claims data with STS.

Similarly, coverage with evidence development (CED) requires participation in a registry such as the STS/ACC TVT Registry, allowing the use of real-world evidence to evaluate the performance of novel technologies. Although CED is a critical mechanism to track post-market outcomes, CMS recently has signaled a shift away from using CED in coverage decisions.

Preserving Health Care Research Funding

Funding for health care research is critical. The Society will continue to build on recent successes to address the financial sustainability of important health care research and policies.

Strengthening Support Systems for Patients with CHD

While STS previously supported the Congenital Heart Futures Act of 2018, more work is needed to ensure quality care for patients with congenital heart disease (CHD). Other areas of focus include eliminating barriers to treatment caused by transitions in insurance coverage and ensuring that newborns are screened for CHD using pulse oximetry testing upon hospital discharge.

New Exclusive Series Covers Hot-Button Issues

The STS-PAC Speaker Series—just launched in March—offers live, virtual conversations with prominent experts in advocacy, journalism, politics, and policy.

These exclusive events, open only to 2021 STS-PAC contributors, are designed to connect special guests with members of the cardiothoracic surgery specialty to share experiences, offer insight, and develop ideas.

More than 110 participants attended the first 1-hour event, held on March 10, which featured foreign affairs columnist for *The Washington Post* and bestselling novelist David Ignatius. Drawing from more than 40 years of on-the-ground reporting on politics, economics, and the Middle East, Ignatius addressed journalistic integrity.

"As a highly respected journalist and *Washington Post* columnist, David Ignatius provided an informative and authoritative view of the national political scene. This was a great way to kick off the STS-PAC Speaker Series," said Mark B. Orringer, MD, STS Past President.

Additional Speaker Series events are in the works, with details to be announced soon. For more information, visit **sts.org/speakerseries**.

(How was your experience serving on the STS Workforce on Health Policy, Advocacy & Reform?

Overall it's been a great experience. I was quite intimidated at first. I was very young and I didn't know anyone on the committee and it's tough to develop rapport through monthly group calls. However, over time I've become more comfortable with the legislative process and speaking up in meetings. The professional team in Washington, DC has been fantastic in not only advocating for the Society, but also in educating us about things that many of us struggle to completely understand.

How have you engaged with your lawmakers at home?

This in an area that I have enjoyed and look forward to developing. I met with Chris Stewart (R-UT) several times. He was extremely nice and accommodating of my time. Even though I felt somewhat intimidated by speaking with a Congressperson about legislative matters, I quickly learned that it wasn't so much about my legislative knowledge, but more about connecting and sharing stories. With a son in residency, Rep. Stewart was intimately aware of some of the concerns and frustrations that we experience as doctors. So, it was fun to share personal and patient stories with him. It's certainly more powerful than simply reading facts.

What would you say to STS Members so that they become more involved?

While these topics are often out of our comfort zone and can be intimidating, they're also fascinating. It is a great opportunity to advocate on behalf of our colleagues and the specialty, and it gives you a new appreciation for our legislative process. I've met some great people in the Society who I otherwise would never have known and it's done nothing but open doors for me moving forward. Whether or not advocacy has been an interest of yours, this is a fantastic way to grow professionally.

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Mark Your Calendar

Upcoming STS Educational Events

- STS Leadership Series: Leading During Crisis
 Virtual - Apr. 8, 2021
- High-Impact Studies in Cardiac Surgery: Key Takeaways Virtual · Apr. 22, 2021
- 18th Annual Perioperative and Critical Care Conference Virtual · Sept. 10–12, 2021
- Advances in Quality & Outcomes: A Data Managers Meeting Virtual · Oct. 12–15, 2021
- ► TAVR: How Surgeons Can Stay Relevant in 2021 Virtual • Aug. 21, 2021
- STS 58th Annual Meeting Miami Beach, Florida · Jan. 29–Feb. 1, 2022
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Thank You!

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