

2018 STS Leadership Orientation



**Sunday, April 29, 2018
11:30 a.m. – 1:00 p.m.
Cobalt 501AB**

**Hilton San Diego Bayfront
San Diego, CA**

The Society of Thoracic Surgeons
2018 Leadership Orientation
Sunday, April 29, 2018
11:30 a.m. – 1:00 p.m., PDT
Cobalt 501AB, Hilton San Diego Bayfront

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STS Governance – Rob Wynbrandt

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Authority – how to get things approved/implemented

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STS Policies – Avi Stern

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Application to sexual harassment

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STS Membership – Damon Marquis

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(Tab 6)

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STS/ACC TVT Registry

Quality, Research, and Patient Safety

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Government Relations – Doug Mathisen, MD/Courtney Yohe

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STS-PAC

STS Advocacy Center

STS Advocacy Manual

Health Policy Compendium

Meetings and Education – Wilson Szeto, MD/Damon Marquis

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Clinical Practice and Member Engagement – Frank Pagani, MD/Damon Marquis

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Budgeting process

Travel and Expense Reimbursement Policy

Budget Exceptions Policy

Insurance

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TAB 1

Genesis and Early Growth of The Society of Thoracic Surgeons

W. Gerald Rainer, MD, and Walter Merrill, MD

University of Colorado Health Sciences Center, Denver, Colorado; and Vanderbilt University School of Medicine, Nashville, Tennessee

Following World War II, there was unrest and frustration among several surgeon groups desirous of starting a new professional society dedicated to thoracic surgery. At that time, certification in thoracic surgery was achieved only by way of an American Board of Surgery subspecialty section. Thoracic surgery training programs were variable in length and quality, and the only professional society concerned with the specialty was the American Association for Thoracic Surgery (AATS), which had a limitation on the number of active members (300), most of whom performed thoracic surgery as part of their general surgery practice. Dissatisfied surgeons wanted an organization for those interested in thoracic surgery to “call their own”; an organization that offered pride of membership and a forum for education and discussion of common interest subjects in the dynamic and rapidly changing field.

A major impetus for this movement was championed by several members of the John Alexander Society, which was composed of surgeons who had trained at the University of Michigan under the tutelage of Dr Alexander, recognized by many as the “Founder of American Thoracic Surgery.”

John Alexander Society meeting minutes are replete with references to discussions about the growing need and practicality of a new society. Of particular note is a meeting in Houston on April 8, 1963, when the formation of a “Committee on the Future of the John Alexander Society” was recorded.

Although the surgeons involved in these formative activities were numerous, two were notably active at this stage, R. Adams Cowley, MD, of Baltimore (Fig 1) and Francis X. Byron, MD, of Duarte, California (Fig 2). Dr Cowley played a dominant role in discussions that led to the beginning of The Society of Thoracic Surgeons (STS). These discussions culminated in a recommendation that “a new society of thoracic and cardiovascular surgery be formed with the following objectives:

1. To disseminate thoracic and cardiovascular information.
2. To promote thoracic and cardiovascular surgery as a specialty.
3. To offer a forum for young men to present and publish papers in this field.”

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Fig 1. R. Adams Cowley, MD.



Fig 2. Francis X. Byron, MD.

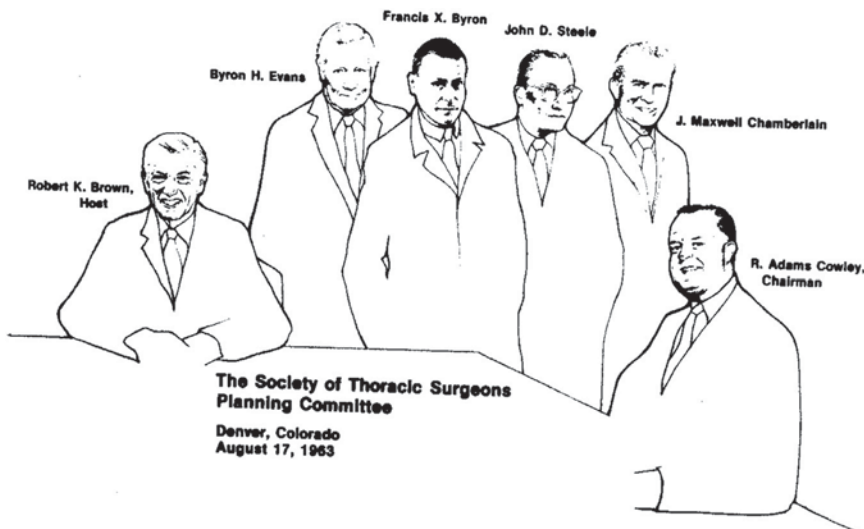


Fig 3. Planning Committee responsible for drafting the STS Constitution.

A Planning Committee was appointed and its members met in August 1963 in Denver at the home of Robert K. Brown, MD, a local and respected thoracic surgeon. Planning Committee members are identified in the drawing shown in [Figure 3](#).

The STS Constitution was finalized on August 17, 1963, on Dr Brown's kitchen table, which was unofficially designated as "The Birthplace of The Society of Thoracic Surgeons" ([Fig 4](#)). Of this group, John D. Steele, MD ([Fig 5](#)), would become the first Editor of *The Annals of Thoracic Surgery* and J. Maxwell Chamberlain, MD ([Fig 6](#)), would become the Corresponding and Organizing Secretary, devoting enormous time and energy in contacting over 500 thoracic surgeons identified as potential Founder Members of this newly formed Society.

The response was enthusiastic and led to an STS Founders Meeting, which was held during the American College of Surgeons (ACS) Clinical Congress in San Francisco on October 31, 1963. Approximately 150 people

attended. [Figure 7](#) identifies the Officers and Councilors elected at this session.

The STS 1st Annual Meeting was held in Saint Louis in January 1965. Thomas H. Burford, MD, with able assistance from Thomas B. Ferguson, MD, served as the Local Arrangements Chairman. Paul C. Samson, MD ([Fig 8](#)), served as President, and Dr Burford ([Fig 9](#)) later became the Society's second President.

To avoid programming conflicts with ACS (which met in the fall) and AATS (which met in the spring), January or February was chosen as the time of year for the STS Annual Meeting. Because of inclement weather implications, it had been decided that the first three meetings would be held in the central part of the country to facilitate travel (hence, Saint Louis, Denver, and Kansas City,



Fig 4. Robert K. Brown, MD at his kitchen table, the birthplace of The Society of Thoracic Surgeons.



Fig 5. John D. Steele, MD.



Fig 6. J. Maxwell Chamberlain, MD.



Fig 8. Paul C. Samson, MD, first STS President.

SOCIETY OF THORACIC SURGEONS
 FOUNDERS MEETING, OCT. 31, 1963

OFFICERS:

PRESIDENT	PAUL C. SAMSON
VICE PRESIDENT	THOMAS H. BURFORD
SECRETARY	FRANCIS X. BYRON
TREASURER	ROBERT G. ELLISON
EDITOR	JOHN D. STEELE

COUNCIL:

RALPH D. ALLEY	
ROBERT K. BROWN	
J. MAXWELL CHAMBERLAIN	
JOHN W. STRIEDER	
R. ADAMS COWLEY, CH. MEMBERSHIP COMMITTEE	
DONALD B. EFFLER, CH. PROGRAM COMMITTEE	

Fig 7. Officers and Council members elected in October 1963.



Fig 9. Thomas H. Burford, MD, second STS President.

in that order), after which the meetings would be held in southern climes. Future attempts at holding meetings in areas closer to highly populated centers where travel could generate increased attendance (eg, Chicago, Montreal, and Washington, DC) were sometimes met with incredibly difficult weather conditions; however, even some southern cities were not immune to unusual problems, such as ice storms in New Orleans and Atlanta or even severe weather problems in the northeast that would hamper travel to the southern part of the United States.

In the first few years of the Society, membership increased rapidly, representation on the American Board of Thoracic Surgery was initiated, *The Annals of Thoracic Surgery* was launched, and an STS management office was established.

The Society's current position as a highly respected, internationally recognized organization is a tribute not only to the efforts of recent and current leadership, but also the vision, dedication, and hard work during the

formative years of the Founder Members and Officers to whom we express enormous gratitude.

Note: Because of space limitations, many of the important and fascinating details about the Society's history are not included in this chapter. Readers can find more detailed accounts expertly and eloquently outlined in the Presidential Address of Robert G. Ellison, MD, at the STS 8th Annual Meeting in San Francisco (Ellison RG. Significant Events in the History of The Society of Thoracic Surgeons. *Ann Thorac Surg* 1972;14:577-604). Dr Ellison was the first STS Treasurer and later became President (1971-1972) and then Historian (1974-1992). He passed away in 2006, and many of his productive years were dedicated to preserving the Society's history.

The Society's Management Evolution

Nicholas T. Kouchoukos, MD, and Robert A. Wynbrandt, JD

Cardiac, Thoracic and Vascular Surgery, Inc, St. Louis, Missouri; and The Society of Thoracic Surgeons, Chicago, Illinois

The Early Years (1963–1969)

The initial management activities associated with the founding of The Society of Thoracic Surgeons (STS) were conducted from the office of J. Maxwell Chamberlain, MD, in New York. The office became the headquarters for the movement to establish STS as a professional society (see Chapter 1). Letters inviting more than 500 thoracic surgeons to become STS Founder Members were issued from Dr Chamberlain's office.

The first meeting of the newly formed STS Executive Committee was held in Saint Louis in December 1963. At that meeting, the second draft of the Constitution and Bylaws was approved, and the Editorial Board for the proposed new journal, *The Annals of Thoracic Surgery*, was appointed (see Chapter 4). Francis X. Byron, MD, was appointed Secretary, and all official Society business was conducted from Dr Byron's California office until his untimely death in 1968.

By 1969, membership in the Society had grown to approximately 700, and it became apparent that management activities could no longer be handled by the staffs of Society officers. A committee was appointed to obtain the services of a professional management organization. The committee consisted of Ralph D. Alley, MD (Chair), John N. Briggs, MD, Robert G. Ellison, MD, and Herbert Sloan, MD. With the assistance of Hiram T. Langston, MD, a member of the STS Council, the Chicago firm of Smith, Bucklin and Associates (SBA) was selected. Walter G. Purcell, an SBA Vice-President, was appointed as the Society's Business Manager (Fig 1).

The SBA Years (1969–2002)

At the time of its selection, SBA was providing management services to 37 national associations. All but two of these were industrial or commercial enterprises. Before joining SBA, Purcell had been an instructor in the School of Communication Arts at the University of Notre Dame and an executive at the NBC-affiliated television and radio stations that were owned by the university. During his tenure (1969–1995), Purcell provided exceptional support to physician-leaders and virtually all committees in existence during that interval. Betty Perkins, Purcell's executive assistant, also provided significant support in the early years of SBA management.

In 1995, SBA's Michael G. Thompson, PhD (Fig 2), was appointed as Purcell's successor, with the title of Executive Director, and served in this capacity until 2002.

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Several other SBA employees devoted a substantial portion of their time and energy to Society activities. Most notable was Joyce Gambino, who served STS with distinction for more than 20 years in meeting and convention planning. Gambino retired from STS as its Director of Meetings and Conventions in 2012 and was succeeded by Courtney Miller Donovan. Gambino was one of seven SBA employees who transitioned into the Society's reorganized management structure in 2002. Also among the SBA employees joining the STS staff were Director of Quality Assurance and Patient Advocacy Mary C. Eiken, RN, MS, and Director of Education and Member Services Christine C. Eme.

It was during the SBA years that the Society established a nationally prominent peer review program, the STS National Database, the STS Education and Research Foundation (now the Thoracic Surgery Foundation for Research and Education), CTSNet, and the STS Political Action Committee, all significant initiatives for the organization. It was also during these years that the Society conducted two major strategic planning exercises. The first was a groundbreaking effort to address topics ranging from the definition of thoracic surgery to the "managed care revolution" under the direction of President John R. Benfield, MD, in 1995–1996. The second was under the direction of President Jack M. Matloff, MD, in 2000–2001 and was especially noteworthy in the history of the Society because it ultimately yielded a comprehensive set of Bylaws amendments that, among other things, entirely revamped the organization's governance structure; these amendments were adopted by the membership at its 2002 Annual Meeting.

Self-Management (2002–Present)

In the later years of the SBA era, there was a growing sense among the Society's leadership that the recent flood of new initiatives and activities had created a need for the Society to consider other options for carrying out the day-to-day business of the Society. The Executive Committee hired the Chicago consulting firm of Henrichs & Associates to help it assess these options, including self-management.

The STS Council voted in late 2001 to negotiate a separation agreement with SBA, hire a staff of dedicated STS employees, and establish a permanent headquarters office in Chicago. An ambitious transition plan was then formulated within a very short period of time.

The transition to self-management was successfully implemented under the direction of Mark B. Orringer, MD (Fig 3), who was completing his term as the STS



Fig 1. Walter G. Purcell.

President, and William A. Baumgartner, MD, his successor as President. After an extensive search, Robert A. Wynbrandt, JD, a partner in the Chicago-based law firm of Jenner & Block who had served as outside legal counsel to the Society for the previous 15 years, was appointed Executive Director & General Counsel, a position he still holds today (Fig 4). He joined STS, along with Cheryl D. Wilson, his former secretary at Jenner & Block and the Society's new Administrative Manager and Executive Assistant, on June 1, 2002, the official date



Fig 2. Michael G. Thompson, PhD.



Fig 3. Mark B. Orringer, MD.

on which STS self-management began. As of that date, nearly all of the Society's operations were under one roof at 633 N Saint Clair St in Chicago, where they remain today.

The transition to self-management was truly a critical turning point for the Society. During the subsequent 11-plus years, there has been enormous growth in virtually every area of STS activity. With regard to the physical



Fig 4. Robert A. Wynbrandt, JD.

premises, a lease was signed with the American College of Surgeons for 25% of one floor in the office building at 633 N Saint Clair. By the end of 2008, the Society occupied the entire floor and sublet a small portion of its space to the American Board of Thoracic Surgery. In 2004, a dedicated STS office in Washington, DC, was established, and in 2010, the Society's Government Relations staff moved to space in the College's new Washington office building at 20 F St. The Society also uses space at the University of Pennsylvania in Philadelphia for *The Annals of Thoracic Surgery* editorial staff.

As of June 1, 2002, the Society had 9.5 full-time employee equivalents (Fig 5). By the end of 2013, STS had 59 budgeted full-time employee positions. A noteworthy recent addition to the STS senior staff is Associate Executive Director William F. Seward, MA, who has assumed various responsibilities for internal Society operations. STS employees provide support to the Board of Directors, five standing Committees, Operating Boards for three Councils, 20 Workforces, and scores of Task Forces, as well as the operations of six affiliated organizations: CTSNet Inc, the Joint Council on Thoracic Surgery Education, the Southern Thoracic Surgical Association, the Thoracic Surgery Directors Association, the Thoracic Surgery Foundation for Research and Education, and Women in Thoracic Surgery.

Society membership numbered about 4,100 in 2002; by late 2013, membership had increased to more than 6,800. Active Membership had increased by 25% and Senior Membership by 50%, while International and Candidate Membership had doubled. In addition, new categories were established for Pre-Candidate Members (medical students and general surgery residents) and Associate Members (physicians not eligible for Active Membership, along with research scientists, perfusionists, nurses, nurse practitioners, practice administrators, data managers, and other health care professionals).

Participation in the STS National Database also increased substantially after 2002 (see Chapter 11). By late 2013, the number of participants in the STS Adult

Cardiac Surgery Database (surgical groups or individual surgeons, many in conjunction with their hospitals) more than doubled, from 510 to 1,080, representing more than 3,000 individual adult cardiac surgeons. The STS General Thoracic Surgery Database grew during this interval from one participant to 244, representing more than 800 individual general thoracic surgeons, and the STS Congenital Heart Surgery Database increased from 32 to 109 participants, representing 360 individual congenital heart surgeons. Interest in the content of these databases among the federal government, other payers, and the public at large has grown substantially. Since 2011, participants in the Adult Cardiac Surgery Database have had the opportunity to publicly report outcomes on the STS website or the Consumer Reports website, or both.

In 2002, the Society was involved with two research initiatives: a grant from the Agency for Healthcare Research and Quality and a clinical trial. As this area of STS activity grew, it became apparent that a separate division for all of the Society's research endeavors was needed. The STS Research Center was established in 2011 (see Chapter 12). By late 2013, STS had five active and 12 pending research grants.

The Society's educational activities have greatly expanded, both within and outside the confines of the Annual Meeting (see Chapter 3). Joint sponsorship of extramural programs in collaboration with other professional specialty societies has increased substantially, and the Society now endorses third-party educational offerings that meet its independent standards.

STS also has become more visible on Capitol Hill. Surgeon leaders and Society staff in Washington and Chicago have collaborated on legislative and regulatory efforts to meet members' needs and promote the cardiothoracic surgery specialty. STS is widely recognized as a leader in health care advocacy by Congress and government agencies, such as the Food and Drug Administration and the Centers for Medicare & Medicaid Services (see Chapter 8).



Fig 5. STS Staff, Summer 2002: (front row) Meghan Carey, Jenna Cummins, Joyce A. Gambino, Lauracyn B. Mayfield; (back row) Future officer Carolyn E. Reed, MD, Cheryl D. Wilson, Christine C. Eme, STS President 2002-2003 William A. Baumgartner, MD, Donna Bennewitz, Mary C. Eiken, consultant Kathleen R. Henrichs, PhD, Robert A. Wynbrandt, and Alfred D. Ticoalu.

Despite periodic downturns in the economy, STS has achieved steady financial growth since 2002. In 2002, net assets equaled less than one-half of the organization's budgeted annual expenses. Eleven years later, more than 12 months of significantly higher budgeted expenses are held in reserve, while annual membership dues have remained constant since 2002. Many individuals have contributed to the successful stewardship of the Society's finances since its transition to self-management. Notable among them are Treasurers Douglas J. Mathisen, MD (2002–2007), Carolyn E. Reed, MD (2007–2012), and Robert S.D. Higgins, MD (2012–present), as well as Directors of Finance and Administration Terry S. Sidlow, MBA (2002–2004), and Sylvia L. Novick, MBA, CPA (2004–present).

Responding to the ever-changing landscape of cardiothoracic surgical practice, the Society conducted two additional strategic planning exercises during this era of self-management, addressing the organization's scope as well as its value to the STS membership and the specialty at large. The first such initiative, under the direction of President Sidney Levitsky, MD, addressed plans and priorities in 2005–2006 and was carried out with the assistance of the research and consulting firm Westat. A strategic planning exercise in 2010–2011 was conducted with the assistance of Henrichs & Associates. This most recent effort, "The Society of Thoracic Surgeons' Strategy for Leadership and Change," was conducted under the direction of President Douglas J. Mathisen, MD. It yielded the organization's current mission statement: "... to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research and advocacy."

Beyond the wide range of services provided for its members, the Society has contributed generously to the broader thoracic surgical community. It has made substantial financial contributions to the Thoracic Surgery Foundation for Research and Education, the Joint Council on Thoracic Surgical Education, and CTSNet, Inc. Many STS members serve among the leaderships of these organizations and are significantly responsible for their respective successes.

Since its move to independence, the enormous progress achieved by the Society has occurred primarily because of the active involvement of the membership in its various activities, an extremely engaged group of volunteer leaders, and a committed staff who place great emphasis on the overarching shared staff values of professionalism and excellence.

Finally, no history of STS management would be complete without an acknowledgement of the Society's long line of distinguished Secretaries, who have served as vital links between the surgeon leadership and the staff, and often have been the unsung heroes behind the achievements documented throughout these pages: Francis X. Byron, MD (1965–1968), John N. Briggs, MD (1968–1969), Ralph D. Alley, MD (1969–1974), Thomas D. Bartley, MD (1974–1979), W. Gerald Rainer, MD (1979–1984), George C. Kaiser, MD (1984–1989), Richard P. Anderson, MD (1989–1995), Peter C. Pairolero, MD (1995–2000), Gordon F. Murray, MD (2000–2005), Douglas E. Wood, MD (2005–2010), David A. Fullerton, MD (2010–2013), and Keith S. Naunheim, MD (2013–present). Their responsibilities have multiplied as the complexity of the organization has grown, and we wish to recognize and thank all of them.

2018 Leadership Orientation

CRITICAL DATES ■ 2018-2019 ■ By Category

STS Board

STS Board of Directors Meetings
November 10, 2018
January 27, 2019

Budgeting

STS Budgeting Process for 2019 Begins
June 2018
Finance Committee Considers Proposed 2019 Budget
Sept./Oct. 2018
for Recommendation to STS Board

Leadership Appointments

2019-20 Leadership Self-Nomination Window
Sept. 1-Sept. 30, 2018
2019-20 Pre-Appointment Leadership Disclosures Requested
Mid-September 2018
2019-20 Leadership Appointment Recommendations Solicited
Late-September 2018
2019-20 Leadership Appointments Finalized
Mid-December 2018

Annual Meeting

STS Annual Meeting Abstract Submission Deadline
August 24, 2018
STS Annual Meeting Program Planning Meeting (Chicago, IL)
September 29, 2018
STS Annual Meeting App Released
Dec. 2018/Jan. 2019
Official Notice of Annual Meeting Mailed
December 14, 2018
STS 55th Annual Meeting and STS/AATS Tech-Con (San Diego, CA)
January 26-29, 2019
Annual Meeting Online Launched
Mid-March 2019

Other Meetings

2018 STS Intermacs Meeting (Rosemont, IL)
May 11-12, 2018
Symposium on Robotic Thoracic Surgery (Chicago, IL)
May 18-19, 2018
STS/ELSO ECMO Management Symposium (Tampa, FL)
July 13-15, 2018
Advances in Quality and Outcomes: A Data Managers Meeting (Hollywood, CA)
September 26-28, 2018
15th Annual Multidisciplinary CV and Thoracic Critical Conference (Washington, DC)
October 4-6, 2018
ACS/STS Cardiothoracic Surgery in the Future Course (Boston, MA)
October 22, 2018
STS/EACTS Latin America Cardiovascular Surgery Conference (Cartagena, Colombia)
November 15-17, 2018

National Database

STS Congenital Heart Surgery Database – Data Submission Period
April 9-Sept 28, 2018
STS General Thoracic Surgery Database – Data Submission Period
April 16-Sept 21, 2018
STS Adult Cardiac Surgery Database – 3rd Quarter Data Submission Period
June 11-August 24, 2018
STS Adult Cardiac Surgery Database – 4th Quarter Data Submission Period
Sept 10-Nov 30, 2018

Membership

STS Active and International Membership Application Deadline – Fall
September 26, 2018
STS Active and International Membership Application Deadline – Winter
December 3, 2018

STS News

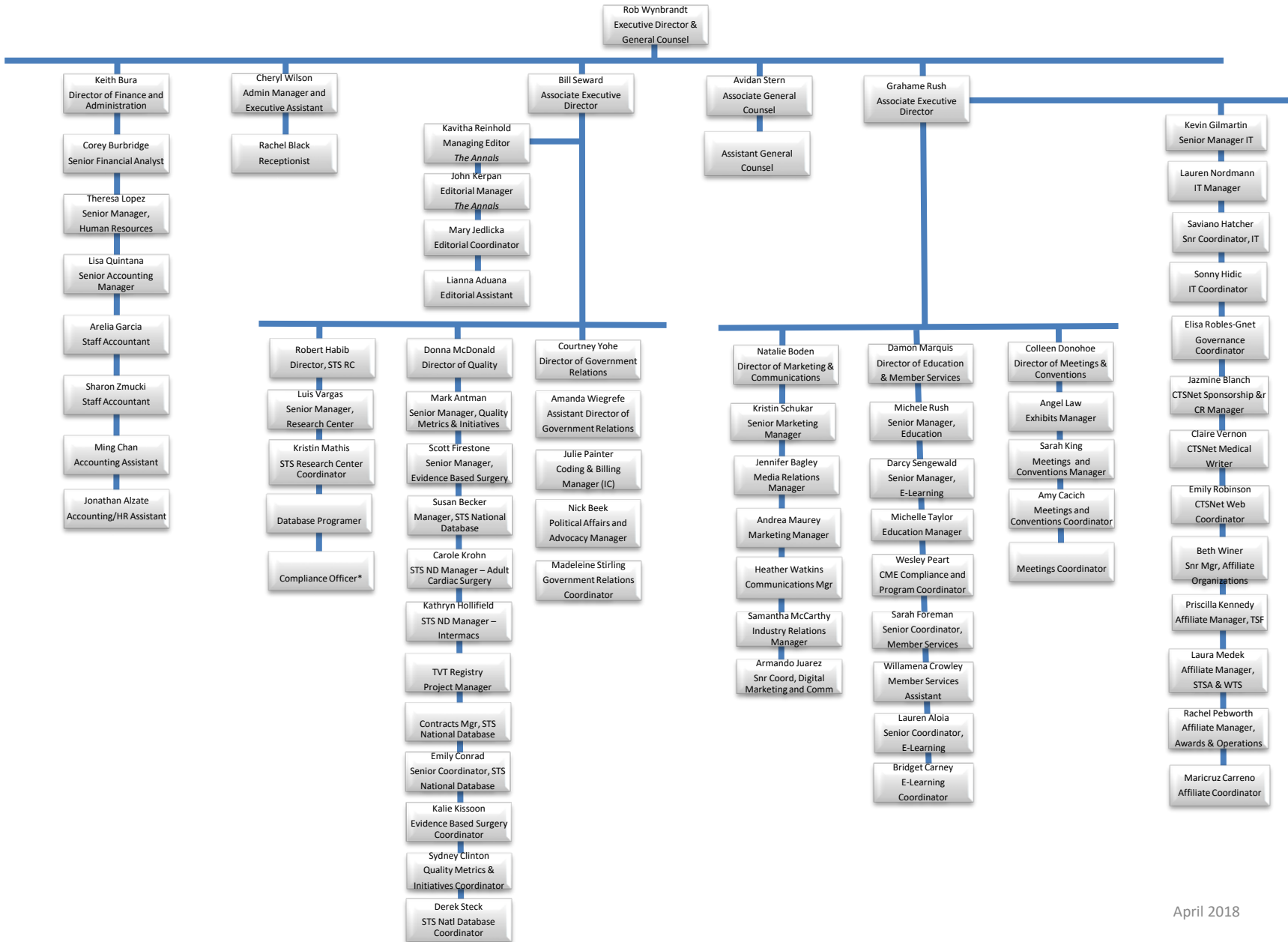
STS News Mailed
Mid-July 2018
Mid-October 2018
Early-January 2019

2018 Leadership Orientation

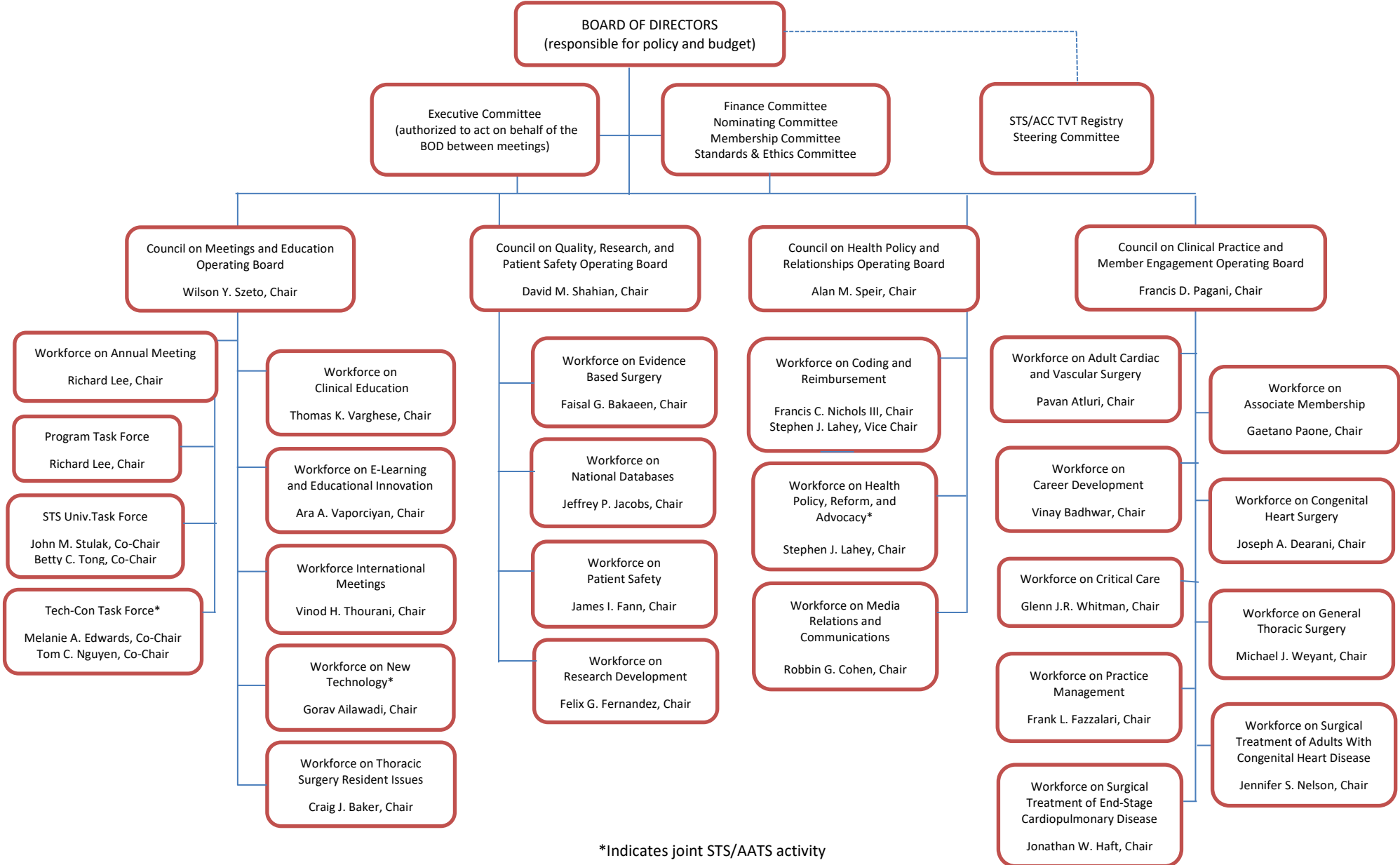
CRITICAL DATES ■ 2018-2019 ■ Chronological Order

STS Congenital Heart Surgery Database – Data Submission Period	April 9-Sept 28, 2018
STS General Thoracic Surgery Database – Data Submission Period	April 16-Sept 21, 2018
2018 STS Intermacs Meeting (Rosemont, IL)	May 11-12, 2018
Symposium on Robotic Thoracic Surgery (Chicago, IL)	May 18-19, 2018
STS Budgeting Process for 2019 Begins	June 2018
STS Adult Cardiac Surgery Database – 3 rd Quarter Data Submission Period	June 11-August 24, 2018
ECMO Symposium (Tampa, FL)	July 13-15, 2018
STS News Mailed	Mid-July, 2018
STS Annual Meeting Abstract Submission Deadline	August 24, 2018
2019-20 Leadership Self-Nominations Window	Sept. 1-30, 2018
2019-20 Pre-Appointment Leadership Disclosures Requested	Mid-September 2018
STS Adult Cardiac Surgery Database – 4 th Quarter Data Submission Period	Sept 10-Nov 30, 2018
Advances in Quality and Outcomes: A Data Managers Meeting (Hollywood, CA)	September 26-28, 2018
STS Active and International Membership Applications Deadline - Fall	September 26, 2018
STS Annual Meeting Program Committee Meeting (Chicago, IL)	September 29, 2018
2019-20 Leadership Appointment Recommendations Solicited	Late-September 2018
Finance Committee Considers Proposed 2019 Budget for Recommendation to STS Board	Sept./Oct. 2018
15 th Annual Multidisciplinary CV and Thoracic Critical Conference (Washington, DC)	October 4-6, 2018
STS News Mailed	Mid-October, 2018
ACS/STS Cardiothoracic Surgery in the Future Course (Boston, MA)	October 22, 2018
STS Board of Directors Meeting	November 10, 2018
STS/EACTS Latin America Cardiovascular Surgery Conference (Cartagena, Colombia)	November 15-17, 2018
STS Active and International Membership Applications Deadline - Winter	December 3, 2018
Official Notice of Annual Meeting Mailed	December 14, 2018
2019-20 Leadership Appointments Finalized	Mid-December 2018
STS Annual Meeting App Released	Dec. 2018/Jan. 2019
STS News Mailed	Early-January, 2019
STS 55 th Annual Meeting and STS/AATS Tech-Con (San Diego, CA)	January 26-29, 2019
STS Board of Directors Meeting	January 27, 2019
Annual Meeting Online Launched	Mid-March 2019

The Society of Thoracic Surgeons Organizational Chart/Employees



The Society of Thoracic Surgeons Organizational Chart/Governance



*Indicates joint STS/AATS activity

Staff Liaison Assignments

See *STS Leadership Directory* (and next page) for direct line numbers for staff.

Executive Committee	Rob Wynbrandt
Finance Committee	Keith Bura
Membership Committee	Damon Marquis/TBD
Nominating Committee	Rob Wynbrandt/Grahame Rush
Standards and Ethics Committee	Avidan Stern
<i>Council on Meetings and Education Operating Board</i>	Damon Marquis/TBD
Workforce on Annual Meeting (including all associated Task Forces)	Michele Rush
Workforce on Clinical Education	Wesley Peart
Workforce on E-Learning and Educational Innovation	Darcy Sengewald/Lauren Aloia
Workforce on International Meetings	Michelle Taylor
Workforce on New Technology	Damon Marquis/TBD
Workforce on Thoracic Surgery Resident Issues	Beth Winer
<i>Council on Quality, Research, & Patient Safety Operating Board</i>	Robert Habib/Donna McDonald
Workforce on Evidence Based Surgery	Scott Firestone
Workforce on National Databases	Susan Becker
Workforce on Patient Safety	Emily Conrad
Workforce on Research Development	Luis Vargas
<i>Council on Health Policy and Relationships Operating Board</i>	Courtney Yohe
Workforce on Coding and Reimbursement	Courtney Yohe
Workforce on Health Policy, Reform, and Advocacy	Courtney Yohe
Workforce on Media Relations and Communications	Natalie Boden
<i>Council on Clinical Practice and Member Engagement Operating Board</i>	Damon Marquis/TBD
Workforce on Adult Cardiac and Vascular Surgery	Damon Marquis/TBD
Workforce on Associate Membership	Sarah Foreman/Willamena Crowley
Workforce on Career Development	Darcy Sengewald
Workforce on Congenital Heart Surgery	Michelle Taylor
Workforce on Critical Care	Michele Rush
Workforce on General Thoracic Surgery	Darcy Sengewald
Workforce on Practice Management	Darcy Sengewald
Workforce on Surgical Treatment of Adults with Congenital Heart Disease	Michelle Taylor
Workforce on Surgical Treatment of End-Stage Cardiopulmonary Disease	Wesley Peart
CTSNet, Inc.	Grahame Rush
Southern Thoracic Surgical Association	Beth Winer
Thoracic Surgery Directors Association	Beth Winer
Thoracic Surgery Foundation	Priscilla Kennedy
Women in Thoracic Surgery	Laura Medek
<i>The Annals of Thoracic Surgery</i>	Kavitha Reinhold
<i>Other STS Publications</i>	Natalie Boden

STS Staff

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Special Presidential Task Forces/STS Councils/Workforces/Task Forces (2018)

I. Special Presidential Task Forces

- A. Task Force on Extraordinary Volunteer Leadership – Douglas E. Wood, Chair
- B. Task Force on the FDA “Network of Experts” Pilot Project – Joseph E. Bavaria, Chair
- C. Task Force on Military Affairs – Theodore C. Koutlas, Chair
- D. Task Force on Diversity and Inclusion – David T. Cooke, Chair
- E. Task Force on Canadian Membership – Sean Grondin, Chair

II. Council on Meetings and Education – Wilson Y. Szeto, Chair

- A. Workforce on Annual Meeting – Richard Lee, Chair
 - 1. Annual Meeting Program Task Force
(Richard Lee, Chair)
 - 2. STS University Task Force
(John M. Stulak and Betty C. Tong, Co-Chairs)
 - 3. Tech-Con Task Force*
(Melanie A. Edwards and Tom C. Nguyen, Co-Chairs)
- B. Workforce on Clinical Education – Thomas K. Varghese, Chair
- C. Workforce on E-Learning and Educational Innovation – Ara A. Vaporciyan, Chair
 - 1. Curriculum Editorial Board Task Force
(Edward D. Verrier, Chair)
 - 2. E-Book Task Force
(Gail E. Darling, William A. Baumgartner, and John E. Mayer, Co-Chairs)
 - 3. Jeopardy Task Force
(Nahush A. Mokadam and Patrick Myers, Co-Chairs)
- D. Workforce on International Meetings – Vinod H. Thourani, Chair

- E. Workforce on New Technology* – Gorav Ailawadi, Chair
 - 1. FDA Relations Task Force
(Patrick M. McCarthy and Michael J. Mack, Co-Chairs)
- F. Workforce on Thoracic Surgery Resident Issues – Craig J. Baker, Chair
 - 1. Looking to the Future Scholarship Task Force
(Elizabeth David, Chair)
 - 2. STS Residents Symposium Planning Task Force
(Edward Chen, Chair)

III. Council on Quality, Research, and Patient Safety – David M. Shahian, Chair

- A. Workforce on Evidence Based Surgery – Faisal G. Bakaeen, Chair
 - 1. Update Task Force on Gender-Specific Practice Guidelines for Coronary Artery Bypass Surgery: Perioperative Management
(Vinod Thourani, Chair)
 - 2. Perfusion Task Force
(John W. Hammon, Chair)
 - Perfusion Guidelines: Anticoagulation
 - Perfusion: Neuroprotection and Neuromonitoring
 - Perfusion: Renal Protection
 - 3. Pulmonary Metastasectomy Task Force
(John R. Handy, Chair)
 - 4. Update Task Force on Glycemic Control
(Harold L. Lazar, Chair)
 - 5. Update Task Force on Antibiotic Duration
(Michael E. Jessen, Chair)
 - 6. Update Task Force on the Management and Prophylaxis of Atrial Fibrillation Associated With General Thoracic Surgery
(Justin Blasberg, Chair)
 - 7. Update Task Force on Blood Conservation
(Susan Moffat-Bruce, Chair)
 - 8. STS/AATS ECMO Project Task Force
(Craig H. Selzman, STS Co-Chair)

B. Workforce on National Databases – Jeffrey P. Jacobs, Chair

1. Adult Cardiac Surgery Database Task Force
(Richard S. D’Agostino, Chair)
2. General Thoracic Surgery Database Task Force
(Benjamin D. Kozower, Chair)
3. Congenital Heart Surgery Database Task Force
(Marshall L. Jacobs, Chair)
4. Quality Initiatives Task Force
(Gaetano Paone, Chair)
5. Quality Measurement Task Force
(David M. Shahian, Chair)
6. Public Reporting Task Force
(Vinay Badhwar, Chair)
7. Appropriateness Task Force
(Joseph C. Cleveland, Jr., Chair)
8. Informatics Task Force
(David W. Wormuth, Chair)
9. Resource Utilization Task Force
(Jeffrey B. Rich and Alan M. Speir, Co-Chairs)
10. Patient-Reported Outcomes Task Force
(Felix G. Fernandez, Chair)
11. Aortic Surgery Task Force
(Edward Chen and Nimesh Desai, Co-Chairs)
12. INTERMACS Database Task Force
(Robert L. Kormos, Chair)

C. Workforce on Patient Safety – James I. Fann, Chair

1. Patient Safety Website Task Force
(Michal Hubka, Chair)

D. Workforce on Research Development – Felix G. Fernandez, Chair

1. Task Force on Funded Research
(Matthew Williams, Chair)
2. Access and Publications Task Force
(Jeffrey P. Jacobs, Chair)
3. Participant User File (PUF) Review Task Force
(Kevin Lobdell, Chair)

IV. Council on Health Policy and Relationships – Alan M. Speir, Chair

A. Workforce on Coding and Reimbursement – Francis C. Nichols III, Chair, and Stephen J. Lahey, Vice Chair

1. Adult Cardiac Coding and Reimbursement Task Force
(Stephen J. Lahey, Chair)
2. General Thoracic Coding and Reimbursement Task Force
(Francis C. Nichols, Chair)
3. Congenital Cardiac Coding and Reimbursement Task Force
(Jeffrey P. Jacobs, Chair)

B. Workforce on Health Policy, Reform, and Advocacy* – Stephen J. Lahey, Chair

1. Thoracic Surgery Practice and Access Task Force
(John S. Ikonomidis, Chair)
2. Task Force on Alternative Payment Models
(Alan M. Speir, Chair)
3. Task Force on Graduate Medical Education
(Michael DiMaio, Chair)
4. Task Force on Tobacco Policy
(Leslie J. Kohman, Chair)
5. Task Force on Medical Liability Reform
(John H. Calhoun, Chair)

C. Workforce on Media Relations and Communications – Robbin G. Cohen, Chair

1. Patient Information Task Force
(Robbin G. Cohen, Chair)

- V. Council on Clinical Practice and Member Engagement – Francis D. Pagani, Chair**
 - A. Workforce on Adult Cardiac and Vascular Surgery – Pavan Atluri, Chair
 - 1. Task Force on Robotic Surgery
(T. Sloane Guy and Joseph A. Dearani, Co-Chairs)
 - B. Workforce on Associate Membership – Gaetano Paone, Chair
 - C. Workforce on Career Development – Vinay Badhwar, Chair
 - 1. Communications Task Force
(Mara B. Antonoff, Chair)
 - 2. Mentorship Task Force
(David D. Odell, Chair)
 - 3. Education Task Force
(Melanie A. Edwards, Chair)
 - D. Workforce on Congenital Heart Surgery – Joseph A. Dearani, Chair
 - 1. Manpower Survey Task Force
(David L. Morales, Chair)
 - E. Workforce on Critical Care – Glenn J.R. Whitman, Chair
 - 1. Task Force on Critical Care Conference – Thomas E. MacGillivray, Chair
 - F. Workforce on General Thoracic Surgery – Michael J. Weyant, Chair
 - 1. Task Force on CT Screening
(Philip A. Linden, Chair)
 - G. Workforce on Practice Management – Frank L. Fazzalari, Chair
 - 1. Task Force on Practice Management Communications
(Paul S. Levy and Raymond L. Singer, Co-Chairs)
 - H. Workforce on Surgical Treatment of Adults with Congenital Heart Disease – Jennifer S. Nelson, Chair
 - 1. Task force on Streamlining Data Entry for ACHD
(Jennifer S. Nelson, Chair)

- I. Workforce on Surgical Treatment of End-Stage Cardiopulmonary Disease – Jonathan W. Haft, Chair
 1. Artificial Lung Technologies Task Force (Shaf Keshavjee, Chair)

*Joint STS/AATS bodies

TAB 2

Bylaws
(as amended on January 29, 2018)

ARTICLE I: Name and Objectives

Section 1. Name. The name of this organization shall be The Society of Thoracic Surgeons.

Section 2. Objectives. The objectives of the Society shall be:

- (a) to improve the quality and practice of thoracic surgery as a specialty;
- (b) to promote the professional and educational development of those surgeons specializing in the field of thoracic surgery and to encourage, represent, and sponsor those surgeons who have entered this field;
- (c) to provide a forum and publication for scientific presentations and discussions;
- (d) to promote and support basic standards in the education programs of thoracic surgery; and
- (e) to encourage basic and clinical research in the field of thoracic surgery.

ARTICLE II: Registered Office and Registered Agent

The Society shall have and continuously maintain in the State of Illinois a registered office and a registered agent whose office shall be identical to such registered office, and may have such other offices within or outside the State of Illinois as the Board of Directors may from time to time determine.

ARTICLE III: Members

Section 1. Types of Membership. There shall be seven types of membership: Active, Senior, Honorary, International, Candidate, Pre-Candidate and Associate, provided that all surgeons granted membership prior to July 1, 1965, also shall be considered Founder Members. There shall be no numerical limit on any type of membership.

Section 2. Active Members.

(a) Qualifications.

- (i) The Active Membership of the Society shall consist of surgeons certified in the United States and Canada in the field of thoracic surgery.
- (ii) An applicant for Active Membership must be certified in thoracic surgery by the American Board of Thoracic Surgery, the American Osteopathic Board of Surgery in Thoracic and Cardiovascular Surgery, or the Royal College of Surgeons of Canada or its equivalency.
- (iii) An applicant for Active Membership shall (a) have a full and unrestricted license to practice medicine in his or her respective geographic area, and (b) have no action pending which could adversely affect the applicant's qualification for staff privileges at any hospital.
- (iv) An applicant for Active Membership must possess ethical and moral fitness, as well as professional proficiency, as determined, in part, on the basis of reports from members consulted as references, reports from other references and other information.

(b) Application and Election.

- (i) Application Form. The application form for Active Membership shall be furnished by the Society upon request by the applicant. The applicant will also be furnished with a citation from the Bylaws setting forth the eligibility requirements for election to Active Membership.
- (ii) Initial Review. Once completed, each application for Active Membership in the Society shall be reviewed by the Membership Committee in light of the qualifications set forth herein.
- (iii) Notice of Applicants. At least one month prior to the date of each meeting of the Board of Directors, the Secretary shall furnish electronically to each Active, International, and Senior Member for whom STS has an actionable e-mail address on file a list of the applicants for Active Membership whose applications have been reviewed and conditionally approved by the Membership Committee. Active, International, and Senior Members shall submit in writing to the Membership Committee any comments, concerns or questions they may have about any such applicant. All comments, concerns and questions received at least fourteen (14) days prior to the date of the next meeting of the Board of Directors at which applications are to be presented for action shall be considered by the Membership Committee.
- (iv) Approval of Applications. Those applications recommended by the Membership Committee after all comments, concerns and questions have been received from Active, International, and Senior Members pursuant to subsection (iii) above, shall be forwarded to the Board of Directors for its approval. Acceptance of an applicant into Active Membership shall require the favorable vote of a majority of the voting directors present and voting.
- (v) Unapproved Applications. Any application for Active Membership not recommended by the Membership Committee or not approved by the Board of Directors if based upon the competence or professional conduct of the applicant, which conduct affects or could affect adversely the health or welfare of a patient or patients, or if based upon ethical or moral considerations, shall be forwarded to the Committee on Standards and Ethics. Such application shall be treated by that Committee in the same manner as a disciplinary matter, and shall be subject to the procedures established pursuant to Article XI of these Bylaws.
- (vi) Notice of Election to Active Membership. Every newly elected Active Member shall be furnished by the Secretary with an official notice of his or her election and a certificate of membership bearing the Seal of the Society and reflecting the signatures of the President, the Secretary, and the Chair of the Membership Committee.

(c) Rights and Duties. Active Members shall have the right to vote on all matters brought before the membership and shall be eligible for election to office and to the Board of Directors. It shall be the duty of each Active Member to attend regularly the meetings of the Society, to uphold the ideals and objectives of the Society, and to pay the fees, dues and assessments of the Society.

Section 3. Senior Members.

(a) Qualifications. Any Active or International Member, upon the first day of January **after reaching the age of seventy years**, shall automatically become a Senior Member. In addition, any Active or International Member **sixty-one years of age or older, upon the submission of a declaration of retirement from employment in the field of medicine** to the Secretary for recommendation to the Board of Directors, and with Board of Directors approval, shall become a Senior Member effective the first day of January after such Board approval. Notice of such transfer to Senior Membership shall be furnished to the member by the Secretary.

(b) Rights and Duties. Senior Members shall possess all the rights, duties, privileges and obligations of Active Members; however, no Senior Member shall be eligible for election to office or to the Board of Directors unless his or her nomination is approved by the Board of Directors. Senior Members shall not be subject to dues or assessments.

Section 4. Honorary Members.

(a) Qualifications. Honorary Membership shall be reserved for such distinguished persons who have achieved prominence in the field of thoracic surgery and who have contributed to its advancement. Upon recommendation of the Board of Directors, Honorary Members shall be elected by a majority vote of the membership at its Annual Meeting.

(b) Notice of Election to Honorary Membership. Every newly elected Honorary Member shall be furnished by the Secretary with an official notice of his or her election and a certificate of membership bearing the Seal of the Society and reflecting the signatures of the President, the Secretary, and the Chair of the Membership Committee.

(c) Rights and Duties. Honorary Members shall not be eligible for election to office or to the Board of Directors, nor shall they be eligible for service on standing committees, Council Operating Boards, or workforces. Honorary Members also shall not have the privilege of voting.

(d) Transfer to Active Membership. Any Honorary Member who is a thoracic surgeon and who has not passed the age of sixty-seven years may apply for Active Membership in the Society and, upon acceptance, shall become subject to all of the rights, duties, privileges, and obligations of an Active Member.

Section 5. International Members.

(a) Qualifications.

- (i) Surgeons who have achieved appropriate certification or recognition of their achievements in thoracic surgery in countries other than the United States or Canada, and who devote their professional efforts to the interests of the specialty, are eligible to apply for International Membership. Appropriate documentation of professional achievements shall be provided to the Membership Committee.
- (ii) An applicant for International Membership shall (a) have a full and unrestricted license to practice medicine in his or her respective geographic area, and (b) have no action pending which could adversely affect the applicant's qualification for staff privileges at any hospital.
- (iii) An applicant for International Membership must possess ethical and moral fitness, as well as professional proficiency, as determined, in part, on the basis of reports from members consulted as references, reports from other references and other information.

(b) Application and Election.

- (i) Application Form. The application form for International Membership shall be furnished by the Society upon request by the applicant. The applicant will also be furnished with a citation from the Bylaws setting forth the eligibility requirements for election to International Membership.
- (ii) Initial Review. Once completed, each application for International Membership in the Society shall be reviewed by the Membership Committee in light of the qualifications set forth herein.

- (iii) Notice of Applicants. At least one month prior to the date of each meeting of the Board of Directors, the Secretary shall furnish electronically to each Active, International, and Senior Member for whom STS has an actionable e-mail address on file a list of the applicants for International Membership whose applications have been reviewed and conditionally approved by the Membership Committee. Active, International, and Senior Members shall submit in writing to the Membership Committee any comments, concerns or questions they may have about any such applicant. All comments, concerns and questions received at least fourteen (14) days prior to the date of the next meeting of the Board of Directors at which applications are to be presented for action shall be considered by the Membership Committee.
 - (iv) Approval of Applications. Those applications recommended by the Membership Committee after all comments, concerns and questions have been received from Active, International, and Senior Members pursuant to subsection (iii) above, shall be forwarded to the Board of Directors for its approval. Acceptance of an applicant into International Membership shall require the favorable vote of a majority of the voting directors present and voting.
 - (v) Unapproved Applications. Any application for International Membership not recommended by the Membership Committee or not approved by the Board of Directors if based upon the competence or professional conduct of the applicant, which conduct affects or could affect adversely the health or welfare of a patient or patients, or if based upon ethical or moral considerations, shall be forwarded to the Committee on Standards and Ethics. Such application shall be treated by that Committee in the same manner as a disciplinary matter, and shall be subject to the procedures established pursuant to Article XI of these Bylaws.
 - (vi) Notice of Election to International Membership. Every newly elected International Member shall be furnished by the Secretary with an official notice of his or her election and a certificate of membership bearing the Seal of the Society and reflecting the signatures of the President, the Secretary, and the Chair of the Membership Committee.
- (c) Rights and Duties. International Members shall possess all of the rights, duties, and privileges of Active Members, including the privilege of voting, except that they shall not be eligible for election to office. International Members shall be subject to the fees, dues and assessments of the Society.

Section 6. Candidate Members.

- (a) Qualifications.
 - (i) An applicant for Candidate Membership shall be matched or enrolled in a thoracic surgery educational program accredited by the Residency Review Committee for Thoracic Surgery under the authority of the Accreditation Council for Graduate Medical Education, a program approved for thoracic surgery education by the American Osteopathic Board of Surgery, or a program approved for thoracic surgery education by the Royal College of Surgeons of Canada or its equivalency. Individuals who have completed their education in one of the above programs and are in process of acquiring certification in thoracic surgery by the American Board of Thoracic Surgery, the American Osteopathic Board of Surgery in Thoracic and Cardiovascular Surgery, or the Royal College of Surgeons of Canada or its equivalency also are eligible to apply for Candidate Membership. In addition, any individual outside the United States and Canada who is enrolled in an accredited or otherwise recognized thoracic surgery educational program, or who has completed his or her education and is in the process of acquiring certification in thoracic surgery or its equivalent, may apply for Candidate Membership.
 - (ii) An applicant for Candidate Membership must possess ethical and moral fitness.

(b) Application and Admission.

- (i) Application Form. The application form for Candidate Membership shall be furnished by the Society upon request by the applicant. The applicant will also be furnished with a citation from the Bylaws setting forth the eligibility requirements for admission to Candidate Membership.
- (ii) Admission of Applicants. Upon the Society's receipt of a fully completed application for Candidate Membership, supported by all applicable fees and/or dues, all in accordance with the applicable standards and procedures adopted by the Society, the applicant will be admitted as a Candidate Member.

(c) Rights and Duties. Candidate Members shall possess all of the rights, duties, privileges and obligations of Active Members, except they shall not be eligible for election to office and shall not have the privilege of voting. Candidate Members shall be subject to the fees and dues of the Society. With approval of the Executive Committee, they may serve as members of standing committees, Council Operating Boards and workforces.

(d) Advancement to Active Membership. After presenting an appropriate application and supporting materials, a Candidate Member, upon approval of the Membership Committee, Board of Directors, and membership, shall be advanced to Active Membership in the Society and shall become subject to all of the rights, duties, privileges and obligations of Active Membership.

(e) Termination of Candidate Membership. Candidate Members who have been certified in thoracic surgery by the American Board of Thoracic Surgery, the American Osteopathic Board of Surgery in Thoracic and Cardiovascular Surgery, or the Royal College of Surgeons of Canada or its equivalency may retain their Candidate Membership for a maximum of two years following certification. Candidate Members enrolled in an appropriately accredited thoracic surgery educational program in the United States or Canada may remain Candidate Members for a maximum of five years following completion of education. Candidate Members enrolled in an appropriately accredited or otherwise recognized thoracic surgery educational program outside the United States and Canada may remain Candidate Members for a maximum of five years, but may have their Candidate Membership extended annually thereafter upon submission of appropriate documentation regarding their ongoing thoracic surgery education.

Section 7. Pre-Candidate Members.

(a) Qualifications.

- (i) An applicant for Pre-Candidate Membership shall be enrolled in an appropriately accredited or otherwise recognized medical school, or enrolled in a general surgery educational program accredited by the Accreditation Council for Graduate Medical Education, the American Osteopathic Board of Surgery, or the Royal College of Surgeons of Canada or its equivalency. In addition, any individual outside the United States and Canada who is enrolled in an accredited or otherwise recognized medical school or general surgery educational program may apply for Pre-Candidate Membership.
- (ii) An applicant for Pre-Candidate Membership must possess ethical and moral fitness.

(b) Application and Admission.

- (i) Application Form. The application form for Pre-Candidate Membership shall be furnished by the Society upon request by the applicant. The applicant will also be furnished with a citation from the Bylaws setting forth the eligibility requirements for admission to Pre-Candidate Membership.

(ii) Admission of Applicants. Upon the Society's receipt of a fully completed application for Pre-Candidate Membership, supported by all applicable fees and/or dues, all in accordance with the applicable standards and procedures adopted by the Society, the applicant will be admitted as a Pre-Candidate Member.

(c) Rights and Duties. Pre-Candidate Members shall not be eligible for election to office or to the Board of Directors, and shall not have the privilege of voting. Pre-Candidate Members shall be subject to the fees and dues of the Society. With approval of the Executive Committee, they may serve as members of standing committees, Council Operating Boards and workforces.

(d) Termination of Pre-Candidate Membership. Pre-Candidate Members enrolled in an appropriately accredited or otherwise recognized medical school or general surgery educational program may remain Pre-Candidate Members for a maximum of two years following completion of said education.

Section 8. Associate Members.

(a) Qualifications.

(i) With the exception of individuals eligible for Active Membership, International Membership, Candidate Membership or Pre-Candidate Membership, all individuals having an interest in the field of thoracic surgery (including but not limited to research scientists, physician assistants, perfusionists, nurses, nurse practitioners, practice administrators, data managers and other health care professionals) shall be eligible for Associate Membership.

(ii) An applicant for Associate Membership must possess ethical and moral fitness.

(b) Application and Admission.

(i) Application Form. The application form for Associate Membership shall be furnished by the Society upon request by the applicant. The applicant will also be furnished with a citation from the Bylaws setting forth the eligibility requirements for admission to Associate Membership.

(ii) Admission of Applicants. Upon the Society's receipt of a fully completed application for Associate Membership, supported by all applicable fees and/or dues, all in accordance with the applicable standards and procedures adopted by the Society, the applicant will be admitted as an Associate Member.

(c) Rights and Duties. Associate Members shall not be eligible for election to office or to the Board of Directors, and shall not have the privilege of voting. Associate Members shall be subject to the fees and dues of the Society. With approval of the Executive Committee, they may serve as members of standing committees and Council Operating Boards, and may serve as members or Chairs of workforces.

Section 9. Resignation. Any member may resign from the Society at any time if (a) he or she has paid in full any dues, assessments or other financial obligations owing to the Society at that time, (b) he or she tenders a resignation request in writing to the Secretary, and (c) the resignation request is accepted by the Board of Directors. Without limiting the generality of the foregoing, the Board of Directors may choose not to accept the resignation request of a member who is the subject of a pending investigation or proceeding pursuant to Article XI of these Bylaws.

Section 10. Lapse of Membership. The membership of any member shall lapse if he or she fails to pay any dues, assessments or other financial obligations within one year after payment is due. No membership shall be considered to have lapsed without prior action of the Board of Directors.

Ill health or other justifiable reason, when considered appropriate by the Board of Directors, may excuse a member from this requirement. The Secretary shall notify the member of pending lapse of membership by e-mail, by registered or certified letter, or by overnight courier directed to his or her e-mail or postal address, as appropriate and shown in the records of the Society.

Section 11. Reinstatement. Any member whose membership has lapsed may be reinstated upon payment of his or her arrears within six months following such lapse of membership.

Section 12. Inactive Status. Inactive status may be granted to any Active Member or International Member prior to eligibility for Senior Membership only for reason of incapacity by disability **or retirement from employment in the field of medicine prior to attaining the age of sixty-one.** An Active Member or International Member who believes that he or she qualifies for inactive status must submit, in writing, a request for change in status to the Secretary for consideration and recommendation to the Board of Directors, which will have final authority for action. If the reason for disability no longer exists, or if the inactive member is again employed in the field of medicine, the member, upon appropriate Board of Directors action, may be restored to Active or International Member status. An Active or International Member who has been granted inactive status will not have the right to vote, nor be eligible for election to office or to the Board of Directors, for the duration of his or her inactive status. An Active or International Member who has been granted inactive status may apply for Senior Membership upon reaching age sixty-one.

ARTICLE IV: Meetings of Members

Section 1. Annual Meeting. An Annual Meeting of the members shall be held at such time and place as the Board of Directors may determine, for the purpose of electing directors and officers, and for the transaction of such other business as may come before the meeting.

Section 2. Special Meetings. Special meetings of the members may be called by the President, by the Board of Directors, or by not less than ten percent (10%) of the members having voting rights; provided, however, that any special meeting of the members called to act on an amendment to these Bylaws must be approved by the Board of Directors.

Section 3. Place of Meetings. The Board of Directors may designate any place, either within or outside the State of Illinois, as the place for any Annual Meeting or for any special meeting called by the Board of Directors. If no designation is made, or if a special meeting be otherwise called, the place of the meeting shall be the registered office of the Society in the State of Illinois.

Section 4. Notice of Meetings. Unless otherwise required by the Illinois General Not-For-Profit Corporation Act of 1986, as amended, written notice stating the place, day and hour of any meeting of members shall be provided to each member entitled to vote at such meeting, not less than five nor more than sixty days before the date of such meeting, by or at the direction of the President, or the Secretary, or the persons calling the meeting. In the case of a special meeting, or when required by statute or by these Bylaws, the purpose for which the meeting is called shall be stated in the notice. If mailed, the notice of a meeting shall be deemed delivered when deposited in the United States mail, addressed to the member at his or her address as it appears on the records of the Society, with postage thereon prepaid. If given by facsimile transmission, such notice shall be deemed to be provided upon confirmation of the receipt of the transmission.

Section 5. Informal Action by Members. Any action required to be taken at a meeting of the members of the Society, or any other action which may be taken at a meeting of members, may be taken by ballot without a meeting in writing by mail, e-mail, or any other electronic means pursuant to which the members entitled to vote thereon are given the opportunity to vote for or against the proposed action, and the action receives approval by a majority of the members casting votes, or such larger number as may be required by the Illinois General Not for Profit Corporation Act of 1986, the Articles of Incorporation, or these Bylaws, provided that the number of members casting

votes would constitute a quorum if such action had been taken at a meeting. Voting shall remain open for not less than 5 days from the date the ballot is delivered; provided, however, that in the case of a removal of one or more directors, a merger, consolidation, dissolution or sale, lease or exchange of assets, the voting shall remain open for not less than 20 days from the date the ballot is delivered. Such informal action by members shall become effective only if, at least 5 days prior to the effective date of such informal action, a notice in writing of the proposed action is delivered to all of the members entitled to vote with respect to the subject matter thereof.

Section 6. Quorum and Manner of Acting. At least one hundred (100) of the members entitled to vote shall constitute a quorum at any meeting of Society members. If a quorum is not present at any meeting of members, a majority of the members present may adjourn the meeting from time to time without further notice. If a quorum is present, the affirmative vote of the majority of the members represented at the meeting and entitled to vote on a matter shall be the act of the members, unless the vote of a greater number is required by law, the Articles of Incorporation or these Bylaws.

ARTICLE V: Board of Directors

Section 1. General Powers. The affairs of the Society shall be managed by its Board of Directors. Without limiting the generality of the foregoing, the Board shall be responsible for formulating policy and maintaining the financial integrity of the Society.

Section 2. Composition. The number of directors shall be within a range between seventeen (17) and twenty-two (22), provided that certain directors shall not have voting rights on the Board. Specifically, the Board shall be composed of the President, the First Vice President, the Second Vice President, the Secretary (and, when appropriate, the Secretary-Elect), the Treasurer (and, when appropriate, the Treasurer-Elect), the Immediate Past President, six (6) Directors-at-Large, two (2) International Directors, a Canadian Director, a Resident Director, a Public Director, the Editor (and, when appropriate, the Editor-Elect) and the Historian. The Editor, the Editor-Elect (if any) and the Historian shall be non-voting directors. Directors need not be residents of Illinois.

Section 3. Nomination, Election, Term and Duties of Directors-At-Large. A total of six (6) Directors-at-Large shall be elected for staggered terms of three (3) years each, i.e., two (2) Directors-at-Large shall be elected on an annual basis. Candidates for these positions will be placed in nomination by the Nominating Committee, and nominations for any of these positions may be made from the floor. An affirmative vote by the majority of the members present shall be required for election. Directors-at-Large shall hold office from the adjournment of the Annual Meeting at which they are elected until the adjournment of the Annual Meeting at which their successors are elected, provided that Directors-at-Large shall be eligible to serve a maximum of two consecutive terms. The Directors-at-Large shall preferably serve sequential one (1) year terms of service on each of the three Council Operating Boards. However, at the discretion of the Executive Committee, a Director-at-Large may not be required to follow the prescribed rotation. Each Director-at-Large shall be an ex-officio, non-voting member of all workforces within his or her assigned Council.

Section 4. International Directors. Two International Directors shall be elected, each for a three-year term, from among the Society's International Members. Each candidate for these positions will be placed in nomination by the Nominating Committee, and nominations for these positions may be made from the floor. An affirmative vote by the majority of the members present shall be required for election. Each International Director shall hold office from the adjournment of the Annual Meeting at which he or she is elected until the adjournment of the Annual Meeting at which his or her successor is elected, provided that each International Director shall be eligible to serve a maximum of two (2) consecutive terms.

Section 5. Canadian Director. A Canadian Director shall be elected for a three-year term from among the Society's Active Members who reside and work in Canada. A candidate for this position

will be placed in nomination by the Nominating Committee, and nominations for this position may be made from the floor. An affirmative vote by the majority of the members present shall be required for election. A Canadian Director shall hold office from the adjournment of the Annual Meeting at which he or she is elected until the adjournment of the Annual Meeting at which his or her successor is elected, provided that a Canadian Director shall be eligible to serve a maximum of two (2) consecutive terms and, provided further, that a Canadian Director's failure to continue residing or working in Canada will render him or her ineligible for re-election.

Section 6. Resident Director. A Resident Director shall be elected for a two-year term from among the Society's Candidate Members. A candidate for this position will be placed in nomination by the Nominating Committee, and nominations for this position may be made from the floor. An affirmative vote by the majority of the members present shall be required for election. A Resident Director shall hold office from the adjournment of the Annual Meeting at which he or she is elected until the adjournment of the Annual Meeting at which his or her successor is elected, provided that a Resident Director shall not be eligible for re-election.

Section 7. Public Director. A Public Director shall be elected for a three-year term. A candidate for this position will be placed in nomination by the Nominating Committee, based upon such criteria that the Board of Directors may adopt from time to time, and nominations for this position may be made from the floor. An affirmative vote by the majority of the members present shall be required for election. A Public Director shall hold office from the adjournment of the Annual Meeting at which he or she is elected until the adjournment of the Annual Meeting at which his or her successor is elected, provided that a Public Director shall be eligible to serve a maximum of two (2) consecutive terms.

Section 8. Regular Meetings. A regular annual meeting of the Board of Directors shall be held in conjunction with the Annual Meeting of the members. The Board of Directors may provide by resolution the time and place, either within or outside the State of Illinois, for the holding of additional regular meetings of the Board.

Section 9. Special Meetings. Special meetings of the Board of Directors may be called by or at the request of the President or any five Directors. The person or persons authorized to call special meetings of the Board may fix any place, either within or outside the State of Illinois, as the place for holding any special meeting of the Board called by them.

Section 10. Notice. Written notice of any special meeting of the Board of Directors shall be provided at least one day before the date of such meeting. If notice be given by mail, such notice shall be deemed to be delivered on the day following the day such notice is deposited with postage prepaid in the United States mail. If notice be given by facsimile transmission, such notice shall be deemed to be provided upon confirmation of the receipt of the transmission.

Section 11. Quorum. One-half (1/2) of the voting directors shall constitute a quorum for the transaction of business at any meeting of the Board, provided, that if less than one-half (1/2) of the directors are present at said meeting, a majority of the directors present may adjourn the meeting from time to time without further notice. Notwithstanding the foregoing, if any voting members of the Board of Directors recuse themselves or otherwise are disqualified from acting on a matter solely for reasons of conflicts of interest, then the number of voting directors will be reduced accordingly for purposes of calculating a quorum, and the act of a majority of the remaining voting directors shall be the act of the Board of Directors; provided, however, that the number of voting directors qualified to act on behalf of the Board of Directors may not be reduced to less than one-third of the entire Board of Directors and, provided further, that if the number of remaining voting directors is less than a majority of the entire Board of Directors, then the act of such remaining voting directors must be unanimous.

Section 12. Manner of Acting. The act of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors, except where otherwise provided by law or by these Bylaws.

Section 13. Informal Action by Directors. Any action required to be taken at a meeting of the Board of Directors or any action which may be taken at a meeting of the Board may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the directors entitled to vote with respect to the subject matter thereof. Electronic signatures shall be acceptable.

Section 14. Vacancies. Except for the position of Immediate Past President, any vacancy occurring in the Board of Directors, or any directorship to be filled by reason of an increase in the number of directors, shall be filled by the Board of Directors or as otherwise set forth in Article VI, Section 4 of these Bylaws. A director selected to fill a vacancy shall be elected for the unexpired term of his or her predecessor in office. The designation of an individual to fill a vacancy pursuant to this provision shall not serve to disqualify him or her from election to the Board for the subsequent term if he or she otherwise would have been eligible for election but for the designation.

Section 15. Compensation. In extraordinary circumstances, the Board of Directors may establish reasonable compensation for any elected officer, director, or other member of the Society in conjunction with his or her services rendered on behalf of the Society.

Section 16. Attendance by Communications Equipment. Members of the Board of Directors or of any committee of the Board of Directors may participate in and act at any meeting of such Board or committee through the use of a conference telephone or other communications equipment by means of which all persons participating in the meeting can communicate with each other. Participation in such meeting shall constitute attendance and presence in person at the meeting of the person or persons so participating.

ARTICLE VI. Officers, Editor, Historian and Immediate Past President

Section 1. Designation and Qualification. The officers of the Society shall be a President, a First Vice President, a Second Vice President, a Secretary, and a Treasurer (the "elected officers") and an appointed Executive Director. The Society also shall have an Editor, an Historian and an Immediate Past President.

Section 2. Terms of Office. The terms of office of the President, the First Vice President and the Second Vice President shall be one year; they shall not be eligible for re-election. The Secretary and Treasurer also shall serve for one-year terms; they shall be eligible for re-election, but they shall serve no more than five consecutive terms. The term of office of the Editor and the Historian shall be five years; the Editor and the Historian shall serve no more than two consecutive terms. The term of office of the Immediate Past President shall be one year.

Section 3. Nomination and Election. The elected officers, as well as the Editor and the Historian, shall be elected at the Annual Meeting of the members. Candidates for these positions will be placed in nomination by the Nominating Committee, and nominations for any of these positions may be made from the floor. An affirmative vote by a majority of the members present shall be required for election. Elected officers shall be elected annually and will hold office from the adjournment of the Annual Meeting at which they are elected until the adjournment of the next Annual Meeting when their successors are elected, with two exceptions: (1) the successor to the Secretary will be elected at the Annual Meeting one year in advance of his or her assumption of duties to serve as an interim assistant to the outgoing Secretary (Secretary-Elect), and (2) the successor to the Treasurer will be elected at the Annual Meeting one year in advance of his or her assumption of duties to serve as an interim assistant to the outgoing Treasurer (Treasurer-Elect). In addition, the successor to the Editor will be elected at the Annual Meeting one year in advance

of his or her assumption of duties to work with the outgoing Editor in order to facilitate transition of leadership (Editor-Elect).

Section 4. Vacancies. In the event that the office of President becomes vacant, the First Vice President shall be and become the President for the unexpired portion of the term. In the event that the office of First Vice President becomes vacant, the Second Vice President shall be and become the First Vice President for the unexpired portion of the term. A vacancy in the office of Second Vice President, Secretary or Treasurer, or in the position of Editor or Historian shall be filled by the Board of Directors for the unexpired portion of the term. A vacancy in the position of Immediate Past President shall not be filled for the unexpired portion of the term. The designation of an individual to fill a vacancy pursuant to this provision shall not serve to disqualify him or her from election to the office for the subsequent term if he or she otherwise would have been eligible for election to that office but for the designation.

Section 5. President. The President shall be the chief elected officer of the Society, and shall preside at the Annual Meeting of the members and at meetings of the Board of Directors and the Executive Committee. The President shall act as Executive Committee liaison to the Council on Meetings and Education, and shall be an ex-officio member of its Operating Board and an ex-officio, non-voting member of all of its workforces. The President, upon approval of the Executive Committee, may appoint such ad hoc task forces as he or she deems appropriate, provided that such task forces shall act in an advisory capacity only, and may not exercise the powers of the President or the Board of Directors.

Section 6. First Vice President. The First Vice President shall assist the President as requested, and in the event the latter is absent or incapable of acting, the First Vice President shall assume the duties of the President. The First Vice President shall serve as Executive Committee liaison to the Council on Health Policy and Relationships, and shall be an ex-officio member of its Operating Board and an ex-officio, non-voting member of all of its workforces. Except as otherwise provided herein, the First Vice President shall recommend to the Executive Committee for appointment members of the standing committees, Council Operating Boards and workforces of the Society, as well as the Chairs thereof. Upon nomination and election by the membership, the First Vice President shall become President.

Section 7. Second Vice President. The Second Vice President shall assist the President and the First Vice President as requested, and in the event the latter is absent or incapable of acting, the Second Vice President shall assume the duties of the First Vice President. The Second Vice President shall serve as Executive Committee liaison to the Council on Quality, Research and Patient Safety, and shall be an ex-officio member of its Operating Board and an ex-officio, non-voting member of all of its workforces. Upon nomination and election by the membership, the Second Vice President shall become First Vice President.

Section 8. Secretary. Under direction of the Board of Directors, the Secretary shall facilitate the workings of the various standing committees, Council Operating Boards and workforces of the Society. The Secretary shall ensure that minutes are recorded of Board of Directors meetings, annual or special meetings of the members, and all committee and workforce meetings that require records. The Secretary shall act as Executive Committee liaison to the Council on Clinical Practice and Member Engagement, and shall be an ex-officio member of its Operating Board and an ex-officio, non-voting member of all of its workforces. The Secretary shall supervise the maintenance of current files and records of the Society, and shall regularly review the Bylaws of the Society in order to help ensure that they remain current and otherwise appropriate. The Secretary shall perform such other duties as are incident to such office or as may be assigned to him or her from time to time by the Board of Directors. The Secretary, with the approval of the Board of Directors, may delegate to the Executive Director such duties as he or she deems appropriate.

Section 9. Treasurer. Under direction of the Board of Directors, the Treasurer shall supervise the financial affairs of the Society. The Treasurer shall approve payment of all bills and shall countersign all checks exceeding an amount to be determined by the Board of Directors. Checks shall be countersigned by the President or the Secretary in the absence of the Treasurer. Financial records and bank accounts shall be maintained under the direction of the Executive Director, who shall provide related information and documentation for audit by an independent certified public accountant. Also the Executive Director will provide the Treasurer with an annual report for presentation to the membership at the Annual Meeting of the members. The Treasurer shall be an ex-officio, non-voting member of all standing committees and workforces except as otherwise provided in these Bylaws or by appointment.

In the event the Treasurer shall be unable to carry out the functions of his or her office, either the President or the Secretary may assume these duties until the duly elected Treasurer is able to resume his or her duties of office or the Board of Directors acts to fill the unexpired term.

Section 10. Editor. The Editor shall be responsible, subject to direction of the Board of Directors, for all of the activities associated with selection of manuscripts and the editing and publishing of The Annals of Thoracic Surgery. The Editor shall be the Chair of the Editorial Board.

Section 11. Historian. The Historian shall provide the Board of Directors with historical context for current and proposed Society policies and practices, as appropriate. The Historian also shall work with the Society's Executive Director to oversee the collection and retention of information and documents considered suitable for the organization's records from a historical standpoint.

Section 12. Immediate Past President. The Immediate Past President shall serve as Executive Committee liaison to the Committee on Standards and Ethics for a one-year term.

ARTICLE VII: Executive Director

The Board of Directors shall appoint a chief staff officer hereinafter designated the Executive Director. The Executive Director shall be responsible for the operational management of the affairs of the Society under the direction of the elected officers and Board of Directors. The Executive Director shall be bonded in an amount sufficient to safeguard the financial assets of the Society.

ARTICLE VIII: Committees

Section 1. Standing Committees: The standing committees of the Society shall be:

- (a) Executive Committee
- (b) Finance Committee
- (c) Nominating Committee
- (d) Membership Committee
- (e) Standards and Ethics Committee

and such other standing committees as the Board of Directors, by a two-thirds (2/3) vote, may establish.

Section 2. Executive Committee.

- (a) Composition. The Executive Committee shall consist of the President, who will serve as Chair, the First Vice President, the Second Vice President, the Secretary, the Treasurer, the Immediate Past President, and, when appropriate, the Secretary-Elect and the Treasurer-Elect.
- (b) Authority. During the intervals between meetings of the Board of Directors, the Executive Committee shall possess and may exercise all the powers of the Board of Directors in the

management and direction of the affairs of the Society, except with respect to authority prohibited, prescribed or limited by resolution of the Board of Directors or by the Illinois General Not-For-Profit Corporation Act.

- (c) Meetings. The Executive Committee shall meet at such time, date and place as may be called by the President, or by any three (3) members of the Executive Committee. Written notice of the meetings shall be provided at the direction of the person or persons calling the meeting at least one (1) day prior to the day of the meeting in the same manner as provided for providing notices of Board meetings pursuant to these Bylaws. A majority of the members of the Executive Committee shall constitute a quorum for meetings and, unless otherwise provided under these Bylaws or by law, the act of a majority of the members of the Executive Committee shall constitute the act of the Executive Committee.

Section 3. Finance Committee. The Finance Committee shall work with the Executive Director in the development of the Society's annual budget, and shall oversee the performance of the Society in light of that budget throughout the fiscal year. The Finance Committee also shall review the independent auditor's report, oversee the Society's investment and other financial matters, and generally provide guidance to the Board of Directors related to the fiscal well-being of the Society. A past elected officer of the Society appointed by the Executive Committee shall serve as Chair of the Committee for a single term of three (3) years, and the five other members of the Committee shall be the First Vice President, the Secretary, the Treasurer, and two members of the Society appointed by the Executive Committee, upon recommendation from the First Vice President as provided at Article VIII, Section 7 hereof; provided, however, that the Treasurer-Elect, when in office, also shall be a member of the Finance Committee.

Section 4. Nominating Committee. 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. The committee shall prepare a slate of nominees for elected officers and the rest of the Board of Directors; provided, however, that no Honorary, International, Candidate or Pre-Candidate Member shall be nominated for election to office; that no Honorary or Pre-Candidate Member shall be nominated for election to the Board of Directors; and that no Senior Member shall be nominated for election to office or to the Board of Directors unless his or her nomination is approved by the Board of Directors.

Section 5. Membership Committee. The Membership Committee shall consider all applications for Active and International membership and report its recommendations to the Board of Directors.

Section 6. Standards and Ethics Committee. The Standards and Ethics Committee shall represent the Society, under the direction of the Board of Directors, in matters relating to standards of conduct in the specialty and in matters pertaining to medical ethics and discipline which involve members of the Society.

Section 7. Committee Members and Chairs. Except as otherwise provided in these Bylaws or in the resolution establishing a committee, (a) members of each committee need not be directors of the Society; (b) the Executive Committee, upon recommendation from the First Vice President, shall appoint the members and Chairs thereof for service during the succeeding term, which shall begin at the end of the Annual Meeting of the members following such appointment; and (c) each committee member and Chair shall serve for a term of three (3) years, with a maximum of two consecutive three-year terms in each capacity; provided, however, that in extraordinary circumstances, the term of any committee member or Chair may be extended by the Executive Committee, upon recommendation from the First Vice President. Any committee member or Chair may be removed by the Executive Committee whenever in its judgment the best interests of the Society shall be served by such removal. Subject to the foregoing, each member and Chair of a committee shall continue as such until his or her successor is appointed, unless the committee shall be sooner terminated, or unless such member or Chair shall cease to qualify as a member thereof.

Section 8. Vacancies. Vacancies in the membership of any committee may be filled by the President, upon approval of the Executive Committee.

Section 9. Quorum. Unless otherwise provided in these Bylaws or the resolution of the Board of Directors designating a committee, a majority of the committee shall constitute a quorum and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of the committee. Notwithstanding the foregoing, if any members of the committee recuse themselves or otherwise are disqualified from acting on a matter solely for reasons of conflicts of interest, then the number of committee members will be reduced accordingly for purposes of calculating a quorum, and the act of a majority of the remaining members shall be the act of the committee; provided, however, that the number of members qualified to act on behalf of the committee may not be reduced to less than one-third of the entire committee and, provided further, that if the number of remaining members is less than a majority of the entire committee, then the act of such remaining members must be unanimous.

Section 10. Rules. Each committee may adopt rules for its own governance not inconsistent with the Illinois General Not For Profit Corporation Act of 1986, as amended, the Articles of Incorporation, these Bylaws or rules duly adopted by the Board of Directors.

ARTICLE IX: Councils, Workforces and the STS Research Center

Section 1. Councils. In order to enhance the Board of Directors' ability to manage the affairs of the Society, the operational activities of the Society conducted outside the auspices of the standing committees shall be divided among four Councils. Each Council shall be governed by an Operating Board and a Chair, who shall be responsible for the day-to-day application of policies established by the Board of Directors, and will submit periodic written reports to the Board. The standing Councils of the Society shall be:

- (a) Council on Meetings and Education
- (b) Council on Quality, Research and Patient Safety
- (c) Council on Health Policy and Relationships
- (d) Council on Clinical Practice and Member Engagement

provided that the Board of Directors may establish or discontinue any Council as set forth at Article IX, Section 10 of these Bylaws.

Section 2. Workforces. Each of the Councils shall include various workforces, each responsible for addressing Society activities within one or more specified areas of endeavor. The various Society workforces, and their corresponding areas of responsibility, are set forth in Appendix 1 attached hereto and made a part hereof, as amended by the Board of Directors from time to time.

Section 3. Council Operating Boards. Each Council shall be governed by an Operating Board, which shall be composed of the Council Chair, the Chair of each workforce included within the Council, at least one (1) Director-at-Large appointed by the Executive Committee, an elected officer of the Society who shall serve as an Executive Committee liaison to the Council, and any other individuals appointed thereto by the Executive Committee, upon recommendation from the First Vice President. Each Council Operating Board will be responsible to the Board of Directors.

Section 4. Council Chairs. The Council Chairs shall be appointed by the Executive Committee, upon recommendation from the First Vice President, for service during the succeeding two-year term, which shall begin at the end of the Annual Meeting of the members immediately following their appointment; provided, however, that in filling any vacancy that may arise, the Executive Committee may adjust the new Council Chair's term so as to achieve staggering among the Council Chairs. The Council Chairs shall be responsible to the Board of Directors; shall implement policy as authorized and updated by the Board of Directors; and shall be accountable to the Board of

Directors in the establishment and management of their respective annual budgets. They shall be responsible for oversight and direction of their respective Council Operating Boards and workforces, and will work with the workforce Chairs to maintain sound financial management of their respective Councils' budgets. The Council Chairs shall submit regular written reports to the Board of Directors to define the progress of their respective Councils and workforces, and shall be authorized to call and preside at meetings of their respective Operating Boards. The Council Chairs shall not be members of the Board of Directors; they shall serve for a term of two (2) years, with a maximum of two consecutive two-year terms.

Section 5. Workforce Members and Chairs. Except as otherwise provided in these Bylaws or in the resolution establishing a workforce, (a) members of each workforce need not be directors of the Society; (b) the Executive Committee, upon recommendation from the First Vice President, shall appoint the members and Chairs thereof for service during the succeeding term, which shall begin at the end of the Annual Meeting of the members following such appointment; and (c) each workforce member and Chair shall serve for a term of three (3) years, with a maximum of two consecutive three-year terms in each capacity; provided, however, that the Executive Committee may make special arrangements with third party organizations for their representation on specified workforces under terms and conditions approved by the Executive Committee; and, provided further, that in extraordinary circumstances, the term of any workforce member or Chair may be extended by the Executive Committee, upon recommendation from the First Vice President. Notwithstanding the foregoing, the members of the Workforce on the Annual Meeting shall serve for one one-year term, and one member thereof shall be appointed to serve as Chair. Any workforce member or Chair may be removed by the Executive Committee whenever in its judgment the best interests of the Society shall be served by such removal. Subject to the foregoing, each member and Chair of a workforce shall continue as such until his or her successor is appointed, unless the workforce shall be sooner terminated, or unless such member or Chair shall cease to qualify as a member thereof.

Section 6. Vacancies. Vacancies in the membership of any Council Operating Board or workforce may be filled by the President, upon approval of the Executive Committee.

Section 7. Quorum. Unless otherwise provided in these Bylaws or the resolution of the Board of Directors designating a Council or workforce, one-third (1/3) of the Council Operating Board or workforce shall constitute a quorum and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of the Council Operating Board or workforce.

Section 8. Rules. Each Council Operating Board and each workforce may adopt rules for its own governance not inconsistent with the Illinois General Not For Profit Corporation Act of 1986, as amended, the Articles of Incorporation, these Bylaws or rules duly adopted by the Board of Directors.

Section 9. Limitation on Powers. No Council Operating Board or workforce, or Chair thereof, shall have any power to act for, represent, or bind the Society in any manner unless such act or action, proposal or recommendation shall have been reported and ratified or approved by the Board of Directors of the Society at any regular or special meeting thereof.

Section 10. Establishment and Termination of Councils and Workforces. The Board of Directors, by a two-thirds (2/3) vote, may establish or discontinue any Council (or, by a majority vote, may establish or discontinue any workforce) when such action is deemed to be in the best interests of the Society, and upon such terms as the Board may deem necessary and proper.

Section 11. STS Research Center. The Society also shall maintain an STS Research Center and an associated workforce, which shall be organized and operated as set forth in Appendix 1 attached hereto and made a part hereof, as amended by the Board of Directors from time to time.

ARTICLE X: Fiscal Year, Fees and Dues

Section 1. Fiscal Year. The fiscal year of the Society shall be determined by the Board of Directors.

Section 2. Initiation Fees and Dues. The initiation fees for newly elected Active and International Members and the annual dues for Active, International, Candidate, Pre-Candidate and Associate Members shall be determined by the Board of Directors with approval by the membership.

Section 3. Assessments. Active and International Members may be subject to assessment from time to time as determined by the Board of Directors.

Section 4. Limited Exemptions. Senior and Honorary Members, as well as Active and International Members who have been granted inactive status, shall be exempt from all dues and assessments; provided, however, that these individuals' subscriptions to The Annals of Thoracic Surgery will be optional; and, provided further, that the Board of Directors may assess appropriate administrative fees payable by Active and International Members who have been granted inactive status, as well as individuals who have been granted Senior Member status by reason of early retirement pursuant to these Bylaws.

ARTICLE XI: Conduct and Discipline

Section 1. Conduct. A member of the Society shall conduct his or her relationships with patients, fellow physicians, and the public at-large in a manner consistent with his or her legal obligations and the Bylaws and policies of the Society.

Section 2. Discipline. The Society may take disciplinary action against a member for conduct inconsistent with his or her legal obligations or the Bylaws or policies of the Society. Such disciplinary action may include, without limitation, admonition, censure, probation, suspension or expulsion.

Section 3. Disciplinary Procedure.

(a) Review of Complaints/Disciplinary Action. Any question or complaint concerning the conduct or discipline of a member shall be reviewed and acted upon by the Society in accordance with procedures established by the Board of Directors.

(b) Member Cooperation. Each member of the Society shall cooperate fully with the Society in its disciplinary processes. Failure to so cooperate shall be considered conduct inconsistent with these Bylaws and the policies of the Society, and may subject a member to disciplinary sanctions as provided in this Article XI of these Bylaws and the related procedures established by the Board of Directors.

ARTICLE XII: Peer Review

Section 1. Purpose. In furtherance of the Society's objectives of improving and strengthening the standards of practice of thoracic surgery, the Society, when appropriate, shall review and evaluate surgical personnel and their procedures, equipment, and systems when requested to do so by hospitals, medical societies, governmental agencies, or similar organizations or groups.

Section 2. Member Cooperation. Each member of the Society shall cooperate fully with the Society in its peer review and evaluation activities. Failure to so cooperate shall be considered conduct inconsistent with the purposes of the Society, and may, upon recommendation of the Committee on Standards and Ethics, subject a member to disciplinary sanctions by the Board of Directors as provided in Article XI of these Bylaws.

ARTICLE XIII: Rules of Order

Any question of order not provided by these Bylaws shall be determined by parliamentary usage as contained in Robert's Rules of Order (Newly Revised).

ARTICLE XIV: Waiver of Notice

Whenever any notice whatsoever is required to be given under the provisions of the Illinois General Not For Profit Corporation Act of 1986, as amended, or under the provisions of the Articles of Incorporation or these Bylaws, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

ARTICLE XV: Indemnification

The Society shall indemnify all officers and directors of the Society to the full extent permitted by the Illinois General Not For Profit Corporation Act of 1986, as amended, and shall be entitled to purchase insurance for such indemnification of officers and directors to the full extent as may be determined from time to time by the Board of Directors of the Society.

ARTICLE XVI: Amendments

The Bylaws may be altered, amended or repealed and new Bylaws may be adopted by a two-thirds (2/3) vote of the members in attendance having voting rights, at any regular or special meeting of the membership, provided that at least thirty (30) days written notice is given of the substance of the proposal to alter, and or repeal or to adopt new Bylaws at such meeting.

APPENDIX 1

Amended: June 28, 2017 (by the STS Board of Directors)

A. Council on Meetings and Education

1. *Workforce on Clinical Education*
Areas of responsibility will include education and educational resources for practicing thoracic surgeons, including oversight of the Society's Accreditation Council for Continuing Medical Education provider status.
2. *Workforce on Thoracic Surgery Resident Issues*
Areas of responsibility will include generating interest in thoracic surgery among medical students and general surgery residents, developing resources for thoracic surgery residents, including educational programming, mentoring initiatives, help with identifying employment opportunities.
3. *Workforce on the Annual Meeting*
Areas of responsibility will include the Annual Meeting program, the Tech-Con program, and other educational programs presented in conjunction with the Annual Meeting.
4. *Workforce on New Technology**
Areas of responsibility will include the identification and assessment of new technologies introduced into the field of thoracic surgery, liaison with other STS Workforces in their efforts to address those issues, and recommending strategies for addressing those issues pertaining to new technology that are not within the scope of other STS Workforces' responsibilities.
5. *Workforce on E-Learning and Educational Innovation*
Areas of responsibility will include the development and maintenance of an electronic learning system for thoracic surgery and the exploration of innovative educational methods and associated technologies.
6. *Workforce on International Meetings*
Areas of responsibility will include the identification of opportunities for the conduct of STS educational meetings to be held outside the United States and provided unilaterally or in conjunction with other organizations, and the development of associated programs.

B. Council on Quality, Research and Patient Safety

1. *Workforce on Evidence Based Surgery*
Areas of responsibility will include the development of patient management protocols and guidelines, and enhancement of the dissemination and implementation of STS practice guidelines.
2. *Workforce on National Databases*
Areas of responsibility will include the development and enhancement of the adult cardiac, general thoracic, and congenital heart surgery databases.
3. *Workforce on Patient Safety*
Areas of responsibility will include promoting safe practice in thoracic surgery by providing resources for thoracic surgeons to learn and exercise the principles of

safe practice, error management and error prevention; facilitating a culture of safety within the specialty of thoracic surgery as a whole and the Society in particular; and providing patient-centered information.

4. *Workforce on Research Development*
Areas of responsibility will include general oversight of the STS Research Center, including those federally funded studies and other research grants made to the Society under its auspices; promotion of scientific areas of research suitable for the Society; education and guidance for new investigators, including ethical standards for research; and development, support and facilitation of clinical trials in thoracic surgery.

C. Council on Health Policy and Relationships

1. *Workforce on Health Policy, Reform and Advocacy**
Areas of responsibility will include developing responses to industry, other specialties and the government on issues that affect the practice of medicine/thoracic surgery, maintaining interaction with other organizations that will provide coalition support or information that will help the Society maintain its position of strength in the area of health policy, and related media interaction activities.
2. *Workforce on Coding and Reimbursement*
Areas of responsibility will include CPT coding, RUC recommendations, and related membership education activities.
3. *Workforce on Media Relations and Communications*
Areas of responsibility will include identifying and responding, as appropriate, to thoracic surgery matters of interest or importance to the media and the public; recommending strategies for STS relationships and interactions with those groups; identifying and preparing STS members for media interaction; and coordinating proactive efforts to position the specialty and its issues positively with the media and the public.

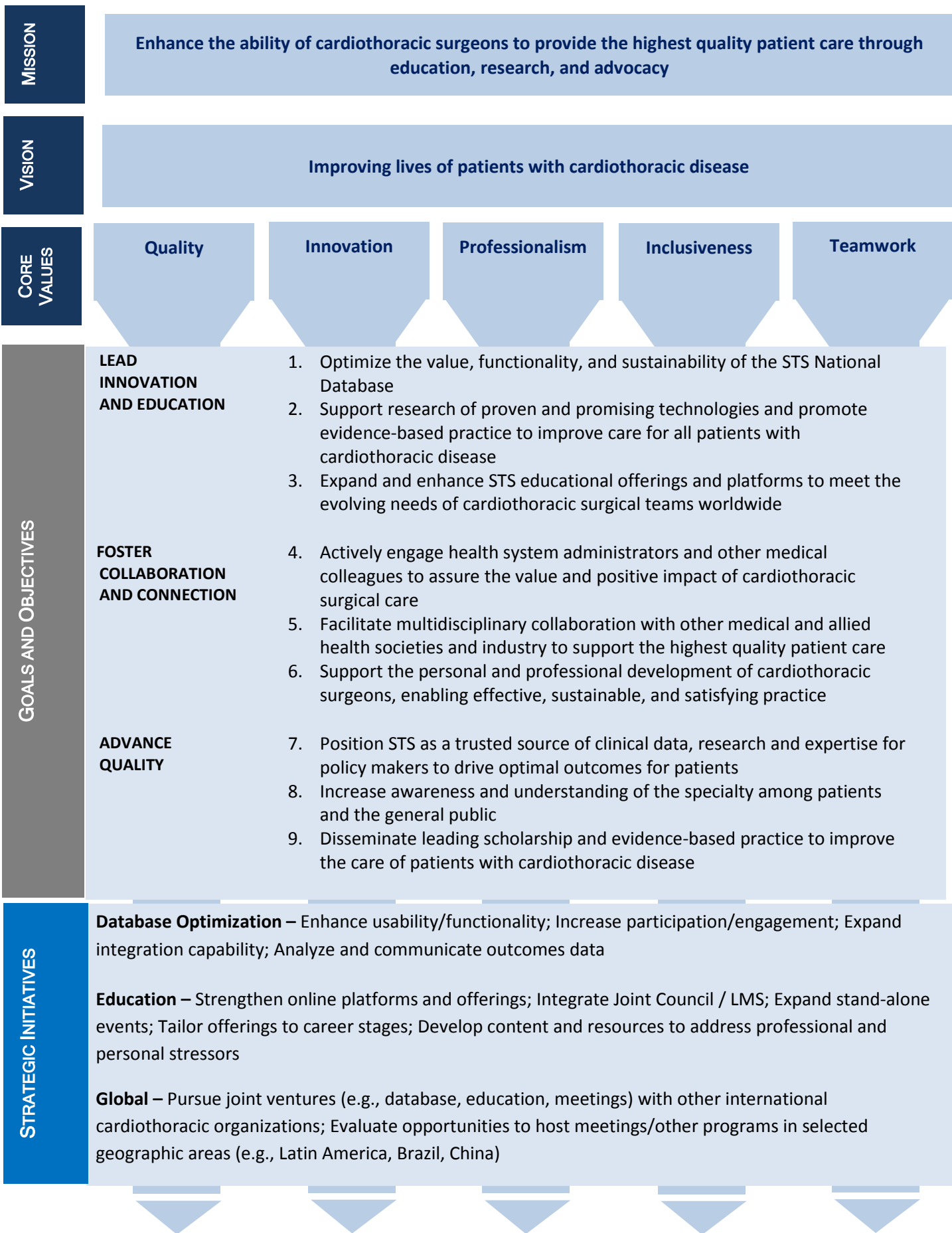
D. Council on Clinical Practice and Member Engagement

1. *Workforce on Practice Management*
Areas of responsibility will include practice management issues, industry relations and medico-legal issues.
2. *Workforce on Congenital Heart Surgery*
Areas of responsibility will include the identification and assessment of issues that are of unique concern to congenital heart surgeons, liaison with other STS Workforces in their efforts to address those issues, and recommending strategies for addressing those issues of unique concern to congenital heart surgeons that are not within the scope of other STS Workforces' responsibilities.
3. *Workforce on General Thoracic Surgery*
Areas of responsibility will include the identification and assessment of issues that are of unique concern to general thoracic surgeons, liaison with other STS Workforces in their efforts to address those issues, and recommending strategies for addressing those issues of unique concern to general thoracic surgeons that are not within the scope of other STS Workforces' responsibilities.

4. *Workforce on Surgical Treatment of End-stage Cardiopulmonary Disease*
Areas of responsibility will include the identification and assessment of issues that are of unique concern to surgeons in the field of cardiac or pulmonary mechanical support, transplantation or other surgery for end-stage cardiopulmonary disease, liaison with other STS Workforces in their efforts to address those issues, and recommending strategies for addressing those issues of unique concern to those surgeons that are not within the scope of other STS Workforces' responsibilities.
5. *Workforce on Adult Cardiac and Vascular Surgery*
Areas of responsibility will include the identification and assessment of issues that are of unique concern to adult cardiac surgeons, liaison with other STS Workforces in their efforts to address those issues, and recommending strategies for addressing those issues of unique concern to adult cardiac surgeons that are not within the scope of other STS Workforces' responsibilities.
6. *Workforce on Associate Membership*
Areas of responsibility will include the identification and assessment of benefits for existing and potential STS Associate Members, the creation of task forces and other mechanisms for interaction among different populations of non-physician allied health care professionals who support and work directly with thoracic surgeons, and promoting the involvement of STS Associate Members in the governance and activities of the Society.
7. *Workforce on Critical Care*
Areas of responsibility will include the identification and assessment of issues that are of unique concern to cardiothoracic surgeons who perform critical care services, liaison with other STS Workforces in their efforts to address those issues, and recommending strategies for addressing those issues of unique concern to cardiothoracic surgeons who perform critical care services that are not within the scope of other STS Workforces' responsibilities.
8. *Workforce on Surgical Treatment of Adults with Congenital Heart Disease*
Areas of responsibility will include the identification and assessment of issues that are of unique concern to surgeons who treat adults with congenital heart disease, liaison with other STS Workforces in their efforts to address those issues, and recommending strategies for addressing those issues of unique concern to those surgeons that are not within the scope of other STS Workforces' responsibilities.
9. *Workforce on Career Development*
Areas of responsibility will include developing resources for cardiothoracic surgeons to assist them during the first 7 years of practice, including educational programming, mentoring initiatives, and resources that will be of value both in the transition from residency to employment or private practice and in early practice development.

*Joint STS/AATS Activity

TAB 3



Strategic Initiative

Date	April 9, 2018
Initiative	Global
Staff Leads	Grahame Rush; Rob Wynbrandt

Objectives Impacted:

List the top 3 objectives that this initiative is designed to impact.

- **(3) Expand and enhance STS educational offerings and platforms to meet the evolving needs of cardiothoracic surgical teams worldwide.**
- **(1) Optimize the value, functionality, and sustainability of the STS National Database.**
- **(9) Disseminate leading scholarship and evidence-based practice to improve the care of patients with cardiothoracic disease.**

Budget Summary:

Each major initiative should have initial funding for two to three years, at which point the progress is reviewed and assessed prior to additional funding allocations.

Current FY	FY 2017	FY 2018
\$	\$	\$

Key Programs and Milestones:

Programs refer to thematic areas of work. For example, under the “Database Optimization” initiative, a program could be titled “Enhance database functionality” and “Increase user participation” as indicated on the strategy map *Milestones* are significant events or points in a program of work that are associated with progress towards the completion of the program. Milestones should be measurable and observable, but typically have no duration (e.g., “a point in time”). Again, using the database as an example, straightforward milestone examples would be “Proposals due from DCRI,” “Discuss proposed scope of changes with Board,” and “Final agreement executed.”

Programs and Milestones	Quarter/Year	April 2018 Status Update
Program 1 – Jointly Participate With EACTS in 2016 CSTCVS Annual Meeting		
• Establish precise nature of proposed STS/EACTS participation in meeting	Q2-Q3, 2016	Completed; May 2016
• Formalize details of STS/EACTS participation	Q2-Q3, 2016	Completed; May-September 2016
• Select STS representatives to attend meeting and make presentations	Q2, 2016	Completed; June 2016
• Participate in 2016 CSTCVS Annual Meeting	Q4, 2016	Completed; October 2016
• Evaluate participation in 2016 CSTCVS Annual Meeting	Q4, 2016	Completed; January 2017 (Was successfully repeated in expanded form at 2017 CSTCVS Annual Meeting in Hangzhou, China; CSTCVS has invited expanded STS/EACTS participation in its 2018 meeting; a meeting will be held in San Diego in conjunction with the 2018 AATS Annual Meeting to discuss potentially presenting an STS/EACTS new technology session at the 2018 CSTCVS Annual Meeting)
Program 2 –Participate in/Coordinate an Educational Program in Asia or Central/South America (Potentially in Collaboration With EACTS)		
• Select country for hosting program	Q2-Q3, 2016	Completed; May 2016
• Formalize STS/EACTS role and (presumed) role of local organization(s)	Q3-Q4, 2016	Completed; April 2017
• Select STS representatives to help organize program/make presentations	Q3-Q4, 2016	Completed; July 2016
• Arrange and implement meeting	Q3, 2016 – Q3, 2017	Completed; September 2017
• Evaluate meeting	Q4, 2017	Meeting was judged to be a success and the course is being repeated in Cartagena during the fall of 2018
Program 3 – STS National Database/EACTS Database Definitions Harmonization (related to the “Database Optimization” Strategic Initiative, Program 4 – “Increase International Database Collaboration,” Milestone 2 – “Harmonize subset of data definitions with existing international databases”)		
• Develop a timeline for harmonizing a subset(s) of STS ACSD definitions with EACTS definitions	Q4, 2016	Related meeting with EACTS occurred in conjunction with the 2018 STS Annual Meeting
• Agree upon subset(s) of definitions to be harmonized	Q1, 2017	Related meeting with EACTS occurred in conjunction with the 2018 STS Annual Meeting
• Implement harmonized definitions in STS ACSD	Q2, 2020	To occur in future upgrades
Program 4 – Develop Clinical Practice Guideline/Expert Consensus Statement in Relation to Which EACTS is a Named Party		

<ul style="list-style-type: none"> • Agree on an administrative structure for overseeing guideline-related documents involving EACTS; determine other organizations to be included in initiative 	Q2, 2017	Will be considered after the new STS/AATS collaboration on clinical practice document development has been given a chance to succeed
<ul style="list-style-type: none"> • Establish/agree upon methodology to be used in creating guideline/expert consensus statement 	Q2, 2017	Will be considered after the new STS/AATS collaboration on clinical practice document development has been given a chance to succeed
<ul style="list-style-type: none"> • Select a guideline/expert consensus statement topic to pursue via a multi-society task force; appoint multi-society task force 	Q3, 2017	Will be considered after the new STS/AATS collaboration on clinical practice document development has been given a chance to succeed
<ul style="list-style-type: none"> • Conduct guideline/expert consensus statement development process 	Q1-Q3, 2018	Delayed; TBD
<ul style="list-style-type: none"> • Jointly publish/disseminate clinical practice guideline/expert consensus statement 	Q4, 2018	Delayed; TBD

Strategic Initiative

Date	April 9, 2018
Initiative	Education--Strengthen online platforms and offerings; Integrate Joint Council / LMS; Expand stand-alone events; Tailor offerings to career stages; Develop content and resources to address professional and personal stressors
Staff Leads	Damon Marquis + Natalie Boden

Objectives Impacted:

List the top 3 objectives that this initiative is designed to impact.

- Primary – (3) Expand and enhance STS educational offerings and platforms to meet the evolving needs of cardiothoracic surgical teams worldwide
- Secondary – (5) Facilitate multidisciplinary collaboration with other medical and allied health societies and industry to support the highest quality patient care
- Tertiary – (6) Support the personal and professional development of cardiothoracic surgeons, enabling effective, sustainable, and satisfying practice

Key Programs and Milestones:

Programs refer to thematic areas of work. For example, under the “Database Optimization” initiative, a program could be titled “Enhance database functionality” and “Increase user participation” as indicated on the strategy map. *Milestones* are significant events or points in a program of work that are associated with progress towards the completion of the program. Milestones should be measurable and observable, but typically have no duration (e.g., “a point in time”). Again, using the database as an example, straightforward milestone examples would be “Proposals due from DCRI,” “Discuss proposed scope of changes with Board,” and “Final agreement executed.”

Programs and Milestones	Quarter/Year	April 2018 Status Update
Program 1 – Strengthening and Expanding Online Offerings		
• Milestone 1 – Disseminate TQI: Readmissions After CABG Webinar (#1)	Q2 2016	Completed May 2016
• Milestone 2 – Disseminate Webinar with Fly-In Didactics to Correspond with Spring Fly-In (#2)	Q2 2016	Completed two - May 2016 and October 2016
• Milestone 3 – Disseminate Webinar Providing Adult Cardiac Surgery Database Audit Instructions (#3)	Q2 2016	Completed June 2016
• Milestone 4 – Disseminate Webinar Providing General Thoracic Surgery Database Audit Instructions (#4)	Q3 2016	Completed August 2016
• Milestone 5 – Disseminate Webinar Providing Instructions to New General Thoracic Surgery Database Managers (#5)	Q3 2016	Completed September 2016
• Milestone 6 – Disseminate Patient Safety Modules (9 total)	Q4 2016	Completed December 2017
• Milestone 7 – Disseminate STS Public Reporting Online Webinar (#6)	Q4 2016	Completed December 2016
• Milestone 8 – Disseminate Webinar Providing Instructions to New Congenital Heart Surgery Database Managers (#7)	Q4 2016	Completed December 2016
• Milestone 9 – Disseminate at Least Four Webinars in 2017 (topics TBD)	Q4 2017	11 completed by December 2017
• Milestone 10 – Add Webinars to LMS so that Certificates of Participation Can Be Offered and Evaluations Received	Q2 2017	Completed February 2017
Program 2 – Integrate Joint Council / LMS		
• Milestone 1 – Identify Key Functions of the Joint Council that STS Intends to Continue	Q2 2017	Completed April 2017 (Jeopardy, TSC, Pearson’s textbook update, and development of the Adult Cardiac and Congenital Cardiac text book)
• Milestone 2 – Complete General Thoracic E-Book	Q1 2018	In progress
• Milestone 3 – Complete Adult Cardiac/Congenital Heart E-Book	Q4 2018	Adult/Congenital Cardiac Textbook, In Progress
• Milestone 4 – Work with Astute to Complete the Integration (Merging) of the Joint Council LMS with STS LMS	Q4 2017	Projected Q42018
Program 3 – Expand Standalone Events		
• Milestone 1 – Co-Provide Annual FACTS-Care Conference	Q3 2016	Completed September 2016
• Milestone 2 – Co-Sponsor Annual CT Surgery in the Future Course with ACS	Q4 2016	Completed October 2016
• Milestone 3 – Provide TEVAR Course	Q4 2016	Completed December 2016
• Milestone 4 – Co-Sponsor Annual ECMO Course with ELSO	Q2 2017	Completed March 2017
• Milestone 5 – Provide Robotics Course	Q2 2017	Completed April 2017

<ul style="list-style-type: none"> Milestone 6 – Co-Sponsor Multidisciplinary Thoracic Cancers Symposium with ASTRO and ASCO 	Q2 2017	Completed March 2017
<ul style="list-style-type: none"> Milestone 7 – Work with EACTS on a Program in Latin America 	Q3 2017	Completed September 2017
Program 4 – Develop Content to Address Career Stages and Personal Stressors		
<ul style="list-style-type: none"> Milestone 1 – Disseminate Roundtable Video on Transitioning from Private Practice to Hospital Employment 	Q1 2016	Completed March 2016
<ul style="list-style-type: none"> Milestone 2 – Disseminate Slides from 2016 Annual Meeting Residents Symposium on “Finding Your First Job” to All STS Members 	Q1-Q2 2016	Completed March 2016
<ul style="list-style-type: none"> Milestone 3 – Convene First Conference Call with New Workforce on Career Development 	Q2 2016	Completed May 2016
<ul style="list-style-type: none"> Milestone 4 – Identify Relevant Content for Educational Interventions with Workforce on Career Development and Workforce on Practice Management 	Q1 2017	Completed February 2017 Now planning online mentorship/mentee opportunities
<ul style="list-style-type: none"> Milestone 5 – Provide Tailored Content on a Periodic Basis in <i>STS News</i> and <i>Candidate Connection</i> 	Q3-Q4 2016	Completed July 2016, September 2016, October 2016, and December 2016
<ul style="list-style-type: none"> Milestone 6 – Provide Tailored Content at the 2017 STS Annual Meeting 	Q1 2017	Completed January 2017

Strategic Initiative Template

Date	April 9, 2018
Initiative	Database Optimization– Enhance usability/functionality; Increase participation/engagement; Expand integration capability; Analyze and communicate outcomes data
Staff Leads	Bill Seward, Donna McDonald, and Robert Habib

Objectives Impacted:

List the top objectives that this initiative is designed to impact.

1. (1) Optimize the value, functionality, and sustainability of the STS National Database
2. (2) Support research of proven and promising technologies and promote evidence-based practice to improve care for all patients with cardiothoracic disease
3. (7) Position STS as a trusted source of clinical data, research and expertise for policy makers to drive optimal outcomes for patients
4. (4) Actively engage health system administrators and other medical colleagues to assure the value and positive impact of cardiothoracic surgical care
5. (8) Increase awareness and understanding of the specialty among patients and the general public

Key Programs and Milestones:

Programs refer to thematic areas of work. For example, under the “Database Optimization” initiative, a program could be titled “Enhance database functionality” and “Increase user participation” as indicated on the strategy map. *Milestones* are significant events or points in a program of work that are associated with progress towards the completion of the program. Milestones should be measurable and observable, but typically have no duration (e.g., “a point in time”). Again, using the database as an example, straightforward milestone examples would be “Proposals due from DCRI,” “Discuss proposed scope of changes with Board,” and “Final agreement executed.”

Programs and Milestones	Quarter/Year	April 2018 Status Update
Program 1 Enhance Database usability/functionality		
<ul style="list-style-type: none"> Milestone 1 Consummate 2016-2018 Data Warehousing and Analytic Center Agreement with DCRI 	Q2 2016	Completed 10/2016
<ul style="list-style-type: none"> Milestone 2 Initiate Continuous Data Harvest 	ACSD Q2 2017 CHSD Q3 2017 GTSD Q3 2017	Completed 1/2017 Completed 10/2017 Completed 10/2017
<ul style="list-style-type: none"> Milestone 3 Develop Dashboard reporting for all 3 Database components 	ACSD Q4 2016 CHSD Q2 2017 GTSD Q2 2017	Completed 10/2017 Deferred; TBD Deferred; TBD
<ul style="list-style-type: none"> Milestone 4 Implement Dashboard Reporting 	ACSD Q4 2017 CHSD Q3 2018 GTSD Q3 2018	Completed Q1/2018 Deferred;TBD Deferred;TBD
<ul style="list-style-type: none"> Milestone 5 Develop a Device Surveillance program Within STS ND 	ACSD Q1 2018	Projected Q3/2018 (Discussions underway)
Program 2 Expand Database integration capability		
<ul style="list-style-type: none"> Milestone 1 Begin SNOMED coding of subset of ACSD elements 	Q3 2016	Delayed, Staff suggest Informatics Task Force evaluate whether to proceed w/ milestone by Q3/2018
<ul style="list-style-type: none"> Milestone 2 Formalize agreement with informatics consultant 	Q3 2017	Delayed, Staff suggest Informatics Task Force evaluate whether to proceed w/ milestone by Q3/2018
<ul style="list-style-type: none"> Milestone 3 Implement a program to allow STS ND participants to extract subsets of data from EHRs 	ACSD Q1 2017 GTSD Q1 2018 CHSD Q1 2019	Completed 7/2017 Projected Q3, 2018 On track
Program 3 Analyze and communicate outcomes data		
Milestone 1 Develop, Obtain STS Board Approval, and Implement Participant User File Research Program	Q4 2016	Completed 10/2016

<ul style="list-style-type: none"> Milestone 2 Develop and Obtain STS Board Approval of Research Center Business Plan 	Q4 2016	Completed 11/2016
<ul style="list-style-type: none"> Milestone 3 Develop and Implement a plan to obtain, incorporate, and utilize long-term mortality follow-up (National Death Index) for quality initiatives and outcomes research 	Q2 2017	Projected Q3 2018
<ul style="list-style-type: none"> Milestone 4 Develop a Program Offering Quality Improvement Resources for Database Participants 	Q1 2017	Completed draft proposal 1/2017, under review

<ul style="list-style-type: none"> Milestone 5 Enhance scientific output based on the STS ND 	Q1 2017 Q1 2018 Q1 2019 Q1 2020	Completed 3/2017 On track
<ul style="list-style-type: none"> Milestone 6 Enhance STS Research Center role in external research funding (federal, industry, and institutional) based on STS ND 	Q1 2017 Q1 2018 Q1 2019 Q1 2020	Completed, PCORI grant submitted (STS RC primary) 12/2016 and revised STS ND fees for external data requests 11/2016 Completed, Schwann/Habib PCORI Grant Resubmitted (Feb., 2018) Jacobs Cost/Quality NIH R01 submitted (Feb., 2018)

Program 4 Demonstrate value and increase participation/engagement

<ul style="list-style-type: none"> Milestone 1 Identify STS measures for MIPS program and APM proposal 	Q4 2016	Completed 1/2017
<ul style="list-style-type: none"> Milestone 2 Create linkages with 3rd party payers to assess cost and quality 	Q2 2017	Projected Q4 2018 (multiple initiatives being pursued including HCA, Avant Garde, CMS)
<ul style="list-style-type: none"> Milestone 3 Develop an outreach program to hospital administrators/execs. 	Q1 2017	Projected Q3 2018 (Relationship w/ AHA established)

<ul style="list-style-type: none"> Milestone 4 Raise awareness of public reporting benefit (USNWR, Payers) 	Q1 2016 Q1 2017 Q1 2018	Completed 1/2016 Completed 1/2017 Completed 1/2018
<ul style="list-style-type: none"> Milestone 5 Maintain status as a Qualified Clinical Data Registry 	Q1 2016 Q1 2017 Q1 2018	Completed 2/2016 Completed 4/2017 Completed 12/2017
Program 5 Increase International Database Collaboration		
<ul style="list-style-type: none"> Milestone 1 Promote and increase International STS National Database Participation 	Q1 2016 Q1 2017 Q1 2018	Completed, 43% growth (Jan. 2015-2016) Completed, 90% growth (Jan. 2016-2017) Completed, 16% growth (Jan. 2017-2018)
<ul style="list-style-type: none"> Milestone 2 Initiate/maintain harmonization of data field definitions with existing International Databases 	ACSD Q3 2016 GTSD Q2 2017 CHSD Q2 2018	Delayed, TBD Projected Q1 2018 On Track
<ul style="list-style-type: none"> Milestone 3 Explore collaborative research opportunities with ESTS and EACTS 	Q1 2017	Projected, Q3 2018

TAB 4

THE SOCIETY OF THORACIC SURGEONS

CODE OF ETHICS

Preamble

The medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. Likewise, The Society of Thoracic Surgeons (STS) recognizes that its members have certain ethical obligations to their patients, profession, and each other, as well as to the community and world at large. As a member of the medical profession, an STS member must recognize and respect these obligations.

The STS Code of Ethics sets standards and provides guidance for STS members in their professional activities, both within the organization and in their provision of health care generally.

The STS Code of Ethics sets forth the governing principles, values, and beliefs shared by all members of STS, as well as the ethical behavior and standards of conduct expected in conformance with these principles and beliefs.

1. Relationship with Patients

1.1 When caring for patients, members must hold the patient's welfare paramount.

1.2 In all dealings with patients, members should act fairly, in good faith, honestly, and with compassion and respect for patients' dignity and rights.

1.3 Members should practice medicine within the scope of their training, experience, and license, should not accept lay interference in professional medical matters, should seek appropriate consultation for problems that are beyond their competence, and should provide appropriate supervision for trainees.

1.4 Members should use their best efforts to protect patients from harm by recommending and providing care that maximizes anticipated benefits and minimizes potential harms.

1.5 Members must make pertinent medical information available to patients to enable them to make informed choices about their health care, and should respect patients' right to make final decisions about their own health care.

1.6 Members must maintain the confidentiality of patients' health information within the constraints of law, and should provide medical information to the patient's family and the public only with the consent of the patient.

1.7 Members must not discriminate on the basis of gender, race, color, national origin, sexual orientation, or any other basis that would constitute medically unjustified discrimination.

1.8 Members should responsibly steward the use of health care resources under their supervision without compromising patient care and welfare.

1.9 In advertising and other publications directed toward patients and the public, members must refrain from making false, deceptive, or misleading statements (see the following STS policies: Advertising and Publicity Policy and Guidelines for Ethical Relations with Communications Media).

2. Relationship with Other Professionals

2.1 Members should uphold the standards of professionalism, be honest in all professional interactions, and report to the appropriate legal, regulatory or peer-based entity health care professionals whose competence or professional conduct adversely affects or could affect the health or welfare of patients.

2.2 Members should act fairly, in good faith, honestly, and respectfully in all their dealings with ancillary staff and other health care professionals.

2.3 Members experiencing substance abuse or physical or emotional/psychological impairment should seek appropriate assistance and limit their practices to ensure the impairment does not adversely affect the health or welfare of patients.

2.4 Members who observe substance abuse or physical or emotional/psychological impairment in a colleague should counsel the colleague, and if the abuse or impairment persists, should report it to appropriate authorities.

2.5 Members should cooperate in legal, regulatory or peer-review processes in connection with alleged incompetence or unprofessional conduct, whether their own or that of other members.

3. Relationship with STS

3.1 Members serving on behalf of STS or in any other professional capacity shall endeavor to base their opinions and decisions on objective data, both published and from personal experience, and avoid bias.

3.2 Members should honor their fiduciary, legal, and professional obligations in serving their professional organizations.

3.3 Members should work toward the attainment of the mission and objectives of STS.

4. Relationship to the Community and to Government

4.1 Members should comply with state and federal laws and regulations governing the practice of medicine, but should work to modify laws and regulations that are unjust or harm patients.

4.2 Members should report patient abuse, neglect or harassment to the appropriate authorities.

4.3 Members should be involved in the community and should support policies and changes that are in the best interests of patients and health care generally.

5. Responsibility for Life-Long Learning

5.1 Members should be actively involved in continuing medical education activities to ensure the continual development of their skills, training, and expertise.

5.2 Members should maintain their professional qualifications through continuous study consistent with evidence-based scientific practice.

6. Responsibilities as Scientists

6.1 When conducting research, members should maintain the highest standards of honesty and integrity, always employing accepted scientific methods.

6.2 Members involved in the conduct of research should comply with all institutional and governmental regulations pertaining to such research, as well as adhere to the ethical practices required by the Nuremberg Code and the Declaration of Helsinki.

6.3 When conducting a clinical investigation, members must demonstrate the same concern for the welfare, safety, and comfort of human subjects as is required of a physician when caring for a patient who is not part of an investigation.

6.4 Members should expose scientific fraud and other forms of professional misconduct whenever they observe it.

7. Expert Witness Testimony

7.1 Expert witness testimony is considered the practice of medicine and is subject to peer review. Members whose testimony is false, deceptive, misleading, or without medical foundation may be subject to disciplinary action by STS. Standards for qualifications of those who wish to serve as expert witnesses and behavioral guidelines when providing expert testimony can be found in the STS Statement on the Physician Acting as an Expert Witness.

7.2 Members must be thoroughly familiar with and abide by the STS Statement on the Physician Acting as an Expert Witness.

8. Conflicts of Interest

8.1 Members should strive to identify and resolve potential and actual conflicts of interests in their professional practices and service to STS. If a conflict cannot be adequately resolved, then the member should withdraw from the relationship.

8.2 Members should be aware of institutional conflicts of interest in their relations with STS and in all other professional relationships.

8.3 Members should inform a patient of any conflicts of interest arising from their financial relationships or investments in companies that manufacture or supply medications, devices, or therapies to be used for the patient. Any such conflict of interest must be resolved in the best interest of the patient.

Conclusion

Adherence to the STS Code of Ethics is a condition of STS membership. Members may be subject to admonition, censure, probation for a stated period of time, suspension for a stated period of time, or expulsion for violating the Code of Ethics, in proceedings governed by the STS Bylaws and associated policies. Any judicial review of an STS disciplinary action adversely affecting membership status shall be governed exclusively in accordance with the laws of the state of Illinois. This Code of Ethics may be revised or replaced periodically, and it is the obligation of members to be informed of and adhere to these changes.

Amended by the STS Board of Directors: October 11, 2009

PROCEDURAL GUIDELINES FOR HANDLING ETHICS COMPLAINTS AGAINST STS MEMBERS

1. All complaints alleging unethical behavior on the part of members of The Society of Thoracic Surgeons (hereinafter “STS” or “Society”) are addressed to the STS Standards and Ethics Committee (hereinafter the “Committee”). (STS Bylaws Article XI.)
2. Any physician or the Committee may initiate an ethics complaint. It is the complainant's obligation to provide supporting records and other evidence. Any such materials must be de-identified and otherwise submitted in accordance with the applicable privacy regulations issued under the Health Insurance Portability and Accountability Act of 1996. A complaint relating to expert witness testimony may be submitted only after final resolution of litigation in which an STS member has provided expert testimony (in written documents, depositions or trial transcripts) that the complainant deems unethical (as described in the Society’s Statement on the Physician Acting as an Expert Witness). Once submitted, a complaint cannot be withdrawn unilaterally by the complainant in view of the Society’s independent interest in the ethical conduct of its members.
3. The initial complaint, with supporting documentation, will first be reviewed by the Chair of the Committee and the STS Executive Director, in consultation with STS legal counsel. Reasonable efforts will be made to complete the initial review within thirty (30) days after the Society’s receipt of the complaint. The initial review will determine only whether the complaint is consistent with these guidelines and any other applicable STS Bylaws, policies, or guidelines, and whether the alleged misconduct, if proven, reasonably could be deemed to constitute a breach of the accused member’s legal obligations, the Bylaws of the Society or the policies of the Society (including the STS Code of Ethics and the STS Statement on the Physician Acting as an Expert Witness). If these conditions are met, the complainant and the member accused of unethical behavior (the “respondent”) will be notified by the Chair of the Committee that the complaint warrants further investigation; if they are not met, only the complainant will be notified that the complaint does not warrant further review. A decision that the complaint does not warrant further review will be final. If the complaint warrants further review, the complainant and respondent will also be advised that the disciplinary proceedings are confidential until the final disposition of the complaint, at which time Section 13 of these guidelines will govern any publication of the decision if disciplinary action is taken. In addition, a copy of these guidelines and other relevant documents (*e.g.*, Article XI of the STS Bylaws and/or the STS Statement on the Physician Acting as an Expert Witness) will be sent to the respondent.
4. The respondent will be asked to reply in writing within thirty (30) days after receiving notification of a complaint, unless extenuating circumstances warrant a delay (the duration of which delay, if any, will be determined at the sole discretion of the Chair of the Committee). The Chair of the Committee will appoint a “Preliminary Review Panel” (hereinafter referred to as “the Panel”) composed of three members of the Society, at least one of whom is familiar with the technical aspects of the complaint. If the complaint pertains to expert testimony, one of the three Panel members will be the Chair of the Expert Witness Subcommittee. Any member of the Panel who is found to be in direct economic competition with the respondent or has any other

conflict of interest will be replaced by a member of the Society who does not have a conflict of interest. Members of the Panel, in consultation with the Chair of the Committee and STS legal counsel, will convene within a reasonable period of time, not to exceed forty-five (45) days, after they have received the complaint and the reply, if any. They will determine by majority vote whether the documents demonstrate that the respondent breached his or her legal obligations, the Bylaws of the Society or the policies of the Society and, if so, what disciplinary action (from the options listed in Section 9), if any, should be imposed. If the Panel finds that there was no such breach, then such decision will be final. If the Panel finds that there was such a breach, then the Panel will send its report, including a summary of its findings and its recommendations, to the Chair of the Committee, who will (a) forward a copy of the report to both the complainant and respondent and (b) notify the respondent that s/he has the right to request a hearing before the full Committee within thirty (30) days after receipt of the notice. A copy of the procedures to be followed (“Procedural Guidelines for Handling Ethics Complaints Against STS Members”) will be included with the notice.

5. If the respondent does not request a hearing in a timely manner, s/he will be deemed to have waived the right to a hearing, and the Committee will make its decision based on the evidence before it and the findings and recommendations of the Preliminary Review Panel.

6. If a timely request for hearing is submitted, the Committee will send the complainant and the respondent one or more additional notices stating the place, date, and time of the hearing. Ethics hearings will generally be held only twice a year, around the time and location of the STS and American Association for Thoracic Surgery Annual Meetings, when the full Committee normally meets. In no event will the hearing be scheduled less than thirty (30) days following the date of the notice of the results of the preliminary review. The full Committee will be sent all pertinent documents prior to the hearing. Any additional documents related to the complaint, as well as a list of witnesses (if any) must be submitted to STS no later than ten (10) business days in advance of the hearing. The members of the Panel also will be asked to attend the hearing and participate in the Committee’s deliberations. The Chair of the Committee will chair the hearing. Members of the Committee, including the Chair, who are in direct economic competition with the respondent or have any other conflict of interest, may not be present or have any other involvement in the hearing and the subsequent executive session. The hearing shall be closed to all except the Committee members, members of the Panel who are not Committee members, the complainant, the respondent, witnesses, legal counsel, and STS staff. Formal legal rules of evidence will not apply, but the Chair may exclude testimony that is not relevant. The complainant and the respondent will be advised that no new matters, evidence or witnesses may be introduced in the hearing if they have not been previously disclosed in the documents supporting and denying the charges.

7. At the hearing, a representative of the Panel may be asked to make a presentation. Legal counsel will be permitted for both sides and may ask questions of the physicians under examination, but will not be permitted to make presentations. The complainant and the respondent may each make a presentation, not to exceed twenty (20) minutes, in the presence of the other party as well as the Committee as a whole. Questions by Committee members, attorneys, and the opposing side will be permitted. Witnesses will be permitted, but a time limit of thirty (30) minutes for each side to present its case and to respond to questions will be absolute, excepting that the Chair may allot additional time for members of the Committee to ask

questions. At the Chair's discretion, witnesses may be excluded from the hearing except when they are called to testify.

8. Professional recording of the hearing will be the responsibility of STS. The complainant and the respondent will be responsible for their own expenses, including those of legal counsel. A copy of the transcript will be provided to the complainant and the respondent upon request. If any party fails to appear at a duly scheduled hearing for any reason, the Committee may still proceed, and shall consider the previously submitted material furnished by the absent party. The Chair of the Committee may reschedule the hearing date if, in the sole judgment of the Chair of the Committee, sufficient cause is shown.

9. After the hearing, the members of the Committee, with the Panel, STS legal counsel, and STS staff in attendance, will go into executive session, which will not be recorded. The facts and issues will be discussed, including but not limited to the charges of the complainant, the reply of the respondent, and the findings and recommendations of the Panel, and a decision will then be made by majority vote of only the members of the Committee, under sealed ballot, as to whether the respondent has breached his or her legal obligations, the Bylaws of the Society or the policies of the Society. If no such breach is found, the Committee's decision will be to dismiss the complaint. If such a breach is found, the Committee may or may not decide to take disciplinary action against the respondent; disciplinary options available to the Committee are: a) admonition, b) censure, c) probation, d) suspension, or e) expulsion, all as defined in STS policy. This second vote shall also be taken under sealed ballot.

10. Whether or not a hearing takes place, the Committee's decision must be based on a reasonable belief that the action is warranted by the facts presented.

11. No disciplinary action of the Committee will be deemed final until reviewed for procedural fairness and approved by the STS Executive Committee. Within thirty (30) days after the date of any such review, the Committee's written findings and decision, with any modifications by the Executive Committee included, will be sent to both sides of the dispute.

12. An accused member may not escape this process by resigning membership in the Society. The Board may refuse to accept a member's resignation so long as an ethics investigation or proceeding is pending. (STS Bylaws Article III, Section 8.)

13. Admonition and censure will not be reported to authorities outside the Society, but the Society will report probation, suspension, and expulsion to the National Practitioner Data Bank, the medical board of the respondent's state(s) of licensure, and such other authorities as the Board deems appropriate. STS may also publish a notice of its decision in the STS News, on the STS Web site, and through other appropriate media. The notice of decision in STS publications will contain a brief description of each disciplinary action, accompanied by the name of the disciplined member in cases of probation, suspension, and expulsion. The name of the disciplined member will not be published in cases of admonition or censure.

Amended by the Executive Committee of The Society of Thoracic Surgeons: June 7, 2017

From: Richard L. Prager, MD
Sent: <DATE>
To: <NAME OF LEADER>
Subject: RESPONSE REQUESTED: Your 2018-19 STS Leadership Assignment

Dear Dr. <LAST NAME OF LEADER>:

During its most recent conference call meeting, the STS Executive Committee approved new appointments to Society leadership positions for 2018-19, which will **commence at the end of our upcoming 54th Annual Meeting in Fort Lauderdale, Florida**. The table below shows your *appointment, reappointment, and/or continuing role* in the following leadership position:

Leadership Body	Leadership Role	Status of Leadership Role	Year Term Expires
<NAME OF LEADERSHIP BODY>	Member	New Appointment	2021

The responsibilities of the Society's workforces are described in the enclosed copy of STS Bylaws Appendix 1 (as most recently amended by the STS Board of Directors on June 28, 2017).

- Please click on the following hyperlink to **ACCEPT** your assignment and review/edit your contact information for publication in the 2018-19 STS Leadership Directory: [Accept Position\(s\)](#)
- Please click on the following hyperlink to **DECLINE** your assignment: [Decline Position\(s\)](#)

Please submit your response no later than Wednesday, December 27, 2017. Please note that pursuant to STS policy, your acceptance of this leadership role will reflect your agreement to assign to the Society copyright in any original works that you might create or contribute to while performing the duties of your assigned position (e.g., in the nature of policy statements, survey instruments, or newsletter articles).

In light of recent news events, we also are taking this opportunity to remind all STS leaders that as members of the Society, we have agreed to comply with the STS [Code of Ethics](#), which requires us to "act fairly, in good faith, honestly, and respectfully in all ... [our] dealings with ancillary staff and other health care professionals." To that end, please note you should avoid engaging in any form of harassment in your dealings with STS staff and other health care professionals. With specific respect to sexual harassment, this includes unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct of a sexual nature. Adherence to the STS Code of Ethics is a condition of STS membership.

If you have any questions regarding this leadership assignment, please don't hesitate to contact STS Governance Coordinator Elisa Robles by phone at (312) 202-5859 or via e-mail at erobles@sts.org. We look forward to your favorable reply, and thank you in advance for your ongoing commitment to the Society and the profession.

Sincerely,

Richard L. Prager, MD
President

Keith S. Naunheim, MD
First Vice President

Wynbrandt, Robert A.

From: Bura, Keith
Sent: Friday, December 22, 2017 11:43 AM
To: STS Staff
Subject: Whistleblower Policy and Policies Related to Sexual Harassment
Attachments: CURRENT SEXUAL HARRASSMENT POLICIES 12 22 17.docx; Whistleblower Policy 2014 1210.doc

To all STS staff,

Please review the attached Whistleblower Policy and report any suspected improprieties in accordance with this policy.

As you will note, our Whistleblower Policy largely focuses on financial improprieties. In light of recent news events, I also want to remind everyone of the Society's policies related to sexual harassment. In that regard, please see the attached excerpts from our Employee Handbook, as amended, which also provide for an internal complaint procedure. It is also worth noting that the STS Code of Ethics, which is binding on our members, requires them to uphold standards of professionalism, to act respectfully in all their dealings with staff, and to honor their legal and professional obligations in serving the Society and its related organizations.

Keith Bura, CPA, CAE
Director of Finance and Administration
The Society of Thoracic Surgeons
633 N. St. Clair Street, 23rd Floor
Chicago, IL 60611
312.202.5815



Fair Employment Practices

The Society of Thoracic Surgeons greatly appreciates the talent and dedication of its employees. As part of our commitment to you, we are dedicated to treating our employees with dignity and respect. We hope to provide a pleasant working environment, with a well-trained and knowledgeable management team to assist you and to maintain the success of our operation.

The Society of Thoracic Surgeons is an equal opportunity employer. Equal employment is both policy and practice at STS. Our policy of equal employment opportunity is to recruit, hire, train, promote and base all other employment decisions without regard to race, color, religion, national origin, sex, age, marital or veteran status, ancestry, sexual orientation, gender identity, or physical or intellectual disability unrelated to the essential functions of the job, or any other protected status.

It is also The Society of Thoracic Surgeons' policy that any form of harassment on the basis of race, color, religion, national origin, sex, age, marital status, physical or intellectual disability unrelated to the essential functions of the job, or any other protected status, will not be tolerated in the workplace. Included within this prohibition is any form of sexual harassment, whether it involves verbal or physical conduct or otherwise interferes with an individual's work or the working environment. Sexual harassment includes unwelcome sexual advances, requests for sexual favors, and other verbal, visual or physical conduct of a sexual nature. No supervisor or other employee shall threaten or insinuate, either explicitly or implicitly, that another employee's or applicant's refusal to submit to sexual advances will adversely affect that person's employment, work status, evaluation, wages, advancements, assigned duties or any other condition of employment or career development. Similarly, no employee shall promise, imply or grant any preferential treatment in connection with another employee or applicant engaging in sexual conduct.

Sexual harassment also includes unwelcome sexual flirtations, advances or propositions, verbal abuse of a sexual nature, subtle pressure or requests for sexual activities, unnecessary touching of an individual, graphic or verbal commentaries about an individual's body, sexually degrading words used to describe an individual, a display in the workplace of sexually suggestive objects or pictures, sexually explicit or offensive jokes, or physical assault.

Internal Complaint Procedure

Any incidents of discrimination or harassment should be reported promptly to the employee's immediate supervisor and the Executive Director, the Director of Finance and Administration, or the Senior Manager, Human Resources. If the situation makes it difficult or impossible to report the incident(s) to these individuals, employees should report the incident(s) to someone else in management.

Violations of STS discrimination or harassment policies will be met with appropriate action, up to and including termination of employment.

The Society of Thoracic Surgeons will promptly investigate all allegations of discrimination and harassment and take all appropriate remedial action. Confidentiality will be protected consistent with a full investigation and remedial action.

STS policy prohibits retaliation against any employee who files a complaint in a good faith belief that he or she has been subjected to sexual harassment or other discriminatory treatment, even if insufficient evidence is found to substantiate the complaint.

We expect all of our employees to act responsibly to create a pleasant working environment free from discrimination. We encourage all employees to raise any questions that they may have regarding discrimination or sexual harassment with their supervisor.

EMPLOYEE STANDARDS OF CONDUCT

Employees should be aware that the violation of any of the following employee standards of conduct might result in disciplinary action, up to and including discharge:

10. Sexual, verbal, physical or visual forms of harassment directed at any person associated with the Society, or discriminatory treatment of employees or applicants, where such discrimination or harassment is based on race, color, religion, national origin, sex, age, disability or any other protected status. This prohibition also covers any form of sexual harassment, including unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct of a sexual nature.

Policies Posted on STS Website

Wednesday, April 18, 2018 11:26 AM

Policies

- Advertising and Publicity Policy
- Cardiothoracic Surgical Organizations' Standards for Interactions with Companies
- Code of Ethics
- Conflict of Interest Policy Applicable to Awards - Subawards Issued Subject to Public Health Service Regulations
- Content Requiring Approval Prior to Publication in *The Annals of Thoracic Surgery*
- Criteria and Stipulations for Endorsing Industry Educational Programs
- Criteria and Stipulations for Endorsing Third-Party (Non-Industry) Educational Programs
- Declaration on Tobacco Control
- Education Disclosure Policy
- Ethical Standards for Cardiothoracic Surgeons Relating to Industry
- Guidelines for Ethical Relations With Communications Media
- Guidelines for Using the Cardiothoracic Operation as a Teaching Instrument
- Guidelines on Use of STS National Database and Database-Derived Information
- Joint STS/AATS Policy Statement on Educational Courses
- Physician Assistant Endorsement Statement
- Policy on STS Annual Meeting for Presenters and Moderators
- Policy on STS Educational Activities Other Than the Annual Meeting for Presenters and Moderators
- Policy Statement on Public Dissemination of Quality Ratings
- Position Statement on Maintenance of Certification
- Position Statement on the Hiring of Cardiac Surgeons by Groups of Cardiologists
- Procedural Guidelines for Handling Ethics Complaints Against STS Members
- Proctoring Policy
- Statement on the Physician Acting As An Expert Witness

Pasted from <<https://www.sts.org/about-sts/policies>>

TAB 5

The Society of Thoracic Surgeons
Membership Numbers as of 4/17/2018

Active Members.....	2,998
International Members.....	1,103
Senior Members.....	1,978
Candidate Members.....	488
Associate Members.....	487
Pre-Candidate Members.....	281
Total.....	7,335

	Annual Dues Living in the US	Annual Dues Living in Canada	Annual Dues for Members Living Outside of the US or Canada (subject to the column to the right)	Annual Dues for Members Living in Low or Lower-Middle Income Countries as per The World Bank	Initiation Fee
Membership Category					
Pre-Candidate	\$25	\$25	\$25	\$25	none
Candidate	\$100	\$100	\$100	\$100	none
Active	\$750	\$650	\$300	\$100	*\$250
International	\$750	\$650	\$300	\$100	*\$250
Associate	\$175	\$175	\$175	\$175	none
Associate for MD/DO	\$250	\$250	\$250	\$250	none

*Initiation Fee Waivers
1. *Candidate Members in good standing advancing to Active or International Membership.
2. *EACTS and ESTS Members
3. *ASCVTS Members living in Low or Lower-Middle Income Countries as per WB

Active and International Membership Application Timeline 2018

Meeting	Date of Board Meeting	Application Deadline	Membership Committee Deadline	Membership Committee Call	List Sent to Membership
AATS	4/29/2018	3/16/2018	3/21/2018	3/27/2018	3/29/2018
STSA	11/10/2018	9/26/2018	10/3/2018	10/8/2018	10/10/2018
STS Annual Meeting	1/27/2019	12/3/2018	12/6/2018	12/11/2018	12/14/2018

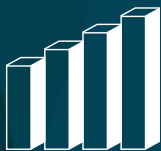
TAB 6

COMMIT TO IMPROVE
THE QUALITY OF PATIENT CARE
THROUGH THE

STS NATIONAL DATABASE

NEW IN 2018:

Intermacros Database



STS
National Database™

Using data to drive quality



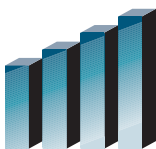
Using Data to Drive Quality

Established in 1989, the STS National Database™ is an internationally renowned clinical outcomes registry that helps cardiothoracic surgeons measure and improve patient care. Due to exponential growth, both in terms of participation and stature, the Database has become the gold standard for clinical outcomes registries.

The Society of Thoracic Surgeons believes that physicians are in the best position to measure clinical performance accurately and objectively. That's why the Society invites you to become a participant today.

Participation in the STS National Database is broken into four components, each focusing on a different area of cardiothoracic surgery: adult cardiac surgery, congenital heart surgery, general thoracic surgery, and—new in 2018—mechanically assisted circulatory support (Intermacs).

Learn more at sts.org/participate.



**STS
National Database™**

Using data to drive quality



Adult Cardiac Surgery Database

The STS Adult Cardiac Surgery Database (ACSD) is the world's premier clinical outcomes registry for adult cardiac surgery. Launched in 1989, the Database contains more than 6.5 million cardiac surgery procedure records and currently has more than 3,700 participating physicians, including surgeons and anesthesiologists.

Participation offers:

- A standardized format for data collection to assess the care of adult patients undergoing cardiac procedures;
- Quarterly performance outcomes reports in a risk-adjusted format that allows comparison of local outcomes to regional benchmarks and national standards;
- Optional anesthesiology module;
- Analysis of major outcomes and process-of-care measures that impact adult cardiac surgery patients;
- Composite measure scores for isolated CABG, isolated AVR, CABG + AVR combined, isolated MVRR, and CABG + MVRR combined;
- Ability to voluntarily report composite measures and star ratings through STS Public Reporting Online; and
- Opportunity to participate in the Centers for Medicare & Medicaid Services (CMS) Merit-Based Incentive Payment System (MIPS) program.

[Learn more at sts.org/acsd.](https://www.sts.org/acsd)

“The comprehensive data contributed by ACSD participants forms the cornerstone of performance improvement and quality measurement activities within our specialty.”

– Richard S. D’Agostino, MD, Burlington, MA





Congenital Heart Surgery Database

The STS Congenital Heart Surgery Database (CHSD) is the largest database in North America dealing with congenital cardiac malformations. The CHSD contains more than 450,000 congenital heart surgery procedure records and currently has more than 900 participating physicians, including surgeons and anesthesiologists.

Participation offers:

- A standardized format for data collection to assess the care of patients undergoing congenital cardiothoracic procedures;
- Semiannual performance outcomes reports in a format that allows comparison of local outcomes against national standards;
- Ability to voluntarily report composite measures and star ratings through STS Public Reporting Online;
- An optional anesthesiology module;
- Analysis of major outcomes and process-of-care measures that impact congenital heart surgery patients; and
- Complexity scoring to evaluate the clinical characteristics of your practice.

Learn more at sts.org/chsd.



“With 95% penetrance, the CHSD allows any program to benchmark its individual institutional outcomes to national aggregate data and, therefore, facilitate quality improvement.”

– Jeffrey P. Jacobs, MD, St. Petersburg, FL





General Thoracic Surgery Database

The STS General Thoracic Surgery Database (GTSD) is the largest and most robust clinical thoracic surgical database in the North America. The GTSD contains more than 530,000 general thoracic surgery procedure records and currently has more than 950 participating surgeons.

Participation offers:

- A standardized format for examining the care of patients undergoing major general thoracic operations;
- An optional minimum dataset for non-analyzed procedures;
- Semiannual performance outcomes reports in a risk-adjusted format that allows comparison of local outcomes against regional benchmarks and national standards;
- Composite measure scores for lobectomy and esophagectomy;
- Ability to voluntarily report composite measures through STS Public Reporting Online;
- Risk profiles of patients benchmarked against national standards; and
- Opportunities to participate in the CMS MIPS program.

[Learn more at sts.org/gtsd.](https://sts.org/gtsd)

“This is a very exciting time for the GTSD. The quality and quantity of data continue to improve. We are now collecting 5-year survival for lung and esophageal cancer resection patients, and successfully launched voluntary public reporting.”

– Benjamin D. Kozower, MD, Charlottesville, VA





Intermacs Database – New in 2018!

The Interagency Registry for Mechanically Assisted Circulatory Support, or Intermacs, became part of the STS National Database on January 1, 2018. Established in 2005 at the University of Alabama at Birmingham as a joint effort of the National Heart, Lung, and Blood Institute, the Food and Drug Administration, CMS, and others, Intermacs is a North American registry for patients who receive an FDA-approved mechanical circulatory support device to treat advanced heart failure.

The addition of the Intermacs registry represents a new chapter in the history of the STS National Database in light of the registry's collection of longitudinal data. Intermacs collects longitudinal data throughout the life of a patient with an MCS device.

[Learn more at sts.org/Intermacs.](https://sts.org/Intermacs)

“The Intermacs metrics for long-term follow-up are very good. Adverse events, quality-of-life variables, device malfunctions, and several other data points are tracked, along with risk modeling for survival.”

- Robert L. Kormos, MD, Pittsburgh, PA





Worldwide Involvement

Institutions in the United States, Canada, Argentina, Australia, Brazil, Cayman Islands, Israel, Italy, Singapore, Turkey, and the United Arab Emirates are among the 1,500 participants representing more than 4,400 cardiothoracic surgeons worldwide!

As a participant in the Database, you will be provided with:

- Well-developed and detailed risk models;
- An opportunity to compare surgical outcomes to STS benchmarks; and
- Valuable aid in administrative, business, and marketing decisions.

Save on participation fees with STS Membership! Visit sts.org/membership.

“Centers around the world have the opportunity to measure outcomes in a precise manner and embark on quality improvement projects, substantially enhancing patient care along benchmarks.”

—Oz M. Shapira, MD, Jerusalem, Israel



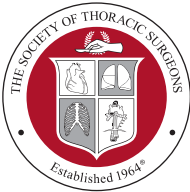
Benefits of Participation

An internationally renowned clinical outcomes registry, the STS National Database provides quality improvement and patient safety for cardiothoracic surgeons in four areas: adult cardiac surgery, congenital heart surgery, general thoracic surgery, and mechanically assisted circulatory support.

Your participation will:

- Help improve patient outcomes;
- Identify initiatives and new areas for quality improvement;
- Document the quality of care delivered by your practice;
- Enable risk modeling of major procedures;
- Offer access to data for assessment of new technologies and techniques;
- Provide the option to publicly report your star ratings; and
- Meet the The American Board of Thoracic Surgery Maintenance of Certification Part IV – Evaluation of Performance in Practice.

Learn more about participation and pricing at sts.org/participate.



**The Society
of Thoracic
Surgeons**

The Society of Thoracic Surgeons
633 N Saint Clair St, Ste 2100
312-202-5800 • sts@sts.org

STS NATIONAL DATABASE PARTICIPATION

Active Participants in the STS National Database					
Participation Status*	As of: 4.13.18	First report of 2018 (2.6.18)	Last report of 2017 (Dec)	First report of 2017 (Jan)	Surgeon/ Anesthesiologist Count
ADULT CARDIAC SURGERY DATABASE					
Active - US and Canada	1079	1098	1098	1092	SURGEON 3110
Active - International	21	21	21	18	
# Anesthesiologist Participants	61	64	64	63	ANESTHESIOLOGIST 676
Pending - Contracts Received	7	8	8	3	
Total	1100	1119	1119	1110	
CONGENITAL HEART SURGERY DATABASE					
Active - US and Canada	117	117	117	119	SURGEON 409
Active - International	2	2	2	2	
# Anesthesiologist Participants	61	61	61	54	ANESTHESIOLOGIST 607
Pending - Contracts Received	1	2	2	0	
Total	119	119	119	121	
GENERAL THORACIC SURGERY DATABASE					
Active - US and Canada	286	290	290	281	SURGEON 999
Active - International	2	2	2	2	
Pending - Contracts Received	1	0	0	1	
Total	288	292	292	283	
INTERMACS					
Active	136				
Pending	33				
Percent	80%				
Expected	169				
PEDIMACS					
Active	26				
Pending	27				
Percent	49%				
Expected	53				
Total Active Participants for 2018	1669	1530	1530	1514	

International Participation in the STS National Database					
Country	Adult Cardiac	General Thoracic	Congenital Heart	Intermacs	Pedimacs
Argentina	1				
Australia	1				
Brazil	2				
Cayman Island	1				
Israel	13		1		
Italy	1				
Singapore		1			
Turkey	1		1		
United Arab Emrites	1	1			
Totals	21	2	2	0	0

PUBLIC REPORTING CONSENTS			
STS.org Public Reporting	2018	2017	
ACSD - Isolated AVR	638	612	
ACSD - Isolated CABG	699	667	
ACSD - AVR + CABG	583	555	
TOTAL Unique ACSD Consents - STS	701	668	
TOTAL Congenital Operative Mortality - STS	87	80	
TOTAL GTSD Lobectomy for Lung Cancer - STS	80	56	
TOTAL Unique Consents - STS	868	804	
Consumer Reports (CR) Public Reporting	2018	2017	
Isolated AVR	536	518	
Isolated CABG	591	571	
AVR + CABG	486	466	
TOTAL Unique ACSD Consents - CR	593	572	
TOTAL Congenital Operative Mortality - CR	71	60	
TOTAL GTSD Lobectomy for Lung Cancer - CR	72	52	
TOTAL Unique Consents - CR	736	684	
Unique STS Consents / US & Canada Participants	% Enrolled		
702 / 1079	65.0 %		ACSD
87 / 117	74.3 %		CHSD
80 / 286	27.9 %		GTSD

STS Measures Endorsed by the National Quality Forum March 2018

NQF #	Measure Title	Endorsement Date
0113*	Participation in a Systematic Database for Cardiac Surgery	November 2014
0114	Risk-Adjusted Postoperative Renal Failure	November 2014
0115	Risk-Adjusted Surgical Re-exploration	September 2015
0116*	Anti-Platelet Medication at Discharge	September 2015
0117	Beta Blockade at Discharge	January 2017
0118	Anti-Lipid Treatment Discharge	September 2015
0119	Risk-Adjusted Operative Mortality for CABG	February 2015
0120	Risk-Adjusted Operative Mortality for AVR	September 2015
0121	Risk-Adjusted Operative Mortality for Mitral Valve Replacement	September 2015
0122	Risk-Adjusted Operative Mortality for Mitral Valve Replacement + CABG Surgery	September 2015
0123	Risk-Adjusted Operative Mortality for AVR + CABG Surgery	September 2015
0126*	Selection of Antibiotic Prophylaxis for Cardiac Surgery Patients	November 2014
0127	Preoperative Beta Blockade	January 2017
0128*	Duration of Antibiotic Prophylaxis for Cardiac Surgery Patients	November 2014
0129	Risk-Adjusted Postoperative Prolonged Intubation (Ventilation)	November 2014
0130	Risk-Adjusted Deep Sternal Wound Infection	September 2015
0131	Risk-Adjusted Stroke/Cerebrovascular Accident	November 2014
0134	Use of Internal Mammary Artery (IMA) in CABG	January 2017
0456	Participation in a Systematic National Database for General Thoracic Surgery	November 2014
0696	STS CABG Composite Score	September 2015
0732	Surgical Volume for Pediatric and Congenital Heart Surgery: Total Programmatic Volume and Programmatic Volume Stratified by the 5 STAT Mortality Categories	September 2015
0733	Operative Mortality Stratified by the 5 STAT Mortality Categories	September 2015
0734	Participation in a National Database for Pediatric and Congenital Heart Surgery	November 2014
1501	Risk-Adjusted Operative Mortality for Mitral Valve Repair	September 2015
1502	Risk-Adjusted Operative Mortality for Mitral Valve Repair + CABG Surgery	September 2015
1790	Risk-Adjusted Morbidity and Mortality for Lung Resection for Lung Cancer	Pending decision ¹
1815	Pediatric Cardiac Surgery Stratified Mortality and Volume Pair (0732 & 0733)	November 2011
2514	Risk-Adjusted CABG Readmission Rate	December 2014
2561	STS AVR Composite Score	November 2014
2563	STS AVR + CABG Composite Score	November 2014
2683	Risk-Adjusted Operative Mortality for Pediatric and Congenital Heart Surgery	September 2015
3030	STS Individual Surgeon Composite Measure for Adult Cardiac Surgery	January 2017
3031	STS Mitral Valve Repair/Replacement (MVRR) Composite Score	January 2017
3032	STS MVRR + CABG Composite Score	January 2017
3294	STS Lobectomy for Lung Cancer Composite Score	Pending decision ²

* Reserve Status

¹ Recommended for continued endorsement, Feb. 2018, pending final Consensus Standards Approval Committee decision

² Recommended for initial endorsement, Feb. 2018, pending final Consensus Standards Approval Committee decision

Clinical Practice Documents April 2018

Guidelines Published by *The Annals*

- STS/SCA/AmSECT Guidelines on Anticoagulation During Cardiopulmonary Bypass (John Hammon, MD, Chair)

Guidelines in Development

- STS/SCA/AmSECT Clinical Practice Guidelines on Renal Protection During Cardiopulmonary Bypass (John Hammon, MD, Chair)

Guideline Updates in Progress

- Blood Glucose Management in Adult Cardiac Surgery (Harold Lazar, MD, Chair)
- Antibiotic Duration Update (Michael Jessen, MD, Chair)
- Prophylaxis and Management of Atrial Fibrillation Associated with General Thoracic Surgery (Justin Blasberg, MD, Chair)
- STS/SCA/AmSECT/SABM Blood Conservation Guidelines (Susan Moffat-Bruce, MD, Chair)

Expert Consensus Topics in Development

- Pulmonary Metastasectomy (John Handy, MD, Chair)

Clinical Practice Document Collaboration with AATS

- Type B Aortic Dissection (T. Gleason and H. Patel Co-chairs)



The STS/ACC TVT Registry™ was developed through collaboration between The Society of Thoracic Surgeons (STS) and the American College of Cardiology (ACC). Representing 35 years of registry experience, more than 100 years leading the cardiovascular medicine profession and more than 45,000 members worldwide combined - the STS and ACC form a distinguished partnership fully equipped to take on this important initiative.

As of March 2018, 570 sites were enrolled in the TVT Registry with more than 140,000 patient records submitted; more than 135,000 patients in the U.S have received FDA approved TAVR devices

As of March 2018, 359 TVT Research Proposal Applications (RPAs) had been submitted to the TVT Research & Publications Subcommittee

85 RPAs have been accepted for publication to date; 32 manuscripts have been published

LEADERSHIP

The STS/ACC TVT Registry™ is governed by a joint steering committee with representatives from the STS and ACC selected through each society's standard selection process. Given the importance and broad function of the registry, it is important that representatives have current relevant clinical background and expertise with large data registries - and be recognized as leaders in their field.

The steering committee also includes representation from the Food and Drug Administration and Centers for Medicare and Medicaid Services. An STS/ACC TVT Research and Publications Subcommittee and Stakeholder Advisory Group allow for input from multiple stakeholders, including industry trial sponsors, consumers, researchers, and health plans, bringing the wisdom of many constituencies to the registry.

TVT Registry Steering Committee

Joseph E. Bavaria (Chair)

Thomas G. Gleason

Jeffrey P. Jacobs

S. Chris Malaisrie

Vinod H. Thourani

TVT Registry Research & Publications Subcommittee

Vinod H. Thourani (Chair)

Joseph C. Cleveland Jr.

Juan P. Crestanello

Thomas G. Gleason

Tsuyoshi Kaneko

S. Chris Malaisrie

Michael J. Reardon

The STS/ACC TVT Registry™ was developed through collaboration between **The Society of Thoracic Surgeons (STS)** and **the American College of Cardiology (ACC)**. Representing 35 years of registry experience, more than 100 years leading the cardiovascular medicine profession and more than 45,000 members worldwide combined – the STS and ACC form a distinguished partnership fully equipped to take on this important initiative.

As of March, 2017, 504 sites were enrolled in the TVT Registry with more than 111,000 patient records submitted. More than 80,000 patients in the U.S have received FDA approved TAVR devices.

As of March 2017, 270 TVT Research Proposal Applications (RPA's) have been submitted to the TVT Research & Publications Subcommittee

- 67 RPA's accepted for publication to date; this includes published and projects in process
- 21 manuscripts have been published

Leadership

The STS/ACC TVT Registry™ is governed by a joint steering committee with representatives from the STS and ACC selected through each society's standard selection process. Given the importance and broad function of the registry, it is important that representatives have current relevant clinical background and expertise with large data registries – and be recognized as leaders in their field.

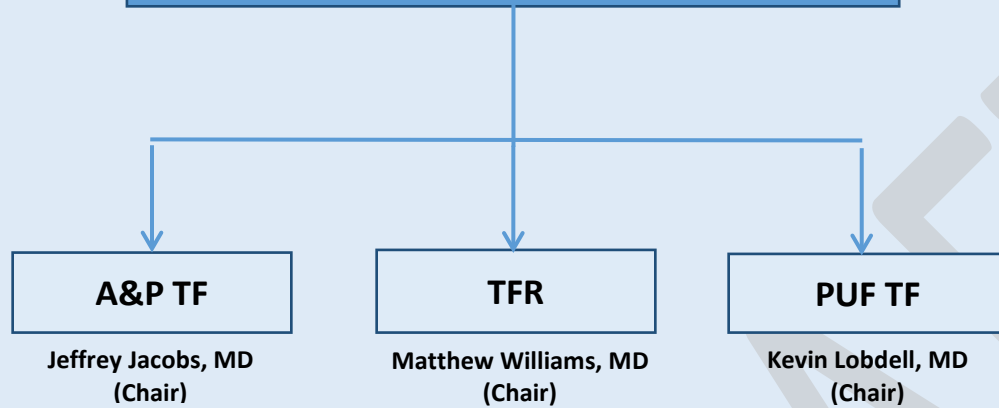
The steering committee also includes representation from the Food and Drug Administration and Centers for Medicare and Medicaid Services. An STS/ACC TVT Research and Publications Subcommittee and Stakeholder Advisory Group allow for input from multiple stakeholders, including industry trial sponsors, consumers, researchers, and health plans, bringing the wisdom of many constituencies to the registry.

STS/ACC TVT Registry Steering Committee

David Holmes, Chair, ACC Representative
Fred Grover, Vice Chair, STS Representative
Fred Edwards, Member, STS Representative
Dave Shahian, Member, STS Representative
Vinod Thourani, Member, STS Representative
John Carroll, Member, ACC Representative
Murat Tuzcu, Member, ACC Representative
Ralph Brindis, Ex-Officio, ACC Representative

TAB 7

Workforce on Research Development
Felix Fernandez, MD - Chair



A&P TF = Access & Publication Taskforce
TFR = Task Force on Funded Research
PUF TF = Participant User File Task Force

Access & Publications (A&P) Task Force

Jeff Jacobs, MD - Chair
Vinod Thourani, MD
Henning Gaissert, MD
Marshall Jacobs, MD
Francis Pagani, MD
Vinay Badhwar, MD
 ex-officios

ACSD Committee	GTSD Committee	CHSD Committee	Intermacs Committee
Vinod Thourani, MD (Chair) Vinay Badhwar, MD Gorav Ailawadi, MD James Gammie, MD Michael Halkos, MD Rakesh Suri, MD Lars Svensson, MD Wilson Szeto, MD Nimesh Desai, MD Edward Chen, MD Danny Muehlschlegel, MD ¹ Matthew Brennan, MD (DCRI) Sean O'Brien, PhD (DCRI)	Henning Gaissert, MD (Chair) Mark Allen, MD Mark Block, MD William Burfeind, MD Elizabeth David, MD James Donahue, MD John Mitchell, MD Paul Schipper, MD Mark Onaitis, MD Andrzej Kosinski, PhD (DCRI)	Marshall Jacobs, MD (Chair) Jeff Jacobs, MD Erle Austin, MD Bill Gaynor, MD Tara Karamlou, MD Sara Pasquali, MD Christian Pizarro, MD Pirooz Eghtesady, MD Jim St. Louis, MD David Vener, MD ² Kevin Hill, MD (DCRI) Karen Chiswell, PhD (DCRI)	Francis Pagani, MD (Chair) Eduardo Rame, MD (I) Jeffrey Morgan, MD (I) Francisco Arabia, MD (I) Jennifer Cowger, MD (I) Viv Rao, MD (I) Jeffrey Teuteberg, MD (I) Simon Maltais, MD (I) David Rosenthal, MD (P) David Morales, MD (P) (I): Intermacs; (P): Pedimacs

¹ Society of Cardiovascular Anesthesiologists; ² Congenital Cardiac Anesthesia Society

ACSD = Adult Cardiac Surgery Database
GTSD = General Thoracic Surgery Database
CHSD = Congenital Heart Surgery Database

Participant User File (PUF) Task Force

Kevin Lobdell, MD - Chair
 Thomas Schwann, MD
 Travis Crabtree, MD
 Jim St. Louis, MD
 Francis Pagani, MD
 ex-officios

ACSD Committee	GTSD Committee	CHSD Committee	Intermacs Committee
<p>Thomas Schwann, MD (Chair) Gorav Ailawadi, MD Shahab Akhter, MD Vinay Badhwar, MD Michael DiMaio, MD Milo Engoren, MD Giovanni Filardo, MD Stephen Fremes, MD Mario Gaudino, MD Brent Keeling, MD Rosemary Kelly, MD Paul Kurlansky, MD Brad Leshnowar, MD Donald Likosky, MD Mark Russo, MD Robert Tranbaugh, MD Vinod Thourani, MD Christina Vassileva, MD Matthew Williams, MD</p>	<p>Traves Crabtree, MD (Chair) Dan Boffa, MD Farhood Farjah, MD Henning Gaissert, MD Eric Grogan, MD Joseph Phillips, MD Varun Puri, MD Rishindra Reddy, MD Brendan Stiles, MD Betty Tong, MD</p>	<p>Jim St. Louis, MD (Chair) Pirooz Eghtesady, MD Bill Gaynor, MD Peter Gruber, MD Kristine Guleserian, MD Jeff Jacobs, MD Marshall Jacobs, MD Tara Karamlou, MD Tom Karl, MD Paul Kirshbom, MD Mark Plunkett, MD</p>	<p>Francis Pagani, MD (Chair) Daniel Goldstein, MD (I) Josef Stehlik, MD (I) Sean Pinney, MD (I) Pavan Alturi, MD (I) Christopher Salerno, MD (I) Arman Kilic, MD (I) Salpy Pambukian, MD (I) Christina VanderPluym, MD (P) IKI Adachi, MD (P)</p> <p>(I): Intermacs; (P): Pedimacs</p>

ACSD = Adult Cardiac Surgery Database
GTSD = General Thoracic Surgery Database
CHSD = Congenital Heart Surgery Database

TAB 8

STS Headquarters

633 N Saint Clair St, Suite 2100
Chicago, IL 60611-3658
(312) 202-5800
sts@sts.org



Washington Office

20 F St NW, Suite 310 C
Washington, DC 20001-6702
(202) 787-1230
advocacy@sts.org

Key Contact Program 2018

Join over 220 of the most politically engaged STS members from 47 states in the Key Contact Program. STS Key Contacts have a direct impact on legislative issues that affect cardiothoracic surgeons. As an STS Key Contact, you will be making a commitment to do at least one of the following during the year:

- **Meet with Your Legislators in Washington, DC**
STS offer a series of Legislative Fly-Ins during which STS members receive a briefing on relevant policy developments and meet with their members of Congress. Face-to-face visits are an important step toward building a meaningful relationship with members of Congress.
- **Meet with Your Legislators in Their Home Offices**
STS staff can help you arrange and prepare for a meeting at the local offices for your representative and senators. Take advantage of the fact that members of Congress spend much of their time in their home districts, listening to constituent concerns.
- **Host a Facility or Practice Tour**
Another way to build relationships with your members of Congress is to invite them to visit your place of work. Site visits are a great way to provide your legislators with firsthand knowledge about the challenges you face delivering high-quality patient care.
- **Attend a Local Town Hall Meeting**
Member of Congress will appreciate having a meaningful conversation with a constituent. STS staff can help you make a positive impression at a town hall meeting by preparing you with a rational question and a reasonable argument to defend your position.
- **Host or Co-Host an Event**
Once you have developed a relationship with your members of Congress, you may decide to support them in upcoming elections by hosting a fundraising event. STS Government Relations staff can help you plan a fundraiser for STS-PAC or for an individual member of Congress.
- **Speak with your Members of Congress over the Phone**
If your schedule does not allow for an in-person meeting, STS Government Relations staff can schedule a phone call for you with your Congressional office. They will provide you with the same level of briefing and follow-up as for an in-person event.
- **Contribute to STS-PAC**
STS Active Members who live in the US can [contribute to STS-PAC](#), which supports the election campaigns of candidates running for Congress. Cultivating relationships with elected officials who understand and support cardiothoracic surgery issues helps STS have a voice in important policy debates.

In return for your commitment to STS advocacy, you will receive:

- Welcome Packet with advocacy materials
- An Advocacy Training Webinar to help hone your skills
- Incentives to attend a Washington, DC Fly-In and meet with your representatives in the halls of Congress
- A section in the STS Advocacy Monthly newsletter, “Key Contact Connect,” containing activity updates and highlights from fellow KCs
- Action alerts about crucial legislative news
- The opportunity to be recognized for exceptional service at the STS Annual Meeting, and have your name engraved in the Key Contact of the Year Plaque
- Annual Meeting programming to deepen your advocacy skills and connect with other Key Contacts

For more information on the Key Contact Program, please contact advocacy@sts.org or visit <http://www.sts.org/advocacy/get-involved>.



Step 1: Contact Information

Name: _____

Home Address: _____

Zip Code: _____

Occupation: _____ Employer: _____

Name, mailing address, occupation and employer are required by federal law.

Best Phone Number: _____ Check One: Work Cell Home

Step 2: Contribution Frequency & Amount Please select your contribution frequency then circle an amount.

One-Time – You will be charged this time only.

One-Time	\$5,000	\$2,500	\$1,200	\$1,000	\$500	\$250	\$100	\$50	\$25	Other: \$
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Annually – You will be charged once per year.

Annual	\$5,000	\$2,500	\$1,200	\$1,000	\$500	\$250	\$100	\$50	\$25	Other: \$
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Monthly – You will be charged once per month.

Monthly	\$416	\$208	\$100	\$83	\$42	\$21	\$8			Other: \$
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Step 3: Payment Information: Only personal contributions will be used to support federal candidates. Please make checks payable to STS-PAC.

Personal Check Personal Credit Card → AmEx Discover Mastercard Visa
 Business/Practice Check Business/Practice Credit Card → AmEx Discover Mastercard Visa

Credit Card Number: _____ Expiration Date: _____

Billing Address (if different than above): _____

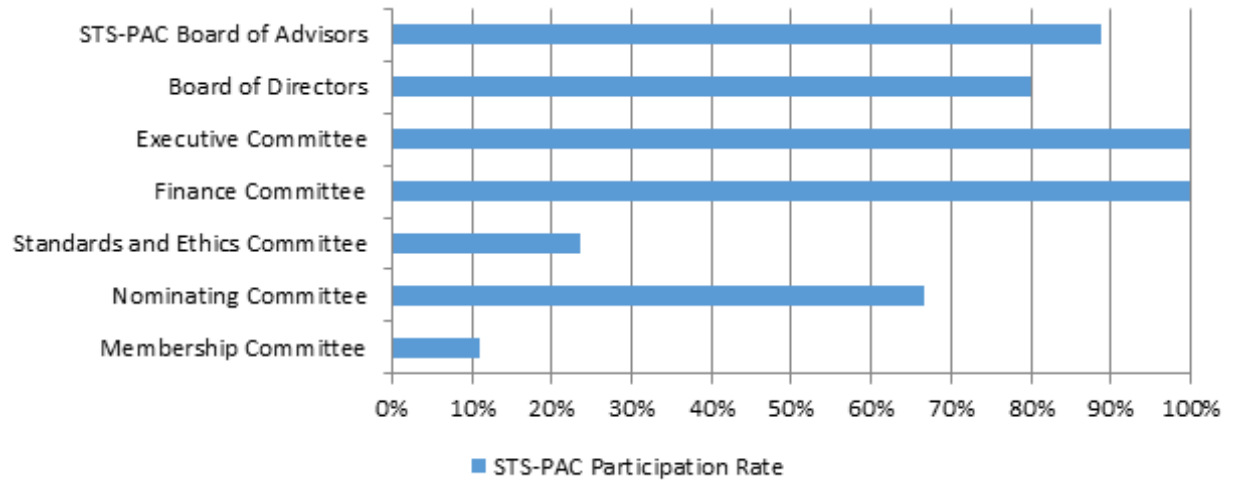
Zip Code: _____

Signature: _____ Date: _____

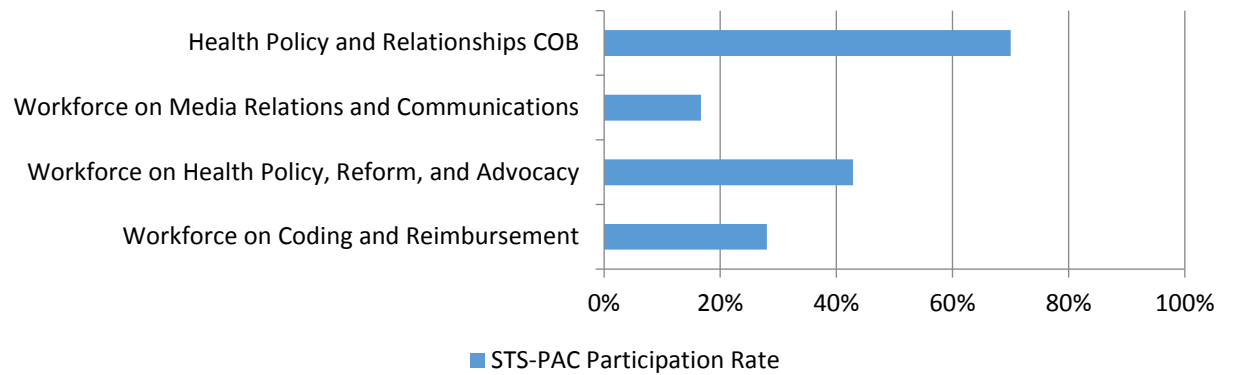
Contributions to STS-PAC are voluntary and not tax deductible for federal income tax purposes. You have the right to decline to contribute without any reprisal against your STS membership. **Your contribution must be made using a credit card, check or money order, and must be drawn on a personal account to be used to support federal candidates. You must be a U.S. citizen or lawfully-admitted permanent U.S. resident to contribute.** Federal law requires us to use our best efforts to collect and report the name, mailing address, occupation and name of employer of each individual whose contributions exceed \$200 in a calendar year. Federal law prohibits STS and STS-PAC from soliciting contributions from persons outside STS's restricted class. STS's restricted class includes individuals who are dues paying members or non-dues paying members with voting rights, and who are U.S. citizens or lawfully-admitted permanent U.S. residents.

STS-PAC Leadership Competition

2018 STS-PAC Participation Rates: Board of Directors and Standing Committees

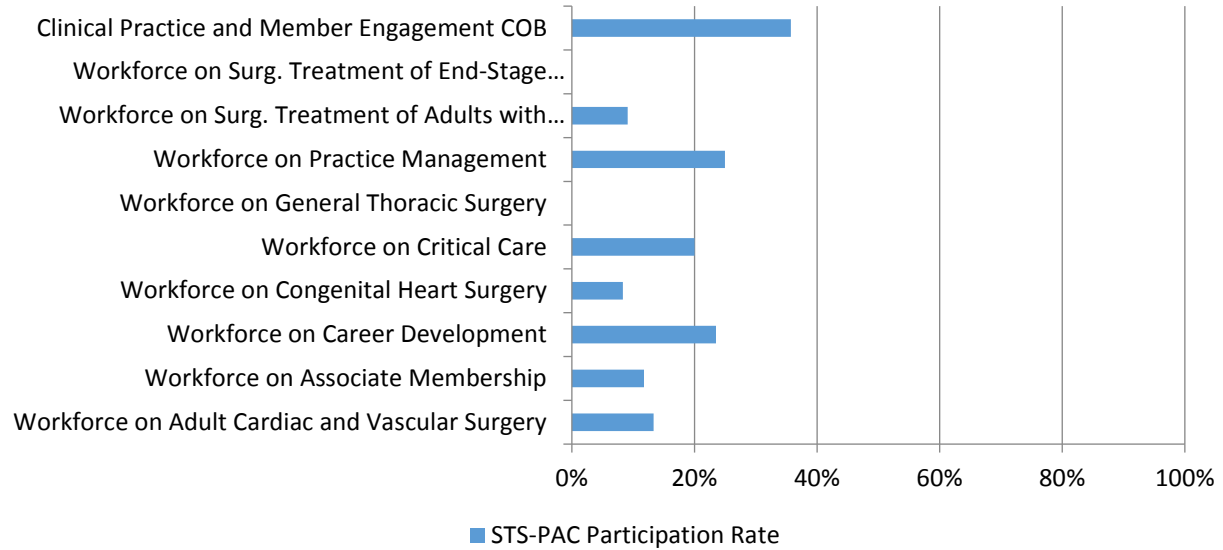


2018 STS-PAC Participation Rates: Council on Health Policy and Relationships

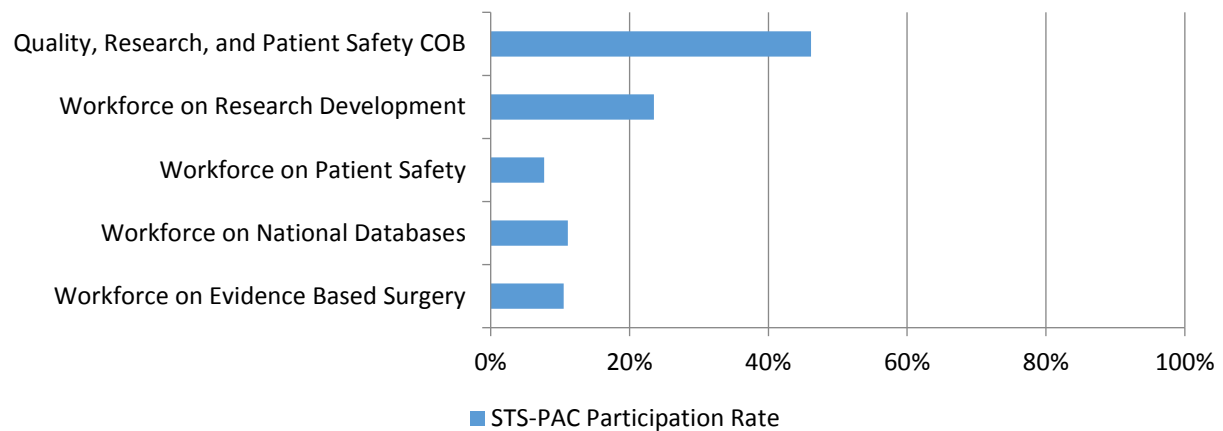


STS-PAC Leadership Competition

2018 STS-PAC Participation Rate: Council on Clinical Practice and Member Engagement

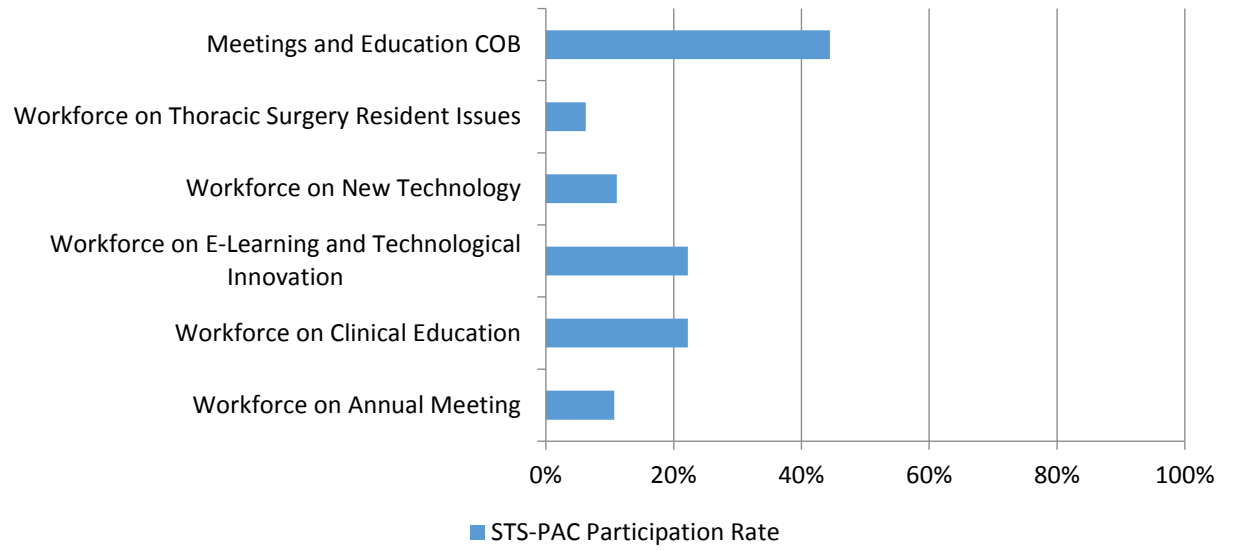


2018 STS-PAC Participation Rate: Council on Quality, Research and Patient Safety



STS-PAC Leadership Competition

2018 STS-PAC Participation Rate: Council on Meetings and Education





Donate to TSF

Search STS.org

Home

Legislative Action Center

STS-PAC

Get Involved

On the Record

Advocacy

The Advocacy section of the STS website offers the latest and most important regulatory and legislative news and resources relevant to cardiothoracic surgery.

- Visit the [Legislative Action Center](#) to learn about issues affecting the specialty, and write or call your members of Congress to let them know what you think.
- Contribute to [STS-PAC](#) and see how your contributions are making a difference.
- [Get involved](#). Sign up to be an STS Key Contact and help build relationships while advocating for the specialty.
- Check out [On the Record](#) to view public statements pertaining to the regulatory issues that affect cardiothoracic surgeons.

What's New

An updated [policy paper on graduate medical education](#) has been released.

STS has adopted a [position statement on maintenance of certification](#).

Check out the [MACRA Toolkit for Cardiothoracic Surgeons](#).

Read the latest updates from the Society on [health reform priorities](#).

Advocacy Monthly

[STS Advocacy Monthly](#) is a monthly newsletter providing a summary of STS activities to support cardiothoracic surgery initiatives in Washington, DC.

Click To Start

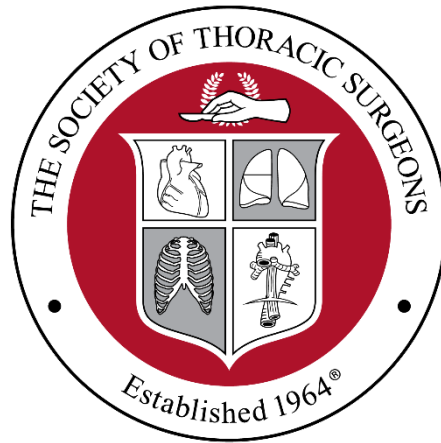


Welcome to the STS Action Center! **Please click "Click to Start" to contact your legislators.**

1. You will be prompted to login with your email and zipcode.
2. Next, fill in your home address information so that we can look up your members of Congress.
3. Choose which issue you would like to contact them about. Once you've read about the issue, click the email or phone icon, depending on how you would like to contact your representative.
4. Click the name of the representative you would like to contact. You can then make any edits or additions to the letter/script.
5. Send or call!

LEGISLATIVE ALERTS

Legislative Alerts



STS Advocacy Manual

The Society of Thoracic Surgeons
20 F Street NW – Suite 310 C
Washington, D.C. 20001-6704
(202) 787-1230
advocacy@sts.org

STS Advocacy Manual

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STS Advocacy Opportunities

Serve as an STS Key Contact

STS Government Relations staff will help you to become a trusted resource for your members of Congress as you use your training and unique perspective on the health care system to help shape health policy. As an STS Key Contact, you will be making a commitment to do at least one of the following during the year:

- Travel to Washington, D.C. and Meet with Legislators - STS will offer a series of Washington, D.C. “fly-ins” as an opportunity for STS members to receive a briefing on important policy developments, and meet with members of Congress. Face-to-face visits are an important step toward building a meaningful relationship with a member of Congress.
- Meet with your Legislators in their Home Offices - Many people forget that their members of Congress spend much of their time in their home districts listening to constituent’ concerns. In fact, Congress is generally in session Tuesday through Thursday during the week to allow members the time to travel back home. STS staff can help you arrange and prepare for a meeting at your representative and senators’ local offices.
- Attend a Local Town Hall Meeting - You can make a very positive impression at a town hall meeting if you are prepared with a rational question and a reasonable argument to defend your position. Your issues may get more attention than you might expect because the member of Congress will appreciate having a meaningful conversation with a constituent.
- Host a Facility or Practice Tour - Another way to build relationships with your members of Congress is to invite them to visit your place of work. Site visits help a member of Congress get to know you and once he or she has firsthand knowledge of your experience delivering care, it will be more difficult to ignore a request for assistance.
- Host or Co-Host a Political Event - A large part of a politician’s job is making sure that he or she is re-elected; raising money and campaigning becomes a necessity. Once you have developed a relationship with your member of Congress, you may decide to support him or her in an upcoming election by hosting a fundraiser. STS Government Relations staff can help you plan such an event.
- Contribute to STS-PAC - STS-PAC is the only political action committee that exclusively represents the interests of cardiothoracic surgeons. STS-PAC supports election campaigns and helps STS advocates to build relationships with members of Congress. Contributing to STS-PAC is a simple yet effective way to help STS continue to advocate for the specialty and for your patients. Please visit <http://www.sts.org/advocacy/pac> and make your contribution today!

Participate in a Fly-In

STS Fly-Ins bring STS advocates to the nation's capital to meet with their members of Congress. Attendees will hear from members of Congress, administration officials, and health care policy experts as well as take meetings on Capitol Hill with members of Congress and/or their staff. STS Fly-Ins provide an opportunity for STS members to directly engage policymakers on issues important to the Society. Information on Fly-Ins will be sent out in STS Advocacy Monthly, a monthly electronic newsletter from the Society's Government Relations office.

Write to your Members of Congress

STS regularly sends grassroots alerts asking members to reach out to policymakers on timely legislative issues. Your willingness to respond and share your professional knowledge and experience can have a tremendous influence. You can read the list of grassroots Alerts and reach out to your members of Congress through the Legislative Action Center, here: <https://sts.ac360.aristotleactioncenter.com/#/searchForMe>.

To learn more, please contact the Government Relations staff in the Washington office at (202) 787-1230 or advocacy@sts.org.

Why Contact your Member of Congress

Explain your Views – Elected officials want to be responsive to the views and concerns of their constituents. They must hear from you personally to understand your concerns.

Provide Information – Your Representatives and Senators encounter numerous, complex issues on a daily basis. Members often lack specific information on how policy will affect their constituents. As a highly skilled surgical specialist, you play a vital role in educating Congress about cardiothoracic surgery and the complex care you provide. If you do not weigh in, who will? More importantly, do you want those who are contributing to the discussion speaking for you?

Build Relationships – Developing a relationship with your member of Congress will enable you to have an impact on health care issues being debated today and those that arise in the future. Once a personal, trusting relationship has been established, members of Congress and staff will look to you for important advice as a medical expert. Enhanced communication will not only help you inform members of Congress, but will also give you access to the latest developments in Congress that may affect you, your practice, or your patients.

Grassroots Advocacy Frequently Asked Questions

What is grassroots communication?

Calls, letters, emails, and in-person visits from individual cardiothoracic surgeons who live and work within the boundaries of a Congressional district or state.

Why can't I simply rely on the Government Relations staff to lobby for my interests?

While the STS Government Relations staff represents your interests before Congress and federal agencies, they do not have the standing in individual communities that a practicing cardiothoracic surgeon will have. More importantly, your members of Congress represent *you*. They are more likely to listen and act on your concerns when you, the constituent and voter, articulate them yourself. A pre-requisite for effective representation in Washington is an organized, active grassroots network to reinforce the local impact on patients and constituents. As former Speaker of the House of Representatives Tip O'Neil once said, "All politics is local." He meant that members of Congress must be constantly concerned with the views and interests of their constituents.

I don't know how to "lobby."

If you have ever written a letter or email, called, or visited with your elected Senators or Representatives, you have already had practice "lobbying." Essentially, lobbying communicates views to those in Congress. Sharing your thoughts with your Congressional members means you are being an advocate for your patients, practice, and the specialty.

I am not a health policy expert. Should I leave the policy work to my Senators and Representatives?

Your experience as a cardiothoracic surgeon makes you an expert on providing health care. While your elected representatives may have specialized knowledge or a general understanding of health policy, members of Congress are constantly learning about how those policies work and how they affect patients and providers "back home." It is impossible for members of Congress or their staffs to be experts on every issue. You can help them understand how their votes on health care policy will affect the delivery of care to patients in their states and districts.

I believe there are too many special interests in Washington. Why should I add to the problem?

If you don't advocate for your patients and specialty, who will? The First Amendment to the Constitution establishes the right of the people, "[T]o petition the Government for a redress of grievances." Our form of representative government not only allows, but encourages direct

contact with our elected officials. By sharing information, you ensure that your voice is not lost in the shuffle of competing interests on Capitol Hill

Why should I bother with Washington politics? Does it really affect my work?

Everything Congress does will affect you one way or another. For example, Medicare policy can directly affect your bottom line, conditions of employment, and services provided to your patients. If you do not become involved in the Congressional decision making process, you may not like the changes implemented without your input.

I'm too busy; there is not enough time in the day.

STS makes grassroots advocacy easy and fast. You can be automatically matched to your member of Congress using the Legislative Action Center. There, letters will be pre-populated with information about a given issue and also provide space for the addition of your own stories or explanations. The Center can also provide you with the phone numbers of your representatives, and talking point scripts to help get your point across. In time, we hope you will begin to reach out to your members of Congress on a more regular basis to develop relationships with them and their staff.

I can't leave my practice to come to Washington to meet with my members of Congress. Can I still stay involved?

Meeting with members of Congress and their staff members "back home" in the district is sometimes more powerful than any face-to-face visit in Washington. There are a number of ways you can interact with your elected officials in the district: (1) attend a town hall meeting; (2) visit a district office; (3) send them an email or phone call through the Legislative Action Center; or (4) invite the member and his/her staff to your facility for a tour. STS staff can help you get started.

The United States Congress

The following information highlights the many stages during which an advocate can influence the policy-making process.

About Congress

- Every American is represented by two Senators (two per state) and one Representative (one per Congressional district).
- National elections are held every two years on the first Tuesday of November in even numbered years (2014, 2016, 2018 etc.).
- Every national election 33 Senators whose six-year terms are expiring and all 435 members of the House of Representatives have to run for reelection or choose to leave their seats.

Timing and Schedule

A "new Congress" begins the January following a November election, lasts two years, and has two sessions. For example, the first session of the 115th Congress began in 2017, and the second session of the 115th Congress will begin in 2018.

Legislation

In general, there are two main types of legislation: (1) authorizing legislation; and (2) appropriations legislation.

- An authorizing bill or authorizing legislation provides a federal agency with the general authority to conduct programs and obligate funds. This type of bill does not guarantee funding; Congress needs to appropriate funds as part of the annual appropriations process.
- An appropriations bill provides funds for the various programs authorized by Congress. Just because the funding has been authorized does not mean it will be appropriated.

The Legislative Process

1. *Bill language or legislation is drafted and introduced* – (In the Senate, all bills start with "S." followed by a number, e.g., S. 1234; all bills in the House start with "H.R.," e.g., H.R. 5678).

Advocates may inspire and help a member to draft new legislation. Once the bill is introduced, advocates must work to collect cosponsors of the legislation in order for it to receive serious consideration by the Committee to which it has been referred. It is helpful to gain the support of members of Congress who sit on that Committee.

2. Legislation is referred to a Committee and Subcommittee – A bill usually is referred to the subcommittee with the most appropriate jurisdiction under the Committee rules.
3. Subcommittee hearing and mark-up – Subcommittees may hold hearings on a bill topic and hear testimony from invited speakers. Once Subcommittee hearings are completed, the Subcommittee usually meets to "mark-up" a bill or consider changes and amendments to the text of the legislation. The Subcommittee then votes to report the legislation out to the full Committee.

Advocates may petition or be asked by the sponsors of the legislation (or those who oppose it) to testify in Subcommittee hearings. Advocates may want to weigh in with members of the Subcommittee to ensure they vote for/against the legislation.

4. Full committee hearing and mark-up – Committees may hold hearings on a bill topic and hear testimony from invited speakers. Committee hearings are completed, the Committee usually meets to "mark-up" a bill or consider changes and amendments to the text of the legislation. The Committee then votes to report the legislation out to the full Senate or full House for consideration by all of the members in the chamber.

Advocates may petition or be asked by the sponsors of the legislation (or those who oppose it) to testify in full Committee hearings. Advocates may want to weigh in with members of the Committee to ensure they vote for/against the legislation.

5. Floor consideration and full chamber vote – The legislation will be debated on the floor of the House or Senate and a vote will take place.

Grassroots advocates across the country should weigh in with their members of the Congress to ensure they vote for/against the legislation.

6. Legislation referred to the other chamber – The other chamber may follow steps 2-5 above.

Advocates should renew their efforts with the other chamber. Frequently steps 1-5 will take place in both chambers simultaneously.

7. Legislation sent to conference committee – If either chamber has changed the bill so that it does not match the version passed by the other chamber, a conference committee usually is appointed to resolve the differences.

8. The House and Senate vote on uniform legislation – The full House and Senate will vote on the legislation developed by the conference committee.

Grassroots advocates across the country should weigh in with their members of the Congress to ensure they vote for/against the legislation.

9. Passed legislation sent to the President– The legislation is sent to the President for his signature or veto.

Thousands of bills are introduced in the Senate and House during each session of Congress; however, very few of the bills introduced are enacted. Bills that have not progressed through this process during the Congressional session (2 years) must be reintroduced in the next session of Congress and the process starts anew.

Key Congressional Committees

House	Senate
<p>House Appropriations Committees: controls the federal purse strings and determines federal funding for all government functions, from defense to biomedical research.</p> <p>House Labor, Health and Human Services-Education Appropriations Subcommittee (LHHS): determines federal funding for several federal agencies, including the Departments of Health and Human Services, Labor, and Education and all of their subagencies (e.g., National Institutes of Health, Centers for Disease Control and Prevention, and the Health Resources and Services Administration).</p>	<p>Senate Appropriations Committees: controls the federal purse strings and determines federal funding for all government functions, from defense to biomedical research.</p> <p>Senate Labor, Health and Human Services-Education Appropriations Subcommittee (LHHS): determines federal funding for several federal agencies, including the Departments of Health and Human Services, Labor, and Education and all of their subagencies (e.g., National Institutes of Health, Centers for Disease Control and Prevention, and the Health Resources and Services Administration).</p>
<p>House Ways and Means Committee and its Health Subcommittee: has policy jurisdiction over the Medicare program (shares jurisdiction over certain parts of Medicare with the House Energy and Commerce Committee).</p>	<p>Senate Health, Education, Labor, and Pensions: has jurisdiction over all non-Medicare and non-Medicaid healthcare policy issues.</p>

<p>House Energy and Commerce Committee and its Health Subcommittee: has policy jurisdiction over the Medicaid program, Part B (outpatient services) of the Medicare program, and all non-Medicare and non-Medicaid healthcare issues.</p>	<p>Senate Finance Committee and its Health Subcommittee: has policy jurisdiction over the Medicare and Medicaid programs.</p>
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Communicating with Members of Congress

A few keys to effective advocacy:

- Above all else, be honest. This will allow you to establish and maintain credibility with your legislators. Providing a full picture of the political landscape not only builds your credibility, but it saves time and helps your member to think of you as an ally.
- Try to avoid using clinical jargon when sharing your professional experiences. If you have to use medical terminology, take the time to explain the term(s).
- Be firm about your position on the issues. Offer useful and helpful information on your viewpoint, including possible solutions.
- Get a commitment. It may be easy to walk away from your meeting feeling as though you had a good conversation, but what have you gained? Make sure to ask for a commitment that the member of Congress take action or at least look into your issue.

The Importance of Congressional Staff

In many instances, you will not be able to speak personally with your member of Congress, especially without a scheduled appointment. Instead you may speak with the legislative assistant responsible for health care policy. Do not be concerned or upset that you are meeting or speaking with staff as they are often very influential in crafting policy agendas. Below are some helpful hints about meeting with congressional staff:

- Staff members are busy, often as busy as the member of Congress, and have many competing demands on their time. Meetings with staff usually last 15-30 minutes. Additionally, most staffers (with the exception of the chief of staff in some cases) do not have private offices. You may be invited to meet in the Member’s office but you should be prepared to meet in the front reception area or even in the hallway outside the office. Offices in the House buildings are very small. Do not take offense if the environment lacks privacy or is a bit hectic.
- Remember, meetings with staff are not a waste of time and can be very valuable.

Professional staff members for committees and senior staff members in congressional offices are usually very knowledgeable and can be very influential in setting legislative priorities. Some junior staff members may not be as well versed on health care issues, but still play a key role for congressional offices. You may need to adapt your message based on the experience and knowledge of the staff member. Additionally, staff members in personal offices are usually very responsive to comments and concerns of constituents. You may find a strong ally in someone who knew very little about your issue when you walked in.

Writing or Emailing your Members of Congress

Email: Identify yourself as a constituent at the beginning of the message or in the subject line of the email. Example, Subject: Constituent from Pittsburgh supports/opposes H.R. 3200

U.S. Mail: Include both your email and home mailing address at the end of the letter. Many members still use regular mail to respond to constituents.

- Identify yourself in a sentence or two. Indicate that you are a cardiothoracic surgeon from his/her district or state (include your city) who provides services to many of his/her constituents.
- Clearly state the purpose of your letter (e.g., invitation, meeting request or support for an issue).
- Be specific. If you are writing in support or opposition to a specific bill, be sure to identify it by reference number (e.g., H.R. 1234, S. 5678) and by its name. Give concrete reasons for your support or opposition to the legislation. Be sure to describe how the bill will affect you, your practice, and your patients.
- Maintain your focus. You may want to address a number of issues in your letter but it is best to keep each letter to one request. Build your case thoroughly and succinctly in your letter. If you feel compelled to take up another issue, draft another letter.
- Be brief. Try to keep your letter to a single page if possible.
- Know your members of Congress. Try to find out the positions your Senators and Representative have taken on the issues you are discussing in your letter. You can contact the STS Government Relations staff to gather this and other information. If your elected representatives support your position, offer thanks. If they oppose your position, provide specific reasons he/she should change positions and examples of how the legislation will be detrimental.
- Ask for a response and follow up. If you do not receive a response in a timely fashion

(this may take six to eight weeks if using regular mail due to security procedures), or if your concerns were not addressed, write again or call the office and ask to speak to the staff person responsible for health care issues. If the response indicates that your position is supported, send a letter of appreciation.

Addressing correspondence:

Senator:

The Honorable (full name)
United States Senate
Room # (name of) Senate Office Building
Washington, D.C. 20515

Representative:

The Honorable (full name)
United States House of Representatives
Room # (name of) Senate Office Building
Washington, D.C. 20510

Dear Senator (Last Name):

Dear Representative (Last Name):

Note: When writing to the Chair of a Committee, the Speaker of the House or another Congressional Leader, it is proper to address him/her by title (e.g., Dear Speaker Ryan or Dear Chairman Wyden).

Calling your Members of Congress

- You can contact your Senators or Representative by phone at the district/state or Washington, D.C. offices. You can find their numbers in your local telephone directory, at www.house.gov, www.senate.gov or through Capitol Switchboard at 202-224-3121.
- When calling, identify yourself as a constituent and ask for the legislative assistant who handles health care issues for the office. If the person isn't available, leave a message either in voicemail or with the staff member that answers your call. STS staff can also help you identify the correct staff person to contact.
- Always make sure the staff knows that you are a constituent and cardiothoracic surgeon serving patients in the member's district/state.
- Identify the issue(s) you wish to discuss – whenever possible use the bill name and reference number.
- Clearly state your position and ask what the Senator/Representative's position on that issue.
- Leave your name, address, phone and email contact information so that the office can send a response.
- Follow up with an email or letter to the staff member with whom you spoke.

Reiterate your position and your appreciation for their time and attention to the matter. This extra step will help build a relationship with the staff.

Meeting with your Members of Congress

A face-to-face meeting with your member of Congress or the legislative assistant responsible for health care policy issues is often the best way to voice your concerns. Meetings with your Senators or Representative can take place in the state/district offices or the Washington, D.C. office. Members of Congress are usually in their home states and districts during District Work Periods. Check the Congressional calendar by visiting: www.house.gov and www.senate.gov. If you have any trouble, feel free to call the STS Washington, D.C. office at 202-787- 1230.

- Always make an appointment. STS staff can help you schedule and prepare for an appointment. We have also included a sample meeting request letter in Appendix A
- Contact STS staff for resources and materials to help you prepare for your meetings.
- Arrive on time. Remember that Congressional offices are very busy and staff often have many appointments in a given morning or afternoon.
- Come prepared. Do your homework and be able to provide facts when discussing issues. Items to know include: (1) the member's position on the issue if it has been made public; (2) background on the issue; (3) specific legislation relating to the issue; and (4) any opposing arguments the member might have been exposed to in past meetings.
- Talk about where you practice, explain why the issues are important to you, and share how they might impact (positively or negatively) your ability to provide outstanding patient care. As mentioned earlier, meetings can be as short as 15 minutes, so be prepared to convey your message concisely.
- Be prepared to answer questions. Remember that offering useful and reasonable information on your viewpoint helpful to lawmakers and staff. If you do not know the answer to a question, ask if you can provide that information in a follow-up communication. Do not feel as though you need to make something up to appear knowledgeable. It is better to send accurate information after a meeting than provide an inaccurate response to a question immediately.
- Provide supporting materials to leave with the office.
- Ask your member to commit to take action or to investigate the issue further.
- Follow up. Send a short thank you note to the member of Congress and staff for meeting with you. Include a short summary of your position. If you were asked for

additional information, this is a good time to provide it.

Town Hall Meetings

One of the most effective—yet underutilized—ways to communicate directly with members of Congress is to attend a town hall meeting. Nearly every member holds these events throughout the year to elicit input and learn about the priorities and concerns of their constituents.

Most members will announce a town hall meeting well in advance, and publicize them on their website or through emails. Some offices will provide exact meeting information only to those constituents who have contacted them directly.

When you arrive at the meeting, see if there is a specific check-in procedure. There is often a signup sheet for individuals who wish to ask a question. Before or after the meeting, make an effort to introduce yourself to the member and his/her staff.

Be prepared in advance with your specific question. Avoid long, multi-pronged questions and do not use jargon or acronyms that others in the audience may not know. Bring supporting materials to leave behind with the member.

Clearly identify yourself and your affiliation to The Society of Thoracic Surgeons. Mention your practice location, and the kinds of procedures you perform. Always be polite and professional, keeping in mind that, in addition to journalists, both potential allies and opposition may be in attendance.

Even if the member does not give a clear response to your question, let him or her know that you will follow up with his or her staff for further discussion and that you look forward to a response at that time. Remember that the goal is not to catch the member off-guard, but rather to establish a relationship to work together.

After the meeting, be sure to follow up with the member's staff. Even if you did not get to ask a question publicly, you should still send a follow-up letter about your presence at the meeting. If the member or staff requested any additional information, be sure to provide it in your correspondence.

Report back to STS the results of the meeting. STS Government Relations staff can echo your message once the member is back in Washington. This coordinated approach will ensure that members of Congress learn about the issues facing the specialty.

Using the Media to Underscore your Message

A great way to ensure your message resonates with your elected officials is by writing a letter to the editor of your local newspaper. Every congressional office in Washington subscribes to

local papers, and Capitol Hill staff members rely on hometown news for a full understanding of issues important to constituents. Below are a few tips that will help you get your letter published:

- Focus your media advocacy efforts close to home rather than large national newspapers. Your letter is certain to catch his or her eye because every Congressional office scours the local papers for references to the member of Congress. In addition, publishing a story on an issue within your community is a great way to rally more people to your cause.
- Be brief. The letter should address only one subject. Keeping the letter short and to the point will ensure that your important points are not cut out by the newspaper due to space constraints.
- Support your letter with facts, statistics, and other evidence. STS can provide talking points and other material to help you to defend your point
- Make a strong statement and be an expert. Point out an error or misrepresentation, disagree with an editorial position, or provide insight that may have been overlooked by the original writer.
- Be sure to include your contact information. Most newspapers will call to verify identity and address.

These basic guidelines also apply to other media opportunities, such as a radio call-in show, online interview, or Facebook/Twitter post.

Facility Tours / Site Visits

Planning Your Tour

Another extremely effective way to have your message heard by your lawmakers is to invite them to visit your facility or practice to see policies in action. When an elected official visits your facility or practice, he/she will get a first-hand look at how you care for your patients. Tours put a human face on the impersonal policy decisions members of Congress make each day.

A well-planned and executed tour provides a learning experience for the elected official and allows you, your employees, and patients to have access to a member of Congress in a meaningful way. This is another way to build a trusting relationship that can be vitally important as your elected officials consider taking positions on policies that will directly affect your ability to provide care for your patients.

Inviting your Member of Congress

A personal visit to your practice or facility makes a strong and lasting impression on members of Congress. Every elected official has at least one office in the district, and many have several. Congressional office staff are there to interact and communicate with constituents just like you.

- Begin by calling or visiting the elected official's office, or sending a formal letter (or email) of invitation to schedule a facility and/or practice tour. Make sure to include information about your practice such as the number of employees and patients you serve. We have included a sample invitation in Appendix A. *STS staff can also handle the planning process for you if you wish.*
- The tour will most likely be limited in duration – two hours maximum but more likely one hour. Notify employees about the tour so they will not be surprised and have an opportunity to meet the legislator.
- Make sure to provide enough time for you to sit down with the member of Congress to discuss issues important to cardiothoracic surgeons and your practice. Have a camera on hand to take a photo, and share it with the STS Government Relations staff (advocacy@sts.org). We can use the photo to publicize your advocacy efforts to your colleagues and get others involved as well.
- Work with the hospital/facility administrator and public relations staff to solicit their assistance. For a public tour of a hospital, the member's communications director will most likely want to include local press outlets to ensure wide dissemination of the visit to constituents.

Conducting the Tour

- Always manage the tour yourself. It is important to manage the tour and ensure that the legislator gets a feel for the complexity of what you do and the obstacles that make it more difficult to provide cardiothoracic surgical services. Make sure to emphasize the steps you take to provide quality care.
- If there are policies that are particularly burdensome to you and your employees, use the tour to demonstrate those problems. Often times elected officials and bureaucrats adopt rules without understanding the consequences on patient care.

Following Up

- Prompt follow-up is an essential part of a successful grassroots strategy. Following up on any visit with a member of Congress – in the Washington, D.C. office, the district office, or through a practice tour – should be immediate, courteous, and

hopefully memorable.

- Don't wait to send a thank you note to the member and staff. Send thank you letters to all involved the day after your visit while the memory is still fresh in their minds.
- Add a personalized comment regarding a subject you discussed or a comment the legislator made while on the tour in order to make the note memorable. If the elected official said or did something that made a lasting impression, use the thank you note to tell them.
- Another way to reinforce the memory of the visit is to send them copies of any photographs taken with you, your staff, or patients.

STS-PAC

Political Action Committees are formed by groups in order to advance the outcome of a political issue or election. The Society of Thoracic Surgeons Political Action Committee, STS-PAC, was formed in 1997. Since then, STS-PAC has raised millions of dollars from politically-savvy cardiothoracic surgeons and disbursed millions of dollars to members of Congress.

STS-PAC is the *only* PAC that represents cardiothoracic surgery. The PAC disburses money to candidates in federal elections in a nonpartisan manner. Due to ethics laws that limit access to members of Congress, STS-PAC is one of the best ways to forge relationships with elected officials and convey the Society's priorities in a fair and open manner. All contributions are public record.

Why does STS have a PAC?

Federal law requires it. The Federal Election Campaign Act, first passed in 1971, streamlined existing laws that banned contributions from corporations and other special interest groups. The law (and its subsequent rulemaking power under the Federal Election Commission) prohibits campaign donations directly from corporations, labor organizations, and other groups. Instead, organizations may establish separate bank accounts to collect voluntary donations and distribute that money to campaign coffers.

This restriction has had an unintended but very powerful consequence: When people contribute to PACs, their political voices are heard in full force with like-minded citizens. Today there are over 1,000 PACs organized by trade associations, membership organizations, and health societies like STS. In addition, there are nearly 2,000 corporate PACs and nearly 300 labor organization PACs. There are thousands of PACs organized around specific issues, causes, and candidates.

Why give to a PAC?

Giving to a PAC helps you get more out of your political contributions. The PAC pools together individual contributions into larger amounts that are given to campaigns. This “strength in numbers” approach also ensures a PAC reaches as many elected officials as possible.

STS-PAC fought to repeal the flawed SGR formula used to calculate physician payment rates until 2015 and eliminated the CMS policy to unbundle global surgical payments. STS-PAC still fights to reduce health care costs, enact medical liability reform, and improve quality of care. Contributions are only accepted from STS members who are US citizens or permanent residents. To learn more about STS-PAC, contact the STS Government Relations staff at 202-787-1230 or advocacy@sts.org.

STS Government Relations Staff are here to Assist You

The STS Government Relations staff in Washington, D.C. is ready to help you to be an active and successful grassroots advocate for cardiothoracic surgery. The professionals in the STS Washington, D.C. office understand how Capitol Hill works. They can help you to use your experience and expertise to form lasting, positive relationships with members of Congress.

With the proper planning, follow-up, and execution, you can become a trusted resource for elected officials who have significant influence over the future of medicine in the United States. Your participation supports your colleagues and your specialty. What you contribute to STS advocacy will help you to continue to provide quality surgical care to your patients.

Please contact the Government Relations team if you have any questions or need any background materials or advice.

<p>Courtney Yohe, MPP Director of Government Relations 202-787-1222 cyohe@sts.org</p>	<p>Nick Beek Political Affairs & Advocacy Manager 202-787-1223 nbeek@sts.org</p>	<p>Madeleine Stirling Government Relations Assistant 202-787-1224 mstirling@sts.org</p>	<p>Amanda Grimm Wiegrefe Assistant Director of Government Relations 202-787-1221 awiegrefe@sts.org</p>
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APPENDIX

Sample Meeting Request –*(Print on Letterhead if possible)*

Date

The Honorable (Full Name)

U.S. House of Representatives / U.S. Senate (Address) House/Senate Office Building
Washington, D.C. (20515 for House, 20510 for Senate)

Dear Representative/Senator (Last Name):

I would like to request a meeting with you on (Date). As a cardiothoracic surgeon in (City, State) *(and a member of the Society of Thoracic Surgeons)*, I would like to discuss health care policy issues (or other specific interests) of concern to cardiothoracic surgeons.

(Provide background on your training, practice, and facility).

(The Society of Thoracic Surgeons is a not-for-profit organization representing more than 6,400 surgeons, researchers, and allied health professionals worldwide who are dedicated to ensuring the best possible heart, lung, esophageal, and other surgical procedures for the chest. Founded in 1964, the mission of STS is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.)

Thank you for your consideration of this request. Please contact me at (phone and email) to confirm a convenient time for this appointment.

Sincerely,

Sample Letter to a Member of Congress

Print on Letterhead if possible

Date

The Honorable (Full Name)

U.S. House of Representatives / U.S. Senate (Address) House/Senate Office Building
Washington, D.C. (20515 for House, 20510 for Senate)

Dear Representative/Senator (Last Name):

I am writing to urge your support of S. ____, the ____ Act of 2017. This legislation will
_____. [Tell them what you're going to tell them]

[Description of problem the legislation seeks to address; why existing laws aren't good enough.
Tell them.]

[Specifics on why this issue is important to you, your practice, your patients.]

[Concluding sentence. Tell them what you told them.]

Please consider cosponsoring and supporting this important piece of legislation. Please know
that I am available to serve as a resource to you on this and other health care issues.

Sincerely,

Sample Facility Tour Request

Print on Letterhead if possible

Date

The Honorable (Full Name)

U.S. House of Representatives / U.S. Senate (Address) House/Senate Office Building
Washington, D.C. (20515 for House, 20510 for Senate)

Dear Representative/Senator (Last Name):

I would like to invite you to tour my facility/practice (include name) on (Date). As a cardiothoracic surgeon in (City, State) (*and a member of the Society of Thoracic Surgeons*), I would like to discuss how health care policy affects my ability to provide surgical care to critically ill patients.

(Provide background on your training, practice, and facility).

(The Society of Thoracic Surgeons is a not-for-profit organization representing more than 6,400 surgeons, researchers, and allied health professionals worldwide who are dedicated to ensuring the best possible heart, lung, esophageal, and other surgical procedures for the chest. Founded in 1964, the mission of STS is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.)

Thank you for your consideration of this request. Please contact me at (phone and email) to confirm a convenient time for this appointment.

Sincerely,

Glossary

A

Amendment: An amendment is a motion offered to change the text of a bill or of another amendment.

Appropriations Bill: An appropriations bill provides the legal authority needed to spend or obligate U.S. Treasury funds. There are 13 annual appropriations bills which together fund the entire federal government. These 13 bills must all be enacted prior to the start of a new fiscal year, designated as October 1. Failure to meet this deadline causes the need for temporary short-term funding or results in a shut-down.

Authorization Bill: An authorization bill provides the authority for a program or agency to exist and determines its policy. It also recommends spending levels to carry out the defined policy, but these levels are not binding. Authorizations may be annual, multi-year, or permanent. Expiring programs require re-authorization. House and Senate rules require that authorizations be in place before final funding decisions are made.

B

Budget Resolution: The budget resolution is the annual decision made by Congress to set spending and revenue levels. It provides a voluntary framework within which Congress agrees to limit subsequent money bills. The Budget Resolution may also instruct committees to change current law in order to save money.

C

Caucus: A caucus is an informal group of members sharing an interest in the same policy issues. Examples include: the Arts Caucus, the Democratic Caucus, the Black Caucus, the Rural Caucus, etc.)

Chairman/Chairperson: The Chairperson is leader of a congressional committee. Chairmen are always members of the majority party, often those with seniority; their powers include the ability to schedule hearings and allocate committee budget.

Chief of Staff: The Chief of Staff is the top-ranking staff member in a Congressional office. (S)he is responsible for counseling the member on the political ramifications of various policy proposals. The Chief of Staff is also in charge of overall office operations, including assigning work, and hiring and supervising staff.

Cloture: Cloture is the formal procedure used to end a filibuster. It can take up to three days and requires 60 votes. Cloture can also be used even if there is no filibuster underway, to ban

non-germane amendments. If cloture wins, 30 additional hours of debate are allowed prior to voting, but they are rarely used. If cloture fails, debate would continue without limits. Instead, the bill is usually set aside.

Colloquy: A colloquy is a pre-scripted floor dialogue between the chairman of a committee and another congressman. The dialogue seeks to clarify the intent behind certain provisions for purposes of legislative history.

Committee Report: A Committee Report is prepared by a House or Senate Committee to explain the content of a bill being reported. Committee reports are optional in the Senate, but mandatory in the House. They contain views of Committee members, a cost impact analysis, and compare the bill to current law.

Companion Bill: A companion bill is a piece of legislation that is similar or may be identical to one introduced in the other house of Congress.

Concurrent Resolution: A concurrent resolution is used to take action or express opinion on behalf of both the House and Senate. It does not make law. Uses include fixing adjournment dates and setting the annual congressional budget.

Conference: Conference refers to a formal meeting, or series of meetings, between House and Senate members. The purpose of a conference is to reconcile the differences between the House and Senate versions of a bill.

Conference Committee: A conference committee is a temporary panel of House and Senate negotiators. A conference committee is created to resolve differences between versions of similar House and Senate bills.

Conference Report: A conference report refers to the final version of a bill proposed by House and Senate conferees. It also contains the "statement of managers," which is a section-by-section explanation of the agreement.

Congressional Budget Office (CBO): The CBO conducts non-partisan economic analysis and research. CBO also evaluates proposed bills and amendments to assess their potential cost.

Cosponsor: A cosponsor is a member who formally adds his/her name as a supporter to another member's bill. An initial cosponsor is one who was listed at the time of the bill's introduction, not someone added at a later date.

Continuing Resolution: A continuing resolution, also known as a "CR," continues funding for a program if the fiscal year ends without a new appropriation in place. A "CR" provides temporary funding at current levels or less.

D

Dear Colleague: A “Dear Colleague” letter refers to a mass-produced letter sent by one member to all fellow members. “Dear Colleagues” usually describe a new bill and ask for cosponsors, or they can ask for a member's vote on an issue.

Demonstration Project: A Demonstration Project is funded by the federal government in order to test new technology or policies. It is intended to demonstrate the feasibility of a technology which might not find private funding.

Discretionary Spending: Discretionary spending refers to spending set by annual appropriation levels according to a decision made by Congress. This spending is optional, and in contrast to entitlement programs for which funding is mandatory.

E

Earmarks: Earmarked funds are those dedicated for a specific program or purpose. Revenues are earmarked by law. Expenditures are earmarked by appropriations bills or reports.

Entitlement Spending: Entitlement spending refers to funds for programs like Medicare/Medicaid, Social Security, and veterans' benefits. Funding levels are automatically set by the number of eligible recipients, not at the discretion of Congress. Each person eligible for benefits by law receives them unless Congress changes the eligibility criteria. Entitlement payments represent the largest portion of the federal budget.

Executive Order: An executive order is a presidential directive with the force of law. It does not need congressional approval. The Supreme Court has upheld executive orders as valid either under the general constitutional grant of executive powers to the President or if authority for it was expressly granted to the President by the Congress. Congress can repeal or modify an executive order by passing a new law; however it must be signed by the President or his veto overridden.

F

Filibuster: A Filibuster is the term used for an extended debate in the Senate which has the effect of preventing a vote. Senate rules contain no motion to force a vote. A vote occurs only once debate ends. The term comes from the early 19th century Spanish and Portuguese pirates, “filibusteros,” who held ships hostage for ransom.

Fiscal Year: The fiscal year for the federal government begins on October 1 and ends on September 30. For example, fiscal year 1999, or “fy '99” began on Oct. 1, 1998 and ended on Sept. 30, 1999.

G

GAO: GAO stands for the General Accounting Office. It audits federal agencies and programs for Congress.

H

Hearing: A hearing is a formal meeting of a committee or subcommittee to review legislation or explore a topic. Hearings may also be called to investigate a matter or conduct oversight of existing programs. Witnesses are called to deliver testimony and answer questions in all three types of hearings.

H.R.: H.R. stands for House of Representatives and designates a measure as a bill (e.g. H.R. 1100.) It becomes law if passed by both the House and Senate, and approved by the President.

J

Joint Resolution: Joint resolutions are used to pose constitutional amendments, to fix technical errors, or to appropriate. They become public law if adopted by both the House and Senate and, where relevant, approved by the President. In terms of Constitutional amendments, they must be approved by 3/4 of the states.

L

Legislative Assistant: A Legislative Assistant (LA) is the staff person who advises a member of Congress on legislative issues. A member of Congress may have a number of LAs who each have different issue areas of expertise.

Legislative Correspondent: A Legislative Correspondent (LC) is the staff person who answers the mail sent to a member of Congress.

Legislative Director: The Legislative Director (LD) is the staff person who monitors the legislative schedule and makes recommendations regarding what action the member should take. The LD works with the member of Congress and the Chief of Staff to set the member's legislative priorities, oversee the development of legislative proposals, and direct the work of legislative staff.

M

Majority Leader: The majority leader is elected by his/her party members in the House or Senate to lead them, to promote passage of the party's issue priorities, and to coordinate legislative efforts with the Minority Leader, the other chamber, and the White House. The Majority Leader also seeks unity among members on the policy positions taken by the party, and works to put together coalitions to create voting majorities.

Manager's Amendment: A Manager's Amendment is a package of numerous individual amendments agreed to by both sides in advance. The managers are the majority and the minority member who manage the debate on a bill for their side.

Mandatory Spending: Mandatory spending refers to funds not controlled by annual decision of Congress. These funds are automatically obligated by virtue of previously-enacted laws.

Mark-up: A Mark-Up refers to the meeting of a Committee held to review the text of a bill before reporting it out. Committee members offer and vote on proposed changes to the bill's language, known as amendments. Most mark-ups end with a vote to send the new version of the bill to the floor for final approval.

Minority Leader: The minority leader is elected by his/her party members in the House or Senate to lead them, to promote passage of the party's issue priorities, and to coordinate legislative efforts with the Majority Leader, the other chamber, and the White House. The Minority Leader also seeks unity among members on the policy positions taken by the party, and works to put together coalitions to create voting majorities.

O

Off-Budget: Off-budget describes programs not counted toward budget limits due to provisions in current law. For example, Social Security trust funds and the postal service are off-budget programs.

Offset: An offset refers to funds received by the federal government, but not counted as revenue. Examples include Medicare premiums, park entrance fees, sales of oil or timber leases or electrical power. Offsets are deducted from specific budget accounts or are treated as negative outlays.

OMB: OMB stands for the Office of Management and Budget, a federal agency. OMB prepares the President's budget submission to Congress and provides him with economic forecasts.

Omnibus Bill: An omnibus bill packages together several measures into one or combines diverse subjects into a single bill. Examples are reconciliation bills, combined appropriations bills, and private relief and claims bills.

Override: An override is the vote taken to pass a bill again, after it has been vetoed by the President. An override takes a 2/3 vote in each chamber, or 290 in the House and 67 in the Senate, if all are present and voting. If the veto is overridden, the bill becomes law despite an objection from the President.

Outlays: Outlays are the actual payments made out of the federal treasury to fulfill obligations incurred earlier.

P

Paygo: The paygo or pay-as-you-go rule compels new spending or tax changes to not add to the federal deficit. New proposals must either be "budget neutral" or offset with savings derived from existing funds.

Pocket Veto: A Pocket Veto is when the President fails to sign a bill within the 10 days allowed by the Constitution. Congress must be in adjournment in order for a pocket veto to take effect. If Congress is in session and the President fails to sign the bill, it becomes law without his signature.

President's Budget: The President's Budget is a document sent to Congress each year by the Administration, usually the first week of February. It estimates the receipts and spending, and recommends appropriation levels and Administrative priorities for the upcoming fiscal year.

Press Secretary / Director of Communications: The Press Secretary in a Congressional office builds and maintains open and effective lines of communication between the member and his/her constituents and others. (S)he is the member's spokesperson and works to promote the member's profile, inform the public of the member's views on specific issues, and help advance the member's legislative agenda.

Public Debt: The public debt is the maximum level of debt which existing law permits the federal government to incur. Once the debt limit is reached, Congress must enact a new law raising the permissible ceiling. The federal government borrows money from many sources (e.g. the public, trust funds, and foreign governments).

Public Law: A public law, or P.L., is designated by the number of the Congress and the order in which it is enacted. For example, P.L. 106-10, is the tenth law enacted during the 106th Congress.

R

Ranking member: A Ranking member is the member of the minority party on a committee and/or subcommittee next in seniority after the chairman (highest ranking member of the minority party).

Reconciliation Bill: A reconciliation bill makes the changes in law required to meet pre-set spending and revenue levels. The bill arises when a prior budget resolution passed by the House and Senate calls for it. The budget committee packages the bills produced by all the other committees into one omnibus bill.

Refer: To "refer" is to send a bill just introduced to the appropriate committee for initial examination. Referral decisions are made by the parliamentarian in both the House and Senate.

Reporting Out: Reporting out refers to the vote of a committee to send a bill to the full House or the Senate for review.

Rider: A Rider is an amendment which is usually unrelated to the subject of the underlying bill. Its sponsor tries to "ride" it to passage on the strength of the original bill. Riders are permitted in the Senate and are routine. House rules ban riders unless an exception is made.

Roll Call Vote: A roll call vote is a vote held on the record. The name of the member and his/her voting position are noted together.

S

S.: S. stands for Senate and designates a measure introduced in the Senate as a bill (e.g., S.910.) Bills become law if passed by both houses of Congress and approved by the President.

Scheduler: A member's Scheduler maintains the calendar and allocates a member's time among Congressional responsibilities, staff requirements, and constituent requests. Schedulers also make travel arrangements, arrange appearances, and visits to the district. Some members have one scheduler in D.C. who maintains their entire schedule. Others have one scheduler in D.C. and one "at home" in a district or state office who keeps the calendar for local events.

Sponsor: Sponsor(s) is/are a member (or members) who introduce(s) legislation.

Standing Committee: A Standing Committee of the House or Senate has permanent status, whereas a Select Committee is temporary.

State or District Director: The member's State or District Director is the highest-ranking staffer in his/her state or district office(s).

State of the Union: The Constitution requires the President report to Congress on the State of the Union "from time to time". The President's State of the Union Speech defines their view of national priorities and needed legislation. Since 1913, presidents have chosen to deliver the speeches in person once a year, usually in January.

U

Unfunded Mandate: An unfunded mandate is a requirement imposed by Congress on state or local governments without funding to pay for it.

Up or Down Vote: An up or down vote refers to a direct vote on the substance of an amendment or bill, sometimes referred to as a "clean vote." Members vote yea or nay. Many votes dispose of a matter indirectly through another motion (e.g. to table) to recommit, to amend in the second degree. Members often seek "up or down" votes because they are less

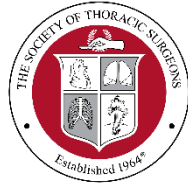
cumbersome and therefore easier to explain to constituents.

V

Veto-Proof: “Veto-proof” describes those votes with a margin sufficient to override a veto, should it occur. Since a 2/3 vote is required to override, a veto-proof majority is 290 in the House and 67 in the Senate.

W

Whip: The Whip is a member elected by his/her party to count potential votes and promote party unity in voting. In the House, the Majority Whip is the 3rd ranking leadership position in his/her party, and the Minority Whip ranks 2nd. In the Senate, the Majority and Minority Whip are the 2nd ranking leadership position in their respective party.



**The Society
of Thoracic
Surgeons**

STS Health Policy Compendium

January, 2014

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Note: The Health Policy Compendium is being updated. The policy paper on Graduate Medical Education has been updated, a policy paper on tobacco is being added, and the paper on Medical Liability Reform is under review by the Workforce on Health Policy, Reform, and Advocacy. The Workforce will also consider recommending that the paper on Physician Medicare Payments and the Sustainable Growth Rate be removed, and potentially replace it with a policy paper on Alternative Payment Models.

About STS

Founded in 1964, The Society of Thoracic Surgeons is an international not-for-profit organization representing more than 6,800 members located in 85 countries, who are dedicated to ensuring the best possible outcomes for surgeries of the heart, lung, and esophagus, as well as other surgical procedures within the chest. The Society's mission is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.

The STS National Database was established in 1989 as an initiative for quality improvement and patient safety among cardiothoracic surgeons. The STS National Database has three components—Adult Cardiac, General Thoracic, and Congenital Heart Surgery, with the availability of anesthesiology participation within the Congenital Heart Surgery Database.

The STS Adult Cardiac Surgery Database is the world's premier clinical registry for cardiac surgery. The Database houses nearly 5 million surgical records and gathers information from more than 90% of the groups that perform cardiac surgery in the United States. In 2012, the Database welcomed surgeons from Brazil, Israel, and Turkey as its first international participants.

Launched in 2011, the STS Research Center is a nationally recognized leader in outcomes research. The Center seeks to capitalize on the value of the STS National Database and other resources to provide scientific evidence and support cutting-edge research that ultimately helps cardiothoracic surgeons, government, industry, and other interested parties improve surgical outcomes and the quality of patient care.

STS has partnered with the American College of Cardiology to create the STS/ACC TVT Registry, a data repository developed to track patient safety and real-world outcomes related to the transcatheter aortic valve replacement (TAVR) procedure. The Registry, which launched in December 2011, has more than 160 sites enrolled and more than 2,500 patient records entered.

As a national leader in health care transparency and accountability, STS believes the public has a right to know the quality of surgical outcomes. To further this goal, the Society has established the STS Public Reporting initiative, which allows participants in the STS Adult Cardiac Surgery Database to voluntarily publicly report their surgical outcomes.

As a part of its public reporting initiative, the Society also collaborates with Consumer Reports to publish performance outcomes data for bypass surgery. Using this information, consumers can see how participating cardiac surgical groups compare with national benchmarks for overall performance, survival, complications, and other measures.

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Comparative Effectiveness Research

Overview

Comparative effectiveness, while still the province of the Agency for Healthcare Research and Quality (AHRQ), has been the object of considerable attention from policy-makers over the past few years. Efforts at health reform pre-dating the 2010 legislation attempted to define and promote comparative effectiveness research (CER) as a cost-saving, quality enhancement tool of policy-makers and healthcare providers alike.

AHRQ defines CER as research “to inform health-care (sic) decisions by providing evidence on the effectiveness, benefits, and harms of different treatment options. The evidence is generated from research studies that compare drugs, medical devices, tests, surgeries, or ways to deliver health care (sic).” AHRQ states that “there are two ways that this evidence is found:

- Researchers look at all of the available evidence about the benefits and harms of each choice for different groups of people from existing clinical trials, clinical studies, and other research. These are called research reviews, because they are systematic reviews of existing evidence.
- Researchers conduct studies that generate new evidence of effectiveness or comparative effectiveness of a test, treatment, procedure, or health-care (sic) service.¹”

Further, AHRQ states that CER, “requires the development, expansion, and use of a variety of data sources and methods to conduct timely and relevant research.”²”

Created under the American Recovery and Reinvestment Act of 2009, the Federal Coordinating Council for Comparative Effectiveness Research (the Council) was established to foster optimum coordination of CER conducted or supported by Federal departments and agencies. The Council was also tasked with providing a report to Congress and the President containing information describing current Federal activities on comparative effectiveness research and recommendations for such research provided for under the act. In that report, the Council states that Comparative effectiveness differs from efficacy research because it is ultimately applicable to real world needs and other decisions faced by patient, clinicians, and other decision makers.”

The Council defined CER as:

The conduct and synthesis of research comparing the benefits and harms of different interventions and strategies to prevent, diagnose, treat and monitor health conditions in “real world” settings. The purpose of this research is to improve health outcomes by developing and disseminating evidence-based information to patients, clinicians, and other decision-makers, responding to their expressed needs, about which interventions are most effective for which patients under specific circumstances.

- To provide this information, comparative effectiveness research must assess a comprehensive array of health-related outcomes for diverse patient populations and sub-groups.
- Defined interventions compared may include medications, procedures, medical and assistive devices and technologies, diagnostic testing, behavioral change, and delivery system strategies.
- This research necessitates the development, expansion, and use of a variety of data sources and methods to assess comparative effectiveness and actively disseminate the results³.

¹ AHRQ. (n.d.). *Agency for Healthcare Research and Quality*. Retrieved 11 2013, from What is comparative effectiveness research: <http://effectivehealthcare.ahrq.gov/index.cfm/what-is-comparative-effectiveness-research1/>

² Ibid

In the Affordable Care Act, Congress took a different approach to CER, attempting to solidify the link between CER and patient-centered care, by creating the Patient-Centered Outcomes Research Institute (PCORI). The PCORI board has defined Patient-Centered Outcomes Research (PCOR) in the following terms⁴:

Patient-Centered Outcomes Research (PCOR) helps people and their caregivers communicate and make informed healthcare decisions, allowing their voices to be heard in assessing the value of healthcare options. This research answers patient-centered questions such as:

- “Given my personal characteristics, conditions and preferences, what should I expect will happen to me?”
- “What are my options and what are the potential benefits and harms of those options?”
- “What can I do to improve the outcomes that are most important to me?”
- “How can clinicians and the care delivery systems they work in help me make the best decisions about my health and healthcare?”

To answer these questions, PCOR:

- Assesses the benefits and harms of preventive, diagnostic, therapeutic, palliative, or health delivery system interventions to inform decision making, highlighting comparisons and outcomes that matter to people;
- Is inclusive of an individual’s preferences, autonomy and needs, focusing on outcomes that people notice and care about such as survival, function, symptoms, and health related quality of life;
- Incorporates a wide variety of settings and diversity of participants to address individual differences and barriers to implementation and dissemination; and
- Investigates (or may investigate) optimizing outcomes while addressing burden to individuals, availability of services, technology, and personnel, and other stakeholder perspectives

STS and CER

STS / ACC ASCERT Study

Funded by the National Heart Lung and Blood Institute (NHLBI) at the National Institutes of Health (NIH), the ASCERT (American College of Cardiology Foundation-The Society of Thoracic Surgeons Collaboration on the Comparative Effectiveness of Revascularization Strategies) study was designed to examine the comparative long-term effectiveness of Coronary Artery Bypass Graft (CABG) and percutaneous coronary intervention (PCI) revascularization strategies in real world populations, including specific subgroups of patients such as those with diabetes, low ejection fractions, chronic lung disease, and renal dysfunction. The study uses data from STS Database and ACC registry along with CMS Medicare Provider Analysis and Review (MEDPAR) data. The total number of patients used in these analyses is an order of magnitude greater than in all previous randomized control trials combined. Comparative analyses were performed using propensity score and inverse probability weighting approaches⁵⁶.

³ Effectiveness, F. C. (2009, June 30). *Report to the President and the Congress*. Retrieved November 2013, from http://www.tuftsctsi.org/~media/Files/CTSI/Library%20Files/FCC%20for%20CER%20Rpt%20to%20Pres%20and%20Congress_063009.aspx

⁴ PCORI. (2012, March 5). *Patient-Centered Outcomes Research Instituted*. Retrieved November 26, 2013, from Patient-Centered Outcomes Research: <http://www.pcori.org/research-we-support/pcor/>

⁵ Shahian, D., O'Brien, S., Sheng, S., Grover, F., Mayer, J., Jacobs, J., . . . Edwards, F. (2012). Predictors of long-term survival after coronary artery bypass grafting: Results from the Society of Thoracic Surgeons Adult Cardiac Surgery Database (the ASCERT study). *Circulation*, 149, 1-500.

⁶ Klein, L. W., Edwards, F. H., DeLong, E. R., Ritzenthaler, L., Dangas, G. D., & Weintraub, W. S. (2010). ASCERT: The American College of Cardiology Foundation The Society of Thoracic Surgeons Collaboration on the Comparative Effectiveness of Revascularization Strategies. *The*

STS views the ASCERT study as a paradigm for a comparative effectiveness research enterprise based on linked clinical and administrative data. Clinically robust, broadly generalizable data from thousands of patients, linked with longitudinal outcomes from claims data, could quickly and cost-effectively answer a broad range of questions that will arise in the coming years of healthcare reform. At least in the cardiovascular world, the necessary data are available now. The results of these studies will be a unique source of information for patients and their providers about the potential long-term results of different treatments in specific subgroups.

STS/ACC TVT Registry

The TVT Registry™ is a benchmarking tool developed to track patient safety and real-world outcomes related to the transcatheter aortic valve replacement (TAVR) procedure. Created by The Society of Thoracic Surgeons and the American College of Cardiology (ACC), the TVT Registry is designed to monitor the safety and efficacy of this new procedure for the treatment of aortic stenosis⁷.

Employing a first-of-its-kind transcatheter heart valve technology, TAVR provides a new treatment option for patients who are considered to be inoperable for conventional aortic valve replacement surgery. Through the capture and reporting of patient demographics, procedure details, and facility and physician information, the TVT Registry provides a data repository capable of delivering insight into clinical practice patterns and patient outcomes. Additionally, the TVT Registry has been approved by the Centers for Medicare and Medicaid Services (CMS) to meet the registry requirement outlined in the Medicare National Coverage Decision on TAVR.

The TVT Registry Measures:

- Patient demographics, provider and facility characteristics;
- History/risk factors, cardiac status and detailed health status;
- Well-defined indications for the procedure;
- Pre, intra and post-procedure data points and adverse event rates; and
- Outcomes at 30 days and one year.

Backed by the registry expertise of the ACC's NCDR® and the STS National Database, the TVT Registry serves as the main repository for clinical data related to TAVR and is positioned to incorporate future catheter-based procedures. A powerful data source, the registry allows the cardiovascular profession to monitor important safety information, detect infrequent complications and build the robust clinical research infrastructure necessary to advance the science surrounding the TAVR procedure. In this capacity, it will serve as a tool for conducting research in areas of comparative effectiveness, cost effectiveness and appropriate use criteria. Analysis of these data will allow the cardiovascular profession and medical community to understand how this new technology will be deployed throughout the U.S., and what impact it will have on patient outcomes as it becomes more prevalent. Data from the TVT Registry will assist the medical device industry and the FDA in surveillance of the quality, safety and efficacy of new medical devices.

STS Position on CER/PCOR Policy

General Priorities and Parameters

Physicians today have access to a wide array of medical information. However, there remains far too little rigorous evidence readily available to physicians and patients when they need it most about which treatments work best for which patients. We believe that federal agencies should target support for CER where it will

Journal of the American College of Cardiology Cardiovascular Interventions, 124-126. Retrieved from <http://interventions.onlinejacc.org/cgi/content/full/3/1/124>

⁷ <https://www.ncdr.com/TVT/Home/Default.aspx>

significantly improve health care value by enhancing physician clinical judgment, fostering the delivery of patient-centered care, and producing substantial benefit to the health care system as a whole.

All aspects of the CER process, including priority setting, must be transparent and include a set of mechanisms to support physician engagement and participation. STS also believes that initial priority areas of CER/PCOR should focus on high volume, high cost delivery models, modalities, and other health services which evidence significant variation in practice. In terms of methodology and study design, we appreciate that the PCORI board has included long-term and short-term assessments as PCOR should not be limited to new treatments. While we agree that the Board should establish a diverse portfolio of priorities, we believe that the national PCOR priorities should, at a minimum, address the prevention, management, and treatment of preventable disease which collectively represent a major cost-driver in today's health care system. Areas in need of further study and research include cardiovascular, endocrinology and metabolic disorders (including diabetes), and nutrition (including obesity). There is a wide range of available research on prevention, nutrition, and obesity interventions with little clarity about which is most effective. We feel that research related to high-cost, preventable diseases will produce the most immediate and useful results.

CER usually considers technology and pharmaceuticals, but behavioral interventions potentially could have the greatest impact for individual patients and system-wide. Prioritizing interventions designed to change physician behavior and to effect behavioral change in patients is necessary, as are other clinical interventions, technologies, and pharmaceutical remedies. Because prevalence rates and the most effective interventions for many diseases vary greatly by race, ethnicity, gender, age, geography, and economic status, we support the inclusion of racial and ethnic health disparities—and health disparities more generally—as a CER/PCOR priority area.

STS believes that the most effective way to study the complete “typical clinical population” is to utilize two powerful infrastructure mechanisms, registries and clinical data networks, that not only produce research findings, but play a key role in priority-setting as well as uptake and adoption of findings in a rapid cycle. Clinical data registries allow health care stakeholders to more clearly observe patterns of care and the effectiveness of various interventions over time. In addition, because clinical registries can be designed to collect population demographics including race/ethnicity, gender, geographic location, socio-economic status, and other factors, they are a useful tool for addressing healthcare disparities as well.

Methodologically speaking, data from randomized controlled studies may not be ideal and are not always feasible to obtain, especially for surgical procedures and rare diseases. Effective CER/PCOR will require opportunities to incorporate data from alternative sources, such as clinical registries. Registries allow health care professionals to identify clinical research priorities in real-time, to generate and test hypotheses, and to develop clinical guidelines in a very rapid cycle. The development and use of registries also align with the Institute of Medicine's current effort to promote a “learning healthcare system”—a system that delivers the best care every time, and to learn and improve with each care experience⁸.

Defining CER/PCOR

STS supports a broad definition of CER/PCOR that involves a comparison of different modalities, including health delivery models, to manage a specific health problem, condition, or disease. Besides the more typical areas of research, such as pharmaceuticals, medical devices and diagnostics, CER/PCOR should also focus on implementation and dissemination issues that would shed light on the most effective strategies that promote a learning health care system and improved clinical outcomes.

⁸ Institute of Medicine. (2012, September 6). *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America*. Retrieved 2012, from IOM.edu: <http://www.iom.edu/Reports/2012/Best-Care-at-Lower-Cost-The-Path-to-Continuously-Learning-Health-Care-in-America.aspx>

We understand that the mandate for PCORI is to focus on patient outcomes. We appreciate that the PCOR definition covers a broad range of categories from preventive, diagnostic, therapeutic, or health delivery system interventions.

Clinical Registries

Expansion of existing clinical registries and databases would provide a strong foundation when conducting CER/PCOR. We encourage federal support for clinical registry infrastructure creation and expansion. Utilizing, replicating, expanding, or integrating existing clinical registries would constitute an invaluable investment in the much needed infrastructure for accurately comparing clinical outcomes based on “real life” conditions where care delivery settings vary, patients may have numerous co-morbidities, and the patient populations are diverse. In turn, the clinical registries are not identical and may, to a greater or lesser extent, be able to promote a learning health care environment. Thus, evaluating the relative clinical effectiveness of various clinical registry models and alternatives to them remains a vital priority. Building the CER/PCOR infrastructure and capacity, in part, upon registries and clinical data networks will leverage CER/PCOR resources and boost the capacity of the system as a whole to learn and adapt in real-time.

STS is eager to participate in efforts to demonstrate the utility of clinical registries to develop an infrastructure to accelerate CER/PCOR and methodological research. We look forward to opportunities to assist federal agencies in this regard. CER/PCOR has the potential to have a profoundly positive impact on the quality of the information available to physicians and patients and, when used appropriately and with care, may help address escalating health care costs. We look forward to working closely interested agencies to ensure that physicians remain engaged, enthusiastic, and involved stakeholders in this complex and very important process. We believe that CER/PCOR can help physicians, in collaboration with patients and families, to provide right care at the right time.

To facilitate scaling of this model across other healthcare sectors, we would advocate

- Incentives for hospitals to participate in registries and for specialties to develop new registries where needed;
- Technical support to facilitate the development of new clinical registries by professional organizations;
- Data element standardization across registries;
- Clarification of federal privacy regulations regarding the submission of unique patient identifiers required for linking across registries; and
- Facilitation of the often cumbersome “one-off” approach to acquisition and use of MEDPAR data through RESDAC.

Regulatory Obstacles

There is significant regional variability in Institutional Review Board (IRB) requirements. In some instances, contribution of data to a national registry has been considered a quality reporting initiative and therefore IRB-exempt. At the other extreme, a significant number of IRBs have treated registry participation like a research effort, requiring the added burden of individual patient consents and standard research protections. While this presents an obstacle in terms of current registry projects, it is also a problem that individual physicians and hospitals will face with increasing frequency as they are held accountable for numerous private sector and ACA-authorized quality reporting requirements, many of which will necessitate the inclusion of patient-reported outcomes. Without some sort of governmental clarification indicating that registry reporting and data collection related to CER/PCOR are considered IRB-exempt quality reporting activities and do not require consent, this added regulatory burden will severely inhibit our ability to generate CER/PCOR data on the scale that will be required to support clinical decision-making at the point of care.

CER and Patient Demographics

Finally, CER/PCOR should be designed, communicated, and used in ways that recognize variation in individual patients' needs, circumstances, preferences, and responses to particular therapies, rather than encouraging one-size-fits-all solutions based on population averages. Similarly, CER/PCOR should support personalized medicine and the ability of physicians to tailor treatments to the needs of individual patients based on genetic information and other factors including patient preference, evidence-based, shared decision-making, and appropriateness of use criteria.

CER/PCOR has the potential to have a profoundly positive impact on the quality of the information available to physicians and patients and, when used appropriately and with care, may help address escalating health care costs.

Approved: January 27, 2013 (STS Board of Directors)

Coverage with Evidence Development and Parallel Review of Medical Devices

Overview

Coverage with Evidence Development

Coverage with Evidence Development (CED) is an evolving policy employed by the Centers for Medicare and Medicaid Services (CMS) that conditions national coverage of a novel item or service under Medicare Part A or B on additional data collection. Data collection requirements may include establishing a registry or conducting or participating in a clinical trial.

On May 16 2012, CMS held a Medicare Evidence Development & Coverage Advisory Committee (MEDCAC) meeting on evidentiary characteristics for coverage with evidence development (CED). This meeting followed CMS' earlier solicitation for public comments on its 2006 CED guidance document. CMS accepted public comments to inform changes to the existing CED policy. CMS' 2006 guidance on the use of CED indicated that this coverage tool would be used infrequently; however, recent coverage decisions suggest that CMS is beginning to use CED more frequently than expected.

Overall, the MEDCAC discussion favored frequent use of CED in CMS coverage decisions, under specific circumstances, and called on CMS to more clearly define evidentiary thresholds and criteria for applying CED. CMS released a draft, updated CED guidance document in November, 2012⁹.

Parallel Review

The Food and Drug Administration (FDA) and the CMS have established a pilot program for concurrent review of certain FDA premarket review submissions for medical devices and CMS national coverage determinations. By reducing the interval between FDA marketing approval and Medical coverage, this process will facilitate the development of innovative products and shorten the time it takes to bring these important products to patients.

During its pilot phase, the agencies will offer to perform parallel review for up to five innovative devices per year. Appropriate candidates for the parallel review pilot are medical devices that meet one of the following criteria:

- New technologies for which the sponsor/requester has a pre-investigational device exemption (IDE) or an approved IDE application designation;
- New technologies that would require an original or supplemental application for premarket approval (PMA) or a petition for de novo review; or
- New technologies that fall within the scope of a Part A or Part B Medicare benefit category and are not subject to a national coverage decision (NCD)¹⁰.

The pilot program is voluntary and will not change the existing, separate and distinct review standards for FDA device approval and CMS coverage determination. It is only available for medical device technologies that meet the above criteria.

⁹ CMS. (2012, December). *CMS.gov*. Retrieved 2012, from Draft Guidance for the Public, Industry, and CMS Staff Coverage with Evidence Development in the context of coverage decisions: <http://www.cms.gov/medicare-coverage-database/details/medicare-coverage-document-details.aspx?MCDId=23>

¹⁰ FDA. (2013, November). *FDA.gov*. Retrieved from FDA-CMS Parallel Review: <http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/HowtoMarketYourDevice/PremarketSubmissions/ucm255678.htm>

Although it was approved and accepted for coverage outside of the Parallel Review Pilot, the Edwards Sapien Transcatheter Aortic Valve Replacement (TAVR) device, may be considered one of the pioneers of parallel review. In the CMS Blog, Acting CMS Administrator Marilyn Tavenner touted the NCD for TAVR as

The result of an unprecedented level of collaboration between CMS, the Food and Drug Administration (FDA), the Agency for Healthcare Research and Quality (AHRQ), the American College of Cardiology, the Society of Thoracic Surgeons and Edwards Lifesciences, this proposed National Coverage Determination continues CMS' commitment to cross-agency collaboration and ensuring patients have access to the latest and best medical technology¹¹

STS and CED/Parallel Review

- September 22, 2011: STS and the American College of Cardiology (ACC) initiated a request on, for a NCD on TAVR that would tie coverage to hospital and provider participation in a prospective, national, audited registry that consecutively enrolls TAVR patients, accepts all manufactured devices, follows patient outcomes for at least one year, and complies with relevant patient privacy protections.
- November 2, 2011: FDA approved Edwards Life Sciences Sapien device, the first TAVR device approved for use in the United States. FDA directed Edwards to "continue to evaluate the outcomes with the Sapien THV through a national Transcatheter Valve Therapy (TVT) registry."
- December 1, 2011: The STS/ACC TVT Registry was jointly developed to track real-world outcomes related to TAVR.
- May 1, 2012: CMS published a groundbreaking National Coverage Determination (NCD) that allows for Medicare CED for transcatheter aortic valve replacement (TAVR) using a national registry.¹²

The STS National Database has earned the Society a place at the leading edge of meaningful health care policy that helps to improve quality while improving efficiency in the delivery of care. Clinical registries are a proven resource to assist in both the FDA's efforts to approve new medical technology and CMS's mission to bring new medical treatments to beneficiaries more quickly. To that end, the Society has strongly supported CMS's use of CED. The Society believes the collection of additional information may be useful in determining that a treatment is reasonable and necessary while also serving to validate the safety and effectiveness of the treatment in question. Additionally, CED may better ensure that appropriate beneficiaries have earlier access to new medical technologies and services.

Throughout the TAVR approval and coverage determination processes, STS sent a strong message that the health care community – and the physician community in particular – has the ability and the responsibility to play an active role in the CED process.

STS Position on CED/Parallel Review Policy

STS supports the development and use of data collection systems to ensure that patients, providers, and decision-makers, like CMS, can make decisions based on the best available clinical evidence. To that end, we strongly support CMS' use of CED. We believe that the collection of additional information may be useful in determining that a treatment is reasonable and necessary while also serving to ensure the safety of those receiving the treatment in question. Additionally, we believe that CED may better ensure that beneficiaries have appropriate access to new medical technologies and services at an earlier stage in their development.

¹¹ Tavenner, M. (2012, February 2). *CMS Blog*. Retrieved August 24, 2012, from CMS.gov: <http://blog.cms.gov/2012/02/02/better-coordination-leading-to-swifter-medicare-coverage-and-access/>

¹² See Appendix A

We believe that the health care community, and the physician community in particular, has the ability and the responsibility to play an active role in the CED process. We believe CED/Parallel Review policy should encourage the following three principles:

1. Coordination among relevant stakeholders;
2. Early discussions among the agency and relevant stakeholders so as to allow sufficient time for ensuring appropriate application, design, and implementation of CED/Parallel Review;
3. Flexibility of the CED/Parallel Review data collection mechanism to adjust the inputs and outputs based on new developments.

Key Principle 1: Coordination among relevant stakeholders

It is crucial that any CED/Parallel Review effort permits collaboration and generates buy-in from relevant stakeholders, including professional societies, government agencies, and industry. Some current activities fail to ensure complementary and collaborative activities between healthcare stakeholder segments. As such, many manufacturers of similar products in the same class often design their studies differently or collect disparate evidence. Further, different government agencies often have dissimilar evidentiary needs, forcing stakeholders to generate significant, varied data for different stakeholders.

STS believes that CED/Parallel Review policy can and should encourage integration and collaboration among different stakeholders. Given that many interventions are unproven from a real world perspective, CED/Parallel Review can be used to help all stakeholders to understand how new technologies work in patients. This can be accomplished by supporting the integration of clinical and administrative data which allows for real time clinical analyses and feedback to stakeholders. Protocol should be designed to enhance the ability for partnerships among industry members to better align development and data collection efforts and to meet the needs of regulators and payors.

STS' experience with the TVT Registry demonstrates that this model may be an effective platform to support collaboration and meet the needs of varied stakeholders. The TVT Registry relies on the integration of clinical and administrative data (e.g., it can be linked to CMS MEDPAR information) to obtain longitudinal outcomes data for a wide array of cardiothoracic surgery operations. The Registry tracks relevant outcomes, which allows stakeholders to use the information to enhance evidence-based shared decision-making with patients and caregivers. Standardized definition and data endpoints in the registry reduce redundancy, decrease unnecessary duplication, and increase important standardization in evidence development efforts. The TVT Registry model allows the varied needs of stakeholders to be addressed but does not "blend" or change different agencies' requirements (and thereby compromise the level or quality of evidence needed by one particular entity). The TVT Registry supports coordination among manufacturers on data collection efforts and has the potential to support the joint evidentiary needs of both CMS and FDA in light of the recently established parallel review initiative.

Key Principle 2: Early discussions among stakeholders

Given the limited statutory timeframes of issuing a NCD, it is important to start the CED/Parallel Review discussion early to ensure sufficient time to setup the mechanism to capture the appropriate data elements and engage relevant stakeholders. In fact, going through a more robust and thorough process for designing CED may have addressed previous CED implementation challenges.

During the TAVR effort, STS and ACC initiated conversations with CMS, FDA, and other relevant stakeholders early to ensure upfront agreement on the components and structure of the TVT Registry. Lessons learned from STS/ACC's experience developing the TVT Registry suggest that CED/Parallel Review policy decisions can be successful if federal agencies facilitate early discussions among relevant stakeholders so as to allow sufficient time for ensuring appropriate application, design, and implementation of CED/Parallel Review.

Key Principle 3: Flexibility of the data collection mechanism

The CED/Parallel Review process must be adaptable and able to evolve in order to respond to the changing evidentiary and technology landscape, which may introduce new or different indications, outcomes, and subpopulations, among others. Data collection should be useable to identify anomalies, target the causes of adverse events, or identify the reason for changes in outcomes. Once a medical specific issue/problem or population is identified, the data collection activities should be able to be adjusted to better capture specific types of information if early results suggest a need to focus on a specific outcome, population, etc. There are endless research questions that can be asked about a given device or product. Registries provide a pragmatic way to get the answers to all of those questions and registry data collection crosses agency boundaries providing a tangible asset to address a number of regulatory pathways.

STS' experience with the TVT Registry suggests that data collection through a registry allows for the necessary flexibility and can evolve alongside the changing environment. The TVT Registry is able to target specific areas for clinical practice improvements, reflect actual practice patterns, assess national and regional averages, and support quality improvement.

Approved January 27, 2013 (STS Board of Directors)

Healthcare Associated Infections

Overview

STS is intent on helping to reduce the incidence of healthcare associated infections and conditions in cardiothoracic surgery when possible, and has spent many years of collecting data through participant feedback, working toward this goal. Many hospital or healthcare-associated conditions are not always avoidable despite the adherence to evidence-based guidelines. For example, in 2009 mediastinitis was known to occur in 0.6 percent of coronary artery bypass graft (CABG) patients, but this does not mean that it is a 100 percent preventable condition. In obese patients with diabetes, the rate of this complication is estimated to be 10 times higher. We are unaware of any large studies that have reported a “zero” mediastinitis rate. Through the use of the STS National Cardiac Database, well-recognized risk factors for mediastinitis have been identified and reported (e.g. diabetes mellitus, obesity, etc.).

Hospital Acquired Conditions

Since October 1, 2008, an inpatient hospital discharge is not assigned to a higher paying Medicare Severity Diagnosis-Related Group (MS-DRG) if a selected hospital-acquired condition (HAC) were not present on admission (POA). That is, the case will be paid as though the secondary diagnosis was not present. The selected HACs are among those that CMS determines: (1) are high cost, high volume, or both; (2) would result in the assignment of a case to a DRG that was a higher payment when present as a secondary diagnosis; and (3) could reasonably have been prevented through the application of evidence-based guidelines.

HAI Data and Data Inventory

There is a significant need to reconcile differences among different data sources with respect to the type of data collected from each source and the ability of researchers to paint a thorough picture of the circumstances surrounding HAI. For example, signals detected through the Centers for Disease Control and Prevention (CDC) may not allow researchers to control for extraneous circumstances and comorbidities. For that reason, STS is working with a variety of stakeholders to align CDC nomenclature with clinical conditions to allow for more realistic signal detection that will allow for risk-adjusted HAI observations.

STS and HAI

STS has long lead the way in patient safety and quality enhancement efforts through our ongoing, innovative work with the STS National Database – a long-standing, trail-blazing quality improvement tool. We believe that any payment methodology associated with hospital or health care-acquired infections should include risk adjustment. Payment that considers non-risk adjusted HAI as a factor will have a negative impact on care as physicians become more concerned about treating high-risk patients.

Public Reporting

STS believes that the public has a right to know and understand the quality of surgical outcomes and sees public reporting as an ethical responsibility of the specialty. Our public reporting initiative is the culmination of many STS efforts. STS volunteer leaders have worked tirelessly to develop a mechanism whereby Database participants can voluntarily report their STS coronary artery bypass grafting (CABG) composite star ratings (overall and component domains).

STS has long recognized the importance of taking a leadership role in developing fair and meaningful reporting structures. Evaluations of quality based solely on administrative or claims data would be incomplete even in the best of situations, misleading and possibly inaccurate in the worst. STS methodology ensures that 11 individual components of clinical care are addressed, including mortality and morbidity rates and adherence to NQF-endorsed measures of quality¹³¹⁴¹⁵.

As part of its commitment to public reporting, STS has partnered with Consumers Union (CU), publishers of Consumer Reports, which now presents the 2009 STS CABG composite star ratings on the health section of its website. This STS Public Reporting Online Website complements the CU initiative and goes further in presenting hospital-level reports and using data going back to 2008¹⁶.

Patient Safety Checklists

STS disseminates Patient Safety Checklists in each of the main areas of cardiothoracic surgery to its members:

- Adult Cardiac Surgery¹⁷
- General Thoracic Surgery¹⁸
- Congenital Heart Surgery¹⁹

STS Position on HAI Policy

STS is concerned that the combination of unrealistic expectations and negative incentives may adversely influence physicians faced with providing care to those patients at higher risk. For example, we are troubled with the manner in which the current HAC payment policy has been implemented and how it will be incorporated into the Hospital Value Based Purchasing Program (VBP). STS does not believe that punitive payment mechanisms are the most appropriate or effective methods to reduce complications. In fact, we fear that the lack of risk adjustment combined with a punitive-payment approach may negatively impact patient care. Adverse consequences could include improper coding changes and limited patient access to care for patients who are most likely to have or acquire these complications.

STS agrees with only those approaches outlined in the National Action Plan to Prevent Healthcare Associated Infections (the Action Plan) (Department of Health and Human Services, 2012) that support reductions in hospital or health care-acquired infections through measurement, feedback, and focused systems efforts at improvement. As such, we are willing to work with all HAI stakeholders to develop appropriate risk-adjustment models for mediastinitis, clostridium difficile infections, ventilator-associated pneumonia, and other infections or conditions that can occur with cardiothoracic surgery.

STS supports implementation of Sec. 3008 of the Affordable Care Act, which modifies the current HAC payment policy by requiring the Secretary of HHS to employ an appropriate risk adjustment methodology so that hospitals are not unfairly punished for health care-acquired conditions that are not always avoidable. To that point, we note that the Action Plan calls for considerable, continuing research into the epidemiology of various HAI. Until the

¹³ Shahian, D. M. (2011). Public Reporting of Cardiac Surgery Performance. *Ann Thorac Surg*, 92, S1. Retrieved from http://www.sts.org/sites/default/files/documents/PublicReportingofCardiacSurgeryPerformanceIntro_090611.pdf

¹⁴ Shahian, D. M. (2011). Public Reporting of Cardiac Surgery Performance. *Ann Thorac Surg*, 92, S2-S11. Retrieved from http://www.sts.org/sites/default/files/documents/PublicReportingofCardiacSurgeryPerformance_HistoryRationaleConsequences_090611.pdf

¹⁵ Shahian, D. M. (2011). Public Reporting of Cardiac Surgery Performance: Part 2 Implementation. *Ann Thorac Surg*, 92, S12-S23. Retrieved from http://www.sts.org/sites/default/files/documents/PublicReportingofCardiacSurgeryPerformance_Implementation_090611.pdf

¹⁶ The business of healing hearts. (2011, September). *Consumer Reports*, pp. 26-36.

¹⁷ See Appendix B

¹⁸ See Appendix C

¹⁹ See Appendix D

epidemiology of a particular condition is fully understood, it stands to reason that it is next to impossible to fully prevent it. Further, if we know that patients with certain characteristics and/or comorbidities are prone to particular HAI, complete elimination of that HAI may be impossible even with the most intense prevention efforts. While we share this lofty goal, and will continue to strive toward that end, we feel that payment policy should be appropriately risk-adjusted so as not to unfairly punish those who are already treating the sickest among us.

Approved: January 27, 2013 (STS Board of Directors)

Graduate Medical Education

Overview

Funding Basics of Graduate Medical Education (GME)

Medicare is the single largest payer supporting Graduate Medical Education (GME) in the United States. Medicare spent approximately \$10 billion in 2012 on GME payments,¹ making up approximately two thirds of all funding. Additional sources of GME funding include Medicaid, patient care revenues, private payers, Veterans Affairs/Department of Defense, Health Resources and Services Administration (for children's hospitals) and other state and federal programs. Medicare GME funding is divided into two areas: Direct Graduate Medical Education (DGME) and Indirect Graduate Medical Education (IGME).

DGME Payments

DGME includes costs that are directly related to educating residents/fellows (trainees):

- Trainee and faculty salaries, benefits, and administrative expenses
- Other overhead costs

Basic Payment Formula: DGME payments are calculated using on a base period, per-resident amount (PRA) multiplied by the number of full-time equivalent (FTE) trainees the hospital staffed in the base period (i.e., 1 resident *working in patient care activities* full-time in one hospital = 1.0 FTE). The base period and PRA are typically based on the hospital's cost reporting period beginning in FY 1984 and the PRA is indexed for inflation each year. This is then multiplied by the hospital's ratio of Medicare inpatient days to total days to arrive at the DGME payment amount the hospital will receive from Medicare.

(PRA x FTE) x (Medicare inpatient days / total days) = Medicare DGME \$ Per Trainee Example, Resident:

$$(\$85,000 \times 1.0) \times (212 / 365) = \$49,369.86$$

$$\text{Example, Fellow: } (\$85,000 \times 0.5) \times (212 / 365) = \$24,684.93$$

Trainees in their initial residency period (IRP) are counted as 1.0 FTE. Trainees who pursue training beyond the IRP or decide to retrain in another specialty are counted as 0.5 FTE. IRP examples include:

- General surgery = 5 years
- Internal Medicine = 3 years
- Obstetrics and gynecology = 4 years

Since cardiothoracic surgery trainees in traditional programs have already completed their general surgery residency and their IRP of five years, they are counted as 0.5 FTE for Medicare DGME payments. 6-year integrated program trainees will have 5 years at 1.0 FTE and one year at 0.5 FTE.

IGME Payments

IGME includes compensation to teaching hospitals for higher inpatient operating costs associated with residency programs:

- Lower productivity
- Standby capacity
- Increased patient complexity (above MS-DRG payments)

Basic Payment Formula: IGME payments are calculated as a percentage add-on to the hospital's Medicare per-case MS-DRG payments based on an intern and resident-to-bed ratio (IRB). The IRB is multiplied by a regional

¹"HEALTH CARE WORKFORCE Federal Investments in Training and the Availability of Data for Workforce Projections." US Senate HELP Committee. April 9, 2014. <https://www.help.senate.gov/imo/media/doc/Kohn.pdf>.

multiplier to calculate the IGME MS-DRG percentage increase. The Medicare multiplier since 2003 has been 1.35 and basically amounts to a 5.5% increase to MS-DRG payments for 10% increase in the IRB.

$$\text{Multiplier} \times ((1 + \text{IRB})^{0.405} - 1) = \text{IGME \%} \quad \text{Example: } 1.35 \times ((1 + 0.215)^{0.405} - 1) = 11\%$$

Example of impact on MS-DRG Payment

MS-DRG 236; Coronary Bypass w/o Cardiac Catheterization w/o MCC= \$21,240.74 Example: \$21,240.74 x (1.11) = \$23,577.22*

Increased payment of \$2,336.48 per case

**Based on 2012 IPPS Medicare National rate*

STS and GME

In the coming decades, the United States will face a projected shortage of both primary care and specialist physicians, including cardiothoracic surgeons. Robust, data-driven forecasting of physician supply and demand from a recent report by the American Association of Medical Colleges (AAMC) identified a projected physician shortfall of 40,800 to 104,900 physicians by 2030.² Analyses commissioned at the state-level overwhelmingly support this conclusion, with thirty three states identifying current or future physician shortages—including a shortfall of at least 1,500 cardiothoracic surgeons by 2025.³

Critics of such forecasts point to the U.S. health care system's increasing utilization of advanced practice registered nurses (APRNs) and physician assistants (PAs), and the identification of further efficiencies in primary-care settings as means of mitigating predicted shortages.⁴ However, the AAMC's report accounted for the increasing supply of APRNs and PAs in their predictions, as well as changes in payment and delivery systems such as accountable care organizations and retail clinics. Despite controlling for these factors, a shortage of 7,300 to 43,100 primary care physicians is forecasted. Moreover, significant shortfalls are predicted amongst surgical specialties whose services are not well addressed by mid-level providers. The AAMC report predicts a shortage of between 19,800 and 29,000 surgeons by 2030.

The physician shortage is driven by many factors, including: an aging population and the retirement of senior physicians; an outdated cap on resident positions; a geographic maldistribution of specialists; and the ever-increasing technological proficiencies necessary to be competitive in the field. Unfortunately, shortages will disproportionately impact vulnerable and underserved populations. These groups include the approximately twenty percent of Americans who live in rural or inner-city locations that are designated as health professional shortage areas (HPSA).⁵ Since Medicare accounts for the vast majority of GME funding, its policies have a massive impact on the system and are an important place to start when looking for ways to address the shortage.

Growing concern regarding the projected shortage of surgeons of all specialties was evident in the American College of Surgeons' 2017 Policy and Position Paper on GME Reform.⁶ One factor causing considerable concern

² "2017 Update: The Complexities of Physician Supply and Demand: Projections from 2015 to 2030." AAMC Projections. February 28, 2017. https://aamc-black.global.ssl.fastly.net/production/media/filer_public/a5/c3/a5c3d565-14ec-48fb-974b-99fafaecb00/aamc_projections_update_2017.pdf.

³ "Recent Studies and Reports on Physician Shortages in the US." Center for Workforce Studies, Association of American Medical Colleges. October 2012. <https://www.aamc.org/download/100598/data/>.

⁴ Gudbranson, E; Glickman, A; Emanuel, EJ. "Reassessing the Data on Whether a Physician Shortage Exists." The JAMA Network. May 16, 2017. <http://jamanetwork.com/journals/jama/article-abstract/2613209>

⁵ HPSAs are designations that indicate health care provider shortages in primary, dental, or mental health care. There is currently no federal data on cardiothoracic surgery shortage areas.

⁶ "ACS Policy & Position Paper on GME Reform." American College of Surgeons. January 2017.

is that older physicians are retiring alongside the aging patient population. According to the latest AAMC workforce report, as of 2015 there were just 4,485 active cardiothoracic surgeons nationwide, which equated to 1 cardiothoracic surgeon per 71,665 people (increased from 62,577 people in a 2008 report). At the same time, fifty seven percent of active cardiothoracic surgeons are older than fifty five years. Among senior surgeons, forty four percent plan to retire between the age of sixty six and seventy years of age, escalating the shortage.⁷ And even as the physician supply decreases, the patient demand increases: Baby Boomers are reaching older adulthood. The Medicare population is expected to grow from fifty four million Americans in 2015 to over eighty million beneficiaries by 2030.⁸ Many researches have raised serious concerns about the dire consequences of a shortage of cardiothoracic surgeons tasked with caring for a growing Medicare-eligible population.⁹ Cardiovascular disease accounts for more than one-third of the deaths in the U.S., and the Medicare population is at the highest risk. Older patients will suffer disproportionately if the projected shortage of surgeons is not addressed.

Another major factor that exacerbates the shortage as older physicians retire is the federal cap on residency positions, established by Congress in the Balanced Budget Act of 1997. Congress capped the number of residency positions that Medicare would support at the number of residents who were training in a given teaching hospital as of December 31, 1996.¹⁰ Any new trainee position created after this twenty-year-old cap is not federally funded. Because of the cap, the number of thoracic surgery training programs has remained fairly constant since the late 1990's, with sixty nine traditional thoracic surgery residency programs (general surgery residency followed by thoracic surgery residency training) and twenty seven integrated thoracic surgery residency programs (general surgery training and thoracic surgery training combined into a six year program.)

In contrast, medical schools increased enrollment by twenty five percent between 2002 and 2015 in an attempt to address the projected physician shortage.¹¹ As the number of medical school graduates increases and the number of GME training programs remains stagnant, there will soon be a shortage of GME training opportunities for newly graduated physicians across all medical specialties. According to the latest report of the Accreditation Council for Graduate Medical Education, the goal of increasing medical school enrollment was achieved; enrollment is projected to have grown by thirty percent since 2002 by 2018, an increase of 4,946 students.¹² Yet because Congress limited the number of residents that can receive DGME funding, hospitals have no incentive to increase graduate medical education programs or start new programs.

The Affordable Care Act (ACA) of 2010 attempted to address these physician workforce issues by including a provision, effective for portions of cost reporting periods occurring on or after July 1, 2011, which redistributed DGME and IGME payments for trainee FTE's from hospitals that had fewer residents than their caps. CMS was to take sixty five percent of the DGME and IGME residency slots that went unused by a hospital for the past three years and redistribute them according to certain criteria. Seventy percent of the redistributions were to go to hospitals with resident-to-population ratios in the lowest quartile, and thirty percent to hospitals in health professional shortage areas (HPSA). On August 15, 2011, CMS posted a list of hospitals that would be either losing or gaining residency slots from their cap. Fifty eight hospitals received an increase in their caps while 276 hospitals saw reductions in their caps. In addition, the ACA called for training positions from hospitals that closed on or after March 28, 2008 to be redistributed to other hospitals. Prior to this provision, DGME and IGME

https://www.facs.org/~media/files/advocacy/workforce/2017_ahp_gmepaperappendixprimer.ashx..

⁷ Ikonomidis, J. S. "The Society of Thoracic Surgeons Thoracic Surgery Practice and Access Task Force: 2014 Workforce Report." US National Library of Medicine. September 13, 2016.

[https://www.ncbi.nlm.nih.gov/labs/articles/27637287/.](https://www.ncbi.nlm.nih.gov/labs/articles/27637287/)

⁸ "Report to the Congress: Medicare and the Health Care Delivery System" MedPAC.gov. 2015.

<http://www.medpac.gov/docs/default-source/reports/chapter-2-the-next-generation-of-medicare-beneficiaries-june-2015-report-.pdf?sfvrsn=0>

⁹ Grover, Atul; Orłowski, Janis; Erikson, Clese. "The Nation's Physician Workforce and Future Challenges." Improving U.S. Healthcare Symposium. THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES, 2016.

<https://www.aamc.org/download/452922/data/thenationsphysicianworkforceandfuturechallenges.pdf>

¹⁰ Iglehart, John K. "The Residency Mismatch." THE NEW ENGLAND JOURNAL OF MEDICINE. July 25, 2013.

[http://www.nejm.org/doi/pdf/10.1056/NEJMp1306445.](http://www.nejm.org/doi/pdf/10.1056/NEJMp1306445)

¹¹ "Nation's Medical Schools Increase Enrollment by 25 Percent Since 2002." AAMC. May 5th, 2016.

https://www.aamc.org/newsroom/newsreleases/459956/enrollment_survey_05052016.html

¹² "Number of Accredited Programs Academic Year 2017-2018." August 31, 2017. ACGME

<https://apps.acgme.org/ads/Public/Reports/ReportRun?ReportId=3&CurrentYear=2017&AcademicYearId=2017>

payments allocated to hospital systems that closed were not redistributed and simply vanished. These reforms were a positive step, but have not solved the larger problem caused by the outdated caps.

Failure to increase federal funding for GME will prevent current thoracic surgery residency programs from expanding training opportunities and new programs from being created. Given the facts of population growth and aging, an increase in federal funding for GME is essential to address workforce shortages and access limitations in the future. Ensuring an adequate workforce, including the supply of skilled surgical specialists, will be crucial to successful health care reform implementation.

Projected manpower shortages in the thoracic surgical workforce are also compounded by a geographic maldistribution of physicians: some areas have more than enough cardiothoracic surgeons, while others have none. While this is well recognized in the area of primary care, there are data on the surgical fields as well. The best documented information is in General Surgery. An Institute of Medicine (IOM) Report noted that the current GME program does not produce adequate numbers of physicians prepared to work in needed specialties or geographic areas, and has failed to train and encourage physicians to practice in the community-based settings where most Americans seek care.¹³ Furthermore, since a significant percentage of graduates of GME programs enter clinical practice in close proximity to their final program, the specialty mix and geographic location of GME programs are essential considerations to resolve the maldistribution of practicing physicians. Addressing inadequate physician distribution at the GME level is likely to have effects that are long lasting and less disruptive to existing physician practices than other options. This strategy requires a coordinated plan for identifying long-term physician workforce needs.

As all of these trends play out, the employment market is expanding. Cardiothoracic surgery is diversifying because of new advancements in mechanical circulatory support devices, endovascular aortic approaches, and percutaneous cardiac valves, to name a few growth areas. In a 2014 Thoracic Surgery Practice and Access Task Force Survey commissioned by STS, most respondents reported that it had been less than 3 years since their practices hired a new surgeon, which is similar to the findings of prior surveys. In a shift from previous surveys, however, respondents reported planning to hire at least 1 new surgeon in the next year.¹⁴ In this new market for cardiothoracic surgeons, recruits must have “special skills.” These requirements have increased the training time to 9 years or more for forty percent of cardiothoracic surgeons. Lacking federal support, surgeons have disparate access to new training techniques depending on where they are located.

STS Position on GME Policy

STS is pursuing the following professional and public policy options that may help address the looming cardiothoracic surgeon shortage and better distribute graduate medical education funding.

- To keep pace with increased medical school enrollment and patient demand, the federal government must increase the number of full time equivalent residents for which hospitals receive funding by lifting the caps. Medicare must continue supporting training costs by supporting at least a 15 percent increase in GME positions, allowing teaching hospitals to prepare another 4,000 physicians a year to meet the needs of a growing and aging population. STS has endorsed HR 2267/S 1301, the Resident Physician Shortage Reduction Act, as a step in the right direction towards this goal.
- There is no reliable funding mechanism to address physician and other health care professional development. It is critical to provide reliable funding, subject to periodic reassessment, which ensures a stable and thoughtful distribution in alignment with the changing needs of the nation.
- Some areas of the US face much more severe shortages than others, whereas a system that best serves all Americans should accurately reflect current and future health care needs. It is crucial to investigate geographical and economic factors that lead to the selection of cardiothoracic residency positions by applicants. It may be necessary to redistribute residency positions within cardiothoracic surgery programs.

¹³ “Graduate Medical Education That Meets the Nation's Health Needs.” The Institute of Medicine Report on GME. July 29, 2014. <http://www.nationalacademies.org/hmd/Reports/2014/Graduate-Medical-Education-That-Meets-the-Nations-Health-Needs.aspx>

¹⁴ Ikonomidis, 2016.

Several pilot programs, such as the one undertaken by Utah, provide valuable lessons in ensuring that residents are located where they are needed. The Utah Medical Education Commission (UMEC) applied for and received a waiver from CMS to distribute DGME funding based on the needs of various specialties as demonstrated by workforce surveys. During the project, FTE positions increased by thirty seven percent, including forty five positions outside the waiver that were “the result of the teaching hospitals within the consortium restructuring and reallocating their own GME resources based on UMEC’s recommendations.”¹⁵ This program demonstrated the effectiveness of using data and public policy to redistribute funding and thus, surgeons.

Other options that incentivize surgeons to practice in underserved areas include loan deference and/or forgiveness programs, and immigration assistance for foreign-born surgeons. These types of policy solutions reduce the economic barriers for medical professionals to choose work in underserved areas.

- As teaching hospitals increasingly rely on new technologies to train the next generation of surgeons, Congress should pass legislation supporting the development of medical simulation technologies that augment training. Medical simulation clinical skills training allows physicians to train and improve techniques without any risk or harm, resulting in reduced errors and improved outcomes for patients while ultimately reducing costs. Some states currently provide grants for this purpose; federal funding would ensure that all residents benefit.

Approved: January 2018 (STS Board of Directors)

¹⁵ ACS Policy & Position Paper on GME Reform.

Medical Liability Reform

Overview

Medical Liability Reform Objectives

Meaningful and effective medical liability reform has the goal of improving patient care and outcomes by eliminating preventable errors, and saving money by decreasing incidence of defensive medicine.

Analysis of reform policy

The following summarizes some of the more typical medical liability reform policies and assesses them against care-related and liability metrics which are described in Appendix E.

Effects of proposed medical liability reforms ²⁰		
Proposed reform	Description	Effects (see Appendix E)
Caps on damages	Limit amount of awards for non-economic losses or punitive damages	Reduces some defensive practices Mostly improves physician supply ²¹ Reduces indemnity payments Constrains growth of insurance premiums Limited or equivocal evidence on claims frequency or care quality
Statute of limitation and repose	Limit the amount of time a patient has to file a claim	Associated with modestly lower premiums No effect on indemnity payments Limited or equivocal evidence on defensive medicine, physician supply, quality of care, claims frequency, and overhead costs
Pretrial screening panels	Expert panels review cases to determine merit	May reduce defensive practices No effect on indemnity costs, claims, or premiums Limited or equivocal evidence on physician supply and quality of care
Certificate-of-merit requirement	Requires an affidavit from a medical expert affirming merit	Limited or equivocal effect on defensive medicine, physician supply, indemnity costs, overhead costs, claims frequency and premiums
Limit on attorneys' fees	Limits amount of plaintiff's attorney may charge as a contingency fee	No effect on indemnity costs, claims frequency, premiums, or physician supply Limited or equivocal evidence on defensive practices and quality of care
Joint and several liability "fair share rule"	When multiple defendants exist, liability is limited to the percentage of fault allocated to that defendant	No effect on indemnity costs, premiums, overhead costs, or physician supply Limited or equivocal evidence on defensive medicine, quality of care, and claims frequency
Collateral-source rule	Allows deduction of an award if injured patient has received compensation from another	No effect on defensive medicine, physician supply, quality of care, indemnity costs, claims frequency, premiums, or overhead costs

²⁰ Metzler, I., & Meara, J. (2012, January). Medical Liability Reform: Evidence for legislative and alternative approaches. *Bulletin of the American College of Surgeons*, 97(1), 7.

²¹ Further research may be required to determine if caps on damages has a more significant impact on certain medical specialties – those that have high malpractice premiums or high rates of lawsuits – above others.

	source	
Periodic payment	Allows awards to be made over a period of time rather than a lump sum	No effect on physician supply or indemnity costs Limited or equivocal effect on defensive medicine, quality of care, claims frequency, premiums, and overhead costs

Per the table above, many of the reform proposals have “limited” or “no effect” on the metrics in Appendix E. This clearly demonstrates the difficulty of developing meaningful medical liability reform policy that improves patient care and outcomes, and decreases incidence of defensive medicine. As a result, policy-makers have begun to explore other ways to implement meaningful reform.

Federal Demonstration Grants

The Affordable Care Act (ACA)²² contained a provision authorizing \$50 million in demonstration grant money to states for the development, implementation, and evaluation of alternatives to current tort litigation. All demonstrations must allow for the resolution of disputes and promote the reduction of health care errors by encouraging collection and analysis of patient safety data. Although authorized, ACA tort reform demonstration programs have not been awarded any money to proceed.

Prior to the enactment of the Affordable Care Act, President Obama directed the Secretary of Health and Human Services, Kathleen Sebelius, to launch medical liability planning grants and demonstration projects through the Agency for Healthcare Resources and Quality (AHRQ) to help States and health care systems test models that meet the following goals:

- Put patient safety first and work to reduce preventable injuries;
 - Foster better communication between doctors and their patients;
 - Ensure that patients are compensated in a fair and timely manner for medical injuries, while also reducing the incidence of frivolous lawsuits;
 - And reduce liability premiums.
- \$23 million in grant funding was awarded under this program. AHRQ released the first annual report on these demonstrations in February, 2012, entitled *Medical Liability Reform and Patient Safety Initiative Progress Reports*²³.

Some of the alternative reform proposals that have been tested as a part of these efforts, among other initiatives, are described below:

Alternative Medical Liability Reform Proposals	
Proposed reform	Description
Full disclosure programs / disclosure and offer	Insurer and insured institution proactively disclose adverse outcomes, investigate, apologize, and compensate
Health court	Specialist judge and committee hears all malpractice cases
Binding alternative dispute resolution	Providers and patients submit disputes to a third party instead of a court
Guidelines protection “safe harbor”	Physicians practicing within established guidelines would be presumed to be non-negligent
Enterprise liability	Organizations bear some of the liability for malpractice
No fault	Administrative body replaces court, grants awards without seeking to prove fault
Adverse event prevention	Targets improvements in communication about potential adverse outcomes and focuses on attempts to reduce adverse events from happening

²² Public Law 111-148: Patient Protection and Affordable Care Act of 2010. (124 Stat. 1009; Date: 3/23/10).

²³ www.ahrq.gov/qual/liability/medliabrep/htm

STS and MLR

HR 5 (112th Congress):

STS endorsed medical liability reform legislation introduced in the 112th Congress.

Introduced by Representatives Phil Gingrey, MD (R-GA) and David Scott (D-GA) in the House and Sens. Roy Blunt (R-MO) and Mark Kirk (R-IL) in the Senate, the bills would have capped non-economic compensatory damages at \$250,000, established a statute of limitations for filing medical malpractice suits, and limited attorneys' fees in health care lawsuits.

HR 1473 (113th Congress):

In the 113th Congress, Rep. Phil Gingrey introduced the Standard of Care Protection Act, which would protect physicians from new liability exposure resulting national care and practice standards put in place by the Affordable Care Act. The legislation would also disallow these new provisions from preempting states' existing liability laws.

This bill has been folded into the larger SGR repeal package put forth by the House Ways & Means Committee. STS has weighed in on the larger SGR package and continues to work towards passage of broad Medicare physician payment reform.

ACS MLR summit:

In October, 2012, the American College of Surgeons hosted a Medical Liability Reform Summit with a wide range of MLR stakeholders in attendance. Participants heard presentations and took part in discussions of a wide array of topics including, alternative dispute resolution, arbitrators and mediators, risk management, health courts and safe harbors.

STS Position on MLR Policy

Our country's inability to protect physicians from frivolous law suits while also maintaining patients' rights to seek redress for legitimate grievances has had a deleterious effect on STS members' ability to provide appropriate care. The prevalence of excessive tort claims against providers limits physicians' ability to provide needed health care services, affects the cardiothoracic surgical workforce as increasing numbers of medical students choose careers in fields with lower liability insurance costs, makes the practice of defensive medicine and the erosion of patient-centered care far more prevalent, and drives up the cost of health care nationwide. STS supports reforms of medical malpractice laws to help lower the costs and reduce incidence of defensive medicine throughout the health care system, while ensuring that patients injured by true malpractice are compensated fairly for their losses.

Demonstration Program Proposal

Quality measurement and data on clinical risk should be used to reduce lawsuits and the cost of liability insurance, and to restore balance to the justice system. Setting standards aligned with best practices identified by specialty societies with simultaneous quality and outcomes assessment is the best way to institute meaningful medical liability reform. STS advocates for the testing of such models, perhaps under the demonstration programs described above.

STS is well-equipped to develop specialty-specific benchmarks and best practices. STS established the STS National Database in 1989 as an initiative for quality improvement and patient safety among cardiothoracic surgeons. The Database includes quality performance measures in all three sub-specialties of surgery; adult cardiac, general thoracic, and congenital. Many of these measures have been approved or are being considered for approval by NQF. By collecting outcomes data for submission to the STS National Database, surgeons are committing to improving the quality of care that their patients receive. Since its inception, more than 100 publications have been derived from Database outcomes and have significantly advanced knowledge in cardiothoracic surgery. In addition, in the interest of transparency, STS Public Reporting Online enables Database participants to voluntarily report to the public their coronary bypass surgery performance.

The STS National Database also serves as the backbone of the STS Risk Calculator. This tool allows a user to calculate a patient's risk of mortality and other morbidities, such as long length of stay and renal failure. The Risk Calculator incorporates the STS risk models that are designed to serve as statistical tools to account for the impact of patient risk factors on operative mortality and morbidity²⁴. As a part of the medical liability reform mode, the STS Risk Calculator could be used to facilitate patient informed consent.

Despite the utility of these tools, we would caution that tort-reform should not be implemented in a way that is overly burdensome to specialty societies in general. Further, the creation of specialty-specific, clinical guidelines while being extremely useful in establishing a baseline for the "standard of care," must be sufficiently specific in their intent such that poor clinical practices or judgments which may happen to meet minimum standards are not, necessarily, considered justifiable. Practice guidelines exist to "guide" physicians in the majority of clinical scenarios, but guidelines do not replace the time-honored physician judgment and should never be used in such a way that would make a physician vulnerable to malpractice litigation because (s)he thoughtfully deviated from the exact elements of the guideline and exercised the appropriate clinical judgment on an individual case. It is this recognition of the occasional patients with unique clinical features that warrant deviation from established "guidelines" and is the hallmark of a competent physician. This must never be used as a means to ensnare the physician for failure to strictly adhere to the exact elements of a clinical guideline.

Additional Concerns

STS and its members across the country are also prepared to engage in a number of other medical liability reform efforts to move medical malpractice out of the jurisdiction of the civil court system to a process that will rationally take into consideration the tenets of practice excellence. Any future reform must have stakeholder buy-in and representation. For example, having a relevant specialist empaneled on a health court or pretrial screening panels is absolutely essential. In addition, STS deems as particularly counterproductive and reprehensible the practice by plaintiff attorneys of using "expert witnesses" who have no specialty training relevant to the malpractice event under review other than a general medical degree. Without specialty training and familiarity with specific issues germane to the litigation, these individuals cannot be viewed as expert. STS proposes that any medical liability reform legislation include strict guidelines as to who/what constitutes an "expert" witness.

We will continue to actively monitor and participate in the alternative medical liability reform models described above.

Approved: January 2014 (STS Board of Directors)

²⁴

<http://www.sts.org/quality-research-patient-safety/quality/risk-calculator-and-models/risk-calculator>

Patient Advocacy - Lung Cancer Screening

Overview

In November 2010, the National Lung Cancer Screening Trial (NLST) -- the largest and most expensive cancer randomized controlled trial ever conducted by the National Cancer Institute (NCI) -- provided conclusive evidence that CT screening can diagnose lung cancer at its earliest, most curable stage and significantly reduce deaths. Lung cancer is the leading cause of all cancer deaths, taking more lives each year than breast, prostate, colon and pancreatic cancers combined. Each year, 160,000 lives are lost to lung cancer, and only 16.6 percent of people diagnosed with lung cancer will live 5 years or longer.^{25,26} Without screening, the majority of lung cancers will continue to be diagnosed at a late stage, when treatment options are extremely expensive and ultimately futile in almost all cases. Currently lung cancer is the leading cause of cancer costs under Medicare by every economic metric. Screening will shift the time of diagnosis to a younger, commercially insured population at early stage when treatments are far more successful and half the cost of late stage treatments.

The NLST randomized more than 53,000 patients to screening with low-dose computed tomography (LDCT) versus chest x-ray, and, in October 2010, the NLST was halted due to a 20% mortality reduction identified in the study population (LDCT).²⁷ According to STS President, Doug Wood, "A 20% mortality reduction is, by far, the most profound finding that benefits our patients at risk for lung cancer, overshadowing improvements in surgical care, new chemotherapy drugs, and evolution in radiation combined." As a result of the study, the National Comprehensive Cancer Network (NCCN) published a new guideline supporting lung cancer screening in October 2011.²⁸

USPSTF

On December 31, 2013, The U.S. Preventive Services Task Force (USPSTF) released a recommendation for using low-dose computed tomography (CT) screening for lung cancer among patients at high risk, endorsing a "B" Grade for the screening protocol.²⁹ The panel's recommendations for screening include current and former smokers age 55–80 years, who have a smoking history equivalent to a pack a day for 30 years or two packs a day for 20 years. The recommendation for screening also includes those who have quit within the past 15 years.

²⁵ <http://www.cdc.gov/cancer/lung/statistics/>

²⁶ <http://seer.cancer.gov/statfacts/html/lungb.html>

²⁷ <http://www.cancer.gov/clinicaltrials/noteworthy-trials/nlst/nlstataglance/nlst-at-a-glance>

²⁸ http://www.lungcanceralliance.org/assets/docs/news/NCCN%20Screening%20Guidelines%2010_11.pdf

²⁹ <http://www.uspreventiveservicestaskforce.org/uspstf13/lungcan/lungcanfinalrs.htm>

USPSTF Grade Definitions ³⁰		
Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

Medicare

In 2014, Medicare is expected to publish a National Coverage Determination providing some Medicare beneficiaries access to lung cancer screening with no cost sharing.³¹

Medicaid

Under the Affordable Care Act (ACA), states that elect to cover, without beneficiary cost sharing, all services graded level A or B by the USPSTF and approved vaccines and their administration, as recommended by the Advisory Committee in Immunization Practices (ACIP), will receive a one percent federal medical assistance percentage (FMAP) increase for expenditures related to those services. States may still opt to cover these services with cost-sharing between the patient and Medicaid under the existing Medicaid program. Medicaid alternative benefit plans, also referred to as Medicaid expansion under the ACA, must provide these services without cost-sharing to all applicable beneficiaries. Under the Medicaid expansion, states will receive additional federal funding for agreeing to cover adults who are less than or equal to 133 percent of the federal poverty level.³²

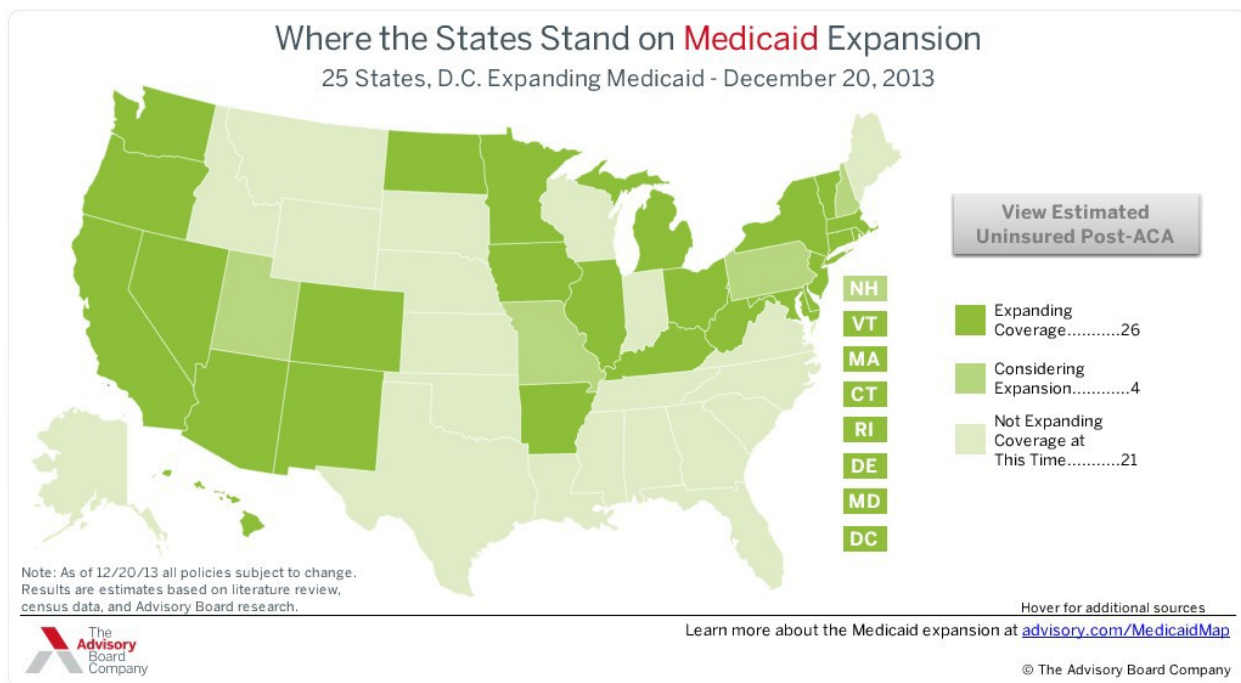
As of September, 2013, only five states, California, Nevada, New Hampshire, New Jersey, and New York had opted to cover preventive services with no beneficiary cost-sharing, thereby making them eligible for a one percent FMAP increase for those services.³³ States that have approved the Medicaid expansion as of November, 2013 are shown in the map below.

³⁰ <http://www.uspreventiveservicestaskforce.org/uspstf/grades.htm#post>

³¹ <http://www.gpo.gov/fdsys/pkg/FR-2013-02-25/pdf/2013-04084.pdf>

³² <http://www.medicaid.gov/Federal-Policy-Guidance/downloads/SMD-13-002.pdf>

³³ http://www.hhs.gov/nvpo/nvac/meetings/pastmeetings/2013/affordable_care_act_update_sept2013.pdf



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Private Insurance / Health Insurance Exchange

Effective September 23, 2010, all new group and individual health insurance plans must cover preventive services that have received a A or B grade from the USPSTF and immunizations recommended by the ACIP and other services for which there is supporting scientific evidence and which are recommended by the Department of Health and Human Services. New health plans must provide these services without applying deductibles or coinsurance if the services are provided in-network. Out-of-network services are eligible for cost-sharing. This requirement does not apply to health plans that have been requested to be “grandfathered” from new health benefit requirements. Plans must begin covering lung cancer screening as recommended by USPSTF by January 2015.

STS and Lung Cancer Screening

Research Advocacy

STS has supported several lung cancer policy initiatives, including the Lung Cancer Mortality Reduction Act. This bipartisan legislation, introduced in the 112th Congress, called for a multifaceted plan to address all aspects of lung cancer. Through a series of legislative compromises, language from the legislation was combined with the Pancreatic Cancer Research & Education Act to form the Recalcitrant Cancer Act of 2012, which was passed by Congress and signed into law in January 2013 as part of the National Defense Authorization Act of 2013.³⁵ The Act directs the National Cancer Institute (NCI) to convene a working group and establish a scientific framework for recalcitrant cancers. Recalcitrant cancers, such as lung cancer, are defined as types of cancers that have a 5-year relative survival rate of less than 20% and are estimated to cause at least 30,000 deaths annually. NCI must submit the framework to Congress by July 2014.

³⁴ <http://www.advisory.com/daily-briefing/resources/primers/medicaidmap>

³⁵ <http://www.gpo.gov/fdsys/pkg/BILLS-112hr4310enr/pdf/BILLS-112hr4310enr.pdf>

Screening Guidelines Endorsement

In December, 2012, the STS Executive Committee adopted a Clinical Statement on the Role of the Surgeon and Surgical Issues Relating to Computed Tomography Screening Programs for Lung Cancer.³⁶

USPSTF Recommendation Advocacy and Endorsement

On July 30, 2013 the USPSTF posted its final evidence report and draft recommendation statement on screening for lung cancer, followed by a final recommendation issues on December 31, 2013. The Task Force provided a grade B draft recommendation supporting screening people “who are at high risk for lung cancer with annual low-dose CT scans, which can prevent a substantial number of lung cancer-related deaths.”

Prior to the July, 2013 recommendation, STS members reached out to their members of Congress and HHS Secretary, Kathleen Sebelius to try to expedite the USPSTF review. STS members noted that, absent a recommendation from the USPSTF more than two and a half years after the scientific validation of lung cancer screening by the NLST, the USPSTF’s delay in making its recommendation was a de facto denial of coverage.

STS also provided a comment letter in support of the B rating from USPSTF on lung cancer screening. In the letter, STS recommended that the USPSTF broaden the scope of lung cancer risk factors beyond smoking and age.

STS Position on Lung Cancer Screening

STS agrees with the B rating from the U.S. Preventive Services Task Force that assures access to screening for patients at risk for lung cancer, as well as the language recommending screening for a group of high-risk patients. These recommendations provide clear guidance to physicians and other providers about the benefits, as well as potential harms, of LDCT screening, and even more importantly, empower patients to ask questions about screening with their physicians. The Task Force has been pragmatic in noting that the benefits may not exceed the potential harms in each individual patient, even in the group at high risk for cancer, stating “Shared decision making is important for persons within the population for whom screening is recommended. The benefit of screening varies with risk because persons who are at higher risk because of smoking history or other risk factors are more likely to benefit.” STS has long been a proponent of patient education, empowerment, and shared decision-making as evidenced by guidelines for the treatment of ischemic heart disease and recent participation in the Choosing Wisely™ campaign led by the American Board of Internal Medicine Foundation.

However, STS is concerned by the apparent decision by the USPSTF to disregard preexisting data about additional risk factors for lung cancer beyond smoking and age. The USPSTF should not have limited the consideration of all risk factors relevant for the development of lung cancer when one is making recommendations for screening policy. Studies have identified environmental, genetic, and other diagnoses as independent risk factors for lung cancer, often synergistic in combination with smoking. As a clinical trial the National Lung Screening Trial (NLST) limited its research question to patients based on age and smoking history only. Although this is an understandable limitation to allow conduct of a well-defined clinical trial, it should not limit the consideration of all risk factors relevant for the development of lung cancer when one is making recommendations for screening policy. It is naive and unrealistic to imply that lung cancer risk is limited to age and smoking history only.

The National Comprehensive Cancer Network recognized this and suggested that independent risk factors should be calculated in risk assessment for persons to be considered for lung cancer screening. Asbestos and radon exposure, family history, history of certain previous cancers, COPD, and pulmonary fibrosis are examples of

³⁶ <http://www.sts.org/sites/default/files/documents/pdf/guidelines/LungScreeningClinicalStatement.pdf>

relevant patient history that should be factored into recommendations for lung cancer screening. Although the data is softer than the randomized trial data from the NLST, STS has strongly recommended that USPSTF consider broadening their inclusion criteria for screening to include patients with less cigarette exposure if combined with additional independent risk factors for the development of lung cancer, similar to that proposed by the broad panel of experts convened by the NCCN. We will continue to advocate that for screening for patients with these additional risk factors be included as an essential health benefit.

STS will continue to advocate that all federal and private health plans cover lung cancer screening. Specifically, STS will be working with other stakeholder groups to ensure proper coverage of lung cancer screening for Medicare beneficiaries.

Approved: January X, 2014 (STS Board of Directors)

Physician Medicare Payments and the Sustainable Growth Rate

Overview

The Medicare Sustainable Growth Rate is the conversion factor used by CMS to determine physician payments for services provided to Medicare Part B (outpatient) beneficiaries. Enacted under the Balanced Budget Act of 1997, the SGR-based formula was adopted to control spending growth by pegging physician reimbursements to growth in GDP. Beginning in 2002 and each subsequent year the SGR-based payment system has been scheduled to impose a cut to physician pay. Congress has voted 12 times to stave off impending reductions to Medicare payments.

Each time Congress passes a temporary patch, a permanent solution becomes more expensive and unlikely. The continued delay in replacing the SGR has escalated the cost of permanent payment reform from \$48 billion in 2005 to more than \$300 billion today. In Fiscal Year (FY) 2013, according to the FY 2013 Physician Fee Schedule, physicians were scheduled to receive a 27.4% cut in pay in addition to a probable 2% sequestration of all federal outlays mandated under the Budget Control Act of 2011.

Many attribute the rising cost of healthcare to the current Medicare payment methodology that rewards physicians for the quantity of services they provide rather than the quality of care the patients receive. If Congress is to act to repeal the current payment formula, they will need to identify a quality-based payment mechanism to stand in its place or at the very minimum must establish a payment system that avoids penalizing physician specialties that develop and disseminate changes in practice patterns that reduce the volume of services provided while maintaining the same or better quality. As a leader in the provision of evidence-based quality healthcare, STS stands at the forefront of this ongoing conversation.

STS and Quality Innovation

Quality and outcome measures

STS has an extensive quality program that includes development of National Quality Forum-(NQF) endorsed quality measures and inclusion in CMS's Physician Quality Reporting System (PQRS). STS has developed composite, outcome, process and structure measures focused in the three subspecialty areas of Adult Cardiac Surgery, Congenital Heart Surgery and General Thoracic Surgery. STS National Database participants can voluntarily elect to have STS send their data from the Adult Cardiac Surgery Database directly to CMS's PQRS. The STS Adult Cardiac Database has been successfully used as the platform for statewide quality improvement initiatives in Michigan (Share, et al., 2011) and Virginia (Speir, Rich, Crosby, & Fonner, Jr., 2009), and to increase the use of arterial grafts and beta-blockers in a multi-state initiative (Ferguson Jr., et al., 2003).

In the interests of transparency, the Society has also established [STS Public Reporting Online](http://www.sts.org/quality-research-patient-safety/sts-public-reporting-online)³⁷—the publishing of Coronary Artery Bypass Graft (CABG) composite quality ratings from STS Adult Cardiac Surgery Database participants who have volunteered to participate. Launched in January 2011, STS received consent from 226 database participants to report their information through STS Public Reporting Online. Today, overall composite star ratings as well as their component ratings are listed on the STS website for 386 Database participants. These ratings were recently published in Consumer Reports as a consumers' guide on how heart surgeons "perform (The business of healing hearts, 2011)."

³⁷

<http://www.sts.org/quality-research-patient-safety/sts-public-reporting-online>

Evidence-based guidelines

The Society of Thoracic Surgeons Workforce on Evidence Based Surgery has developed evidence-based guidelines to provide practical assistance to STS membership. Thorough research of each guideline topic is completed through an exhaustive review of clinical information. The conclusions and recommendations are based on a review of scientific evidence published in the medical literature.

STS Clinical Practice Guidelines are intended to assist physicians and other health care providers in clinical decision-making by describing a range of generally acceptable approaches for the diagnosis, management, or prevention of specific diseases or conditions. STS has developed clinical guidelines on areas such as pre- and post-surgical antibiotic management, blood conservation, managing atrial fibrillation and surgical management of endocarditis.

Patient Registries

Tools such as the STS National Database can be utilized to track, monitor, and assess clinical improvement by physicians. To this end, the STS National Database plays an essential role in several initiatives aimed at improving health care quality.

In early 2012, CMS contracted with STS to develop measures that reflect quality of care for patients undergoing CABG. Specifically, STS will use its robust database to develop a hospital-level all-cause risk-adjusted readmission measure for CABG.

Additionally, the STS National Database plays a valuable role in many regional quality improvement programs. In the Virginia Cardiac Surgery Quality Initiative (VCSQI) Unsolicited Demonstration Project, which is a voluntary consortium of 17 hospitals and 13 cardiac surgical practices providing open-heart surgery in the Commonwealth of Virginia, participants utilize the STS National Database to identify quality improvement opportunities and patient outcomes. The work of the VCSQI has gone beyond quality improvement to include cost containment in cardiac surgery and its work has been highlighted in numerous Congressional testimonies over the past several years (Rich, Jeffrey on behalf of STS, October 7, 2005), (Rich, Measuring Physician Quality and Efficiency of Care for Medicare Beneficiaries, March 15, 2005), (Rich, Medicare Physician Payment: How to Build a Payment System the Provides Quality, Efficient Care for Medicare Beneficiaries, July 27, 2006), (Mayer Jr, MD, 2009), (STS, February, 2012).

As described previously, the STS National Database is the information platform for the Michigan STS initiative which involves all institutions and surgeons in Michigan and has led to the adoption of higher quality surgical practices such as the use of arterial bypass conduits during coronary artery bypass operations. The Northern New England Cardiovascular Study Group has used similar methods over many years to improve the mortality rates for patients undergoing coronary artery bypass surgery and to completely eliminate the inter-institutional variation in outcomes that was present initially.

STS actively engages in the creation of quality performance measures many of which have been endorsed by the National Quality Forum. Some of the Society's measures have also been approved for inclusion in the PQRS, allowing STS National Database participants who participate in PQRS to qualify for incentive payments by satisfactorily reporting on the approved quality measures under the existing program.

Non-Medicare payers have readily recognized that the utilization of quality performance measures generated from comprehensive clinical registries that offer alternatives to standard fee for service reimbursement. By linking overall payments, or supplemental payment to routine reimbursement, to clinical outcomes that have exceeded accepted benchmarks derived from recognized clinical databases, non-Medicare payers have established legal incentives to surgical providers who have achieved clinical improvement to cardiac surgical care at decreased cost by reduction of mortality and morbidity. This is exemplified by the pay for performance agreement with the

cardiac surgery practices that were members of the VCSQI and Anthem that was in effect from 2006 to 2011. Clinical and process metrics were generated and mutually agreed upon, derived from STS performance measures, and endorsed by the National Quality Forum. Weighted scores were derived from such metrics and augmented payments to contracted rates, ranging between 3 percent and 8 percent, were then added to the payments of surgical care depending upon the extent to which these metrics were achieved. This resulted in an overall improvement in care with associated decrease in costs by those providers who exceeded established quality standards. Importantly, the Michigan initiative has also received major funding through a grant from Michigan Blue Cross.

From 2006 to the present, STS has partnered with WellPoint, one of the largest private health plans, to provide performance information from hospitals and medical groups that agreed to share their data from the Society's Adult Cardiac Surgery Database of nationally accepted outcomes measures for adult cardiothoracic surgical procedures.

STS provides WellPoint with a series of reports on the quality performance of hospitals and cardiothoracic surgeon groups in certain states served by WellPoint health plans. The reports highlight participant performance on approximately 15 performance measures that have been endorsed by the National Quality Forum. These measures represent the first national voluntary consensus measures for cardiac surgical care, and include use of beta blockers before and after surgery, as well as infection and mortality rates. WellPoint has incorporated performance on these quality measures into its pay-for-performance and quality improvement programs, including the Quality-In-Sights: Hospital Incentive Program. The Society also provides information on quality performance to United Healthcare, which incorporates STS's quality metrics into their quality recognition program. Periodically, STS has provided quality performance information to Blue Cross Blue Shield related to its Blue Distinction Quality Recognition Program.

Finally, employing a first-of-its-kind transcatheter heart valve technology, TAVR provides a new treatment option for patients who are considered to be inoperable for conventional aortic valve replacement surgery. Through the capture and reporting of patient demographics, procedure details, and facility and physician information, the TVT Registry provides a data repository capable of delivering insight into clinical practice patterns and patient outcomes. According to a recent National Coverage Determination, the TVT Registry will likely play a pivotal role in CMS' coverage with evidence development of TAVR.

STS Position on Medicare Payment Policy

STS believes that an alternative payment methodology should align incentives along specialty or disease process lines at the regional or national level. This type of payment system would foster and incentivize physicians to act as members of a profession and fulfill their professional responsibilities to collaborate and share knowledge and practices with their peers (Mayer Jr, MD, 2009). There are several alternatives to current Medicare physician and hospital payment mechanisms which could advance these goals, including specialty-specific conversion factors for physician payment and global payments to hospitals and physicians for specified procedures such as isolated coronary bypass procedures

STS believes that the most powerful and reliable method to affect physician practice is to engage physicians in the collection of outcomes data on the services that they provide, and to provide meaningful, risk-adjusted feedback that allows them to compare these outcomes to those of their peers. We believe that the reimbursement system should promote physician practices that exemplify the profession's responsibilities to not only improve the quality of the care that is given to patients but also to wisely allocate societal healthcare resources. We also believe that responsible professional organizations provide important database and educational resources that can provide the infrastructure to support the needed improvements in physician practice and resource utilization.

Any modernization of the physician payment system should ensure that individual medical specialties can—and have incentive to—control the growth rate of their services and payments by identifying the most effective and appropriate treatment for the patient. At the very least, specialties should not be penalized if their quality and value improvement activities result in a lower Medicare utilization and expenditures (Alhassani, Chandra, & Chernew, Sources of the SGR "Hole", 2012). As the STS National Database and registries of other specialties have demonstrated, feedback of credible, risk-adjusted outcomes data encourages physicians to change their practice patterns to achieve better outcomes, more efficient care delivery, and thereby, increased patient value. The following should be included in any Medicare physician payment reform initiatives:

- Mandate and incentivize the development and utilization of clinical data registries;
- Require the Centers for Medicare and Medicaid Services (CMS) and other payers to make administrative (cost and claims) data available to registries for use in their analyses so that resource utilization becomes an outcome variable to be assessed in the same manner as traditional clinical outcomes such as mortality or complication rates;
- Address barriers imposed by federal and state privacy regulations;
- Allow physicians to share the savings generated by their quality improvement efforts and consider providing economic incentives and disincentives at higher level than the individual physician or practice; and
- Utilize registries and other resources to generate comparative effectiveness research.
- Consider significant changes to reimbursement systems for both hospitals and physicians that promote wise use of resources and improved clinical outcomes

STS believes that meaningful quality measures and rewards for physician performance cannot be applied simply to administrative data reported by hospitals and physicians (Bufalino VJ, 2011). While administrative data provides information on longitudinal medical treatment and resource utilization across settings of care and by various physicians, its clinical accuracy has been shown to be sub-optimal (Shahian & Normand, Comparison of "risk-adjusted" hospital outcomes, 2008), and it excludes pertinent information on patient risk factors, disease severity, or clinical outcomes. This critical information is only found in clinical datasets where there is input of clinical data by clinicians. It is only by linking administrative and clinical data that we can appropriately and accurately assess whether physicians are improving patient outcomes.

Registry-Based Reform

STS urges the policy-makers to consider quality incentive programs that encourage the coordination of Medicare claims data with existing registries to enhance patient monitoring and physician performance, and improve quality. Without linking the administrative data collected by health plans with the clinical information reported by clinicians, patients cannot be effectively monitored. By using linked longitudinal registries, physicians can more broadly monitor patients for readmissions or care transitions. Similarly, longitudinal patient histories allow physicians to assess the success of cardiothoracic interventions. The successful linking of the STS database with CMS administrative data in Virginia, for example, has led to a clinical/financial tool that brings quality improvement and cost containment to reality through a focus on reductions in costly complications and the redesign of care delivery models that promote high quality efficient care.

Public Reporting and Patient Involvement

It is important that patients have access to high-quality, high-value healthcare services. Through STS Public Reporting Online and incorporation of STS quality measures in other ranking programs, STS has led the way towards increasing transparency and access to value-based care. STS encourages patients to utilize these tools in seeking out cardiothoracic surgery services.

STS believes that patients will seek high-value healthcare services if they are provided with access to accurate, vetted physician and hospital performance measurements or ratings. The STS Public Reporting Online program allows patients to review provider scores based on a "star" system derived from quality measures reported to the

STS National Database (The business of healing hearts, 2011). The U.S. News and World Report utilized the STS Congenital Heart Surgery Database in their ranking calculations for the Best Children’s Hospitals of 2011–2012 (Olmsted, et al., 2011). Hospitals reporting congenital heart program data to the Database earned additional points for quality improvement activities. We believe that including endorsed measures and quality programs in these publicly available ranking programs is beneficial to both providers and patients. However, we strongly urge that any performance information must be appropriately risk-adjusted and weighted and we believe that clinical registries such as the STS Databases offer the most valid and reliable mechanisms for risk-adjustment. We also believe that there should be mechanisms in place to allow for physician appeal of the ratings prior to public release.

Care Coordination

STS believes that quality improvement initiatives such as Accountable Care Organizations (ACOs) have the potential to improve the quality of patient care and patient outcomes. However, the final ACO rule released by CMS mandates that participating ACOs must comply with 33 quality measures, none of which are relevant to cardiothoracic (CT) surgery. Measures used in any payment delivery model must include items for specialists, such as CT surgeons, to encourage their participation. Moreover, the final ACO rule does not require registry-based reporting, such as that in the STS National Database.

STS supports the use of payment systems that align incentives not only between physicians and hospitals, but also among physicians of the same or related specialties. Bundled payment, such as the previously mentioned VCSQI and the CMS Acute Care Episode (ACE) demo, are appropriate alternatives to the current fee-for-service environment. Utilizing STS data, both programs were shown to be associated with improved quality and patient outcomes when physician payment is bundled with the hospital. By bundling payments, Medicare can align payment with quality and efficiency based on the patient’s disease or condition.

Regulatory Relief

As stated previously, the lack of access to Medicare cost and utilization data for physician claims is a roadblock in the path towards understanding care delivery and the impact of medical and surgical interventions. We believe that important first steps have been taken in opening the Medicare claims files to collaborating investigators from STS and the American College of Cardiology in the NIH funded ASCERT comparative effectiveness trial on coronary artery disease treatments recently reported in the New England Journal of Medicine and in the Annals of Thoracic Surgery (Weintraub, et al., 2012) (Shahian, et al., 2012). We urge the Committee to eliminate any barriers that prevent CMS from sharing this data with approved registries and databases. Physicians, hospitals, payers and patients could all benefit if registries could access and merge this data with administrative claims to study trends and ultimately improve the quality of interventions (Jacobs, et al., Successful linking of the Society of Thoracic Surgeons adult cardiac surgery database to Centers for Medicare and Medicaid Services Medicare data., 2010).

In addition, in November 2011, the Social Security Administration rescinded its policy of sharing state-reported death data as a part of the Social Security Death Master File (SSDMF). There are continuing efforts to restrict access to the SSDMF further so as to protect those listed in the file from identity theft. As expressed in a recent letter to Social Security Commissioner, “linking clinical registries to the SSDMF allows for the verification of ‘life status’ of patients who otherwise would be lost for follow up after their treatment. Research based on this information helps physicians to provide information to today’s patients and families to help them with decision making. Outcomes data gives patients confidence in their medical interventions and demonstrates to patients and their families the durability and long-term benefits of medical procedures (Jacobs, et al., Successful linking of the Society of Thoracic Surgeons database to social security data to examine survival after cardiac operations, 2011) (The Society of Thoracic Surgeons, et. al.).” We look forward to working with Congress to find a solution to this problem that protects those listed in the SSDMF and their families from fraud while allowing legitimate users continued access to this important resource.

We also encourage Congress to consider the effects of certain regulations that impose restrictions on potential gainsharing programs among providers. STS has commented to CMS on Waiver Designs in Connection with the Medicare Shared Savings Program and the Innovation Center (The Society of Thoracic Surgeons).

In addition, the current and upcoming reporting programs will greatly impact the amount of time and attention physicians can dedicate to their patients. These programs include the value-based modifier, penalties under the electronic prescribing (e-prescribing) program, PQRS and EHR incentive program. We have recently joined over 90 other specialty and state medical societies to urge CMS to re-evaluate the penalty timelines associated with these programs and examine the administrative and financial burdens and intersection of these various federal regulatory programs. The combined implementation of these programs, along with preparations for transition to the ICD-10 coding system in 2014, may cause confusion and burden for physician practices.

While these programs are designed to improve quality, the design and implementation schedules place an administrative burden on physicians and their practices. Our hope is that these programs can be streamlined to work in concert with each other rather than creating repetitive work for physicians and their staff.

As the facility setting is the primary setting for care delivered by cardiothoracic surgeons, our members influence both physician and hospital reimbursements and revenues. Cardiothoracic surgeons need to be involved not only in discussions regarding Medicare physician payment systems, but also hospital payment systems. While cardiothoracic surgeons are not primary care physicians and to this point in time have not been the lead physicians performing care coordination services and chronic condition management, our members do have a significant influence over costs and value in the healthcare system. Any changes to physician and hospital payment systems should be those that effectively and adequately value both primary care and specialty services.

Finally, we hope that Congress will use payment reform as an opportunity to address the issue of medical liability. Our inability to protect physicians from frivolous law suits while maintaining patients' rights to seek redress for legitimate grievances has had a deleterious effect on our ability to provide appropriate care. In addition to limiting physicians' ability to provide needed health care services, our current system is affecting the cardiothoracic surgical workforce as increasing numbers of medical students choose careers in fields with lower liability insurance costs.

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Appendix A: TAVR NCD Highlights

TAVR NCD Highlights		
<p>TAVR is covered for the treatment of severe aortic stenosis when furnished according to an FDA-approved indication. The NCD also requires that two cardiac surgeons have independently examined the patient and the patient is under the care of a heart team: a cohesive, multidisciplinary team of medical professionals that includes a cardiothoracic surgeon and a cardiologist.</p>		
Requirements	TAVR must be furnished in a hospital with the appropriate infrastructure	
Institution	Without TAVR Experience	With TAVR Experience
	<ul style="list-style-type: none"> • ≥ 50 total AVRs in the previous year prior to TAVR, including ≥ 10 high risk patients; and • ≥ 2 physicians with cardiac surgery privileges; and • ≥ 1,000 catheterizations per year, including ≥ 400 percutaneous coronary interventions (PCIs) per year 	<ul style="list-style-type: none"> • ≥ 20 AVRs/yr. or ≥ 40 AVRs every 2 years; and • ≥ 2 physicians with cardiac surgery privileges; and • ≥ 1,000 catheterizations per year, including ≥ 400 percutaneous coronary interventions (PCIs) per year
Operator	Heart Team With TAVR Experience	
	<p>The Heart Team must include a cardiovascular surgeon and an interventional cardiologist whose combined experience maintains the following:</p> <ul style="list-style-type: none"> • ≥ 20 TAVR procedures in the prior year; or • ≥ 40 procedures in the prior 2 years; and <p>Additional members of the heart team such as echocardiographers, imaging specialists, heart failure specialists, cardiac anesthesiologists, intensivists, nurses, and social workers. The heart team's interventional cardiologist(s) and cardiac surgeon(s) must jointly participate in the intra-operative technical aspects of TAVR.</p>	
	Cardiovascular Surgeon Without TAVR Experience	
	<ul style="list-style-type: none"> • ≥ 100 career AVRs, including 10 high-risk patients; or • ≥ 25 AVRs in one year; or • ≥ 50 AVRs in 2 years; and which include at least 20 AVRs in the last year prior to TAVR initiation 	
	Interventional Cardiologist Without TAVR Experience	
	<ul style="list-style-type: none"> • Professional experience with 100 structural heart procedures lifetime; or • 30 left-sided structural procedures per year of which 60% should be balloon aortic valvuloplasty (BAV). Atrial septal defect and patent foramen ovale closure are not considered left-sided procedures 	
Registry	The heart team and hospital must participate in a prospective, national, audited registry that consecutively enrolls TAVR patients, accepts all manufactured devices, follows the patient for at least one year, and complies with relevant patient privacy protections.	

Appendix B: Adult Cardiac Surgery Check List



Adult Cardiac Surgery Check List (Template)

Before Induction SIGN IN	Before Skin Incision TIME OUT	Before Patient Leaves Room SIGN OUT								
<p>PATIENT HAS CONFIRMED</p> <ul style="list-style-type: none"> <input type="checkbox"/> IDENTITY <input type="checkbox"/> SITE <input type="checkbox"/> PROCEDURE <input type="checkbox"/> CONSENT <p><input type="checkbox"/> SITE MARKED/NOT APPLICABLE</p> <p><input type="checkbox"/> ANESTHESIA SAFETY CHECK COMPLETED</p> <p><input type="checkbox"/> PULSE OXIMETER ON PATIENT AND FUNCTIONING</p> <p><input type="checkbox"/> UNOS ID# (IF APPLICABLE)</p> <p>DOES PATIENT HAVE A KNOWN ALLERGY?</p> <ul style="list-style-type: none"> <input type="checkbox"/> NO <input type="checkbox"/> YES <ul style="list-style-type: none"> <input type="checkbox"/> DRUGS <input type="checkbox"/> LATEX <input type="checkbox"/> OTHER <p>DIFFICULT AIRWAY/ASPIRATION RISK?</p> <ul style="list-style-type: none"> <input type="checkbox"/> NO <input type="checkbox"/> YES, AND EQUIPMENT/ASSISTANCE AVAILABLE <p>RISK OF >500ML BLOOD LOSS OR (7ML/KG IN CHILDREN)?</p> <ul style="list-style-type: none"> <input type="checkbox"/> NO <input type="checkbox"/> YES, AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED <p><input type="checkbox"/> BLOOD AVAILABLE</p> <p>SIGN (NURSING): _____</p> <p>SIGN (ANESTH): _____</p>	<p><input type="checkbox"/> CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE: SURGEON, ANESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><input type="checkbox"/> PATIENT</td> <td style="width: 50%;"><input type="checkbox"/> SITE/SIDE</td> </tr> <tr> <td><input type="checkbox"/> PROCEDURE</td> <td><input type="checkbox"/> POSITION</td> </tr> <tr> <td><input type="checkbox"/> PERFUSION TEMP</td> <td><input type="checkbox"/> BLOOD BORN PATH</td> </tr> <tr> <td><input type="checkbox"/> PREP PROTOCOL</td> <td><input type="checkbox"/> IMPLANTS AND EQUIP.</td> </tr> </table> <p>ANTICIPATED CRITICAL EVENTS</p> <p><input type="checkbox"/> SURGEON REVIEWS:</p> <ul style="list-style-type: none"> <input type="checkbox"/> CRITICAL OR UNEXPECTED STEPS, AIRWAY OR VENTILATORY ISSUES <input type="checkbox"/> OPERATIVE DURATION, ANTICIPATED BLOOD LOSS? FLUID MANAGEMENT <p>ANESTHESIA TEAM REVIEWS:</p> <ul style="list-style-type: none"> <input type="checkbox"/> ANY PATIENT-SPECIFIC CONCERNS? <p>NURSING TEAM REVIEWS:</p> <ul style="list-style-type: none"> <input type="checkbox"/> HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? <input type="checkbox"/> ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS? <p>HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?</p> <ul style="list-style-type: none"> <input type="checkbox"/> YES <input type="checkbox"/> NOT APPLICABLE <p>DVT PROPHYLAXIS?</p> <ul style="list-style-type: none"> <input type="checkbox"/> COMPRESSION STOCKINGS <input type="checkbox"/> SQ HEPARIN <p>IS ESSENTIAL IMAGING DISPLAYED?</p> <ul style="list-style-type: none"> <input type="checkbox"/> YES <input type="checkbox"/> NOT APPLICABLE <p>SIGN (SURG): _____</p>	<input type="checkbox"/> PATIENT	<input type="checkbox"/> SITE/SIDE	<input type="checkbox"/> PROCEDURE	<input type="checkbox"/> POSITION	<input type="checkbox"/> PERFUSION TEMP	<input type="checkbox"/> BLOOD BORN PATH	<input type="checkbox"/> PREP PROTOCOL	<input type="checkbox"/> IMPLANTS AND EQUIP.	<p>NURSE VERBALLY CONFIRMS WITH THE TEAM:</p> <ul style="list-style-type: none"> <input type="checkbox"/> NAME OF THE PROCEDURE <input type="checkbox"/> THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT OR NOT APPLICABLE <p><input type="checkbox"/> POST PUMP ABX</p> <p><input type="checkbox"/> MEDICATION/DRIPS</p> <p><input type="checkbox"/> HOW THE SPECIMEN IS LABELLED</p> <ul style="list-style-type: none"> <input type="checkbox"/> INCLUDING PATIENT NAME <p><input type="checkbox"/> WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED</p> <p>SURGEON, ANESTHESIA PROFESSIONAL AND NURSE</p> <ul style="list-style-type: none"> <input type="checkbox"/> REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT <p>SIGN (NURSING): _____</p> <p>SIGN (SURG): _____</p>
<input type="checkbox"/> PATIENT	<input type="checkbox"/> SITE/SIDE									
<input type="checkbox"/> PROCEDURE	<input type="checkbox"/> POSITION									
<input type="checkbox"/> PERFUSION TEMP	<input type="checkbox"/> BLOOD BORN PATH									
<input type="checkbox"/> PREP PROTOCOL	<input type="checkbox"/> IMPLANTS AND EQUIP.									

Appendix C: General Thoracic Surgery Check List

Before Induction SIGN IN	Before Skin Incision TIME OUT	Before Patient Leaves Room SIGN OUT
<p>PATIENT HAS CONFIRMED</p> <ul style="list-style-type: none"> <input type="checkbox"/> IDENTITY <input type="checkbox"/> SITE <input type="checkbox"/> PROCEDURE <input type="checkbox"/> CONSENT <p><input type="checkbox"/> SITE MARKED/NOT APPLICABLE</p> <p><input type="checkbox"/> H & P CURRENT</p> <p><input type="checkbox"/> ANESTHESIA SAFETY CHECK COMPLETED</p> <p><input type="checkbox"/> PULSE OXIMETER ON PATIENT AND FUNCTIONING</p> <p><input type="checkbox"/> UNOS ID# (IF APPLICABLE)</p> <p>DOES PATIENT HAVE A KNOWN ALLERGY?</p> <ul style="list-style-type: none"> <input type="checkbox"/> NO <input type="checkbox"/> YES <ul style="list-style-type: none"> <input type="checkbox"/> DRUGS <input type="checkbox"/> LATEX <input type="checkbox"/> OTHER <p>DIFFICULT AIRWAY/ASPIRATION RISK?</p> <ul style="list-style-type: none"> <input type="checkbox"/> NO <input type="checkbox"/> YES, AND EQUIPMENT/ASSISTANCE AVAILABLE <p>RISK OF >500ML BLOOD LOSS OR (7ML/KG IN CHILDREN)?</p> <ul style="list-style-type: none"> <input type="checkbox"/> NO <input type="checkbox"/> YES, AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED <p><input type="checkbox"/> BLOOD AVAILABLE OR NA</p> <p><input type="checkbox"/> SIGN (NURSING): _____</p> <p><input type="checkbox"/> SIGN (ANESTH): _____</p>	<p><input type="checkbox"/> CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE SURGEON, ANESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM</p> <ul style="list-style-type: none"> <input type="checkbox"/> PATIENT <input type="checkbox"/> SITE <input type="checkbox"/> PROCEDURE <p>ANTICIPATED CRITICAL EVENTS</p> <p>SURGEON REVIEWS:</p> <ul style="list-style-type: none"> <input type="checkbox"/> CRITICAL OR UNEXPECTED STEPS, AIRWAY OR VENTILATORY ISSUES <input type="checkbox"/> OPERATIVE DURATION, PROSTHETICS, ANTICIPATED BLOOD LOSS? FLUID MANAGEMENT <p>ANESTHESIA TEAM REVIEWS:</p> <ul style="list-style-type: none"> <input type="checkbox"/> ANY PATIENT-SPECIFIC CONCERNS? <p>NURSING TEAM REVIEWS:</p> <ul style="list-style-type: none"> <input type="checkbox"/> HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? <input type="checkbox"/> ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS? <p>HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?</p> <ul style="list-style-type: none"> <input type="checkbox"/> YES OR NA <p>DVT PROPHYLAXIS?</p> <ul style="list-style-type: none"> <input type="checkbox"/> COMPRESSION STOCKINGS <input type="checkbox"/> SQ HEPARIN <p>IS ESSENTIAL IMAGING DISPLAYED?</p> <ul style="list-style-type: none"> <input type="checkbox"/> YES <input type="checkbox"/> NOT APPLICABLE <p><input type="checkbox"/> SIGN (SURG): _____</p>	<p>NURSE VERBALLY CONFIRMS WITH THE TEAM:</p> <ul style="list-style-type: none"> <input type="checkbox"/> NAME OF THE PROCEDURE <input type="checkbox"/> THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT OR NOT APPLICABLE <p>HOW THE SPECIMEN IS LABELLED</p> <ul style="list-style-type: none"> <input type="checkbox"/> CHECK PATIENT NAME <input type="checkbox"/> NUMBER OF SPECIMENS <input type="checkbox"/> TISSUE TYPE/ NODAL STATIONS <p><input type="checkbox"/> WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED</p> <p>SURGEON, ANESTHESIA PROFESSIONAL AND NURSE</p> <ul style="list-style-type: none"> <input type="checkbox"/> REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT <p><input type="checkbox"/> SIGN (NURSING): _____</p> <p><input type="checkbox"/> SIGN (SURG): _____</p>



Appendix D: Congenital Heart Surgery Check List



Congenital Heart Surgery Check List (Template)

Before Induction SIGN IN	Before Skin Incision TIME OUT	Before Patient Leaves Room SIGN OUT
<p>PATIENT HAS CONFIRMED</p> <ul style="list-style-type: none"> <input type="checkbox"/> IDENTITY <input type="checkbox"/> SITE <input type="checkbox"/> PROCEDURE <input type="checkbox"/> CONSENT <p>DOES PATIENT HAVE A KNOWN ALLERGY?</p> <ul style="list-style-type: none"> <input type="checkbox"/> NO <input type="checkbox"/> YES <ul style="list-style-type: none"> <input type="checkbox"/> DRUGS <input type="checkbox"/> LATEX <input type="checkbox"/> OTHER <ul style="list-style-type: none"> <input type="checkbox"/> H&P CURRENT (< 30d) <input type="checkbox"/> WEIGHT RE-CHECKED <input type="checkbox"/> ANESTHESIA SAFETY CHECK COMPLETED (Machine and Meds) <input type="checkbox"/> PULSE OXIMETER ON PATIENT AND FUNCTIONING <p>DIFFICULT AIRWAY/ASPIRATION RISK?</p> <ul style="list-style-type: none"> <input type="checkbox"/> NO <input type="checkbox"/> If YES, EQUIPMENT/ASSISTANCE AVAILABLE <ul style="list-style-type: none"> <input type="checkbox"/> INTRAVENOUS ACCESS AND FLUIDS PLANNED <input type="checkbox"/> WARMER (blankets and fluids) IN PLACE <input type="checkbox"/> BLOOD BANK NOTIFIED AND BLOOD PRODUCTS AVAILABLE WHEN NEEDED <ul style="list-style-type: none"> <input type="checkbox"/> SIGN (NURSING): _____ <input type="checkbox"/> SIGN (ANESTH): _____ 	<ul style="list-style-type: none"> <input type="checkbox"/> CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME <input type="checkbox"/> SURGEON, ANESTHESIA, PERFUSIONIST AND NURSE VERBALLY CONFIRM <ul style="list-style-type: none"> <input type="checkbox"/> PATIENT <input type="checkbox"/> SITE <input type="checkbox"/> PROCEDURE <input type="checkbox"/> IMAGING AVAILABLE AND REVIEWED <input type="checkbox"/> TRANSESOPHAGEAL ECHO (TEE) OR OTHER ECHO <input type="checkbox"/> ANTIFIBRINOLYTICS <input type="checkbox"/> ANTIBIOTICS ADMINISTERED (within last 60 min) <p>PERFUSION STRATEGY:</p> <ul style="list-style-type: none"> <input type="checkbox"/> CANNULATION SITES <input type="checkbox"/> CANNULAE SIZES <input type="checkbox"/> BYPASS PRIME (blood vs prime) <input type="checkbox"/> TARGETED CORE TEMP <input type="checkbox"/> USE OR NON-USE OF DHCA, SELECTIVE CEREBRAL PERFUSION <input type="checkbox"/> ICE ON THE HEAD <input type="checkbox"/> OTHER BYPASS CONSIDERATIONS (shunts, collaterals, AR, LV venting, CARDIOPLEGIA, etc) <p>ANESTHESIA TEAM REVIEWS:</p> <ul style="list-style-type: none"> <input type="checkbox"/> ANY FURTHER PATIENT-SPECIFIC CONCERNS? <p>NURSING TEAM REVIEWS:</p> <ul style="list-style-type: none"> <input type="checkbox"/> EQUIPMENT STERILITY CONFIRMED? <input type="checkbox"/> ARE THERE EQUIPMENT/PROSTHESES ISSUES OR ANY CONCERNS? <ul style="list-style-type: none"> <input type="checkbox"/> SIGN (SURG): _____ 	<p>NURSE VERBALLY CONFIRMS WITH THE TEAM:</p> <ul style="list-style-type: none"> <input type="checkbox"/> NAME OF THE PROCEDURE <input type="checkbox"/> THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT <ul style="list-style-type: none"> <input type="checkbox"/> HOW THE SPECIMEN IS LABELLED <ul style="list-style-type: none"> <input type="checkbox"/> INCLUDING PATIENT NAME <input type="checkbox"/> SENT FOR APPROPRIATE TESTS <input type="checkbox"/> WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED <p>SURGEON, ANESTHESIA PROFESSIONAL AND NURSE</p> <ul style="list-style-type: none"> <input type="checkbox"/> REVIEW THE KEY CONCERNS FOR POST-OP RECOVERY AND MANAGEMENT OF THIS PATIENT <input type="checkbox"/> BLOOD PRODUCTS USED <input type="checkbox"/> BLOOD PRODUCTS STILL AVAILABLE <input type="checkbox"/> BREAKS IN TECHNIQUE <ul style="list-style-type: none"> <input type="checkbox"/> SIGN (NURSING): _____ <input type="checkbox"/> SIGN (SURG): _____

Appendix E: Metrics for assessing the performance of medical liability reforms

Metrics for assessing the performance of medical liability reforms³⁸	
Liability measures	
Claims frequency	The number of malpractice claims filed
Indemnity costs	Settlement and verdict amounts among paid claims
Overhead costs	Administrative expenses associated with pursuing and defending litigation and running liability-insurance companies
Malpractice insurance costs	The premiums paid by health care providers for malpractice insurance coverage
Care-related measures	
Defensive medicine	Ordering tests, referrals, and other services primarily, though not solely, to reduce liability risk; or avoidance of high-risk services or patients
Patient access / physician supply	The availability of physician services in a state / region
Quality of care	The quality of care that patients receive, as indicated by patient outcomes and other measures

³⁸ Kachalia, A., & Mello, M. M. (2011). New Directions in Medical Liability Reform. *New England Journal of Medicine*, 364(16), 1564-1572.

TAB 9

STS Continuing Medical Education (CME) Mission Statement

The continuing medical education mission of The Society of Thoracic Surgeons is to provide a forum for reporting results of scientific research and for updating information in the disciplines of cardiovascular, general thoracic and congenital heart surgery. The principal continuing education programs conducted by the Society include an annual scientific meeting, self-study programs, and other stand-alone meetings. The Annual Meeting is composed of peer-reviewed scientific abstracts, invited overview presentations, small group presentations, presentations on new technologies, hands-on sessions and video programs. The broad scope of topics related to cardiothoracic surgery is covered during each Annual Meeting. In addition to and separate from the national meeting, topical meetings are held that focus on relevant information needs of cardiothoracic surgeons. These educational sessions frequently highlight a multidisciplinary approach and include content relevant to cardiothoracic surgeons as well as other physicians and health care providers in related disciplines. STS programs are developed and provided with the intent of confirming existing knowledge base, imparting new knowledge, and promoting competence in the content areas covered for cardiothoracic surgeons, residents and their allied health care providers.

Amended by the STS Board of Directors: January 25, 2009

The Society of Thoracic Surgeons

Education Disclosure Policy

As a sponsor of continuing medical education accredited by the Accreditation Council for Continuing Medical Education (ACCME), The Society of Thoracic Surgeons requires that any individual who is in a position to control the content of an educational activity must disclose all relationships with commercial interests (including known relationships of his or her immediate family, department, and partners). The ACCME defines a commercial interest as “any entity producing, marketing, reselling, or distributing health care goods or services consumed by, or used on, patients. The ACCME does not consider providers of clinical service directly to patients to be commercial interests.” The question of whether a disclosed conflict situation could represent undue influence on the educational activity by a commercial interest or whether the disclosed information is sufficient to consider an abstract, presentation, or other educational enduring material to represent potentially biased information must be resolved prior to an individual’s involvement in STS educational programming.

Required disclosures include (1) a financial interest of any amount (e.g., through ownership of stock, stock options, or bonds) (2) the receipt of any amount of cash, goods or services within the current 12-month period (e.g., through research grants, employment, consulting fees, royalties, travel, or gifts) or (3) a nonremunerative position of influence (e.g., as officer, director, trustee or public spokesperson). EXCLUDED from this disclosure requirement are blind trusts or other passive investments such as mutual funds. In the case of a financial or other relationship disclosure, the company, product/service, and specific nature of the relationship must be noted. Disclosure is mandatory for any person involved in the planning, management, presentation, and/or evaluation of STS educational activities.

Failure to disclose all relationships with commercial interests disqualifies the individual from being a planning committee member, a teacher, or an author of educational materials, and this individual cannot have any responsibility for the development, management, presentation, or evaluation of STS educational activities. This requirement is intended neither to imply any impropriety of such relationships nor to prejudice any individual planner, presenter or author. It is merely to identify such relationships through full disclosure, and to allow STS to assess and resolve potential influences on the educational activity prior to the planning and implementation of an educational activity. If no relationships with commercial interests exist, the individual must indicate this on the disclosure form.

Additionally, the fact that the presentation, paper, or other educational product describes (a) the use of a device, product, or drug that is not FDA approved or (b) an off-label use of an approved device, product, or drug must also be disclosed. This requirement has been adopted in response to FDA policy and case law involving medical societies, and is not intended to prohibit or inhibit independent presentation or discussion regarding the uses of devices, products, and drugs as described in (a) or (b) above.

For live presentations, all disclosures must be stated orally and on a slide at the beginning of the presentation and will be noted in published material related to the activity. Slides, handouts, and other materials utilized as part of an educational activity cannot contain any advertising, trade names or a product group message. Speakers are required to disclose that they have nothing to disclose if this is the case.

Amended by the STS Executive Committee: April 11, 2012

Accreditation Criteria

Providers seeking full Accreditation or reaccreditation for a four-year term must comply with Criteria 1–13. Providers also have the option to aim to achieve Accreditation with Commendation, a six-year term. Providers seeking commendation must comply with Criteria 1-13 and choose one of the following two options. Providers that will receive accreditation decisions between November 2017 and November 2019 will have the choice of using either Option A: Commendation Criteria (C16-C22) or Option B: Menu of New Commendation Criteria (C23-C38) to seek Accreditation with Commendation. Providers that will receive accreditation decisions after November 2019 must use Option B to seek Accreditation with Commendation.

[More information on Accreditation with Commendation options is available here.](#)

CRITERION 1 The provider has a CME mission statement that includes expected results articulated in terms of changes in competence, performance, or patient outcomes that will be the result of the program.

CRITERION 2 The provider incorporates into CME activities the educational needs (knowledge, competence, or performance) that underlie the professional practice gaps of their own learners.

CRITERION 3 The provider generates activities/educational interventions that are designed to change competence, performance, or patient outcomes as described in its mission statement.

CRITERION 4 This criterion has been eliminated effective February 2014.

CRITERION 5 The provider chooses educational formats for activities/interventions that are appropriate for the setting, objectives, and desired results of the activity.

CRITERION 6 The provider develops activities/educational interventions in the context of desirable physician attributes [eg, Institute of Medicine (IOM) competencies, Accreditation Council for Graduate Medical Education (ACGME) Competencies].

CRITERION 7 The provider develops activities/educational interventions independent of commercial interests. (SCS 1, 2, and 6).

CRITERION 8 The provider appropriately manages commercial support (if applicable, SCS 3 of the ACCME Standards for Commercial SupportSM).

CRITERION 9 The provider maintains a separation of promotion from education (SCS 4).

CRITERION 10 The provider actively promotes improvements in health care and NOT proprietary interests of a commercial interest (SCS 5).

DEFINITION OF A COMMERCIAL INTEREST A commercial interest is any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients. The ACCME does not consider providers of clinical service directly to patients to be commercial interests - unless the provider of clinical service is owned, or controlled by, an ACCME-defined commercial interest. A commercial interest is not eligible for ACCME accreditation. Commercial interests cannot be accredited providers and cannot be joint providers. Within the context of this definition and limitation, the ACCME considers the following types of organizations to be eligible for

accreditation and free to control the content of CME: 501-C Non-profit organizations (Note, ACCME screens 501c organizations for eligibility. Those that advocate for commercial interests as a 501c organization are not eligible for accreditation in the ACCME system. They cannot serve in the role of joint provider, but they can be a commercial supporter.) Government organizations Non-health care related companies Liability insurance providers Health insurance providers Group medical practices For-profit hospitals For profit rehabilitation centers For-profit nursing homes Blood banks Diagnostic laboratories ACCME reserves the right to modify this definition and this list of eligible organizations from time to time without notice.

CRITERION 11 The provider analyzes changes in learners (competence, performance, or patient outcomes) achieved as a result of the overall program's activities/educational interventions.

CRITERION 12 The provider gathers data or information and conducts a program-based analysis on the degree to which the CME mission of the provider has been met through the conduct of CME activities/educational interventions.

CRITERION 13 The provider identifies, plans and implements the needed or desired changes in the overall program (eg, planners, teachers, infrastructure, methods, resources, facilities, interventions) that are required to improve on ability to meet the CME mission.

CRITERION 14 This criterion has been eliminated effective February 2014.

CRITERION 15 This criterion has been eliminated effective February 2014.

Accreditation with Commendation - Option A

CRITERION 16 The provider operates in a manner that integrates CME into the process for improving professional practice.

CRITERION 17 The provider utilizes non-education strategies to enhance change as an adjunct to its activities/educational interventions (e.g., reminders, patient feedback).

CRITERION 18 The provider identifies factors outside the provider's control that impact on patient outcomes.

CRITERION 19 The provider implements educational strategies to remove, overcome or address barriers to physician change.

CRITERION 20 The provider builds bridges with other stakeholders through collaboration and cooperation.

CRITERION 21 The provider participates within an institutional or system framework for quality improvement.

CRITERION 22 The provider is positioned to influence the scope and content of activities/educational interventions.

Accreditation with Commendation - Option B

CRITERION 23 Members of interprofessional teams are engaged in the planning and delivery of interprofessional continuing education (IPCE).

CRITERION 24 Patient/public representatives are engaged in the planning and delivery of CME.

CRITERION 25 Students of the health professions are engaged in the planning and delivery of CME.

CRITERION 26 The provider advances the use of health and practice data for healthcare improvement.

CRITERION 27 The provider addresses factors beyond clinical care that affect the health of populations.

CRITERION 28 The provider collaborates with other organizations to more effectively address population health issues.

CRITERION 29 The provider designs CME to optimize communication skills of learners.

CRITERION 30 The provider designs CME to optimize technical and procedural skills of learners.

CRITERION 31 The provider creates individualized learning plans for learners.

CRITERION 32

The provider utilizes support strategies to enhance change as an adjunct to its CME.

CRITERION 33 The provider engages in CME research and scholarship.

CRITERION 34 The provider supports the continuous professional development of its CME team.

CRITERION 35 The provider demonstrates creativity and innovation in the evolution of its CME program.

CRITERION 36 The provider demonstrates improvement in the performance of learners.

CRITERION 37 The provider demonstrates healthcare quality improvement.

CRITERION 38 The provider demonstrates the impact of the CME program on patients or their communities.

Source URL: <http://www.accme.org/requirements/accreditation-requirements-cme-providers/accreditation-criteria>

STANDARDS FOR COMMERCIAL SUPPORT: STANDARDS TO ENSURE INDEPENDENCE IN CME ACTIVITIES

STANDARD 1: INDEPENDENCE

STANDARD 1.1 A CME provider must ensure that the following decisions were made free of the control of a commercial interest. (See the Policies Supplementing the Standards for Commercial Support for a definition of a "commercial interest" and some exemptions.) (a) Identification of CME needs; (b) Determination of educational objectives; (c) Selection and presentation of content; (d) Selection of all persons and organizations that will be in a position to control the content of the CME; (e) Selection of educational methods; (f) Evaluation of the activity.

STANDARD 1.2 A commercial interest cannot take the role of non-accredited partner in a joint provider relationship.

STANDARD 2: RESOLUTION OF PERSONAL CONFLICTS OF INTEREST

STANDARD 2.1 The provider must be able to show that everyone who is in a position to control the content of an education activity has disclosed all relevant financial relationships with any commercial interest to the provider. The ACCME defines "relevant" financial relationships" as financial relationships in any amount occurring within the past 12 months that create a conflict of interest.

STANDARD 2.2 An individual who refuses to disclose relevant financial relationships will be disqualified from being a planning committee member, a teacher, or an author of CME, and cannot have control of, or responsibility for, the development, management, presentation or evaluation of the CME activity.

STANDARD 2.3 The provider must have implemented a mechanism to identify and resolve all conflicts of interest prior to the education activity being delivered to learners.

STANDARD 3: APPROPRIATE USE OF COMMERCIAL SUPPORT

STANDARD 3.1 The provider must make all decisions regarding the disposition and disbursement of commercial support.

STANDARD 3.2 A provider cannot be required by a commercial interest to accept advice or services concerning teachers, authors, or participants or other education matters, including content, from a commercial interest as conditions of contributing funds or services.

STANDARD 3.3 All commercial support associated with a CME activity must be given with the full knowledge and approval of the provider.

STANDARD 3.4 The terms, conditions, and purposes of the commercial support must be documented in a written agreement between the commercial supporter that includes the provider and its educational partner(s). The agreement must include the provider, even if the support is given directly to the provider's educational partner or a joint provider.

STANDARD 3.5 The written agreement must specify the commercial interest that is the source of commercial support.

STANDARD 3.6 Both the commercial supporter and the provider must sign the written agreement between the commercial supporter and the provider.

STANDARD 3.7 The provider must have written policies and procedures governing honoraria and reimbursement of out-of-pocket expenses for planners, teachers and authors.

STANDARD 3.8 The provider, the joint provider, or designated educational partner must pay directly any teacher or author honoraria or reimbursement of out-of-pocket expenses in compliance with the provider's written policies and procedures.

STANDARD 3.9 No other payment shall be given to the director of the activity, planning committee members, teachers or authors, joint provider, or any others involved with the supported activity.

STANDARD 3.10 If teachers or authors are listed on the agenda as facilitating or conducting a presentation or session, but participate in the remainder of an educational event as a learner, their expenses can be reimbursed and honoraria can be paid for their teacher or author role only.

STANDARD 3.11 Social events or meals at CME activities cannot compete with or take precedence over the educational events.

STANDARD 3.12 The provider may not use commercial support to pay for travel, lodging, honoraria, or personal expenses for non-teacher or non-author participants of a CME activity. The provider may use commercial support to pay for travel, lodging, honoraria, or personal expenses for bona fide employees and volunteers of the provider, joint provider or educational partner.

STANDARD 3.13 The provider must be able to produce accurate documentation detailing the receipt and expenditure of the commercial support.

STANDARD 4: APPROPRIATE MANAGEMENT OF ASSOCIATED COMMERCIAL PROMOTION

STANDARD 4.1 Arrangements for commercial exhibits or advertisements cannot influence planning or interfere with the presentation, nor can they be a condition of the provision of commercial support for CME activities.

STANDARD 4.2 Product-promotion material or product-specific advertisement of any type is prohibited in or during CME activities. The juxtaposition of editorial and advertising material on the same products or subjects must be avoided. Live (staffed exhibits, presentations) or enduring (printed or electronic advertisements) promotional activities must be kept separate from CME.

- **For print**, advertisements and promotional materials will not be interleaved within the pages of the CME content. Advertisements and promotional materials may face the first or last pages of printed CME content as long as these materials are not related to the CME content they face and are not paid for by the commercial supporters of the CME activity.

-
- **For computer based**, advertisements and promotional materials will not be visible on the screen at the same time as the CME content and not interleaved between computer 'windows' or screens of the CME content. (Supplemented February 2014; the information in blue previously appeared in ACCME policies. No changes have been made to the language.) Also, ACCME-accredited providers may not place their CME activities on a Web site owned or controlled by a commercial interest. With clear notification that the learner is leaving the educational Web site, links from the Web site of an ACCME accredited provider to pharmaceutical and device manufacturers' product Web sites are permitted before or after the educational content of a CME activity, but shall not be embedded in the educational content of a CME activity. Advertising of any type is prohibited within the educational content of CME activities on the Internet including, but not limited to, banner ads, subliminal ads, and pop-up window ads. For computer based CME activities, advertisements and promotional materials may not be visible on the screen at the same time as the CME content and not interleaved between computer windows or screens of the CME content.
 - **For audio and video recording**, advertisements and promotional materials will not be included within the CME. There will be no 'commercial breaks.'
 - **For live, face-to-face CME**, advertisements and promotional materials cannot be displayed or distributed in the educational space immediately before, during, or after a CME activity. Providers cannot allow representatives of Commercial Interests to engage in sales or promotional activities while in the space or place of the CME activity.
 - (Supplemented, February 2014; the information in blue previously appeared in ACCME policies. No changes have been made to the language.) For **Journal-based CME**, None of the elements of journal-based CME can contain any advertising or product group messages of commercial interests. The learner must not encounter advertising within the pages of the article or within the pages of the related questions or evaluation materials.

STANDARD 4.3 Educational materials that are part of a CME activity, such as slides, abstracts and handouts, cannot contain any advertising, [corporate logo](#), trade name or a product-group message of an ACCME-defined commercial interest.

STANDARD 4.4 Print or electronic information distributed about the non-CME elements of a CME activity that are not directly related to the transfer of education to the learner, such as schedules and content descriptions, may include product-promotion material or product-specific advertisement.

STANDARD 4.5 A provider cannot use a commercial interest as the agent providing a CME activity to learners, e.g., distribution of self-study CME activities or arranging for electronic access to CME activities.

[STANDARD 5: CONTENT AND FORMAT WITHOUT COMMERCIAL BIAS](#)

STANDARD 5.1 The content or format of a CME activity or its related materials must promote improvements or quality in healthcare and not a specific proprietary business interest of a commercial interest.

STANDARD 5.2 Presentations must give a balanced view of therapeutic options. Use of generic names will contribute to this impartiality. If the CME educational material or content includes trade

names, where available trade names from several companies should be used, not just trade names from a single company.

STANDARD 6: DISCLOSURES RELEVANT TO POTENTIAL COMMERCIAL BIAS

STANDARD 6.1 An individual must disclose to learners any relevant financial relationship(s), to include the following information: The name of the individual; The name of the commercial interest(s); The nature of the relationship the person has with each commercial interest.

STANDARD 6.2 For an individual with no relevant financial relationship(s) the learners must be informed that no relevant financial relationship(s) exist.

STANDARD 6.3 The source of all support from commercial interests must be disclosed to learners. When commercial support is "in-kind" the nature of the support must be disclosed to learners.

STANDARD 6.4 'Disclosure' must never include the use of a [corporate logo](#), trade name or a product-group message [of an ACCME-defined commercial interest](#).

STANDARD 6.5 A provider must disclose the above information to learners prior to the beginning of the educational activity.

STS Criteria and Stipulations for Endorsing Industry Educational Programs

CRITERIA

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

STIPULATIONS

1. The Workforce on Clinical Education will vet activities for which STS endorsement is sought with input from the Chair of the Council on Meetings and Education (at his/her discretion) and make recommendations to the Executive Committee with regard to the request.
2. STS must approve the objectives and final program.
3. The organization seeking endorsement must describe its disclosure process for speakers and planners, including the manner in which conflicts of interest are resolved and the way this resolution will be disclosed to learners.
4. STS members should be included as speakers for the program where possible.
5. If wet labs are to be used for demonstrating new procedures and techniques, STS members should be involved in the teaching.
6. STS will not provide endorsement for any third-party program that includes a live surgery component.
7. The program objectives should include an outcomes component that demonstrates the intended impact of the educational activity on the clinical practice of participants.
8. The program as offered to physicians must be in compliance with The Society of Thoracic Surgeons' Ethical Standards for Cardiothoracic Surgeons Relating to Industry.
9. The program must be in compliance with ACCME Essentials, Elements, Policies, and Standards if *AMA PRA category 1 credit™* is awarded.
10. The program may not be scheduled to take place on the same dates as those of major meetings conducted by international, national and regional cardiothoracic surgery and related medical specialty societies.
11. An application fee must be paid prior to any review of the proposed educational activity.

IF APPROVED

1. Organizations sponsoring activities approved for STS endorsement will have the right to use the STS name and logo (trademark license) for that program only.
2. One set of STS member mailing labels will be provided to the industry partner for a one time use to market the program.
3. STS will retain approval rights for any marketing material that bears the STS name or logo.
4. STS members will be granted a discount on the program if a registration fee is involved.

Amended: April 30, 2017 (STS Board of Directors)

STS Criteria and Stipulations for Endorsing Third Party (Non-Industry) Educational Programs

CRITERIA

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

STIPULATIONS

1. The Workforce on Clinical Education will vet activities for which STS endorsement is sought with input from the Chair of the Council on Meetings and Education (at his/her discretion) and make recommendations to the Executive Committee with regard to the request.
2. STS must approve the objectives and final program.
3. The organization seeking endorsement must describe its disclosure process for speakers and planners, including the manner in which conflicts of interest are resolved and the way this resolution will be disclosed to learners.
4. STS members should be included as speakers for the program where possible.
5. If wet labs are to be used for demonstrating new procedures and techniques, STS members should be involved in the teaching.
6. STS will not provide endorsement for any third-party program that includes a live surgery component.
7. The program objectives should include an outcomes component that demonstrates the intended impact of the educational activity on the clinical practice of participants.
8. The program as offered to physicians must be in compliance with The Society of Thoracic Surgeons' Ethical Standards for Cardiothoracic Surgeons Relating to Industry.
9. The program must be in compliance with ACCME Essentials, Elements, Policies, and Standards if *AMA PRA category 1 credit™* is awarded.
10. The program may not be scheduled to take place on the same dates as those of major meetings conducted by international, national and regional cardiothoracic surgery and related medical specialty societies.
11. An application fee must be paid prior to any review of the proposed educational activity.

IF APPROVED

1. Organizations sponsoring activities approved for STS endorsement will have the right to use the STS name and logo (trademark license) for that program only.
2. One set of STS member mailing labels will be provided to the industry partner for a one time use to market the program.
3. STS will retain approval rights for any marketing material that bears the STS name or logo.
4. STS members will be granted a discount on the program if a registration fee is involved.

Amended: April 30, 2017 (STS Board of Directors)

TAB 10

2018 Courses:

Symposium on Robotic Cardiac Surgery	March 23–24, 2018	Chicago
2018 STS Intermacs Meeting	May 11-12, 2018	Chicago
Symposium on Robotic Thoracic Surgery	May 18-19, 2018	Chicago
STS/ELSO ECMO Management Symposium	July 13-15, 2018	Tampa
STS/EACTS/ESTS Shanghai GTS Conference	Sept. 8-9, 2018	Shanghai
AQO: A Data Managers Meeting	Sept. 26-28, 2018	Hollywood, CA
15 th Annual Multidisciplinary Critical Care Conference	Oct. 4-7, 2018	Washington DC
Cardiothoracic Surgery in the Future	Oct. 22, 2018	Boston
STS/EACTS Latin America Cardiovascular Conference	Nov. 15-17, 2018	Cartagena, Colombia
TEVAR (tentative)	Nov. 30 – Dec 1, 2018	Chicago

2019 Courses:

Symposium on Robotic Cardiac Surgery (tentative)	March 2019	Chicago
2019 STS Intermacs Meeting	TBD	TBD
Symposium on Robotic Thoracic Surgery (tentative)	TBD	Chicago
CSTCVS (Add Tech College?)	TBD	TBD
STS/EACTS/ESTS GTS Session at		
Brazilian Society Thoracic National Congress	May 15-18, 2019	Belo Horizonte
STS/ELSO ECMO Management Symposium	TBD	Tampa (?)/Arizona (?)
AQO: A Data Managers Meeting	TBD	TBD
16 th Annual Multidisciplinary Critical Care Conference	Oct. 2019	TBD
Cardiothoracic Surgery in the Future	Oct. 28, 2019	San Francisco
STS/EACTS Latin America Cardiovascular Conference	Nov 2019	TBD
Structural Heart (tentative)	Dec. 5-6, 2019	Chicago

2020 Courses:

Multi-Society Thoracic Latin America Conference	May 2020	Rio De Janeiro
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TAB 11

The Society of Thoracic Surgeons

LEADERSHIP ORIENTATION MEETING FINANCIAL OVERVIEW APRIL 29, 2018



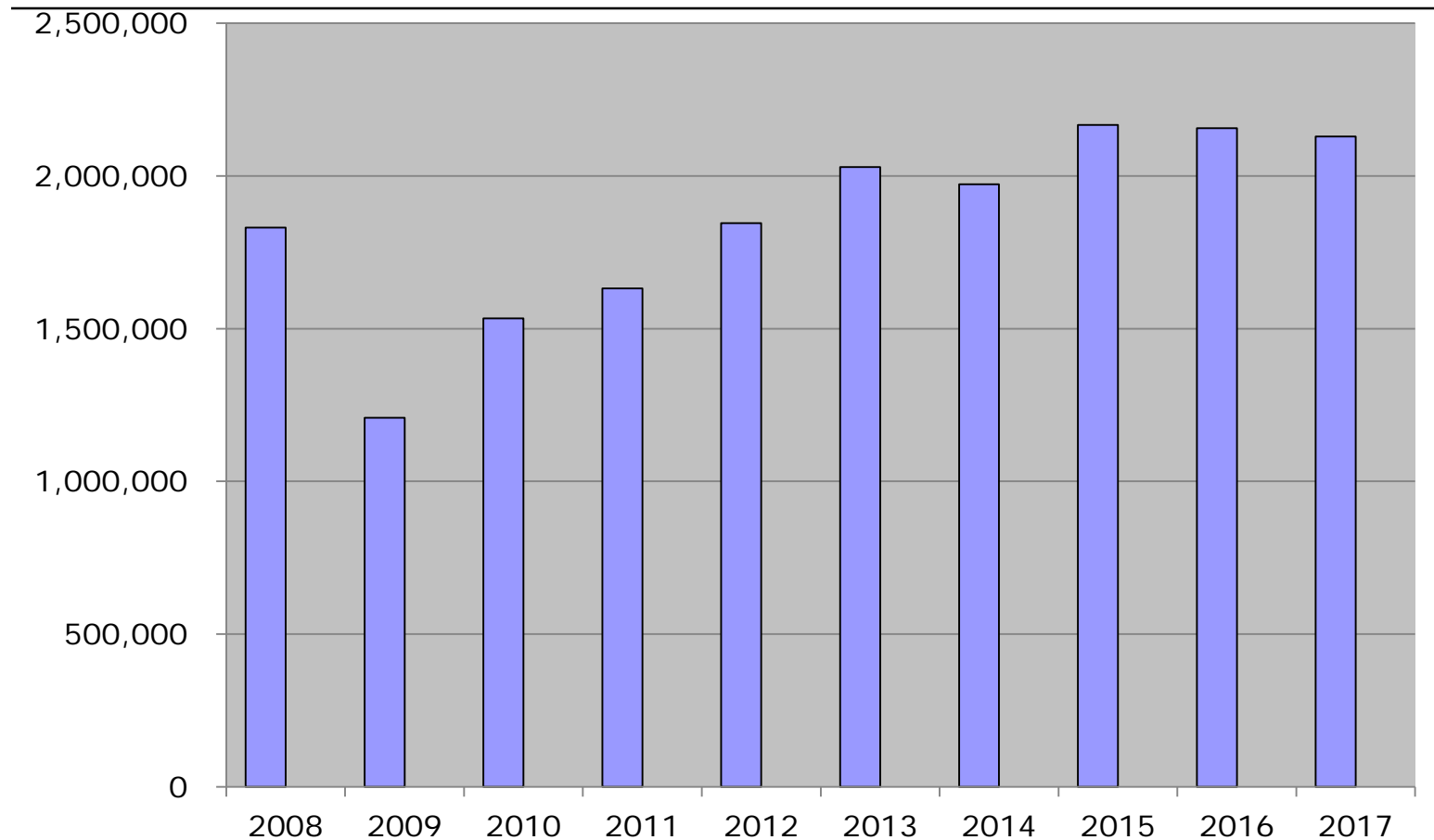
Fiscal Year Comparisons

	2016 Actual	2017 Actual	2018 Budget
Operating Revenue	\$ 24,431,968	\$ 26,899,021	\$ 28,603,247
Operating Expense	<u>22,275,551</u>	<u>24,770,208</u>	<u>29,542,664</u>
Net Operating Income/(Loss) Before Transfer	2,156,417	2,128,813	(939,417)
Transfer of Funds to Operating Budget in Support of “Special Programs” Under the Spending Policy*	<u>0</u>	<u>0</u>	<u>633,369</u>
Net Operating Income/(Loss) After Transfer	\$ 2,156,417	\$ 2,128,813	\$ (306,048)

Note: Financial results exclude Investments and PAC Activities.

* On Jan. 28, 2018, the Board approved the funding of four “special programs” from monies available under the spending policy.

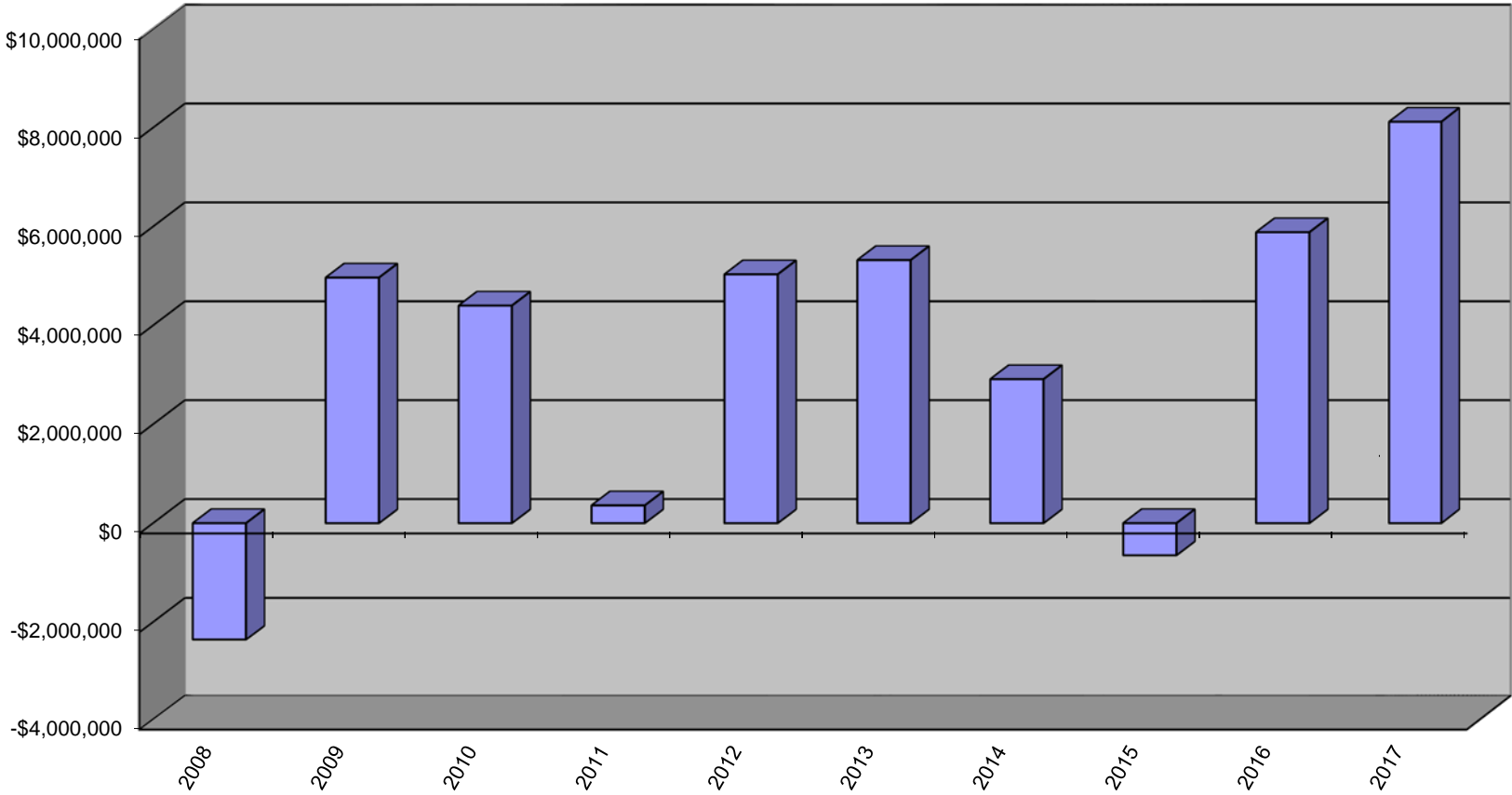
Net Operating Income Trends



Note: Results exclude Investment Activity, Lillehei Endowment, and STS President's Award Endowment.

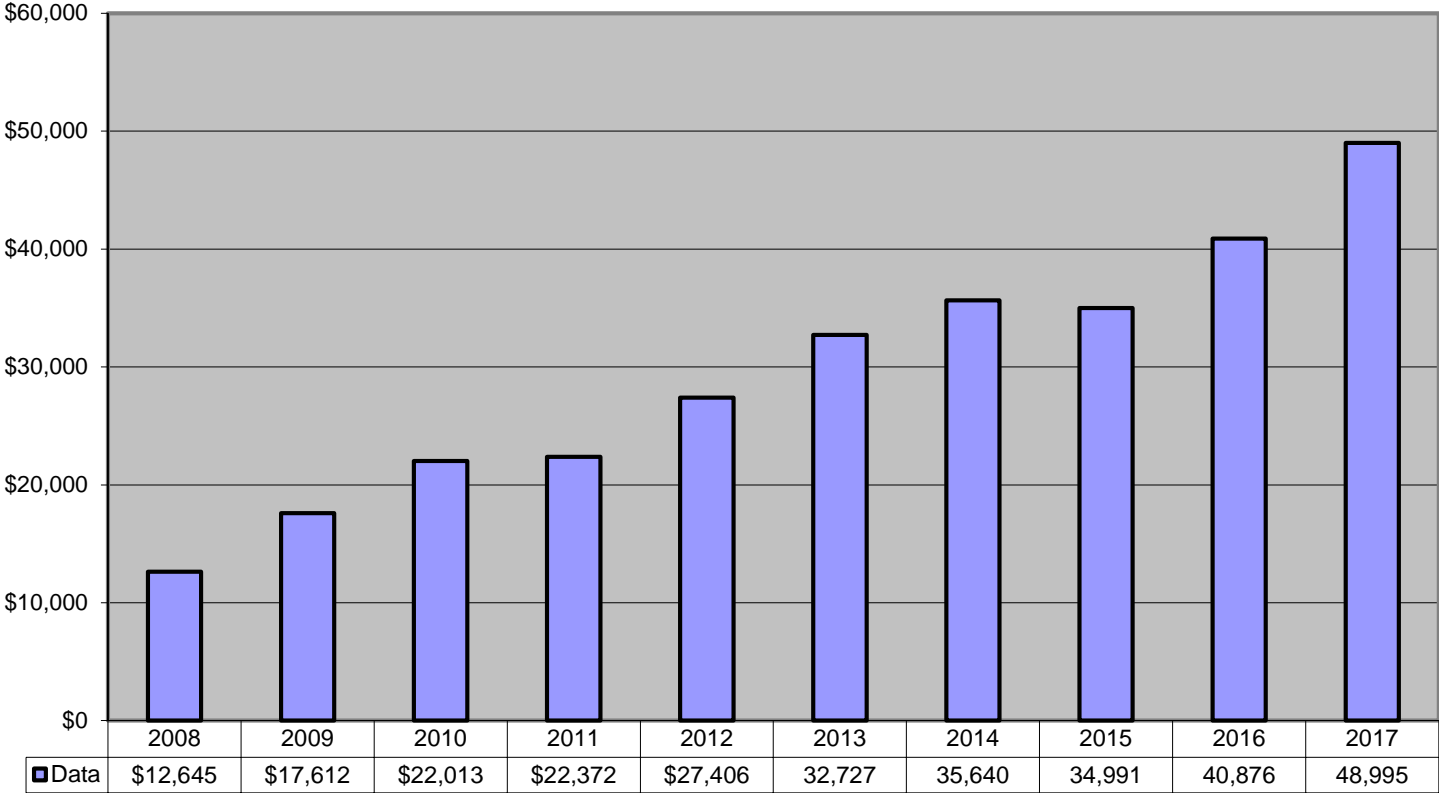
The Spending Policy allocations were initially allocated against the Operating budget, which resulted in a reduction to Net Operating Income of \$607K in 2014 and \$760K in 2015. Starting in 2016 per direction from the Executive Committee, Spending Policy allocations were allocated against Investment Activity.

Net Income Trends



Note: Investment Activity is included but PAC activities are excluded.

Net Assets (000's)

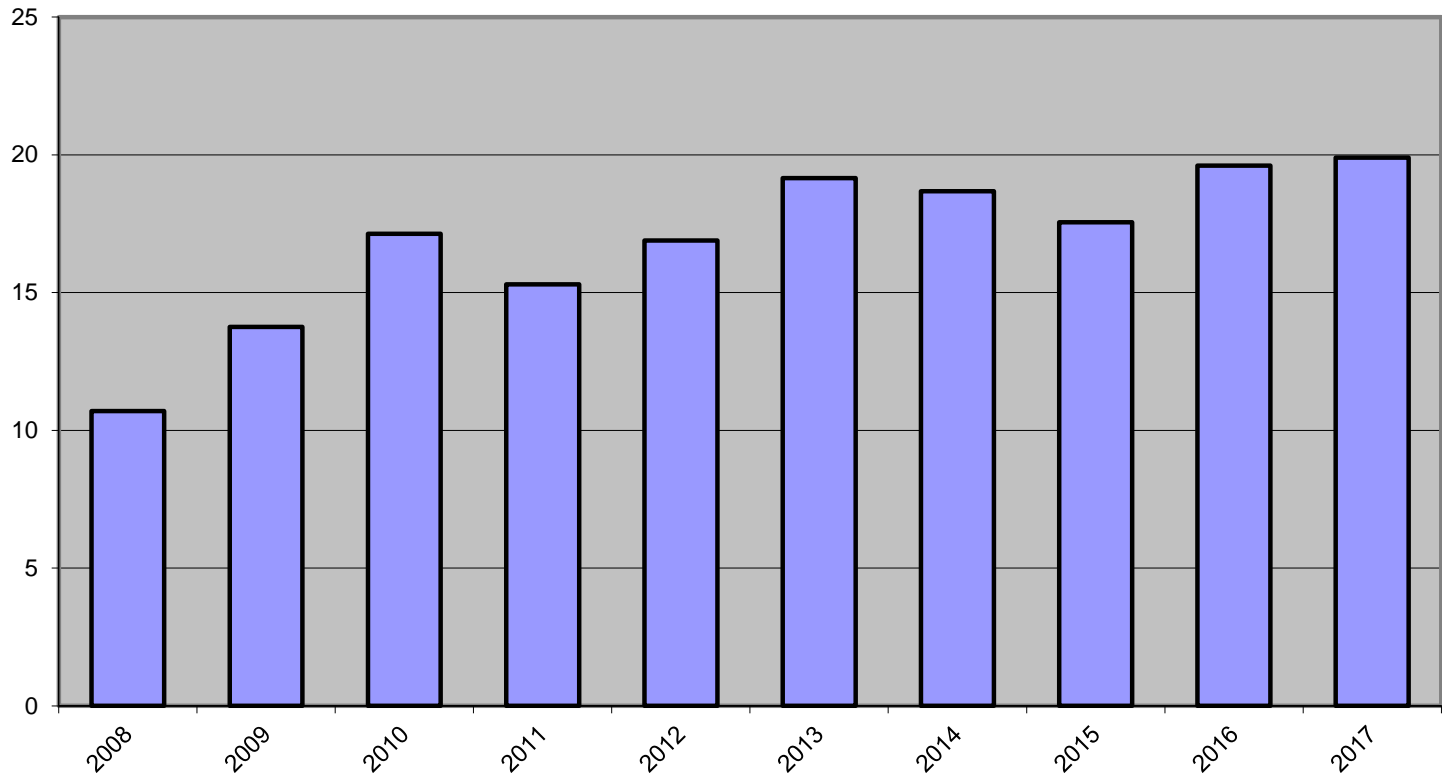


2017 Net Assets are 166% of 2018 Budgeted Expenses.

Note: Investment Activity is included but PAC activities are excluded.

12/31 Net Assets/Budgeted Expenses for Following Year X 12 Months

Months Covered



“Reinvesting In The Specialty”

In 2013, the STS Board approved a 2% spending rule (% of investment portfolio) to use as a guideline for Board spending on special projects, programs, and affiliated organizations (apart from regular STS operations).

	2014	2015	2016	2017	2018	
Spending Policy Funds Available	\$600,000	\$760,000	\$748,000	\$750,000	\$904,000	
<u>Payments Made</u>						
• TSF	357,707	603,000	733,000	665,077	30,000	
• JCTSE	250,000					
• TSDA/TSRA		100,000		69,923	105,000	*
• WTS		30,000	15,000	15,000		
• STS Special Initiatives		27,000			633,369	*

* The allocation of spending policy funds is contingent upon actual results with the figures shown above reflecting the maximum allocation.

THE SOCIETY OF THORACIC SURGEONS

Statement of Financial Position

	<u>March 31,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>	<u>Variance</u>
ASSETS			
CURRENT ASSETS			
Cash and Cash Equivalents	7,925,073	6,426,681	1,498,392
Net Accounts Receivable	5,497,419	1,890,299	3,607,120
Prepaid Expenses	485,276	658,522	(173,246)
TOTAL CURRENT ASSETS	<u>13,907,768</u>	<u>8,975,502</u>	<u>4,932,266</u>
NON CURRENT ASSETS			
Long-term Investments	49,826,185	50,100,138	(273,953)
Net Fixed Assets	4,334,116	3,177,537	1,156,579
Deposits	9,263	9,263	-
TOTAL NON CURRENT ASSETS	<u>54,169,564</u>	<u>53,286,938</u>	<u>882,626</u>
TOTAL ASSETS	<u>68,077,332</u>	<u>62,262,440</u>	<u>5,814,893</u>
LIABILITIES & NET ASSETS			
CURRENT LIABILITIES			
Accounts Payable	212,452	636,519	(424,067)
Accrued Expenses	4,692,168	5,167,997	(475,829)
Deferred Expenses	1,387,756	59,745	1,328,011
Deferred Revenues	8,518,247	5,493,626	3,024,621
TOTAL CURRENT LIABILITIES	<u>14,810,623</u>	<u>11,357,887</u>	<u>3,452,736</u>
LONG TERM LIABILITIES			
Deferred Expenses	687,750	723,500	(35,750)
Deferred Revenues	1,156,777	1,185,852	(29,075)
TOTAL LONG TERM LIABILITIES	<u>1,844,527</u>	<u>1,909,352</u>	<u>(64,825)</u>
NET ASSETS			
Net Assets (beginning of year)	48,566,067	40,447,202	8,118,865
Temporarily Restricted (Lillehei)	404,594	404,594	-
Temporarily Restricted (STS President's Award)	24,539	24,539	-
Current Year Earnings	2,426,983	8,118,865	(5,691,882)
TOTAL NET ASSETS	<u>51,422,183</u>	<u>48,995,200</u>	<u>2,426,983</u>
TOTAL LIABILITIES & NET ASSETS	<u>68,077,332</u>	<u>62,262,440</u>	<u>5,814,893</u>

THE SOCIETY OF THORACIC SURGEONS
STS SUMMARY
For the Three Months Ending March 31, 2018

	March 2017 YTD Actual	March 2018 YTD			2018 Budget
		Actual	Budget	Variance Act vs Bud	
REVENUES					
Research Center Revenue	208,121	198,945	185,637	13,308	2,010,670
TVT Registry Revenue	1,146,857	3,157,828	3,157,827	1	5,068,809
Membership Revenue	492,448	485,632	487,020	(1,388)	2,690,038
National Database Revenue	1,919,070	2,357,395	2,381,002	(23,607)	9,597,500
Meetings Revenue	3,360,178	3,139,880	3,219,727	(79,847)	4,401,743
Sponsorships Revenue	669,000	596,000	660,000	(64,000)	933,500
Publications and Subscriptions Revenue	632,728	652,855	653,025	(170)	2,661,964
Management Agreement Fees Revenue	193,349	244,850	244,850	-	979,400
Other Revenue	351,331	72,276	51,477	20,799	259,676
TOTAL REVENUES	8,973,082	10,905,661	11,040,565	(134,904)	28,603,300
EXPENSES					
Salaries & Wages Expense	1,772,024	1,949,089	2,000,772	51,683	8,537,727
Employee Benefits Expense	412,778	441,466	451,527	10,061	1,805,365
Office Expense	296,525	321,738	337,138	15,400	1,284,547
Occupancy Expense	124,960	125,256	127,257	2,001	587,952
Fees & Services Expense	1,689,668	2,603,780	2,609,495	5,715	11,641,788
Travel Expenses	266,653	241,328	249,815	8,487	825,920
Meetings Expense	1,743,674	1,863,752	1,798,716	(65,036)	2,926,157
Corporate Insurance Expense	13,960	14,736	13,170	(1,566)	72,179
Memberships and Contributions	61,202	357,358	358,279	921	404,360
Depreciation Expense	219,102	279,026	349,930	70,904	1,420,569
Other Expense	5,354	3,899	6,596	2,697	36,100
TOTAL EXPENSES	6,605,900	8,201,428	8,302,695	101,267	29,542,664
NET OPERATING INCOME / (LOSS) BEFORE TRANSFER	2,367,182	2,704,233	2,737,870	(33,637)	(939,364)
Transfer of Funds to Operating Budget In Support of "Special Programs" Under the Spending Policy	-	217,707	289,512	(71,805)	633,369
NET OPERATING INCOME / (LOSS) AFTER TRANSFER	2,367,182	2,921,940	3,027,382	(105,442)	(305,995)
Investment Activities	2,295,778	(494,958)	3,613	(498,571)	298,500
NET INCOME / (LOSS)	4,662,960	2,426,982	3,030,995	(604,013)	(7,495)

THE SOCIETY OF THORACIC SURGEONS
ADMINISTRATION SUMMARY
For the Three Months Ending March 31, 2017

	March 2017 YTD Actual	March 2018 YTD		Variance Act vs Bud	2018 Budget
		Actual	Budget		
<u>REVENUES</u>					
Research	-	-	-	-	-
Membership Revenue	492,448	485,632	487,020	(1,388)	2,690,038
National Database Revenue	-	-	-	-	-
Meetings Revenue	-	-	-	-	-
Sponsorships Revenue	-	-	-	-	-
Publications and Subscriptions Revenue	632,228	652,355	652,525	(170)	2,607,464
Management Agreement Fees Revenue	193,349	244,850	244,850	0	979,400
Other Revenue	30,643	50,088	29,571	20,517	143,517
TOTAL REVENUES	1,348,668	1,432,925	1,413,966	18,959	6,420,419
<u>EXPENSES</u>					
Salaries & Wages Expense	970,587	1,076,582	1,105,565	(28,983)	4,926,242
Employee Benefits Expense	239,004	261,960	266,743	(4,783)	1,068,784
Office Expense	177,070	203,963	205,648	(1,685)	847,584
Occupancy Expense	108,387	108,517	110,586	(2,069)	520,989
Fees & Services Expense	278,003	240,757	240,370	(387)	1,008,476
Travel Expenses	32,550	27,584	11,825	(15,759)	181,450
Meetings Expense	25,346	27,661	36,655	8,994	101,293
Corporate Insurance Expense	10,264	11,227	9,596	(1,631)	38,384
Memberships and Contributions	48,449	346,536	348,085	1,549	392,085
Depreciation Expense	87,648	109,155	136,187	27,032	544,750
Other Expense	(23,150)	(17,141)	(22,748)	(5,607)	(90,993)
TOTAL EXPENSES	1,954,158	2,396,801	2,448,512	(23,329)	9,539,044
NET OPERATING INCOME / (LOSS) BEFORE TRANSFER	(605,490)	(963,876)	(1,034,546)	70,670	(3,118,625)
Transfer of Funds to Operating Budget In Support of "Special Programs" Under the Spending Policy	-	-	-	-	-
NET OPERATING INCOME / (LOSS) AFTER TRANSFER	(605,490)	(963,876)	(1,034,546)	70,670	(3,118,625)

THE SOCIETY OF THORACIC SURGEONS
HEALTH POLICY & RELATIONSHIPS SUMMARY
For the Three Months Ending March 31, 2018

	March 2017 YTD Actual	March 2018 YTD			2018 Budget
		Actual	Budget	Variance Act vs Bud	
<u>REVENUES</u>	-	-	-	-	-
Research	-	-	-	-	-
Membership Revenue	-	-	-	-	-
National Database Revenue	-	-	-	-	-
Meetings Revenue	-	-	-	-	130,650
Sponsorships Revenue	-	-	-	-	-
Publications and Subscriptions Revenue	500	500	500	0	2,000
Management Agreement Fees Revenue	-	-	-	0	-
Other Revenue	22,850	17,500	15,250	2,250	61,000
TOTAL REVENUES	23,350	18,000	15,750	2,250	193,650
<u>EXPENSES</u>					
Salaries & Wages Expense	69,882	107,825	101,259	(6,566)	413,715
Employee Benefits Expense	15,816	19,944	19,511	(433)	73,591
Office Expense	11,249	10,981	13,067	2,086	75,000
Occupancy Expense	16,573	16,739	16,671	(68)	66,963
Fees & Services Expense	98,069	87,076	97,748	10,672	374,400
Travel Expenses	20,885	21,834	18,000	(3,834)	115,525
Meetings Expense	6,907	6,635	11,415	4,780	100,667
Corporate Insurance Expense	-	-	-	-	-
Memberships and Contributions	6,428	4,000	4,500	500	6,000
Depreciation Expense	2,754	2,929	2,866	(63)	11,463
Other Expense	-	-	50.00	50.00	500
TOTAL EXPENSES	248,563	277,963	285,087	7,124	1,237,824
NET OPERATING INCOME / (LOSS) BEFORE TRANSFER	(225,213)	(259,963)	(269,337)	9,374	(1,044,174)
Transfer of Funds to Operating Budget In Support of "Special Programs" Under the Spending Policy	-	-	-	-	-
NET OPERATING INCOME / (LOSS) AFTER TRANSFER	(225,213)	(259,963)	(269,337)	9,374	(1,044,174)

THE SOCIETY OF THORACIC SURGEONS
 QUALITY, RESEARCH, AND PATIENT SAFETY SUMMARY
 For the Three Months Ending March 31, 2018

	March 2017 YTD Actual	March 2018 YTD			2018 Budget
		Actual	Budget	Variance Act vs Bud	
REVENUES					
Research Center Revenue	208,121	198,945	185,637	13,308	2,010,670
Membership Revenue	-	0	0	0	-
TVT Registry Revenue	1,146,857	3,157,828	3,157,827	1	5,068,809
National Database Revenue	1,919,070	2,357,395	2,381,002	(23,607)	9,597,500
Meetings Revenue	-	5,550	5,150	400	440,610
Sponsorships Revenue	-	0	0	0	-
Publications and Subscriptions Revenue	-	0	0	0	-
Management Agreement Fees Revenue	-	0	0	0	-
Other Revenue	-	0	0	0	25,000.00
TOTAL REVENUES	3,274,048	5,719,718	5,729,616	(9,898)	17,142,589
EXPENSES					
Salaries & Wages Expense	388,092	422,186	451,691	29,505	1,927,746
Employee Benefits Expense	85,606	84,492	92,498	8,006	365,588
Office Expense	3,759	13,183	15,120	1,937	69,577
Occupancy Expense	-	0	0	0	-
Fees & Services Expense	1,239,826	2,239,501	2,234,677	(4,824)	10,047,117
Travel Expenses	6,873	12,693	6,000	(6,693)	91,250
Meetings Expense	15,409	21,121	26,129	5,008	388,374
Corporate Insurance Expense	3,695	3,471	3,574	103	33,795
Memberships and Contributions	825	375	194	(181)	775
Depreciation Expense	107,319	145,562	184,738	39,176	738,952
Other Expense	24,619	18,740	26,745	8,005	121,493
TOTAL EXPENSES	1,876,023	2,961,324	3,041,366	80,042	13,784,667
NET OPERATING INCOME / (LOSS) BEFORE TRANSFER	1,398,025	2,758,394	2,688,250	70,144	3,357,922
Transfer of Funds to Operating Budget In Support of "Special Programs" Under the Spending Policy	-	210,136	280,256	(70,120)	488,519
NET OPERATING INCOME / (LOSS) AFTER TRANSFER	1,398,025	2,968,530	2,968,506	24	3,846,441

THE SOCIETY OF THORACIC SURGEONS
COUNCIL ON CLINICAL PRACTICE & MEMBER ENGAGEMENT SUMMARY
For the Three Months Ending March 31, 2018

	March 2017 YTD Actual	March 2018 YTD		Variance Act vs Bud	2018 Budget
		Actual	Budget		
REVENUES					
Research	-	-	-	-	-
Membership Revenue	-	-	-	-	-
National Database Revenue	-	-	-	-	-
Meetings Revenue	255,400	88,650	91,250	(2,600)	507,090
Sponsorships Revenue	38,500	40,000	25,000	15,000	58,500
Publications and Subscriptions Revenue	-	-	-	-	-
Management Agreement Fees Revenue	-	-	-	-	-
Other Revenue	-	-	-	-	-
TOTAL REVENUES	293,900	128,650	116,250	12,400	565,590
EXPENSES					
Salaries & Wages Expense	76,955.00	81,492	84,640	3,148	340,449
Employee Benefits Expense	21,199.00	16,084	21,183	5,099	85,107
Office Expense	15,002	13,760	13,130	(630)	49,410
Occupancy Expense	-	-	-	-	-
Fees & Services Expense	5,685	2,220	2,500	280	12,300
Travel Expenses	42,410	17,581	19,950	2,369	95,625
Meetings Expense	171,238	78,966	74,671	(4,295)	381,130
Corporate Insurance Expense	-	-	-	-	-
Memberships and Contributions	-	-	-	-	-
Depreciation Expense	5,705.00	5,705	5,705.00	-	22,820.00
Other Expense	-	-	-	-	300
TOTAL EXPENSES	338,194	215,808	221,779	5,971	987,141
NET OPERATING INCOME / (LOSS) BEFORE TRANSFER	(44,294)	(87,158)	(105,529)	18,371	(421,551)
Transfer of Funds to Operating Budget In Support of "Special Programs" Under the Spending Policy	-	6,033	5,705	328	57,000
NET OPERATING INCOME / (LOSS) AFTER TRANSFER	(44,294)	(81,125)	(99,824)	18,699	(364,551)

THE SOCIETY OF THORACIC SURGEONS
COUNCIL ON MEETINGS AND EDUCATION SUMMARY
For the Three Months Ending March 31, 2018

	March 2017 YTD Actual	March 2018 YTD		Variance Act vs Bud	2018 Budget
		Actual	Budget		
REVENUES					
Research	-	-	-	-	-
Membership Revenue	-	-	-	-	-
National Database Revenue	-	-	-	-	-
Meetings Revenue	3,104,778	3,045,680	3,123,327	(77,647)	3,323,393
Sponsorships Revenue	630,500	556,000	635,000	(79,000)	875,000
Publications and Subscriptions Revenue	-	-	-	-	52,500
Management Agreement Fees Revenue	-	-	-	-	-
Other Revenue	297,838	4,688	6,656	(1,968)	30,159
TOTAL REVENUES	4,033,116	3,606,368	3,764,983	(158,615)	4,281,052
EXPENSES					
Salaries & Wages Expense	266,508	261,004	257,616	(3,388)	929,575
Employee Benefits Expense	51,158	58,984	51,594	(7,390)	212,294
Office Expense	89,445	79,852	90,175	10,323	242,975
Occupancy Expense	-	-	-	-	-
Fees & Services Expense	68,086	34,227	34,200	(27)	199,495
Travel Expenses	163,936	161,638	194,040	32,402	342,070
Meetings Expense	1,524,772	1,729,370	1,649,847	(79,523)	1,954,694
Corporate Insurance Expense	-	38	-	(38)	-
Memberships and Contributions	5,500	6,447	5,500	(947)	5,500
Depreciation Expense	15,675	15,675	20,434	4,759	102,584
Other Expense	3,885	2,300	2,550	250	4,800
TOTAL EXPENSES	2,188,965	2,349,535	2,305,956	(43,579)	3,993,987
NET OPERATING INCOME / (LOSS) BEFORE TRANSFER	1,844,151	1,256,833	1,459,027	(202,194)	287,065
Transfer of Funds to Operating Budget In Support of "Special Programs" Under the Spending Policy		1,538	3,551	(2,013)	87,850
NET OPERATING INCOME / (LOSS) AFTER TRANSFER	1,844,151	1,258,371	1,462,578	(204,207)	374,915

STS POLICY

Travel and Expense Reimbursement

I. Policy

STS will reimburse its members and staff for actual and reasonable travel, lodging and meal expenses that are incurred while conducting STS business and that are properly documented.

II. Purpose

The purpose of this policy is to define STS expectations relative to the expenditure, accountability, and reporting of the use of Society funds for expenses associated with the Society's business-related travel.

III. Practices/Procedure

A. Transportation

1. Air Travel

Society members and employees will make their own airline reservations unless it is previously agreed that headquarters staff will make air arrangements for them prior to a meeting.

Reimbursement is provided for restricted coach class airfare for all STS business travel, provided that STS volunteer leaders and senior staff are permitted additional reimbursement of up to \$250 per round trip for enhanced coach class, "add-on" services that provide preferential seating and/or priority boarding (e.g., United Airlines Economy Plus or American Airlines Choice Essential). For trips to the EACTS and ESTS Annual Meetings, as well as other meetings identified by the Executive Committee as appropriate for official STS representation, STS volunteer leaders and senior staff may book their air travel at the next higher class of service if the nautical miles from point of origin to point of destination exceed 3,500 nautical miles. In addition, trips by STS International Directors to STS Board of Directors meetings other than those held in conjunction with the STS and AATS Annual Meetings may be booked at the next higher class of service if the nautical miles from point of origin to point of destination exceed 3,500 nautical miles.

Reservations must be made at least 14 days prior to departure to take advantage of low discount airfares; full reimbursement for reservations that are made within 14 days prior to departure will be provided only if late notice is given to traveler that (s)he must attend a meeting or a documented emergency exists; otherwise, reimbursement will be limited to then prevailing restricted coach fares for a comparable reservation made at least 14 days prior to departure.

2. Ground Transportation

Local taxis and bus fares, to and from airports, will be reimbursed.

3. Use of Personal Vehicle

In situations where individuals must travel on STS business or travel to and from the airport using a personal vehicle, the Society will reimburse mileage in accordance with the federal government standard mileage index. Actual and reasonable parking fees and toll charges are reimbursable and should be documented on the reimbursement form attached as Exhibit A. Parking receipts should be provided.

4. Rental Vehicles

Rental cost of vehicles is normally only reimbursable in lieu of airfare, or if the Society requested or approved a member or employee to arrange for the vehicle. Approval should be requested at least one week in advance of the date it is required. When traveling in any of the United States, its territories and possessions, and/or Canada, all optional insurance offered by auto rental companies should be declined, as STS maintains insurance for rental vehicles valued at under \$50,000. Luxury vehicles, or any rental vehicles with a replacement value of \$50,000 or more should not be rented. In the event of a situation regarding a rental car which may result in a claim situation, the member or employee must notify the STS Director of Finance and Administration as soon as possible following such incident.

The Society will only reimburse the equivalent of the local taxi fare to and from the airport should the member or employee arrange a rental for personal use. If the member or employee is using a rental vehicle for personal use, his/her personal insurance would apply on a primary basis.

5. Members attending the Annual Meetings of the STS, AATS, STSA, WTSA, the General Thoracic Surgical Club and/or the ACS Clinical Congress for other reasons than STS business will not be reimbursed for their travel, hotel, or meal expenses, unless they can demonstrate circumstances that required additional expenses due to STS business they conducted.

6. STS will pay for coach airfare (or the next higher class of service airfare, assuming the flight meets the criteria defined in III.A.1. in this policy) for up to four officers and/or designated individuals to officially represent the Society at the EACTS¹ and ESTS² Annual Meetings, as well as other meetings identified by the Executive Committee for official STS representation. It is anticipated that meeting hosts will pay the officers' and/or designated individuals' meeting registration and hotel expenses. Incidentals are the responsibility of the individual.

B. Hotel Reservations

¹ See STS Executive Committee Meeting Minutes, August 14, 2002, for selection criteria.

² See STS Executive Committee Meeting Minutes, November 12, 2013, for selection criteria.

STS arranges for a special group rate with a hotel or a group of hotels in the city where a meeting is to be held. The STS Department of Meetings and Conventions will make hotel arrangements for staff and volunteer leaders attending the STS Annual Meeting. Volunteer leaders may make their own reservations for the Annual Meeting within specified dates to take advantage of guaranteed group rates. The Department of Meetings and Conventions may make hotel arrangements for other STS meetings, depending on the nature of the meeting and the circumstances. Reimbursement is based on a single occupancy room rate plus applicable taxes.

Hotel reservations for other STS business are to be made by the individual at reasonably priced hotels and reimbursement is based on a single occupancy room rate plus applicable taxes.

C. Meals and Entertainment

Reimbursement will be made for up to three meals during a twenty-four hour period while on STS business, assuming STS has not provided meals during that same time period. Expenses are expected to be reasonable. Receipts for all meals must be obtained. Tear tabs must be accompanied by a cash register receipt or a receipt such as a credit card's "customer copy." Reasonable expenses for room service meals will be reimbursed.

Group dinners for staff and volunteer leaders attending an STS function should be arranged in advance to the extent possible. The senior staff person should pay for the meal. The cost of a group dinner involving staff and volunteer leaders, including tax, tip and beverage, should not exceed \$100 per person.

D. Miscellaneous Expenses

1. A preset telephone allowance may be set for staff during attendance at the Annual Meeting and at other meetings. The telephone allowance is meant to cover reasonable personal telephone expenses (a call home on arrival or a daily call home, for example) in addition to business calls. When a telephone allowance has not been provided to staff, telephone expenses will be reimbursed for STS business upon submission of receipts.
2. Expenses not eligible for reimbursement include entertainment such as in-room movies, sporting events, night clubs, theatres or health club services. In addition, personal items such as cleaning, laundry, toiletries, books, magazines, newspapers and other reading materials are not reimbursable. Alcoholic beverages are not reimbursable unless they are an incidental cost associated with a meal.
3. Tips will be reimbursed within the following parameters:
 - a. baggage handling at airport and hotel – up to \$2 per bag per occurrence
 - b. maid service – up to \$2 per 24 hour period
 - c. meals – up to 15% - 18% should be submitted as part of meal expense
 - d. taxi drivers – up to 15%

E. Spouse/Other Travel

Occasionally, a spouse or other relative or friend may accompany a Society member or staff on STS business. Travel, lodging or meal expenses for a spouse/other will not be reimbursed.

F. Combined Business/Personal Travel

In cases when STS business travel is combined with personal travel, the Society will only reimburse for expenses directly associated with the STS business travel.

G. Reimbursement Request

1. Receipts must be provided for all expenses of \$25.00 or more. Receipts must be originals. "Tear tab" receipts must be accompanied by the cash register tape or credit card receipt. If for any reason a valid receipt is lost, a written explanation must be provided with the request for reimbursement. Credit card statements and bank statements will not be accepted in lieu of receipts.
2. To request reimbursement, an STS expense reimbursement form should be completed within 30 days following travel. STS staff should submit their expense reports along with all pertinent original receipts to their supervisor for approval. Volunteer leadership should submit their expense report with all pertinent original receipts to the appropriate staff person. At the discretion of management, expense reports submitted in excess of two (2) months after the date of activity may not be eligible for reimbursement.
3. Supporting documentation must be provided for all expenses – this should include the amount of the expense, date and place of travel or business activity, the business purpose of the expense, and the names and business relationships of all persons for whom the expense was incurred.
4. Directors are authorized to approve expenses in accordance with these guidelines. Director expenses must be approved by the Executive Director, and the Executive Director's expenses will be referred to the Director of Finance and Administration for authorization.

Amended: December 7, 2016 (STS Executive Committee)

STS POLICY

Budget Exceptions

Each standing committee and workforce Chair is responsible for periodically monitoring actual financial results compared to budgeted amounts for his/her specific standing committee or workforce. If it becomes necessary to reallocate funds from one expense account to another, the standing committee or workforce Chair, working with the appropriate Department Director, Executive Director and Director of Finance and Administration, may do so if the following conditions are met:

1. The total expenditure for the standing committee or workforce does not exceed the budgeted expenditure for that program.
2. The reallocation of funds is for initiatives previously approved by the Board of Directors or Executive Committee.
3. The reallocation of funds does not change the general intent of the original budget.

The Treasurer and any relevant Council Chair shall be notified of any reallocation of funds and the reason for the reallocation.

Any request for expenditure of funds which will result in the total expenditure for the workforce or standing committee exceeding the budgeted amounts must be submitted to the Executive Director and the Director of Finance and Administration in advance of the commitment of the expenditure. The Executive Director and Director of Finance and Administration will seek approval of the expenditure(s) in accordance with the authorization schedule below, and will subsequently report approval of unbudgeted expenditures to the Finance Committee. Additionally, any requests for expenditure of funds for new initiatives must be pre-approved.

Requests must include the following:

- (1) The original budget for the standing committee or workforce.
- (2) The effect of budget reallocations already made and the reasons for these reallocations.
- (3) The reason for the request.
- (4) The amount of the request.

With respect to internal approval of unbudgeted expenses, the level of approval is as follows:

- (1) Executive Director – May approve any expenditure up to 15% of the program (e.g., a standing committee or workforce) budget or \$25,000, whichever is less.
- (2) Executive Committee – May approve any unbudgeted expenditure over \$25,000 and up to \$100,000.
- (3) All other requests require the recommendation of the Finance Committee and approval of the Board of Directors.

Amended: October 16, 2005 (Board of Directors)

**THE SOCIETY OF THORACIC SURGEONS
SUMMARY OF INSURANCE COVERAGE
AS OF 4/29/2018**

DESCRIPTION OF COVERAGE	LIMITS
<u>Commercial Package Policy</u>	
<u>Commercial Property</u>	
Location 1: Business Personal Property – Replacement Cost Deductible - \$1,000	\$3,577,600
Location 2: Business Personal Property – Replacement Cost Deductible - \$1,000	\$6,500
Business Income & Extra Expense	ALS
Employee Theft	\$100,000
<u>General Liability</u>	
General Aggregate	\$2,000,000
Products-Completed Operations Aggregate	\$2,000,000
Each Occurrence	\$1,000,000
Personal and Advertising Injury	\$1,000,000
Damages to Premises Rented to You	\$1,000,000
Medical Expenses – Any one person	\$10,000
<u>Employee Benefits Liability</u>	
Aggregate	\$2,000,000
Each Claim	\$1,000,000
<u>ERISA Bond</u>	
Employee Dishonesty	\$500,000
<u>Business Auto</u>	
Hired & Non-Owned Liability	\$1,000,000
Hired Car Physical Damage	\$50,000
Deductible	\$500
<u>Commercial Umbrella</u>	
General Aggregate	\$5,000,000
Each Occurrence	\$5,000,000
Self-Insured Retention	\$10,000
<u>Workers Compensation</u>	
Bodily injury by Accident	\$500,000
Bodily injury by Disease	\$500,000
Bodily injury by Disease	\$500,000

**THE SOCIETY OF THORACIC SURGEONS
SUMMARY OF INSURANCE COVERAGE
AS OF 4/29/2018**

DESCRIPTION OF COVERAGE	LIMITS
<u>Cyber</u>	
Aggregate	\$5,000,000
Each Claim	\$5,000,000
Retention	\$2,500
<u>Event Cancellation</u>	
Event Cancellation	\$3,900,000
Additional Financial Commitments	\$220,000
<u>Errors & Omissions – Employed Lawyers</u>	
General Aggregate	\$1,000,000
Each Occurrence	\$1,000,000
Deductible (per claim)	\$5,000
Punitive Damages	\$25,000
Defense costs are within the policy limits	
Pending and Prior Date: 09/20/2003	
<u>Directors and Officers & Employment Practices Liability</u>	
General Aggregate	\$5,000,000
Retention	\$10,000
Executive Liability - Side A	\$500,000
Settlement Clause: 80% / 20%	
Wage and Hour Claims – Defense only	\$500,000
Third Party Liability	Included
Retention	\$15,000
<u>Fiduciary Liability - Sublimit</u>	
Aggregate	\$1,000,000
Retention	\$5,000
<u>Crime</u>	
Employee Theft	\$1,000,000
Premises	\$1,000,000
Transit	\$1,000,000
Forgery	\$1,000,000
Computer	\$1,000,000
Fund Transfer	\$1,000,000
Money Orders & Counterfeit Currency	\$1,000,000
Credit Card	\$1,000,000
Client	\$1,000,000
Expense	\$10,000
Retention	\$5,000

**THE SOCIETY OF THORACIC SURGEONS
SUMMARY OF INSURANCE COVERAGE
AS OF 4/29/2018**

DESCRIPTION OF COVERAGE	LIMITS
<u>3rd Party Equipment</u>	
Catastrophe	\$250,000
Any One Item	\$50,000
Retention	\$1,000

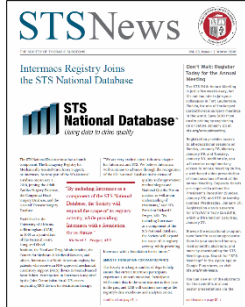
TAB 12



The Society of Thoracic Surgeons

Newsletters

STS News

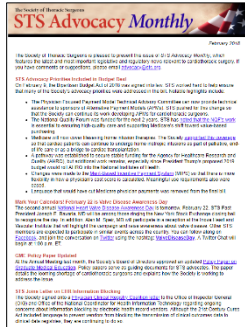


Circulation: 7,200

Type: Electronic and Print

Audience: All STS Members, Looking to the Future Scholarship Recipients and Applicants

STS Advocacy Monthly

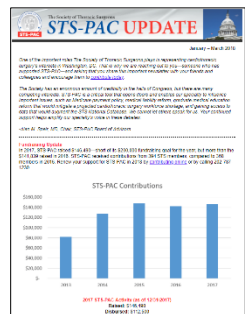


Circulation: 4,875

Type: Electronic

Audience: All STS Members in the United States

STS-PAC Update



Circulation: 615

Type: Electronic

Audience: STS-PAC Donors

STS National Database News

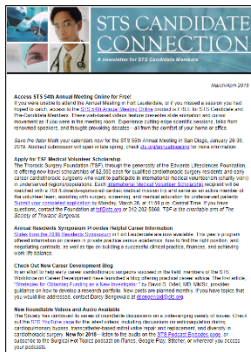


Circulation: 6,000

Type: Electronic

Audience: STS National Database Participants, Data Managers, and Vendors

STS Candidate Connection

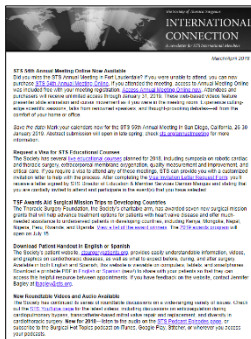


Circulation: 950

Type: Electronic

Audience: STS Candidate and Pre-Candidate Members, Looking to the Future Scholarship Recipients and Applicants, I-6 Residents

STS International Connection

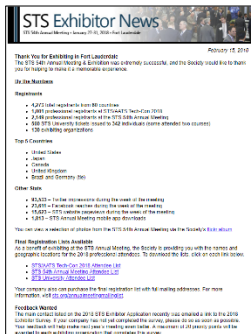


Circulation: 1,300

Type: Electronic

Audience: STS International Members

STS Exhibitor News



Circulation: 370

Type: Electronic

Audience: STS Annual Meeting Exhibitors



The Society of Thoracic Surgeons
633 N. St. Clair, Suite 2320
Chicago, IL 60611
www.sts.org

News

For Immediate Release

STS Press Release

Media Contact:

Jennifer Bagley

312-202-5865

jbagley@sts.org

‘Aggressive’ Surgery Is Best Treatment Option for Early Stage Lung Cancer

Patients who undergo lobectomy for the disease live longer

CHICAGO (November 30, 2017) — Patients with early stage lung cancer live longer when they receive a lobectomy—the most common type of operation for the disease—rather than a less extensive operation or radiation treatment, according to a study published online today in *The Annals of Thoracic Surgery*.

“Our data suggest that the more aggressively we treat early lung cancer, the better the outcome,” said lead author Alex Bryant, BS, of the School of Medicine at the University of California, San Diego. “This study is one of the best-powered and detailed analyses to date and suggests that lobectomy is still the preferred treatment of this disease for most patients.”

Using the Veterans Affairs Informatics and Computing Infrastructure (VINCI), Bryant, James D. Murphy, MD, and colleagues identified patients who were diagnosed with early stage non-small cell lung cancer (NSCLC) between 2006 and 2015, and who were treated with either surgery or radiation. In all, 4,069 patients were included: 73% (2,986) underwent lobectomy, 16% (634) received a sublobar resection, and 11% (449) received stereotactic body radiation therapy (SBRT). Lobectomy is the removal of an entire lobe of the lung; sublobar resection is a less extensive operation that includes wedge and segmental resections; SBRT delivers very high doses of radiation over a short period of time (typically 1-2 weeks), precisely targeting the tumor.

The researchers described VINCI as an “extremely rich source of health information” from which they were able to gather

detailed data related to a large, nationwide group of veterans. The database includes patient-specific data related to preoperative pulmonary function, smoking history, and tumor staging. Factors such as these are often not available and have not been consistently addressed in previous studies, which sets this study apart, according to Bryant.

In their analyses, the researchers found that the 5-year incidence of cancer death was lowest in the lobectomy group at 23%, with the sublobar group at 32%, and SBRT patients at 45%. SBRT also was associated with a 45% increased risk of cancer death compared with lobectomy.

KEY POINTS

- Long-term survival is more likely in patients who undergo lobectomy than those who receive radiation.
- Lobectomy is often the standard treatment for early stage NSCLC.
- The 5-year survival rate for lobectomy was 70%, sublobar resection was 56%, and SBRT was 44%.

Surgery, though, was not without risks. The study showed that both surgical groups had higher immediate mortality compared to radiation due to operative risks. The 30-day mortality was 1.9% for lobectomy, 1.7% for sublobar resection, and 0.5% for SBRT. But as time went on and with longer follow-up, the surgery groups demonstrated superiority to SBRT, with long-term survival favoring surgery, especially lobectomy, over radiation. The 5-year overall survival rate for lobectomy patients was 70%, followed by the sublobar resection group at 56%, and SBRT at 44%.

“Our data suggest that the higher operative risks of surgery are more than offset by improved survival in the months and years after treatment, particularly for lobectomy,” said Bryant.

Increased Use of SBRT

The study also showed that the use of SBRT increased throughout the study period, accounting for 2% of all treatments in 2006 and 19% in 2015. Bryant explained that for patients who are too sick to tolerate a major operation like lobectomy, SBRT makes sense and has become an increasingly common option. Less extensive surgeries, such as sublobar resections, also remain a possibility, but there are ongoing concerns about a higher risk of tumor recurrences, he said. As a result, lobectomy remains the standard treatment for early lung cancer in patients who can tolerate a major surgical procedure.

“The public should be aware that lung cancer – even when caught at a very early stage – is a serious diagnosis and deserves aggressive treatment,” said Bryant.

Lung cancer is the leading cause of cancer death, with more people dying of lung cancer than of colon, breast, and prostate cancers combined. NSCLC is the most common type of lung cancer, accounting for 80% to 85% of all lung cancer diagnoses, according to the American Cancer Society (ACS). ACS estimates that more than 222,500 Americans will be diagnosed with lung cancer this year, and more than 155,000 lung cancer patients will die. About 14% of all new cancers are lung cancers.


###

Bryant AK, Mundt RC, Sandhu AP, Urbanic JJ, Sharabi AB, Gupta S, Daly ME, and Murphy JD. Stereotactic Body Radiation Therapy Versus Surgery for Early Lung Cancer Among US Veterans. 10.1016/j.athoracsur.2017.07.048.

Find comprehensive medical information presented for patients by leading experts in cardiothoracic surgery at the STS Patient Website (ctsurgerypatients.org). For a copy of *The Annals* article, contact Jennifer Bagley at 312-202-5865 or jbagley@sts.org.

Founded in 1964, The Society of Thoracic Surgeons is a not-for-profit organization representing more than 7,400 cardiothoracic surgeons, researchers, and allied health care professionals worldwide who are dedicated to ensuring the best possible outcomes for surgeries of the heart, lung, and esophagus, as well as other surgical procedures within the chest. The Society’s mission is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.


The *Annals of Thoracic Surgery* is the official journal of STS and the Southern Thoracic Surgical Association. It has an impact factor of 3.700.


English | Spanish

The Patient Guide to Heart, Lung, and Esophageal Surgery


A Website Presented by Cardiothoracic Surgeons Committed to Improving Patient Care

Adult Heart Disease
Pediatric and Congenital Heart Disease
Lung, Esophageal, and Other Chest Diseases
Heart and Lung Transplantation
Before, During, and After Surgery
BLOG
News & Trending Topics
What is a Cardiothoracic Surgeon?
Resources



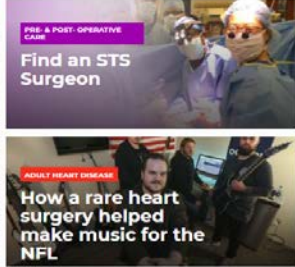
PEDIATRIC AND CONGENITAL HEART DISEASE

Baby Jack is beating the odds; KC family holds out hope...




LUNG, ESOPHAGEAL, AND OTHER CHEST DISEASES

BLOG: Never Smokers: The New Face of Lung Cancer



PRE- & POST- OPERATIVE CARE

Find an STS Surgeon




Joseph E. Bavaria, MD, was credited with saving the life of an NFL player.

March Health Observances

The month of March recognizes Patient Safety Awareness Week, National Kick Butts Day, and National Doctors Day.

Video: Why You Should Become a Cardiothoracic Surgeon



The Society of Thoracic Surgeons


The STS mission is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.

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About STS

Blogs

How We Balance Motherhood and Cardiothoracic Surgery

By Mara Antonoff, MD, FACS, and Leah Backhus, MD, MPH, FACS





In recent years, women have gradually made up greater proportions of medical school classes, with most medical schools in the United States currently fairly balanced between male and female students. However, women continue to be underrepresented in certain specialties, particularly in surgery. Cardiothoracic (CT) surgery is a fairly extreme example, with women constituting approximately 5% of practicing surgeons.

While we remain a small minority of the surgeons in our area of expertise, we must recognize that great strides have been made over the last 3 decades in terms of creating a space for women in CT surgery. As our field has evolved, we have experienced increasing support, encouragement, and opportunities. Women are slowly finding their way into positions of leadership and setting examples for young trainees interested in the specialty. We are certain that the future is bright, even for women like us who choose to be both surgeons and mothers.

Overview

Article





Mara Antonoff, MD, FACS

STS Social Media



7600 Followers

The Society of Thoracic Surgeons (STS) 55TH ANNUAL MEETING & EXHIBITION San Diego Convention Center January 26-30, 2019

Today is #KickButtsDay, a national day that empowers youth to stand up and speak out against Big Tobacco. Smoking can cause many health problems and risks, including cancer, heart disease, COPD and stroke. STS supports the fight to protect kids and save lives from tobacco use. #KickButtsDay



5800 Followers

Thoracic Surgeons @STS_ThorSurg
The Society of Thoracic Surgeons
Chicago, IL, USA
Joined February 2011

Thoracic Surgeons @STS_ThorSurg · Tue 07
Here both make it easier to treat patients w/ lung cancer. Dr Doug Wood (@WoodSurge) moderates discussion with Dr. Leah Bachman (@LeahBachman), Elizabeth David (@ElizabethDavidSurge), Mabelle Liberman (@MabelleLiberman) about ICI: energy saving device, news & more in @jco/online



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Posted by Kristin Schukar · 3/15/2018 · Sponsor now

The Society of Thoracic Surgeons

Access to STS 54th Annual Meeting Online is now available! Experience the exceptional content that was presented in Fort Lauderdale at the 2018 STS Annual Meeting, from the comfort of your home or office. Meeting attendees re...see more

Annual Meeting Online
sts.org

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- How to Successfully Implement Surgical Innovations and New...
- The Consequences of Refusing Surgery
- Transcatheter-Based Mitral Valve Repair and Replacement
- Mentorship in Cardiothoracic Surgery
- 2018 Roundtable Discussion: The Debate Over Exercise
- Addressing the Impending Shortage of Cardiothoracic...
- Anticoagulation During Cardiothoracic Bypass
- STS Symposium on Robotic Cardiac Surgery: Atrial Valve



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Society of Thoracic Surgeons
www.sts.org

Grid of photos showing various STS events and speakers.

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Grid of photos showing various STS events and speakers.



The Society of Thoracic Surgeons

STS WEEKLY

March 20, 2018

Access Annual Meeting Online

Experience the exceptional content from the STS 54th Annual Meeting in the comfort of your own home or office with [STS Annual Meeting Online](#)^{*}. This online product gives you access to more than 100 hours of recorded sessions, packed with thought-provoking lectures, pro-con debates, and new research results. Highlights include the Presidential Address from Dr. Richard L. Prager, a keynote lecture by Dr. Robert H. Bartlett on the history and evolution of ECMO, and "how to" video sessions covering adult cardiac, congenital cardiac, and general thoracic surgeries. Annual Meeting Online was included with meeting registration. Didn't attend the 2018 meeting in Fort Lauderdale? [Purchase access now](#).

Register Onsite Friday for the Robotic Cardiac Surgery Symposium in Chicago

The [STS Symposium on Robotic Cardiac Surgery: Mitral Valve Repair, Coronary Bypass, and More](#)^{**} kicks off this Friday in Chicago. If you are looking to establish or enhance a robotic cardiac surgery program in your hospital—don't miss the opportunity to engage with internationally renowned faculty members who have built their own successful programs. Learn the essentials of robotic arterial and valvular procedures, watch demonstrations, and experience hands-on opportunities with multiple simulators. [Register online](#) now or onsite at the Loews Chicago Hotel.

Read New *Annals* Article on GTSD Research

The Annals of Thoracic Surgery has released an article summarizing the latest research findings from the General Thoracic Surgery Database (GTSD). "[The Society of Thoracic Surgeons General Thoracic Surgery Database 2018 Update on Outcomes and Quality](#)," written by Dr. Christopher W. Seder and colleagues, reviews current aggregate national outcomes in general thoracic surgery, as well as GTSD-related activities in the areas of quality measurement, performance improvement, and transparency. This article will appear in the April print issue of *The Annals*.

Watch or Listen to Discussion on Emerging Lung Cancer Technologies

New technologies and innovative treatments for lung cancer patients are the focus of this week's installment of STS roundtable discussions. [Watch here](#) as Drs. Douglas E. Wood, Leah M. Backhus, Elizabeth A. David, and Moishe A. Liberman explore how low-dose computed tomography, wearable devices, energy-sealing devices, and robots are changing patient outcomes and experiences. You also can listen on the [STS Podcast Episodes page](#), or subscribe to Surgical Hot Topics via iTunes, Google Play, or wherever you access your podcasts.

^{*}STS Annual Meeting Online

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

The Society of Thoracic Surgeons designates this enduring material for a maximum of 108.75 AMA PRA Category 1 Credits[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

^{**}Symposium on Robotic Cardiac Surgery: Mitral Valve Repair, Coronary Bypass, and More

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

The Society of Thoracic Surgeons designates this live activity for a maximum of 16.50 AMA PRA Category 1 Credits[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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Marketing Collateral



sts.org/annualmeeting

STS 54th Annual Meeting

January 27-31, 2018
Fort Lauderdale, Florida

Late-breaking abstract submission closes Friday, December 8, 2017.



The Society of Thoracic Surgeons



Learn from the Best

COURSE DIRECTORS
Hussein H. Badier, Chicago, IL
Joseph A. Dearani, Rochester, MN
T. Shane Clay, New York, NY

INVITED SPEAKERS
Vijay Bhatnagar, Minneapolis, MN
David M. Eckstein, Fort Lauderdale, FL
Joseph P. Costantino, St. Louis, MO
Robert D. White, Rochester, MN
A. Brett Geary, Cleveland, OH
Linda Jabbari, Fort Lauderdale, FL
Clifford J. Lewis, Dallas, TX
Gina M. Long, St. Louis, MO
Daphne A. Murphy, Atlanta, GA
Nancy D. Patel, Houston, TX
John D. Puskas, Rochester, NY
Brendan R. Reynolds, Boston, MA
Linda Rodriguez, Rochester, MN
Francis P. O'Gara, Pittsburgh, PA

Robotic Cardiac Surgery: Mitral Valve Repair, Coronary Bypass, and More

March 23-24, 2018
Loews Chicago Hotel

COURSE DIRECTORS
Hussein H. Badier, Chicago, IL
Joseph A. Dearani, Rochester, MN
T. Shane Clay, New York, NY

Learn more to support the search for cardiac surgery video programs in a hospital setting.

sts.org/roboticcardiac



MASTERS IN INNOVATIVE STRUCTURAL HEART AND VALVE THERAPY:

A Case-Based and Hands-On Symposium



December 1-2, 2017
Chicago
SWISSÔTEL CHICAGO

sts.org/structuralheart




2019 STS Exhibitor Prospectus

The Society of Thoracic Surgeons
55TH ANNUAL MEETING & EXHIBITION
 Exhibitor Prospectus

San Diego Convention Center
 January 26-30, 2019



AN EXTRAORDINARY EXPERIENCE AWAITS

Join us and more than 4,100 registrants—including approximately 2,200 cardiothoracic surgery professionals—from 66 countries in San Diego, California, for the 2019 STS Annual Meeting.




As the world's largest organization representing thoracic and cardiothoracic surgeons, the Society provides an Annual Meeting that offers you the best forum to display your products and services and interact with the decision makers in the field.

The STS Annual Meeting is not only recognized for its educational innovation and world-renowned faculty, but also for its engaged and very active attendees. In fact, virtually every single attendee visits the exhibit hall at least once, and most visit at least 3 times during the Annual Meeting!

Meeting Information

EXHIBITORS
 The STS exhibit hall is a truly unique opportunity to showcase a wide range of products and services related to cardiothoracic surgery. Exhibitors include: medical device manufacturers, pharmaceutical and biotechnology companies, medical equipment, medical technology groups, and health care staffing organizations.

2019 VENUE
 San Diego Convention Center
 1770 La Jolla Village Dr., San Diego, CA 92161

FLOORPLAN
 A floor plan for the 2019 meeting will be available online on our website, beginning in February 2018.

Note: No changes in subject to change pending contract approval.

STS ANNUAL MEETING REGISTRATION 2017

4,156
 Total Registrants

969 Professional Registrants
 2,211 Professional Registrants
 643 STS Generalists (attendees to visit the exhibit hall)
 128 Inviting Organizations


PROFESSIONAL ATTENDEES VISIT THE EXHIBIT HALL

98% visit at least once
 52% visit 3-5 times
 35% visit 1-2 times
 11% visit at least 6 times

71% of attendees who attended the 2017 Annual Meeting reported that they plan to visit the exhibit hall before the next meeting.

INTERNATIONAL MEETING SCOPE




66 countries represented at the STS Annual Meeting



COUNTRIES WITH THE MOST ATTENDEES





1. United States
2. Japan
3. Canada
4. Mexico
5. United Kingdom

22% Professional attendees from outside the US

Reserve Your Booth for the 2019 STS Annual Meeting

Exhibit space applications are accepted online at sts.org/exhibits. If you previously have exhibited at an STS Annual Meeting, you can use the same password. If you are a new exhibitor, you can create a login through the link on the bottom, right-hand side. Completion of your online application includes agreeing to the Society's Exhibit Rules & Regulations.

Booth Information

ASSIGNMENT OF BOOTH SPACE
 All booth space assignments are based on the Application for Exhibitor Space, which is completed and accepted by the Society's committee. It is a binding contract that will be provided by the Society to the exhibitor.

Booth space for the 2019 Annual Meeting will be assigned to 2019 Annual Meeting exhibitors using a Priority Point System. Assignments begin on Sunday, January 26, 2019. At the 2018 Annual Meeting, exhibitor requests received in chronological order will be awarded in order of their request. If the Society anticipates a high volume of exhibitor requests regarding booth location, such requests cannot be guaranteed. In the event of a conflict regarding space or other material conditions, the Society shall reserve the right to assign space to the exhibitor, regardless of the exhibitor's order of request, at any time before or during the period of exhibit.

EXHIBITION SCHEDULE
 Monday, January 29, 2019 - 8:30 am - 6:30 p.m.
 Tuesday, January 30, 2019 - 9:00 am - 6:30 p.m.
 Wednesday, January 31, 2019 - 9:00 am - 6:30 p.m.
 All times listed here are subject to change without notice. The exhibitor must be on site at the time listed.

INSTALLATION & REMOVAL OF EXHIBITS
 Installation of exhibits will commence on Tuesday, January 29, 2019 at 8:00 am. All exhibits must be fully installed by 10:00 am. Exhibitor removal of exhibits will begin on Wednesday, January 30, 2019, and may not be distributed or removed until the time listed. Exhibitor exhibits must be ready to move on or before 2:00 pm. Wednesday, January 30, 2019.

BOOTH PRICING

System	1st Year (2019)	2nd Year (2020)
10' x 10' exhibitor booth	\$3,750	\$3,375
10' x 10' exhibitor booth with a corner	\$3,900	\$3,450
All exhibitor expenses per 100 sq ft	\$3,450	\$3,075

CANCELLATION AND DEPOSITS
 Cancellation of exhibit space must be completed in writing to the Society, the following rules apply:
 • Exhibitor cancellations or deposits on or before April 16, 2019, will result in a 100% refund of the total cost of the previously contracted booth space.
 • Exhibitor cancellations or deposits on or after April 16, 2019, will result in a 100% deposit on the total cost of the previously contracted booth space.
 • Exhibitor cancellations or deposits on or after August 11, 2019, will result in a 100% deposit on the total cost of the previously contracted booth space.
 • Exhibitor cancellations or deposits on or after August 11, 2019, will result in a 100% deposit on the total cost of the previously contracted booth space. No refunds will be issued for cancellations on or after August 11, 2019. For more information, contact Registration and Exhibitor Services at exhibitor@sts.org or 312-202-0838.

BEYOND THE BOOTH

The following opportunities will be offered to exhibitors at the STS 55th Annual Meeting.

MULTIPURPOSE SUITES
 Offer a space for your business to showcase your products and services. The Society provides a variety of services to help you maximize your space. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars.

BRANDING OPPORTUNITIES
 Offer your brand a unique opportunity to showcase your products and services. The Society provides a variety of services to help you maximize your space. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars.

STS MEETING BULLETIN
 Advertise in the printed, online, and mobile version of the STS Annual Meeting program.

ADVERTISING ON STS.ORG
 This is a unique opportunity to showcase your products and services. The Society provides a variety of services to help you maximize your space. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars.

EARLY COMMUNICATIONS
 Share your new products and services with the Society's members. The Society provides a variety of services to help you maximize your space. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars.

INDUSTRY-SPONSORED SATELLITE ACTIVITIES
 Offer your company a unique opportunity to showcase your products and services. The Society provides a variety of services to help you maximize your space. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars.




STS ANNUAL MEETING REGISTRANT LIST LICENSE
 Register for the STS Annual Meeting and receive a license to use the registrant list for your business. The license is valid for one year and can be used for a variety of purposes. The Society provides a variety of services to help you maximize your space. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars.

EDUCATIONAL GRANTS
 Receive a grant to support your educational activities. The Society provides a variety of services to help you maximize your space. Exhibitor space is available for a variety of services based on your needs. All rates are in US dollars.

If you have questions or ideas about these opportunities, please contact Sarah McCarty, Industry Relations Manager, at sarahmccarty@sts.org or 312-202-5469.






Exhibitor Advisory Committee

Do you have ideas or suggestions for the upcoming STS 55th Annual Meeting? We want to hear from you! The Exhibitor Advisory Committee (EAC) was formed to represent the exhibitor community and provide input on the meeting. The EAC will meet on Tuesday, January 29, 2019, at 8:00 am. All exhibitors are invited to attend. For more information, contact Registration and Exhibitor Services at exhibitor@sts.org or 312-202-0838.

2019 HOTELS
 Grand Hyatt San Diego
 Marriott Marquis San Diego Hotel
 Omni San Diego

FUTURE MEETINGS
 STS 56th Annual Meeting
 San Diego Convention Center
 January 29-31, 2020

DON'T DELAY

To secure your place at the STS 55th Annual Meeting & Exhibition, contact Angel Lee, Exhibit Manager, at angel@sts.org or 312-202-0838.

Exhibitor Advisory Committee Members:
 Bob D'Amico, Senior Manager, Compliance & Quality
 Jeffrey Rubin, Marketing & Communications Manager
 Bob D'Amico, Senior Manager, Compliance & Quality
 Bob D'Amico, Senior Manager, Compliance & Quality
 Bob D'Amico, Senior Manager, Compliance & Quality
 Bob D'Amico, Senior Manager, Compliance & Quality

TAB 13

STS Affiliated Organizations: CTSNet, STSA, TSDA, TSF, and WTS

STS currently provides management services for CTSNet, The Thoracic Surgery Foundation (TSF), the Southern Thoracic Surgical Association (STSA), the Thoracic Surgery Directors Association (TSDA), and Women in Thoracic Surgery (WTS).

CTSNet

CTSNet is an independent, not-for-profit organization that operates under the auspices The Society of Thoracic Surgeons, the American Association for Thoracic Surgery, and the European Association for Cardio-thoracic Surgery. STS, AATS, and EACTS are the Member Organizations of CTSNet, and numerous other cardiothoracic surgical organizations around the world are also involved in CTSNet as Participating Organizations. CTSNet's new mission, developed during a January 2017 strategic planning session, is to "connect the global cardiothoracic community." Its vision is to "leverage Internet connectivity to facilitate communication, collaboration, education, and interaction amongst cardiothoracic surgeons and their teams across the globe." Among many other valuable electronic resources pertaining to CT surgery, CTSNet offers:

- Profile pages for cardiothoracic surgeons and allied health professionals.
- The premier job board across all of cardiothoracic surgery.
- A broad and expanding range of video and text-based educational content.
- Gateways to the major specialty journals.
- A calendar of specialty-related events.
- Growing social media presences on Twitter, YouTube, and Facebook.
- The highly popular *Pulse* and *JANS* weekly blast e-mails.

STSA

STSA supports southern and southern-trained members of the cardiothoracic surgery community and their families in the pursuit of the highest quality patient care, education, scientific achievement, collegiality, and life balance. STSA represents more than 1,100 cardiothoracic surgeons throughout the country. STSA hosts an Annual Meeting for members and non-members each fall, offering a weekend of high-quality scientific sessions, postgraduate programming, vendor exhibits, and numerous networking opportunities. Several awards and lectureships are offered in conjunction with the STSA Annual Meeting to recognize the best scientific papers and significant contributions to the specialty.

TSDA

TSDA provides resources and networking opportunities for program directors and program coordinators, and supplemental curriculum materials and resources for general surgery and cardiothoracic surgery residents. Members meet twice a year to exchange information about relevant topics in cardiothoracic surgery education, such as Milestones reporting and assessment, residency program start dates, and curriculum development. Key programs include the annual In-Training Exam for CT surgery residents and congenital cardiac surgery fellows, Boot Camp, the Congenital Cardiac Surgery Fellowship Match, and the dissemination of vessel anastomosis training kits to first-year cardiothoracic surgery residents.

The Thoracic Surgery Residents Association (TSRA), which falls within TSDA, publishes numerous resources that are widely used by residents around the world, including *TSRA Review of Cardiothoracic Surgery*, *TSRA Multiple Choice Review of Cardiothoracic Surgery*, *TSRA Primer of Cardiothoracic Surgery*, *TSRA Clinical Scenarios in Cardiothoracic Surgery*, *TSRA Journal Club*, and *Operative Dictations in Cardiothoracic Surgery*, and *Fighting Fatigue: A Guide for Cardiothoracic Surgery Residents*. TSRA also offers the TSRA Traveling Fellowship in Cardiothoracic Surgery.

TSF

On October 1, 2014, TSF became the charitable arm of STS. The mission of TSF is to foster the development of surgeon scientists in cardiothoracic surgery, increasing knowledge and innovation to benefit patient care. TSF offers research fellowships and grants, traveling fellowships, and grants to support patient care in underserved regions of the world through the TSF/Edwards Foundation Every Heartbeat Matters program. TSF also offers educational awards to cardiothoracic surgeons to attend the Brandeis University Leadership Program in Health Policy and Management and the ACS Surgeons as Educators course.

WTS

WTS was founded in 1986 with a mission to enhance the quality of medical care given to patients of its members, mentor young women thoracic surgeons, enhance the education of patients about heart and lung diseases, and enhance educational opportunities for women cardiothoracic surgeons. Key programs include two networking receptions a year, the Scanlan/WTS Traveling Mentorship Award, the Carpenter Scholarship, and the WTS Scholarship Program. WTS also hosts an annual educational session in conjunction with the STS Annual Meeting.

TAB 14

Funding **research**
and **education** today
to improve the
practice of tomorrow





Mission

The mission of The Thoracic Surgery Foundation (TSF) is to foster the development of surgeon-scientists in cardiothoracic surgery, increasing knowledge and innovation to benefit patient care.

research education practice

INSIDE

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A MESSAGE FROM THE PRESIDENT

Dear Colleagues, Patients, and Friends:



It has been my privilege to serve as The Thoracic Surgery Foundation's President for the past year, and I am pleased by the significant progress the Foundation has made. This time has afforded me the opportunity to learn and experience first-hand the generosity of the members of our specialty in supporting the Foundation's research and education initiatives.

2017 was a great year for The Thoracic Surgery Foundation. With support from The Society of Thoracic Surgeons, the Foundation is continuing to thrive. TSF's established role as STS's charitable arm has strengthened our fundraising potential and covered our administrative costs, enabling us to have a greater impact with our mission.

“The Foundation's awards have been instrumental in developing hundreds of young surgeons by providing the support needed for their career advancement. These awards also have been important stepping stones in furthering innovation in cardiothoracic surgery.”

TSF is truly Your Foundation. Research grants, fellowships, and educational scholarships from TSF represent all of our disciplines (cardiac, general thoracic, and congenital) and surgeons at all career stages. The Foundation's awards have been instrumental in developing hundreds of young surgeons by providing the support needed for their career advancement. These awards also have been important stepping stones in furthering innovation in cardiothoracic surgery.

If you have not given to the Foundation recently, I urge you to consider doing so now. And, if you generously donated in 2017, please consider another gift at this time. Let's build on the momentum from a successful 2017 and make 2018, our 30th anniversary, our best year yet. **You can click [here](#) or anywhere on the bottom of each page to make an online donation.** Your generosity will help us ensure a bright future for surgeon-scientists and excellent care for our patients.

Thank you for your continued support of TSF.

Douglas E. Wood, MD
TSF President, 2017-2019

TSF's recent accomplishments include:

\$702,500
in **GRANTS AWARDED**

50
SURGEON AWARDEES
UP FROM 23 IN 2016

\$300,000+
in **CORPORATE** donations

\$175,100+
in **INDIVIDUAL**
(non-surgeon) donations

\$510,000+
in surgeon donations and an additional \$200,000 through the **TSF/STS Surgeon Match Challenge**

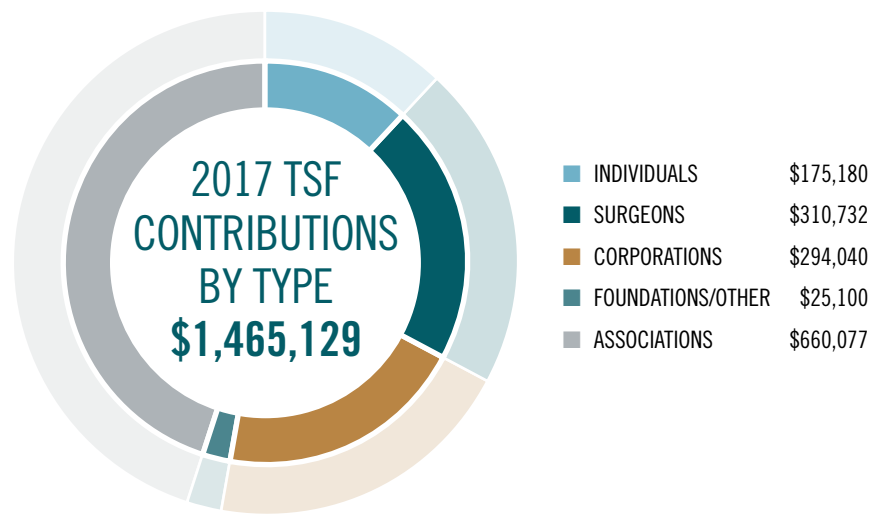
\$200,000+
in donations for the newly created **Replogle Traveling Fellowship**
IN MEMORY OF TSF FOUNDER AND STS PAST PRESIDENT ROBERT L. REPLOGLE, MD

Revenue Summary

2017 TOTAL REVENUE



2017 REVENUE BY TYPE



100%

OF THE FOUNDATION'S OPERATING EXPENSES ARE COVERED BY STS



TSF Award Offerings

Research Awards

TSF Research Award

This award provides operational support of original research efforts by cardiothoracic surgeons who have completed their formal training and who are seeking initial support and recognition for the research program. Awards of up to \$40,000 per year for up to 2 years are granted to support the work of early career cardiothoracic surgeons (within 7 years of first faculty appointment at the time of application deadline).

STS Research Award

This award provides operational support of original research efforts by cardiothoracic surgeons who have completed their formal training, and who are seeking initial support and recognition for the research program. Awards of up to \$40,000 per year for up to 2 years are granted to support the work of early career cardiothoracic surgeons (within 7 years of first faculty appointment at the time of application deadline). The STS Research Award designation is given to the highest-ranking research application awarded by TSF based on merit as judged by a rigorous peer review process.

Nina Starr Braunwald Research Award

Nina Starr Braunwald, MD was the first woman to be certified by the American Board of Thoracic Surgery (ABTS) and the first woman to perform open heart surgery. This award in her name provides operational support of original research efforts by women cardiac surgeons who have completed their formal training and who are seeking initial support and recognition for their research program. Awards of up to \$40,000 per year for up to 2 years are made each year to support the work of early career women cardiac surgeons (within 5 years of first faculty appointment).

Nina Starr Braunwald Research Fellowship Award

This award supports up to \$30,000 per year for up to 2 years for a woman resident working in a cardiac surgical clinic or laboratory research program who has not yet completed cardiothoracic surgical training.

STSA Research Award

This award provides operational support of original research efforts by cardiothoracic surgeons who have completed their formal training and who are seeking initial support and recognition for their research program. An award of up to \$25,000 for 1 year will be granted to support the work of an early career cardiothoracic surgeon (within 7 years of first faculty appointment at the time of application deadline). Membership in the Southern Thoracic Surgical Association (STSA) is not required; however, applicants must meet STSA membership eligibility requirements.

NEW FOR 2018

TSF Resident Research Fellowship Award

This award provides up to \$30,000 per year for up to 2 years to support a research fellowship for a resident who has not yet completed cardiothoracic surgical training. During the fellowship, the resident will work in a cardiothoracic surgical clinical or laboratory research program.

Education Awards

Carolyn E. Reed Traveling Fellowship Award

Carolyn E. Reed, MD was a thoracic surgeon, educator, and successful researcher who died while still in her prime. She served as the first female Chair of the ABTS and also was President of STSA and STS. This award in her name provides support of up to \$10,000 for a clinically established woman thoracic or cardiac surgeon, or woman resident in her last year of cardiothoracic surgery residency, to travel to another institution for the purpose of learning a new skill or technology.

Michael J. Davidson Fellowship Award

Michael J. Davidson, MD was an outstanding cardiothoracic surgeon and teacher who was murdered in January 2015 at Brigham and Women's Hospital in Boston. The tragedy profoundly affected the cardiothoracic community and brought to light Dr. Davidson's achievements in mastering sophisticated catheter skills and advocating for a future that would meld the cardiac catheterization lab with the operating theater. This award in his name provides annual support of \$25,000 for a deserving young early career cardiothoracic surgeon (within 7 years of first faculty appointment at the time of application deadline) committed to the vision of innovative and collaborative cardiovascular care that Dr. Davidson helped pioneer.

\$265,000

\$200,000

\$140,000

\$45,000

\$27,500

\$25,000

Research
(TSF, STS + STSA)

International Cardiac
Surgical Outreach

Braunwald
Research + Fellowship

Fellowships
(Carolyn Reed +
Michael Davidson)

Travel Awards

Scholarships
(Alley-Sheridan +
Levi Watkins)

2017 AWARDS BY TYPE

2017 GRANTS AWARDED

\$702,500



Alley-Sheridan Scholarships

Ralph D. Alley, MD was a Founder Member of The Society of Thoracic Surgeons and served as President from 1975–1976. David Sheridan was an inventor and close friend of Dr. Alley, who held more than 50 patents for innovations that have improved health care. Moved by his collaborator and friend’s commitment to cardiothoracic surgery, Sheridan created the Alley-Sheridan Fund, which provides scholarships of \$2,500 toward the cost of tuition to attend the Leadership Program for Health Policy and Management at the Heller School of Public Policy and Management at Brandeis University.

Levi Watkins Innovation and Leadership Development Scholarship

Levi Watkins, MD was an accomplished cardiothoracic surgeon and social activist at The Johns Hopkins Medical Center who made medical history by working with innovative physicians and engineers to implant the first automated internal cardiac defibrillator in a human being. The Watkins Scholarship supports travel to a center of excellence for the purposes of acquiring clinical, translational, or leadership training to enhance skills and practice in an area of innovation or surgical significance. This award in Dr. Watkins’s name provides support of up to \$5,000 for up to 2 weeks for cardiothoracic surgeons who are within 7 years of first faculty appointment.

NEW FOR 2018

Robert L. Replogle Traveling Fellowship Award

Robert L. Replogle, MD was a talented pediatric cardiac surgeon, as well as an educator, researcher, and national leader in cardiothoracic surgery. The purpose of the Replogle Fellowship is to facilitate the continuing education of deserving young faculty surgeons or residents committed to the treatment of congenital heart disease in neonates, infants, children, and adults. The award is intended for travel to another institution for the purpose of learning a novel technique, adapting innovative technology, and/or fostering collaboration among surgical investigators in order to further the progress of congenital heart surgery at the recipient’s home institution. This award in Dr. Replogle’s name provides support of up to \$10,000 for up to 2 weeks for early career congenital heart surgeons who are within 7 years of ACGME-accredited congenital heart surgery fellowship completion (or its equivalent).

NEW FOR 2019

Sarns Terumo Perfusion Education Fellowship Award

The purpose of the Sarns Terumo Perfusion Education Fellowship is to facilitate the continuing education of a deserving board-certified perfusionist who is committed to expanding cardiovascular perfusion education and knowledge. This \$10,000 award will support travel to another institution for the purpose of learning unique techniques, simulation approaches, and innovative technology to improve care for cardiothoracic surgery patients at the recipient’s home institution.



Surgical Outreach Awards

TSF International Cardiac Surgical Outreach Award

TSF, through the generosity and philanthropy of the Edwards Lifesciences Foundation, offers support of up to \$37,500 for qualified surgeons with proven track records of volunteer experience conducting charity work for underserved regions/populations. Awards are designed to provide support for sustainable programs that educate, screen, and/or treat underserved populations to reduce the global burden of heart valve disease or support other programs that advance health care and address underserved populations.

TSF Travel Awards

These awards of \$1,000 provide cardiothoracic surgeons who treat underserved patients and demonstrate a financial need with the opportunity to attend either the STS/EACTS Latin America Cardiovascular Surgery Conference or the STS Annual Meeting. Underserved people are those who have a health disparity as defined by the Centers for Disease Control and Prevention and lack awareness of, or access to, medically appropriate health care. These scholarships are made possible by the Edwards Lifesciences Foundation.

NEW FOR 2018

TSF International Medical Volunteer Scholarship

TSF, through the generosity and philanthropy of the Edwards Lifesciences Foundation, offers travel scholarships of \$2,500 for qualified cardiothoracic surgery residents and early career cardiothoracic surgeons (within 7 years of CT surgery residency completion) who wish to gain a global cardiothoracic surgery volunteer experience under the mentorship of experienced surgeon volunteers. TSF International Medical Volunteer Scholars will have the opportunity to join a TSF International Cardiac Surgical Outreach Award mission trip team.



Research + Education Award Recipients

The following recipients were notified of their awards in early February 2017.

Lisa M. Brown, MD

UC Davis School
of Medicine

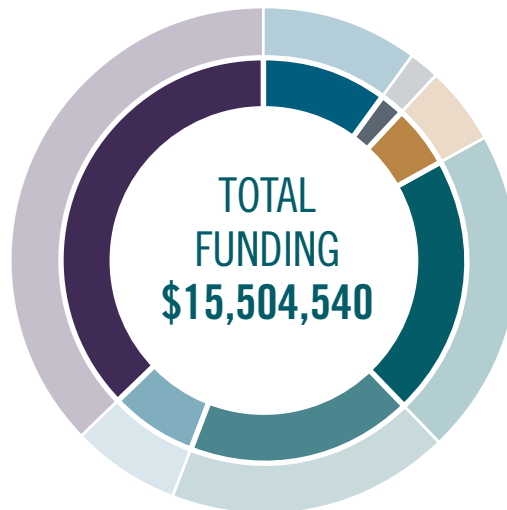
*Carolyn E. Reed
Traveling Fellowship
\$10,000*

“University of Michigan
Health Services Research
Traveling Fellowship”



“My goal is to develop a research focus on health care delivery and quality for lung cancer patients. This award will allow me to travel to the University of Michigan’s Institute for Healthcare Policy and Innovation to work with Dr. Amir Ghaferi, a leading health services researcher and academic surgeon.”

CUMULATIVE TSF AWARD FUNDING* 1993-2017



CAREER DEVELOPMENT	\$1,530,000
SIMULATION	\$269,385
SURGICAL OUTREACH MISSIONS	\$705,000
FELLOWSHIPS	\$3,294,250
RESEARCH GRANTS	\$2,857,500
EDUCATIONAL SCHOLARSHIPS	\$1,080,905
NIH (K08/K23/ACS CO-SPONSOR)	\$5,737,500
TRAVEL SCHOLARSHIPS AND AWARDS	\$30,000

*As of March 19, 2018, includes Alley-Sheridan Scholarships

Errol L. Bush, MD

John Hopkins University

*Levi Watkins
Innovation and Leadership
Development Scholarship
\$5,000*

“Development of a
Successful Ex-Vivo Lung
Perfusion Program at
Toronto General Hospital”



“I am honored and excited to accept the inaugural Levi Watkins Innovation and Leadership Development Scholarship. The scholarship will allow me to observe an exemplary academic lung transplant program that will stimulate my innovation and development of my own model program.”

David M. Hoganson, MD
Boston Children's Hospital
STS Research Award
\$80,000
"Endothelialized
Vascular Scaffold for
Lung Engineering"



"Through the generosity of the TSF, I will be able to continue to develop this exciting program and be in a position to apply for NIH funding in the future."

"I would like to extend my gratitude to the TSF for their support of my project. I look forward to the opportunity to fully explore thoracic aortic disease in women and to continue working toward a career as a surgeon-scientist. It is an honor to be recognized by the organization and to be among these great recipients, both past and present."



Lauren V. Huckaby, MD
University of Pittsburgh
Medical Center
*Nina Starr Braunwald
Research Fellowship*
\$60,000
"Estrogen and Sex
Differences in Bicuspid
and Tricuspid Aortic Valve
Thoracic Aortic Aneurysm"

Lauren C. Kane, MD
Baylor College of Medicine
*Carolyn E. Reed
Traveling Fellowship*
\$10,000
"Learning Surgical
Strategies with Later
Presenting Congenital
Heart Disease in India
and Beyond"



"I am grateful to the TSF for providing this opportunity for me to travel away from my home institution and learn from others. The skills and knowledge that I will bring back home will benefit my patients, my practice, and hopefully inspire other learners to never stop pursuing knowledge. This is a rare opportunity that would otherwise not be available to me."

"I consider it a great honor to receive this research award. The specialty of cardiothoracic surgery is fortunate to have an entity like the TSF that places such great focus on helping young surgeon-scientists like me."



Anson M. Lee, MD
Stanford University School
of Medicine
STSA Research Award
\$25,000
"Identifying the Common
Final Pathway in
Post-Operative Atrial
Fibrillation With
Transcriptome Profiling"

“I am extremely grateful to the TSF for their support. The funding will allow me to further advance the development of our regional lung cancer collaborative and provide valuable resources to support future applications for federal funding.”



David D. Odell, MD
Northwestern University
TSF Research Award
\$80,000
“Development of a Novel Lung Cancer Collaborative in Illinois”

Maral Ouzounian, MD, PhD
Toronto General Hospital
Nina Starr Braunwald Research Award
\$80,000



“The support from the TSF has provided me the opportunity to expand my research activities and to help launch my career as an independent investigator. This award will allow me to conduct an in-depth exploration of the utility of innovative imaging tools in predicting vulnerable aortas.”

“Biomechanical and Metabolic Properties of Proximal Aortic Aneurysms in Patients With Bicuspid Aortic Valves”

“The award is a great honor and privilege, and I am truly indebted to the TSF for its support. The Fellowship holds a particularly deep emotional and historical place in the hearts of many people here at Brigham and Women’s Hospital. I will look to honor both those sentiments and the TSF in the year ahead.”



Brian T. Plunkett, MD
Brigham and Women’s Hospital
Michael J. Davidson Fellowship
\$25,000
“Clinical Fellowship in Endovascular Cardiac Surgery”

Hiroo Takayama, MD, PhD
Columbia University
TSF Research Award
\$80,000



“I sincerely thank the TSF for this award. The collaborators and I are thrilled with this opportunity and are all committed to moving the cardiovascular science forward.”

“Novel Noninvasive Assessment of Mechanical Stress on Aortic Valve During Continuous-Flow Left Ventricular Assist Device”

2017 CHAIR

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University of Michigan

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Duke University

Kalpaj R. Parekh, MD
University of Iowa

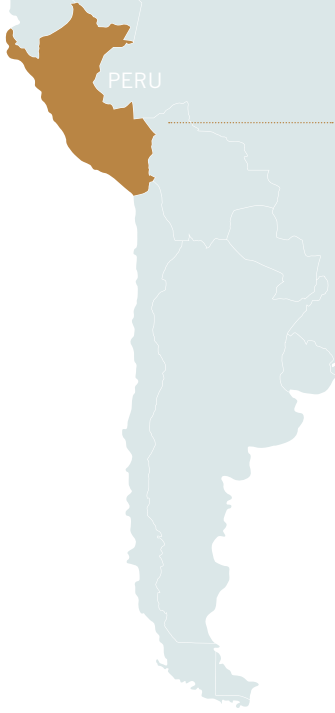
Marc Ruel, MD
University of Ottawa

Brendon M. Stiles, MD
Weill Cornell Medical College

Elaine Tseng, MD
University of California, San Francisco

Dennis A. Wigle, MD
Mayo Clinic

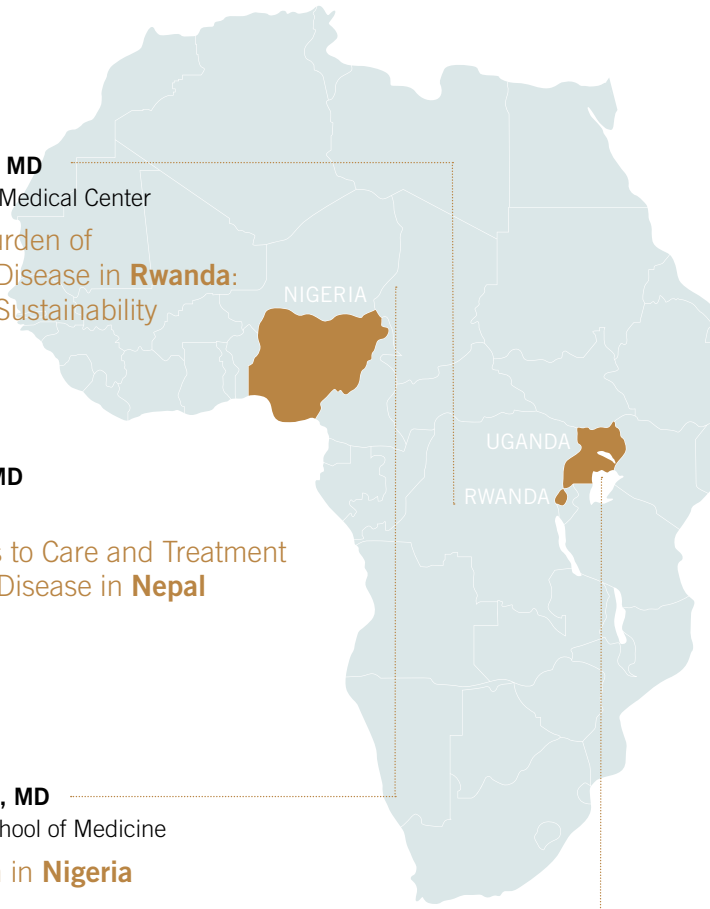
International Cardiac Surgical Outreach Award Recipients



Reshma M. Biniwale, MD
University of California, Los Angeles
Hearts with Hope Foundation in **Peru**
\$25,000



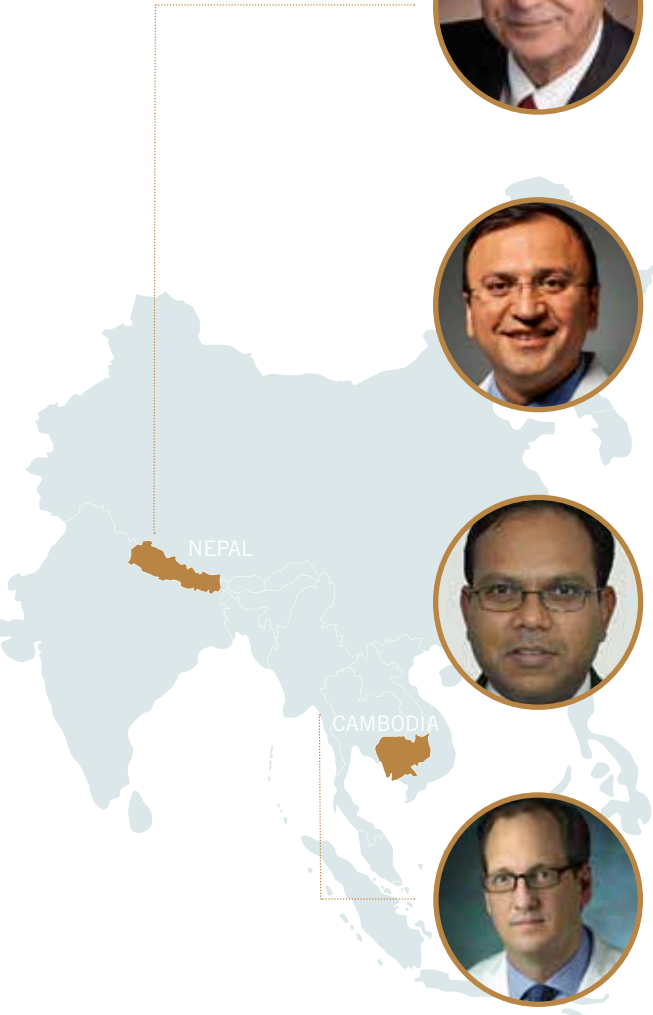
R. Morton Bolman III, MD
University of Vermont Medical Center
Addressing the Burden of
Rheumatic Heart Disease in **Rwanda:**
A Plan for Future Sustainability
\$37,500



Frederick L. Grover, MD
University of Colorado
Enhancing Access to Care and Treatment
of Cardiovascular Disease in **Nepal**
\$37,500



Reza A. Khodaverdian, MD
Stanford University School of Medicine
VOOM Foundation in **Nigeria**
\$25,000



Pranava Sinha, MD
Children's Research Institute
Management of Rheumatic
Heart Disease in **Uganda**
\$37,500



Luca A. Vricella, MD
The Johns Hopkins University
Pediatric Cardiac Surgery
Mission to **Cambodia**
\$37,500





2017 TSF Award Recipients

Alley-Sheridan Scholarship Recipients

Stephen R. Broderick, MD
The Johns Hopkins University

Chuong D. Hoang, MD
NIH—National Cancer Institute

Ravi Ghanta, MD
Baylor College of Medicine

Vigneshwar Kasirajan, MD
VCU Health

Meena Nathan, MD
Boston Children's Hospital

Anastasios C. Polimenakos, MD
Children's Hospital of Georgia/Medical
College of Georgia

Alexander Roitstein, MD
Aurora BayCare Medical Center

Elaine Tseng, MD
University of California, San Francisco

Travel Award Recipients 2017



Juan Carlos Bahamondes, MD
Temuco, Chile
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Krishna Bhandari, MD
Kathmandu, Nepal
STS 54th Annual Meeting

Norberto Cesar Blanco, MD
Buenos Aires, Argentina
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Enzo A. Borzellino, MD
Barquisimeto, Venezuela
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Chizoba A. Efobi, MD
Benin City, Nigeria
STS 54th Annual Meeting

Carlos A. Fernandez, MD
Tacna, Perú
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Debora Klein Ferreira, MD
Porto Alegre, Brazil
STS 54th Annual Meeting

Manuel Giraldo Grueso, MD
Bogotá, Colombia
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Mauricio Damian Gomez-Gonzalez, MD
Ciudad de México, México
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Ricardo Guzman Gonzalez, MD
Durango, México
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Blas Fabián González, MD
Asunción, Paraguay
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

José M. Gutiérrez García, MD
Mérida, México
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Benjamin I. Hernandez, MD
Ciudad de México, México
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

David Maldonado, MD
Guayaquil, Ecuador
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Lorena Montes, MD
Bogotá, Colombia
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Akinwumi Babatunde Ogunrombi, MD
Pretoria, South Africa
STS 54th Annual Meeting

Juan F. Parra, MD
Bogotá, Colombia
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Diego Pena, MD
Bogotá, Colombia
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Americo Peña-Oscuivilca, MD
Lima, Peru
STS 54th Annual Meeting

Alberto Alejandro A. Quintero Gomez, MD
La Estrella, Colombia
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Pedro Horigoshi Reis, MD
São Luís, Brazil
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Josías Caleb Ríos, MD
Lima, Perú
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

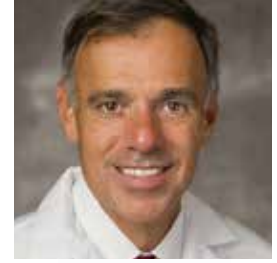
Lizeth D. Saldaña, MD
Medellín, Colombia
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

Juan B. Umana-Pizano, MD
Bogotá, Colombia
2017 STS/EACTS Latin America
Cardiovascular Surgery Conference

STS/EACTS Award Xiaoying Lou, MD

Emory University
This award was issued for the best abstract
presented during the EACTS @ STS session at
the STS 53rd Annual Meeting.

*Award funded by Terumo CVS and Vascutek



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2017

2017 Major Gifts Donor Honor Roll

TSF IS GRATEFUL FOR ITS MOST GENEROUS DONORS WHO HAVE GIVEN \$10,000 OR MORE CUMULATIVELY.

PARTNERS

\$1,000,000+

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AATS Graham Foundation
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