

Society of Thoracic Surgeons

General Thoracic Surgery Database
New Data Manager Webinar

October 25, 2023



STS National Database™
Trusted. Transformed. Real-Time.



WELCOME

Agenda

- Welcome and Introductions
- Introduction to STS and the Databases
- Role of the Data Manager
- Data Manager Resources
- How to read the Data Collection Form (DCF)
- Required fields
- Intro to Data Specs
- Intro to Training Manual
- Submitting a question
- Keys to abstracting data
- Building a relationship with your surgeon
- Ensuring Clean Data
- Data Submission Deadlines
- Additional STS Resources





Donna McDonald,
Vice President of Quality
RETIRED!!



Jane Han
Vice President of Quality and
Research Operations



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Senior Manager, STS National
Database Contracts



Sydney Clinton, Quality and
Database Operations Manager



Banu Yagci, Quality Measures
Manager



Adie Dolan
Quality Programs
Operations Manager



Ruth Raleigh
Core Group/GTSD Consultant
Trinity Health



Introduction to STS and the Databases



- Society founded in 1964

“To enhance the ability of cardiothoracic surgeons to provide the highest quality care through education, research, and advocacy”

- Today has more than 7500 members in 99 countries
- More than 80 employees in Chicago and D.C.
- The first database was started in 1989 as an initiative for quality improvement and patient safety among cardiothoracic surgeons
 - Response to HHS/HCFA (now CMS)
 - Malpractice lawsuits related to a misperception of the risk associated with surgery
 - JCAHO’s requirement of all health systems to have a QA program used for surgeon recredentialing
 - Threats to reimbursement

Introduction to STS and the Databases

- Accomplishments of the STS National Databases
 - Improved Patient Outcomes/Patient Safety
 - Developed Clinical Practice Guidelines
 - Blood Conservation
 - Antibiotic Usage
 - Voluntary Public Reporting
 - Sites who publicly report have better outcomes



Introduction to STS and the Databases

- General Thoracic Surgery Database (GTSD) started in 2003
- Today has more than 903 surgeons at 287 national and international site(s)
 - International site: New Zealand
 - Approximately 60% of these sites participate in GTSD Public Reporting
- Contains more than 719,000 records for more than 612,000 patients



The Data Abtractor/Data Manager Role

- Your Role
 - Abstract Data
 - Submit Data
 - Clean Data
 - Quality Improvement Projects
 - Charting
 - Best Practices
 - Improve Workflow on Units
 - Improve Team Work
 - Quality Assurance Meetings with Surgeons and Supporting Departments
 - Administration Reporting on Star Ratings



Data Manager Resources



STS Website



Webinars



Mentorship Program



Advances in Quality and Outcomes

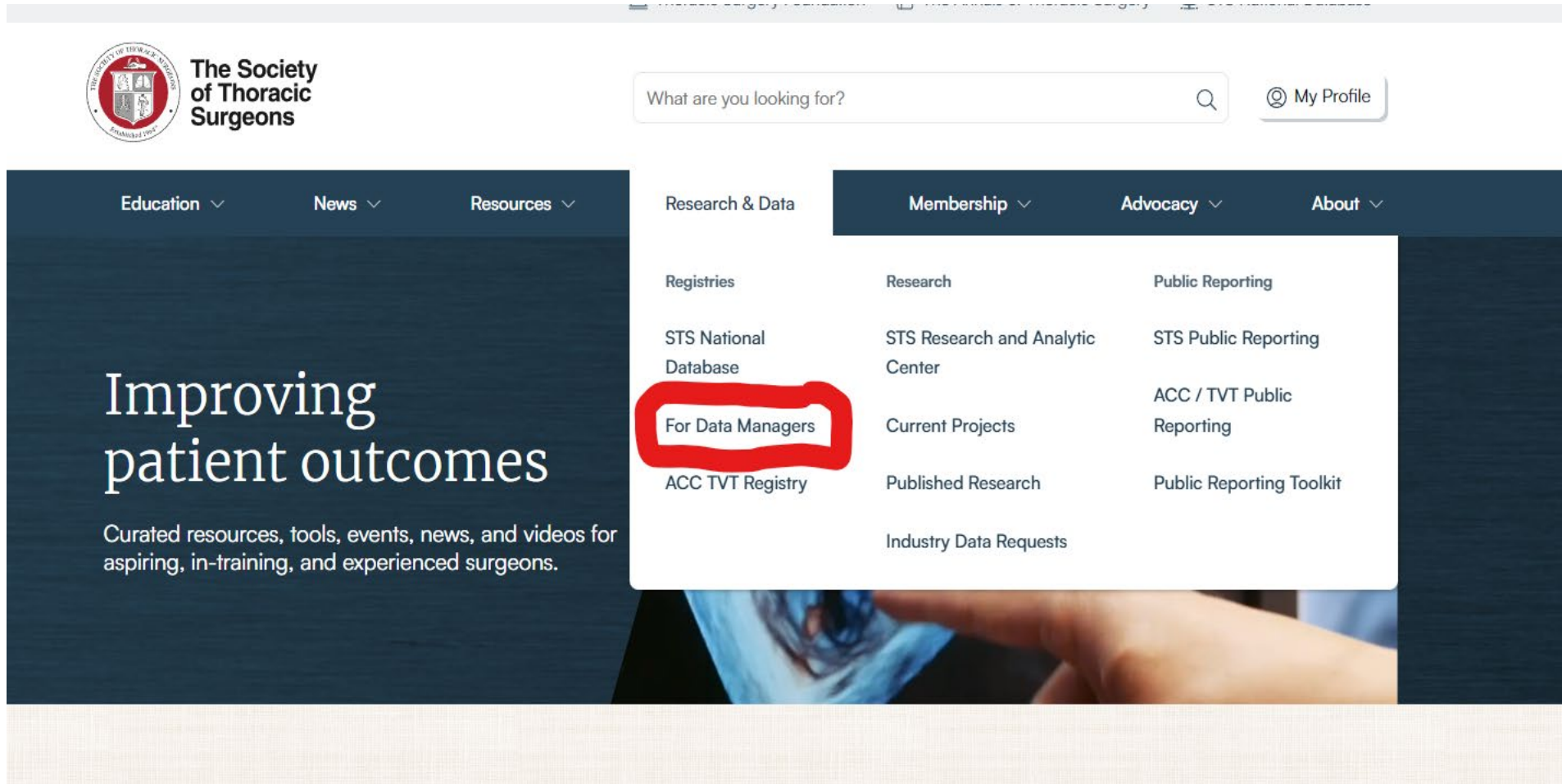


Database Newsletter



Clinical Support

STS National Database Website



The screenshot shows the homepage of the Society of Thoracic Surgeons (STS) website. The header includes the STS logo and name, a search bar with the placeholder text "What are you looking for?", and a "My Profile" link. The main navigation bar features links for Education, News, Resources, Research & Data, Membership, Advocacy, and About. The Research & Data dropdown menu is open, displaying a grid of links. The "For Data Managers" link is highlighted with a red rectangle. The main content area on the left features a large heading "Improving patient outcomes" and a subheading "Curated resources, tools, events, news, and videos for aspiring, in-training, and experienced surgeons." The background of the main content area shows a close-up of a hand holding a medical device.

The Society of Thoracic Surgeons

What are you looking for?

[My Profile](#)

[Education](#) [News](#) [Resources](#) [Research & Data](#) [Membership](#) [Advocacy](#) [About](#)

Research & Data

- Registries
 - STS National Database
 - For Data Managers**
 - ACC TVT Registry
- Research
 - STS Research and Analytic Center
 - Current Projects
 - Published Research
 - Industry Data Requests
- Public Reporting
 - STS Public Reporting
 - ACC / TVT Public Reporting
 - Public Reporting Toolkit

Improving patient outcomes

Curated resources, tools, events, news, and videos for aspiring, in-training, and experienced surgeons.



Data Manager Resources



The Society
of Thoracic
Surgeons

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[Home](#) > [STS National Database](#)

STS National Database

The gold standard of cardiothoracic surgery clinical outcomes registries, with nationally recognized quality performance measures for adult cardiac, general thoracic, congenital heart surgery, and mechanical circulatory support.

[Become a Participant](#)[Access the Database](#)

STS National Database™

Trusted. Transformed. Real-Time.

IQVIA ACCESS



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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 700,000 general thoracic surgery procedure records and currently has more than 1,000 participating surgeons.



Data Manager Resources

Visit the Resources for Data Managers page for important forms, upcoming webinar schedules, harvest deadlines, and more.


[Resources for Data Managers](#)

[Data Manager Resources](#)

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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 600,000 congenital heart surgery procedure records and currently has more than 1,000 participating physicians, including surgeons and anesthesiologists.



Data Manager Resources

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Data Manager Guidance

Advances in Quality & Outcomes: A Data Managers Meeting

Surgeon leaders and data managers will gather during AQO this year — virtually — to share valuable research and important clinical findings with the goal of improving data collection and patient outcomes. The event dates are September 26-29, 2023, with each day dedicated to one registry. [Learn more.](#)

Data Manager Mentorship Program

The STS National Database mentorship program pairs experienced data managers with those who are seeking advice related to data abstraction. After filling out a questionnaire, potential mentors and mentees will be matched based on Database type, experience in specific areas, and other factors.

Apply as either a [mentor](#) or [mentee](#). You will be notified once you have been matched.

If you have questions about the program or any feedback on the sign-up forms, contact National Database Coordinator [Adelaide Dolan](#).

Regional Groups

STS National Database regional groups offer a collaborative networking environment for peer-to-peer support and non-clinical guidance related to data abstraction. [Learn more.](#)

STS National Database News

This bimonthly e-newsletter offers news and updates about the STS National Database, with a separate issue for each of the four registries. STS data managers receive a free subscription for each registry in which they participate. Do you have colleagues who should be receiving *STS National Database News*? Or would you like to receive a copy? [Fill out this form](#) to be added to the mailing list for future issues.



STS Database Newsletter

General News

STS Launches Next-Generation Adult Cardiac Surgery Risk Calculator

The Society of Thoracic Surgeons has launched its next-generation [Operative Risk Calculator](#) to assess the risk of adult cardiac surgery operations.

The STS Adult Cardiac Surgery Database represents 97% of all cardiac operations performed in the United States and the new calculator is based on precise statistical models from the experience of more than 8 million patients. The dynamic Risk Calculator is mobile-friendly and features a simplified, intuitive user design to improve physician-patient decision-making allowing surgeons and multidisciplinary medical providers to estimate a patient's risk in real time. The risk calculations are based on the most current nationwide 2023 data from the STS Adult Cardiac Surgery Database and these are informed by robust risk models that continuously update every three months. [Learn More.](#)

Join the Data Manager Mentorship Program

The STS National Database mentorship program pairs experienced data managers with those seeking advice related to data abstraction. And it's easy to participate. Simply fill out a questionnaire and [mentors](#) and [mentees](#) will be matched based on database type, experience in specific areas, and other key factors.

Apply as either a mentor or mentee. You will be notified once you have been matched.

If you have questions about the program or any feedback on the sign-up forms, contact National Database Coordinator [Adelaide Dolan](#).

Adult Cardiac



If you couldn't join us for the [NCD quality improvement series: Decreasing Vent Times](#) webinar held July 19, 2023, be sure to check out the recorded session. This webinar, featuring a presentation on reporting dashboards by Diana Alejo, director of informatics at Johns Hopkins, is designed to help improve national quality initiatives. [Watch it here.](#)

Harvest Schedule Update

The Harvest submission window for Harvest 3 term is August 18, 2023. Opt-out date is August 22, 2023. This reporting period includes procedures performed by June 30, 2023.

General Thoracic



GTSD Update

GTSD New Data Managers Recorded Webinar Now Available

If you missed the June webinar for GTSD data managers, originally held on June 14, 2023, check out the recorded session now available. This monthly educational webinar for data managers in the GTSD includes updates from STS, such as harvest deadlines, audit notifications, information about the 2023 AQO meeting, and attendee questions. [Watch it here.](#)

Harvest Schedule Update

The Harvest submission window for the fall 2023 term closes on September 8, 2023. Opt-out date is September 12, 2023. This reporting period includes procedures performed by June 30, 2023.

Congenital





Data Manager Mentorship Program

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STS Mentorship Program



ADVANCES IN QUALITY & OUTCOMES: A Data Managers Meeting

SEPTEMBER 26-29, 2023 ■ VIRTUAL



Browse By Track >

People >

E-Posters
Login Required

Awards

Accreditation

FAQ

Resources & Forms

About STS

ret me was paid as a
janitor and couldn't use
the hospital front
entrance. Hear his
legacy: bit.ly/3RLGU00
[#TheFaceofCTsurgery](#)
[#blackhistorymonth](#)

Managers Meeting which features sessions for all four components of the STS National Database. This year's meeting will be held virtually, from September 26-29, 2023.

This meeting includes live sessions at scheduled times and recorded programs that you can watch at your convenience. Speakers will offer the latest information about the Database, including version upgrades and new features, as well as provide timely tips on improving data collection and abstraction. You can also review and vote on your favorite e-poster.

Data managers and surgeon leaders will come together to share valuable research and best practices with the goal of improving data collection and patient outcomes. STS recognizes that data managers are the backbone of the Database, which is why this meeting has been designed specifically for you! Your contributions are vital to the success of many quality initiatives that ultimately lead to better patient outcomes.

Thank you for being here. I am confident that you will benefit from this educational and interactive experience. Enjoy the meeting!

Felix G. Fernandez, MD

Chair, STS Workforce on National Databases

**SAVE
THE DATE!**

ADVANCES IN QUALITY & OUTCOMES:
A Data Managers Meeting

SEPTEMBER 11-13, 2024



Advances In Quality and Outcomes: A Data Managers Meeting (AQO)

sts.org

Clinical Support and Database Support

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Clinical Question Request Form

Are you struggling with a clinical question regarding data abstraction? Fill out the Clinical Question Request Form and get a response within 30 days.

[Submit a Request](#)

Contact and Support

STS is available to help you with questions regarding the STS National Database.

If you have specific questions regarding the platform or participant reports, contact the [STS National Database helpdesk](#). You will receive a helpdesk ticket, and STS will aim to follow up with you within 2 business days. Note: Heavy call and email volumes are anticipated as harvest deadlines approach. We appreciate your patience.

For general questions (like invoicing, updating contacts, or harvest schedules), contact the [STS National Database staff team](#). For public reporting questions, contact [STS Public Reporting](#).

[Contact Helpdesk](#)

Essential Forms and Resources

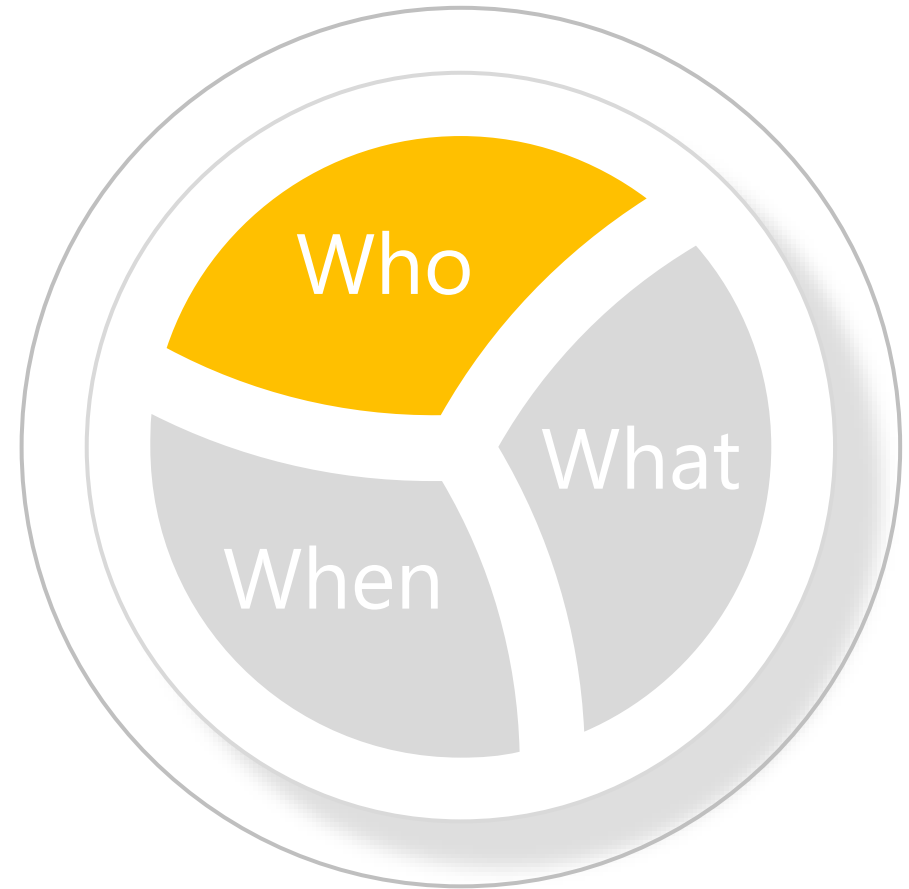
- [Database participant role descriptions](#)
- [Database participant and platform roles](#)
- [Participant contact form](#)
- [Schedule A](#)
- [Schedule B](#)

Data Collection Organization



Identification of Surgical Population

- Identify gold standard source
 - reliable and reproduceable
 - OR log, IT report...
- Identify secondary source as a double check
- May update overtime



Data Collection Fields

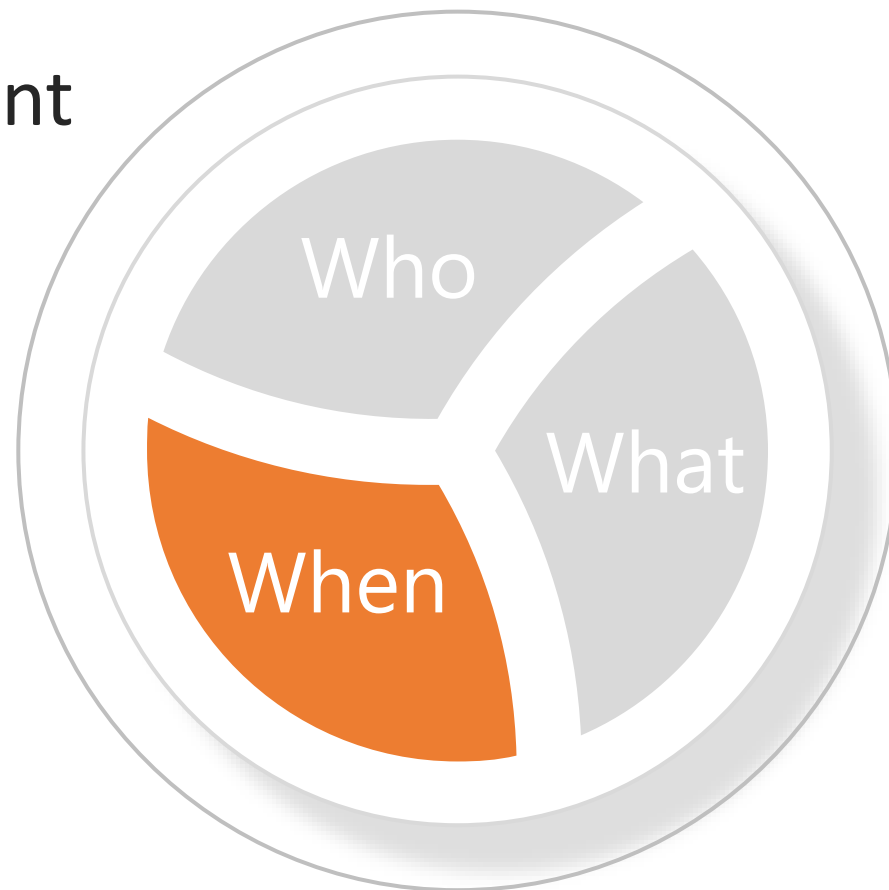


- Identify sources for all fields
 - reliable and reproducible
 - EHR documentation, IT reports
- Utilize database Training Manual for guidance/definitions
- Utilize available resources for any questions/confusion

When to Perform Data Functions?

Program dependent

- Resources
- Volume
- EHR
- Data needs



Real time
data collection

Post discharge data
collection

Hybrid - combination

Reading the Data Collection Form (DCF)

National Identifier Known <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Pt. Refused (If Yes →)		SSN: _____ SSN (150)	
Permanent Street Address: _____ PatAddr (160)		City: _____ PatCity (170)	State/ Region: _____ PatRegion (180)
Country: _____ PatCountry (190)		Patient Postal Code: _____ PostalCode (200)	
Patient participating in STS-related clinical trial: <input type="checkbox"/> None <input type="checkbox"/> Trial 1 <input type="checkbox"/> Trial 2 <input type="checkbox"/> Trial 3 <input type="checkbox"/> Trial 4 <input type="checkbox"/> Trial 5 <input type="checkbox"/> Trial 6			
(If None →) Clinical trial patient ID: _____ ClinTrialPatID (220)			
Date of Birth: ____/____/____ DOB (230) (mm/dd/yyyy)		Age: ** _____ Age (240)	Gender: ** <input type="checkbox"/> Male <input type="checkbox"/> Female Gender (250)
Patient's Race Documented? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient Declined to Disclose (If Yes, select all that apply ↓)			
Documented (260)			
<input type="checkbox"/> White/Caucasian		<input type="checkbox"/> Black/African American **	
<input type="checkbox"/> Asian		<input type="checkbox"/> American Indian/Alaskan Native	
<input type="checkbox"/> Native Hawaiian/Pacific Islander		<input type="checkbox"/> Other	
Hispanic or Latino Ethnicity: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Documented			
Ethnicity (340)			
Admission			
Admission Status: <input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient / Observation		(If Inpatient →)	Admission Date: ____/____/____ AdmitDt (360) (mm/dd/yyyy)
AdmissionStat (350)		(If Primary Payor is not None/Self ↓)	
Indicate the Primary Payor:		Indicate the Secondary (supplemental) Payor:	
PayorPrim (370)		PayorSecond (420)	
<input type="checkbox"/> None/Self		<input type="checkbox"/> None/Self	
<input type="checkbox"/> Medicare (includes commercially managed options)		<input type="checkbox"/> Medicare (includes commercially managed options)	
(If Medicare →)		(If Medicare →)	
Commercially Managed Medicare Plan:		Commercially Managed Medicare Plan:	
<input type="checkbox"/> Yes <input type="checkbox"/> No (If No ↓)		<input type="checkbox"/> Yes <input type="checkbox"/> No (If No ↓)	
ComMngMedPlnPrim (380)		ComMngMedPlnSec (430)	
HICN/MBI Known: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓)		HICN/MBI Known: <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes ↓)	
HICNMBIKnown (390)		HICNMBIKnownSec (440)	
HICN/MBI: _____		HICN/MBI: _____	
HICNMBI (400)		HICNMBI (400)	
HICNMBI (400)		HICNMBI (400)	
Primary Payor Medicare Part B: <input type="checkbox"/> Yes <input type="checkbox"/> No		Secondary Payor Medicare Part B: <input type="checkbox"/> Yes <input type="checkbox"/> No	
PrimMCareFFS (410)		SecondMCareFFS (460)	

Procedure Inclusion – The STS General Thoracic Registry version 5.21.1 requires submission of all lung resections for primary lung cancer and all esophageal resections for primary esophageal cancer. Lung and esophageal resections for primary cancer are analyzed including national outcomes for benchmarking, risk adjusted outcomes, and star rating. Participants in the General Thoracic Registry may choose to submit Thymus/Mediastinal Mass

Resection, Tracheal Resection, and Hiatal Hernia/GERD cases. These case types are optional modules for submission to the registry and benchmark data will be available in the national report if submitted. All other case types are not required for collection or submission. They will not be available in the national report if submitted.

Major/Analyzed (Required)

- Confirmed Lung Cancer Resections
- Confirmed Esophageal Cancer Resections
- Risk Adjusted

Major/ Analyzed Procedures (Not Required)

- Optional Procedures
- Thymus/Mediastinal Mass/Myasthenia Gravis
- Tracheal Resection
- Hiatal Hernia/GERD
- Benchmark data provided

Minor/Non-Analyzed Procedures

- Accepted into the database if you choose to collect
- Required fields "On Save" checks will be applied to these records

Concomitant Procedures

- If a procedure considered 'minor' or 'optional' is done at the same time as an 'analyzed' procedure, then it needs to be included on the same DCF

Submitting Cases



Which Variables are Required?

- Per STS all variables are important
 - Parent/child relationships help reduce the number of missing data in the feedback reports
- Do not omit the fields included in the analysis report:
 - Mortality Variables
 - Risk Model Variables
 - 'Required' Variables
- Complete all fields consistently so they are meaningful internally and over time



A. Demographics			
Patient ID: _____ PatID (90)		Medical Record #: _____ MedRecN (100)	
First Name: _____ PatFName (110)	Middle Name: _____ PatMName (120)	Last Name: _____ PatLName (130)	
SSN/National Identifier Known <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Pt. Refused (If Yes →) SSNKnown (140)		SSN: _____ SSN (150)	
Permanent Street Address: _____ PatAddr (160)		City: _____ PatCity (170)	State/ Region: _____ PatRegion (180)
Country: _____ PatientCountry (190)	Patient Postal Code: _____ PostalCode (200)		
Patient participating in STS-related clinical trial: <input type="checkbox"/> No <input type="checkbox"/> Trial 1 <input type="checkbox"/> Trial 2 <input type="checkbox"/> Trial 3 <input type="checkbox"/> Trial 4 <input type="checkbox"/> Trial 5 <input type="checkbox"/> Trial 6 ClinTrial (210)			
(If not None) Clinical trial patient ID: _____ ClinTrialPatID (220)			
Date of Birth: ____/____/____ DOB (230) (mm/dd/yyyy)	<u>Age</u> : ** _____ Age (240)	<u>Gender</u> : ** <input type="checkbox"/> Male <input type="checkbox"/> Female Gender (250)	
<u>Is the Patient's Race Documented?</u> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient Declined to Disclose (If Yes, select all that apply ↓) RaceDocumented (260)			
<u>Race</u> **: RaceMulti (270)	<input type="checkbox"/> White/Caucasian	<input type="checkbox"/> Black/African American **	
	<input type="checkbox"/> Asian	<input type="checkbox"/> American Indian/Alaskan Native	
	<input type="checkbox"/> Native Hawaiian/Pacific Islander	<input type="checkbox"/> Other	
Race or Latino Ethnicity: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Documented RaceLatino (340)			

Required Variables for Case Inclusion

The variables underlined in blue must be included for your case to be included in analysis

Understanding the Data Collection Form

What do these "weights" mean?

- Lung Cancer Resection
 - Weight = 60
- Esophagus Resection
 - Weight = 70
- Hiatal Hernia/Gerd
 - Weight = 30
- Trachea Resection
 - Weight = 40
- Thymus/Mediastinal Mass
 - Weight = 50
- Concomitant Procedures
 - Weight = 20
- Minor Procedures
 - Weight = 10

Procedures performed. Indicate (circle) the Primary Procedure
Primary (1480)

Major/Analyzed Procedures (must complete required fields that are <u>underlined and in blue</u>)	
Lung Cancer Resection (Required) Weight = 60	
Thoracoscopy, surgical; with lobectomy (32663) **	<input type="checkbox"/> Removal of lung, two lobes (bilobectomy) (32482) **
Thoracoscopy with therapeutic wedge resection (eg mass nodule) initial, unilateral (32666) **	<input type="checkbox"/> Removal of lung, single segment (segmentectomy) (32484) **
Thoracoscopy with removal of a single lung segment (segmentectomy) (32669) **	<input type="checkbox"/> Removal of lung, sleeve lobectomy (32486) **
<input type="checkbox"/> Thoracoscopy with removal of two lobes (bilobectomy) (32670) **	<input type="checkbox"/> Removal of lung, completion pneumonectomy (32488) **
<input type="checkbox"/> Thoracoscopy with removal of lung, pneumonectomy (32671) **	<input type="checkbox"/> Resection and repair of portion of bronchus (bronchoplasty) when performed at time of lobectomy or segmentectomy (32501) **
<input type="checkbox"/> Thoracotomy with therapeutic wedge resection (eg mass nodule) initial (32505) **	<input type="checkbox"/> Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, without chest wall reconstruction(s) (32503)
<input type="checkbox"/> Removal of lung, total pneumonectomy; (32440) **	<input type="checkbox"/> Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, with chest wall reconstruction (32504)
<input type="checkbox"/> Removal of lung, sleeve (carinal) pneumonectomy (32442) **	<input type="checkbox"/> Resection of lung with resection of chest wall
<input type="checkbox"/> Removal of lung, single lobe (lobectomy) (32480) **	
Concomitant Procedures Weight = 20	<input type="checkbox"/> Thoracoscopy with therapeutic wedge resection (eg mass or nodule) each additional resection, ipsilateral (32667) List separately in addition to primary procedure code
	<input type="checkbox"/> Thoracoscopy with mediastinal and regional lymphadenectomy (+32674) List separately in addition to primary procedure code
	<input type="checkbox"/> Thoracotomy with therapeutic wedge resection (eg mass nodule) each additional resection, ipsilateral (+32506) List separately in addition to primary procedure code
Esophagus Resection (Required) Weight = 70	
<input type="checkbox"/> Transhiatal-Total esophagectomy, without thoracotomy, with cervical esophagogastrostomy (43107) **	<input type="checkbox"/> Partial esophagectomy, distal two-thirds, with thoracotomy only (43121) **
<input type="checkbox"/> Total esophagectomy without thoracotomy; with colon interposition or small intestine reconstruction (43108) **	<input type="checkbox"/> Thoracoabdominal-Partial esophagectomy, thoracoabdominal approach (43122) **
<input type="checkbox"/> Three Incision -Total esophagectomy with thoracotomy; with cervical esophagogastrostomy (43112) **	<input type="checkbox"/> Partial esophagectomy, thoracoabdominal with colon interposition or small intestine (43123) **
<input type="checkbox"/> Total esophagectomy with thoracotomy; with colon interposition or small intestine reconstruction (43113) **	<input type="checkbox"/> Total or partial esophagectomy, without reconstruction with cervical esophagostomy (43124)
<input type="checkbox"/> Partial esophagectomy, cervical, with free intestinal graft, microvascular anastomosis (43116)	<input type="checkbox"/> Minimally invasive three incision esophagectomy (McKeown) (43288)
<input type="checkbox"/> Ivor Lewis-Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision (43117) **	<input type="checkbox"/> Minimally invasive esophagectomy, Ivor Lewis approach (43287) **
<input type="checkbox"/> Total esophagectomy, with thoracotomy and separate abdominal incision with colon interposition or small intestine	<input type="checkbox"/> Minimally invasive esophagectomy, Abdominal and neck approach (43286) **

Data and Software Specifications

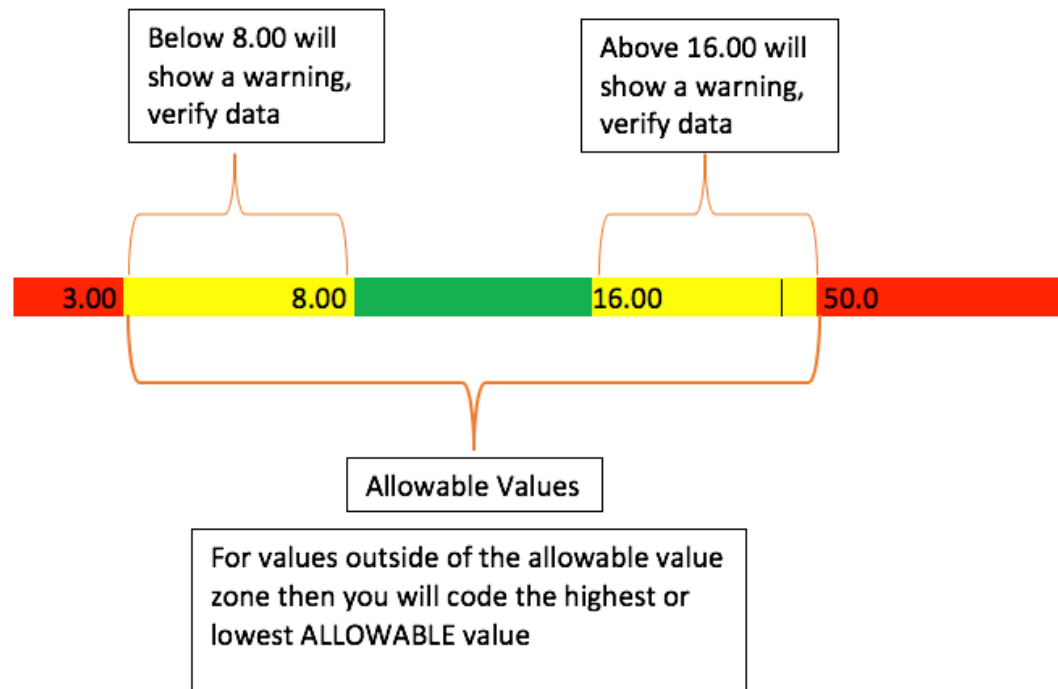
- The database is updated every 3 years
- The data and software specifications are key tools in this process
- It is important to understand how to read them
 - Definitions
 - Allowable values
 - Field type
 - Parent/Child Relationships
 - Specify vendor requirements

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No
3	Patient declined to disclose

<i>Long Name:</i>	Race - White or Caucasian	<i>SeqNo:</i>	210
<i>Short Name:</i>	RaceCaucasian	<i>Core:</i>	Yes
<i>Section Name:</i>	Demographics	<i>Harvest:</i>	Yes
<i>DBTableName</i>	Demographics		
<i>Definition:</i>	Indicate whether the patient's race, as determined by the patient or family, includes Caucasian. This includes a person having origins in any of the original peoples of Europe, the Middle East, or North Africa.		
Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity : The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting. (www.whitehouse.gov/omb/fedreg/1997standards.html)			

- F. Core – This field contains a value of Yes or No to define whether or not the field should be available to the users for data entry. These values have the following meanings:
- Yes = Field must be available to the users for entering data for records following this version of the data specifications and the field must be included in the data files exported for submission to the STS database that contain records following this data version.
 - No = Field is not required to be available to the users for entering data for records following this version of the data specifications. Whether or not the field is included in data files exported for submission to the STS database depends on the Harvest value described below and on what other data versions are being included in the data extract. (See the "Data Export for Harvest to the Data Warehouse" section of the Software Specifications below.)
- G. Harvest – This field contains a value of Yes, No or Optional to define whether or not the data for this field is included in the export file to be submitted to the data warehouse. (See the "Data Export for Harvest to the Data Warehouse" section of the Software Specifications below for more details about the contents of the submitted files.) The values for this field have the following meanings:
- Yes – Data from this field must be included in the data file for all records following this version of the data specifications.
 - No – Data from this field must not be included in the data file for all records following this version of the data specifications.

Allowable Values



Long Name: Last Hemoglobin Level

Short Name: **HemoglobinLst**

Section Name: Pre-Operative Evaluation

DBTableName: Operations

Definition: Indicate the hemoglobin level closest management (induction area or operation)

LowValue: 3.00 *UsualRangeLow:* 8.00

HighValue: 50.00 *UsualRangeHigh:* 16.00

Parent Long Name: Hemoglobin Level Measured

ParentShortName: HemoglobinMeasured

ParentValue: = "Yes"

ParentHarvestCodes: 1

The Training Manual

- Guidance on abstracting variables
- Intent/Clarification provided to further explain definitions
- Update monthly with new FAQ's
- Refer to this to ensure you are abstracting correctly
- Check here first!

SeqNo: 500

Long Name: Valvular Heart Disease

Short Name: VHD

Definition: Indicate if the patient has had or has the presence of dysfunction of at least one heart valve graded as 2+ or greater on an echocardiogram. Excludes surgically corrected disease.

Intent/Clarification: Valvular heart disease is characterized by damage to or a defect in one of the four heart valves: the mitral, aortic, tricuspid or pulmonary. ~~If a range is provided (i.e., 1–2+) use the highest number given, in this example, 2.~~

May 2019: Valvular heart disease is not limited to just insufficiency or stenosis. If the patient has valvular heart disease that is documented as 2+ (moderate) or greater this field should be captured.

The **mitral and tricuspid valves** control the flow of blood between the atria and the ventricles (the upper and lower chambers of the heart). The **pulmonary valve** controls the flow of blood from the heart to the lungs, and the **aortic valve** controls the flow of blood from the heart to the aorta, and thereby the blood vessels to the rest of the body. The **mitral and aortic valves** are the ones most frequently affected by valvular heart disease.

August 2018: 1+ = mild, 2+ = moderate, 3+ = severe. Mild to moderate is less than 2+ and would not qualify as 2+ or greater.

Harvest Codes:

Code: Value:

1 Yes

2 No

3

January 2019: In the patient's H&P it specifies that the patient has mitral valve prolapse. There is no echo to confirm 2+ or greater. Should I count MVP as Valvular Heart Disease in this case? **No, do not count MVP as VHD.**

April 2019: Prior to index admission, echocardiogram was done at OSH. Actual report is not available but per Cardiology consult summary, echo shows "moderate mitral and tricuspid regurgitation." No mention of valvular structure. During lung resection admission, echocardiogram was repeated. This one documents that both MV and TV are "normal in structure" but also notes moderate regurgitation. Does moderate regurgitation in presence of normal structure constitute valvular disease? **Yes, Moderate regurgitation = 2+**

May 2019: What are the date parameters of the echocardiogram to be used to gather this data? **Within 6 months.**

SeqNo: 510

Long Name: Valvular Heart Disease Location - Aortic Valve

Short Name: VHDLocAV

Definition: Indicate whether the patient has or had the presence of dysfunction of the aortic valve

Training Manual

FAQ Summary Document

STS GTSD FAQ's

August 2021

Version 5.21.1

Seq. Number	Short Name	Update
580	Reop	Aug 2021: Only capture prior surgical procedures within the same anatomical space – not percutaneous procedures such as chest tubes, thoracentesis, paracentesis etc.
650	HistCancer	Aug 2021: Photodynamic therapy is not equivalent to thoracic radiation therapy and is not captured.
870	ECOGScore	Aug 2021: Lung and esophagus cases will NOT be rejected due to a missing ECOG score.
1250	CategoryPrim	Aug 2021: Metastatic lung cancer from a lung primary should be captured here, however new primary lung cancer or synchronous primary lung cancers should be captured with the appropriate lung cancer category of disease and not with C78.00.
1505	Laterality	Aug 2021: Lung resections have laterality, most hernia repairs and esophagectomies do not and will be coded as N/A.
1620	ClinStagMeth	Aug 2021: Question - How do I capture a Core Needle Biopsy of the lung mass itself preop? It is not a mediastinal lymph node biopsy? Answer – core needle biopsies of the lung mass are not captured in V5.21.
4270	Readm30Dis	Aug 2021: Readmission applies to IP readmissions only. If a patient returns to the hospital and is in OP/OBS status for their entire stay, please code 'no' to 4270.

Case Scenario: Carcinoid

Preoperative diagnosis: Right bronchus intermedius typical carcinoid

Postoperative diagnosis: Right bronchus intermedius typical carcinoid

Procedures:

1. Right robotic assisted thoracoscopic mediastinal lymph node staging.
2. Right robotic-assisted thoracoscopic middle and lower bi-lobectomy.
3. Right bronchus intermedius bronchoplasty with pericardial flap.
4. Mediastinal lymphadenectomy
5. Thoracic field block
6. Flexible fiberoptic bronchoscopy.



To Abstract
or To Not
Abstract,
that is the
question...

TUMOR

Tumor Focality	Single focus
Tumor Site	Bronchus intermedius
Tumor Size	
Total Tumor Size (size of entire tumor)	Greatest Dimension (Centimeters): 2 cm
Histologic Type	Typical carcinoid / Neuroendocrine tumor, grade 1
Histologic Grade	G1, well differentiated
Visceral Pleura Invasion	Not identified
Direct Invasion of Adjacent Structures	Not applicable (no adjacent structures present)
Treatment Effect	No known presurgical therapy
Lymphovascular Invasion	Present: lymphovascular invasion present, favor venous invasion

MARGINS

Margin Status for Invasive Carcinoma	Invasive carcinoma present at margin
Margin(s) Involved by Invasive Carcinoma	Bronchial: Tumor focally involves the superficial mucosal aspect of the bronchial margin; it is not deeply invasive at this site.
Margin Status for Non-Invasive Tumor	Not applicable

REGIONAL LYMPH NODES

Lymph Node(s) from Prior Procedures	No known prior lymph node sampling performed
Regional Lymph Node Status	All regional lymph nodes negative for tumor
Number of Lymph Nodes Examined	13

Seq 1510: Make sure you read your FAQ's

SeqNo:	1510						
Long Name:	Primary Lung Cancer Resection Performed						
Short Name:	LungCancer						
Format:	Text (categorical values specified by STS)						
Definition:	Indicate whether a major lung resection was performed for a primary lung cancer (e.g. wedge, segment, lobe, pneumonectomy), open or VATS. If yes complete clinical and pathological staging.						
Harvest Codes:	<table><tr><td><u>Code:</u></td><td><u>Value:</u></td></tr><tr><td>1</td><td>Yes</td></tr><tr><td>2</td><td>No</td></tr></table>	<u>Code:</u>	<u>Value:</u>	1	Yes	2	No
<u>Code:</u>	<u>Value:</u>						
1	Yes						
2	No						

July 2022: Code 'yes' to 1510 for new primary carcinoid tumors of the lung that are therapeutically resected.



Choosing Primary Category of Disease

Be mindful of what will and will not be included in analyses. This is a lung cancer case, a lung cancer COD should be selected. Your options are:

Data versions 2.41 and 5.21.1:

Any of the following disease categories have been chosen as 'Primary' using SeqNo. 1250 (v2.41 and 5.21.1):

- 150 = Lung cancer, main bronchus, carina 162.2
- 160 = Lung cancer, upper lobe 162.3
- 170 = Lung cancer, middle lobe 162.4
- 180 = Lung cancer, lower lobe 162.5
- 190 = Lung cancer, location unspecified 162.9

The location of this lung cancer is technically hilar, which is not an option – I would therefore choose 'location unspecified.'

Choosing Primary Category of Disease

Do NOT choose any of the below for a case with pathology that confirms the presence of new primary lung cancer:

- Solitary Pulmonary Nodule
- Lung Tumor, Metastatic
- Lung Nodule/Mass/Other
- Abnormal Radiologic Finding
- Lymphadenopathy
- Other Unlisted Category of Disease



A Word on Invasive Mediastinal Staging

By definition, staging must occur prior to surgical treatment. The surgeon's pre-op H&P indicates that they planned to perform mediastinal staging at the time of surgery.

Plan:

1. Schedule robotic-assisted thoracoscopic bilobectomy, possible thoracotomy.
2. Intraoperative mediastinal lymph node staging will be performed.
3. Preoperative nurse teaching visit.

Did they carry out that plan? The procedure list makes me think so, but the operative note must be read to confirm that surgical resection of the lesion did not begin prior to pathology returning results on any staging procedure performed.

...I started with mediastinal nodal staging, and the inferior pulmonary ligament was taken down with bipolar cautery and the level 9 lymph nodes sent for frozen section. The lung was retracted anteriorly, and the level 7 nodal station dissected out and sent for frozen section. This was a large node, quite inflamed and adherent to the underlying bronchus intermedius and mainstem bronchus. The lung was then retracted inferiorly, and the level 2 and 4 nodal stations were dissected and sent for frozen section. Surgicel was packed into the nodal dissection beds for hemostasis. The frozen sections were reported as negative for any metastatic disease in the lymph nodes. As such, I then proceeded with the anatomic pulmonary resection...



Submitting a Clinical Question

If you have a question about submitting a case that is clinical in nature, then please submit it to the FAQ Mailbox.

- You will need
 - Participant Identification (PID)
 - This is a 5-digit number starting with a 4
 - Shortname and Sequence Number
 - Can be found on the annotated DCF or TM
 - As much information you can provide to help us answer your question
 - We can only answer based off the information you provide
- It can take up to 30 days for a response
 - We may have to discuss it with Surgeon Leaders
 - We may ask you for additional information
 - Please ensure the email you use is complete and correct when submitting an FAQ



Clinical Question Request Form

Are you struggling with a clinical question regarding data abstraction? Fill out the Clinical Question Request Form and get a response within 30 days.

Ask a Question

Full Name *

Email *

Phone *

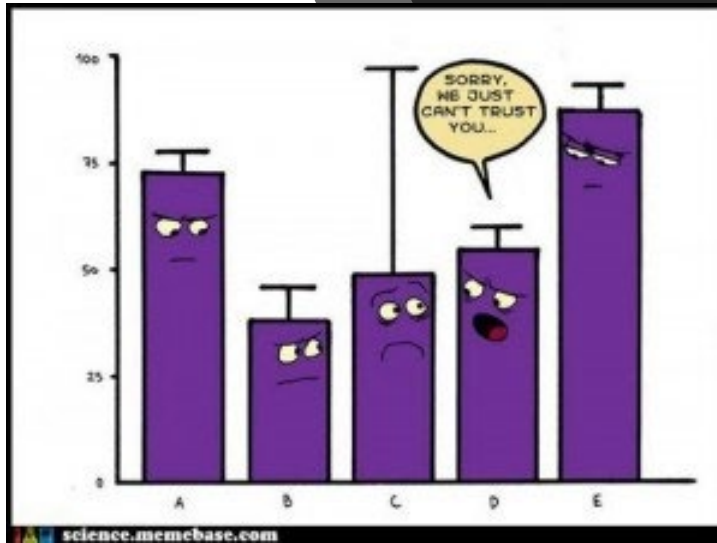
Participant ID #

Database Version *

State/Province *



Keys to Abstraction



- Be consistent in where you obtain information but...
- Pay attention to source documentation
 - Use data that meets the listed requirements
 - Timeframe
 - Mode of testing
- If you can't find it, ask your surgeon
- Do not guess. No data is better than bad data.
 - If you can't find it, ask
 - This is different than out of range high/low value

Working with your Surgeons

- Surgeons are busy, be patient but persistent
- Be clear and concise
- Know what you are going to ask before you ask it
- Do your homework and know the facts
- Get involved with Quality Meetings and Department Meetings where the data is being discussed
- Ask to observe a case
- Offer to review data with the surgeon
- Offer tips on how documentation can be improved
 - Build EHR templates
 - Use Surgeon Worksheets
- Work with Nursing and OR staff – they can help you



Clean Data

- Your vendor will allow you to run internal QA checks on your data prior to submission
- IQVIA, the data warehouse provides you with
 - Data Quality Report
 - Harvest Summary Report
 - Critical Error Report
- Version 5.21.1 has 'on-save' consistency checks built into your vendors software that will prevent you from exporting your data if certain errors are present



Data Submission Deadlines

- Harvest submission deadlines occur twice a year for General Thoracic
 - Spring and Fall
 - Each report will be a star-rating
 - Voluntary Public Reporting Result are based on the Spring Harvest
 - Lung Cancer and Esophageal Cancer Cases



Additional STS Resources

- Monthly Didactic Webinar
- Monthly User Group Calls
- New Data Manager Webinars
- Advances in Quality and Outcomes: A Data Managers Meeting
 - AQO 2024 will be held September 11 – 13; *Location announcement coming soon!!*



Open Discussion



PLEASE USE THE Q&A
FUNCTION



WE WILL ANSWER AS
MANY QUESTIONS AS
POSSIBLE



WE ENCOURAGE YOUR
FEEDBACK AND WANT TO
HEAR FROM YOU!

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Thank you for joining!

