STS National Database™

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Society of Thoracic Surgeons

General Thoracic Surgery Database
 Monthly Webinar

April 13, 2022

GTSD Monthly Webinar

- Welcome and Introductions
- STS Update
- STS Education - Audit
- IQVIA Update
- User Feedback
    - Include Ticket Number/Case Number

STS Updates

- **Training Manual for April to be posted by end of this week**

- **Fall 2021 Analysis Results**
  - **Resection for Lung Cancer Report was released on Monday, March 28th**
    - **Updated Analysis Overview with the Resection composite details posted in IQVIA Library**
    - **NIS data set now reflects 2019 data**
      - **Analysis previously utilized the 2015 NIS data set**
  - **Report related questions should be directed to gtsdtechsupport@iqvia.com**

- **GTSD Public Reporting**
  - **Next update is scheduled for this Spring**
  - **Will utilize results from Fall 2021 Harvest (July 1, 2018 – June 30, 2021)**
  - **Questions should be directed to Sydney Clinton (sclinton@sts.org)**

- **IQVIA Platform Access**
  - **Adding new user accounts or deactivating current user access**
    - **Complete the STS Participant Contact Form (https://www.sts.org/sts-participant-contact-form)**
    - **Contact STSDB@sts.org for assistance**

STS Updates

General Thoracic Surgery Database - 2022

	Harvest Submission Window Close	Opt-Out Date	Includes Procedures Performed Through:	Report Posting	Comments
Spring 2022	3/4/2022	3/8/2022	12/31/2021	Summer 2022	Star Rating
Fall 2022	9/9/2022	9/13/2022	6/30/2022	Winter 2022	Star Rating

- Fall 2022 Harvest is currently underway
  - Submit your data early and often

2021 Audit Result
&
2022 Audit Update

Carole Krohn

STS Clinical Manager

STS National Databases

2021 Audit Results

26 Sites Audited

20 rando... ...rmed between July 1, ...19 and June 30, 2020

54 version 2.41 dat... elements...

Overall... ...ment Rate: ...out of 22340

Complications Agreement Rate: **93.9%**

- 223 Mismatches out of... Variables

...9.0%

...tches out of 1040 ...ables

Site Expectations

- 6 sites exceeded expectations
- 14 sites met expectations
- 6 sites did not meet expectations – reaudit in 2023

CONGRATULATIONS!!!

2 sites > 99%!!!!

Audit Policy

If you are a site that will be reaudited and would like assistance, please reach out to Ruth, Leigh Ann, or Carole

(d) For all sections (excluding the Complications or Mortality sections) and overall site accuracy (agreement) rates, the following grading system will be provided to the sites

(i) 98% or greater is defined as a site that exceeds expectations.
(ii) 90% to 98% is defined as a site that meets expectations.
(iii) Less than 90% is defined as a site that does not meet expectations.

(e) For the Complications or Mortality sections, the following grading system will be provided to sites. See Appendix B for a breakdown of the complications section per Database.

(i) 98% or greater is defined as a site that meets expectations.
(ii) 90 to 98% is defined as a site that does not meet expectations.
(iii) A site achieving less than 90% accuracy on the Complications or Mortality section will require a re-audit.

(f) Sites identified as not meeting expectations for overall site accuracy (agreement) or sites having less than 90% accuracy on the Complications or Mortality sections will be required to undergo a follow-up audit within 2 years.

(g) Sites identified as continuously not meeting expectations or with a lower-than 90% agreement rate for the Complications or Mortality sections following the second audit jeopardize their participation in the STS National Database. A participant will not receive a star rating (except in the instance of CHSD participants, who do not receive star ratings), will not be included in the aggregate data, and will not receive a risk-adjusted report of data. The site will also be denied the option to publicly reporting their data.

Variables that we need to work on…

Diabetes	Diabetes Control	Preoperative Chemo	Preoperative Immunotherapy
FEV1% Predicted	DLCO% Predicted	ECOG Score	Procedure performed – thoracotomy vs. thoracoscopy
	Lung/Esophageal Cancer Tumor Stage	Smoke Cessation Counseling	

Measure	Rate	Notes
Diabetes Therapy/Control	93.2%	Most of these mismatch's coding that the patient was diabetic without supporting documentation. Received a mismatch for coding medication as none when the patient did not have diabetes (parent/child). Will educate during webinars/AQO.
Preoperative Chemotherapy/ Immunotherapy	97.3%	Randomly occurring. Will educate on during webinars/AQO.
FEV1 % Predicted	80.3%	Many sites with mismatches. Seems to be a widespread issue. Many sites not coding highest value. Will education on webinars/AQO.
DLCO % Predicted	91.7%	Seems to be a widespread issue. It looks like most mismatches were a result of sites not coding the 'unadjusted' value but coding some other value. Will educate on webinars/AQO.
ECOG Score	90.8%	Seems to be a wide-spread issue. Will educate on webinars/AQO.
All Procedures Performed	90.0%	Seems to be a widespread issue. Looks like there is confusion around a thoracoscopy versus a thoracotomy and the coding of minimally invasive procedures. Will educate on webinars/AQO.
Lung Cancer Tumor Stage	92.0%	Smaller denominators. Seems to be a widespread issue. Will educate on webinars/AQO.
EUS	90.7%	Small denominator.
Esophageal Tumor Stage	86.1%	Small denominator.
Esophageal Cancer Nodes	91.7%	Small denominator.
Total # Lymph Nodes Sampled/Harvested	88.9%	Small denominator.
Smoking Cessation Counseling	85.8%	This looks like a widespread issue with many sites having incorrect data. Will educate on webinars/AQO.
PostOpInvProc	91.5% (95.2%)	18/43 mismatches were a result of parent/child fields. For purposes of STS, when the parent is marked incorrect, the child is a mismatch. We do not assume 'no' for a blank field. Ture coding match rate is ~95%.
Pneumonia	92.9% (96.3%)	18/37 mismatches were related to parent child relationships. True match rate is ~96%
ARDS	94.9% (100%)	20/20 mismatches are a result of parent child coding. True coding accuracy of 100%
RespFail	93.8% (97.7%)	22/34 mismatches were a result of parent child coding. True match rate is ~98%
Vent	94.8% (99.4%)	24.27 mismatches are a result of parent child coding. True match rate is ~99%
AtrialArryth	93.8% (97.7%)	21/33 mismatches are a result of parent child coding. True match rate is closer to ~98%.
MI	94.4% (98.8%)	20/25 mismatches are a result of parent child coding. True mismatch rate is ~99%.
DelayCondEmp	96.3% (99.1%)	3/4 mismatches are a result of parent child coding. True match rate is ~99%
LaryngealNerve	97.2% (99.1%)	2/3 mismatches are a result of parent child coding. True match rate is ~99%.
MtDCStat	99.8%	One mismatch - site coded patient as dead even though alive. Died on readmission, greater than 30 days post-op
Mt30Stat	98.3%	Mismatches likely related to sites not submitting their follow-up logs. Will educate.

Next steps

Education on monthly webinars and AQO

Sites to have someone familiar with the database to review documentation prior to sending

Sites to confirm that tracking documentation is provided

Reach out to sites if complete documentation is not provided

Adjudicated results post audit

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Audit 2022

~26 Sites Audited

20 randomly selected medical records

- Primary Lung and Primary Esophageal Cancer Cases
- Cases performed between July 1, 2020 – June 30, 2021

Version 2.41

Sites will be notified May-ish

- Data in the warehouse will be pulled in April, any updates you make after data-pull are not used for the audit

Procedures for 2022 Audit

Esophageal Procedures:

- Records meeting all the following criteria:
  - Esophageal Cancer (1590 - EsophCancer) = Yes
  - Category Of Disease – Primary (1250 – CategoryPrim) must be one of the following values:
    - 1140 = Malignant neo stomach unspecified (151.9, C16.9)
    - 1460 = Malignant neoplasm of the esophagus, unspecified (150.9, C15.9)
    - 1130 = Malignant other part esophagus, specified (150.8, C15.8)
    - 710 = Esophageal cancer, esophagogastric junction (cardia) (151.0, C16.0)
    - 690 = Esophageal cancer, middle third (150.4, C15.4)
    - 700 = Esophageal cancer, upper third (150.3, C15.3)
    - 680 = Esophageal cancer-lower third (150.5, C15.5)
  - For the procedures associated with the operation record, the one that is flagged to be the primary procedure (Primary=Yes) must be one of the following:
    - 3320 = Transhiatal-Total esophagectomy, without thoracotomy, with cervical esophagogastrostomy (43107)
    - 3330 = Three hole-Total esophagectomy with thoracotomy; with cervical esophagogastrostomy (43112)
    - 3340 = Ivor Lewis-Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision (43117)
    - 3350 = Thoracoabdominal-Partial esophagectomy, thoracoabdominal approach (43122)
    - 3360 = Minimally invasive three incision esophagectomy (McKeown) (43288)
    - 3370 = Minimally invasive esophagectomy, Ivor Lewis approach (43287)
    - 4190 = Minimally invasive esophagectomy, Abdominal and neck approach (43286)
    - 3380 = Total esophagectomy without thoracotomy; with colon interposition or small intestine reconstruction (43108)
    - 3390 = Total esophagectomy with thoracotomy; with colon interposition or small intestine reconstruction (43113)
    - 3400 = Partial esophagectomy, cervical, with free intestinal graft, including microvascular anastomosis (43116)
    - 3410 = Partial esophagectomy, with thoracotomy and separate abdominal incision with colon interposition or small intestine (43118)
    - 3420 = Partial esophagectomy, distal two-thirds, with thoracotomy only (43121)
    - 3430 = Partial esophagectomy, thoracoabdominal with colon interposition or small intestine (43123)
    - 3440 = Total or partial esophagectomy, without reconstruction with cervical esophagostomy (43124)

Procedures for 2022 Audit

Primary Lung Cancer Procedures:

- Records meeting all the following criteria:
  - Lung Cancer (1580 - LungCancer) = Yes
  - Category Of Disease – Primary (1250 – CategoryPrim) must be one of the following values:
    - 150 = Lung cancer, main bronchus, carina (162.2, C34.00)
    - 160 = Lung cancer, upper lobe (162.3, C34.10)
    - 170 = Lung cancer, middle lobe (162.4, C34.2)
    - 180 = Lung cancer, lower lobe (162.5, C34.30)
    - 190 = Lung cancer, location unspecified (162.9, C34.90)
  - For the procedures associated with the operation record, the one that is flagged to be the primary procedure (Primary=Yes) must be one of the following:
    - 2470 = Removal of lung, total pneumonectomy (32440)
    - 2500 = Removal of lung, single lobe (lobectomy) (32480)
    - 2510 = Removal of lung, two lobes (bilobectomy) (32482)
    - 2520 = Removal of lung, single segment (segmentectomy) (32484)
    - 2530 = Removal of lung, sleeve lobectomy (32486)
    - 4140 = Thoracotomy with therapeutic wedge resection (eg mass nodule) initial
    - 2800 = Thoracoscopy, surgical; with lobectomy (32663)
    - 4070 = Thoracoscopy with therapeutic wedge resection (eg mass or nodule, initial, unilateral
    - 4120 = Thoracoscopy with removal of lung, pneumonectomy (32671)
    - 4110 = Thoracoscopy with removal of two lobes (bilobectomy) (32670)
    - 4100 = Thoracoscopy with removal of a single lung segment (segmentectomy) (32669)

GTSD Audit Variables for 2022
(OR Dates from July 1, 2020 – June 30, 2021)

V2.41 Seq #	ShortName
60	ParticID
370	HospName
NA	ProcedureType
10	RecordID
80	PatID
NA	form_record_id (IQVIA record identifier)
290	AdmitDt
440	Hypertn
450	CHF
470	CAD
580	MVD
610	CerebroHx
650	Diabetes
660	DiabCtrl
680	Dialysis
700	PreopChemoCur
710	PreopChemoCurWhen

	PreopChemoCurWhen
720	PreopXRT
730	PreopXRTDisWhen
750	PriorCTS
830	PreopImmunoThx
880	CrtLst
910	PFT
940	FEVPred
960	DLCOPred
970	CigSmoking
1070	ECOG
1250	CategoryPrim
1310	SurgDt
1360	ProcStartT
1370	ProcEndT
1410	Reop
1480	ASA
1490	Proc
1580	LungCancer
1590	EsophCancer

1680	PET or PET/CT
1860	LungCaTumSz
1880	ClinStageLungTumor
1890	ClinStageLungN
1920	PathStageLungT
1940	PathStageLungN
1960	PathStageLungM
1990	LungCANodes
2000	LungCANodStat
2010	LungCAPathMarg
2090	ClinStagEsophEUS
2150	ClinStageEsophT
2160	ClinStageEsophNode
2170	ClinStageEsophM
2230	PathStageEsophT
2240	PathStageEsophN
2250	PathStageEsophM
2260	PathStageEsophH
2280	EsophCANodes
2290	EsophCAPathMarg

3330	PostOpInvProc
3460	Pneumonia
3470	ARDS
3480	RespFail
3490	Bronchopeural
3500	PE
3520	Vent
3530	Trach
3560	AtrialArryth
3580	MI
3620	AnastoMed
3650	DelayCondEmp
3780	LaryngealNerve
3870	DischDt
3880	MtDCStat
3890	DisLoctn
3900	CTubeDis
3930	Readm30Dis
3950	Mt30Stat
4030	SmokCoun
4070	TempDt – COVID Date
4080	TempCode – COVID Diagnosis
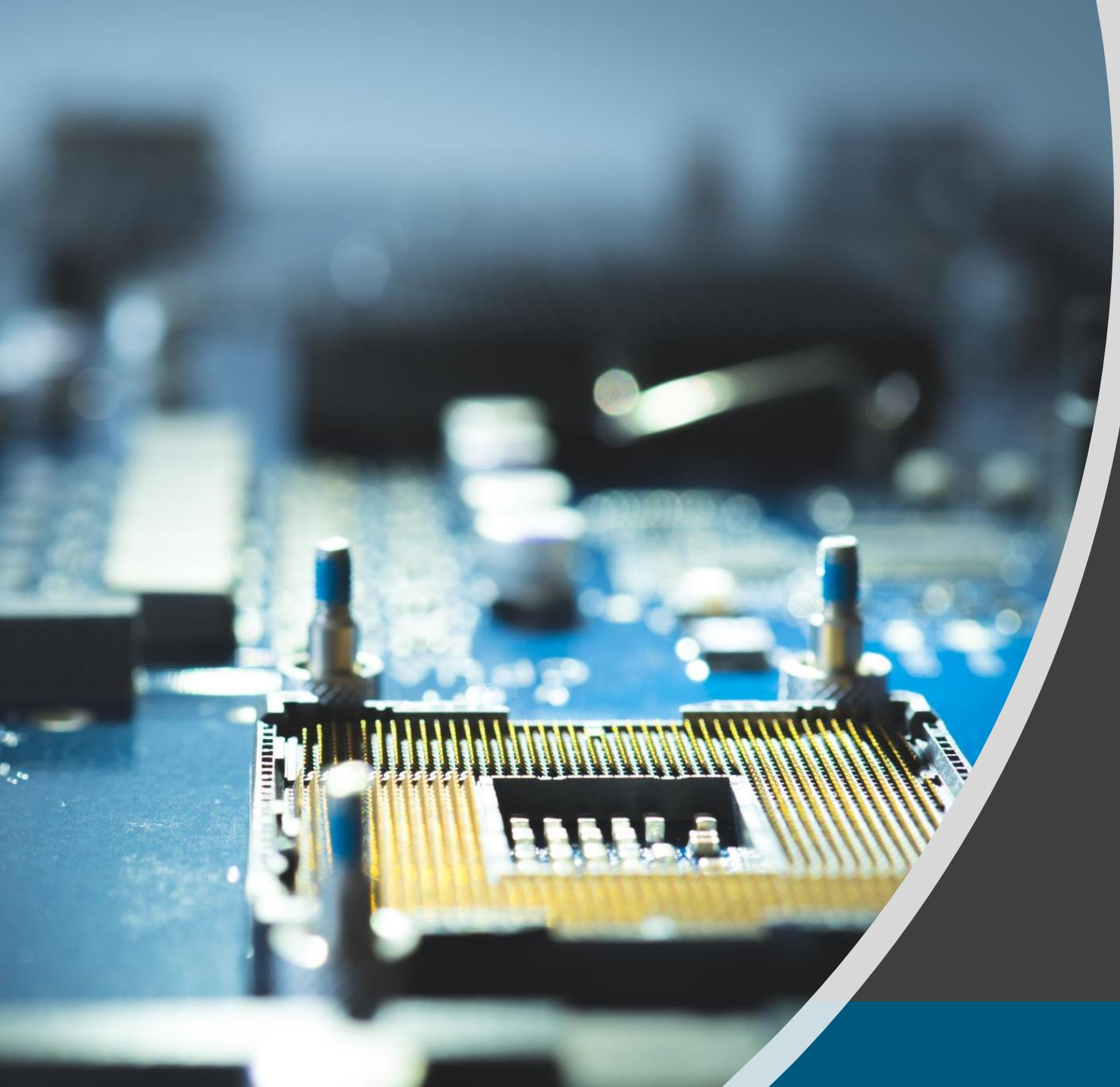
IQVIA Review
Joe Brower

IQVIA Release March 2022

IQVIA Updates - March 2022 Release

Released the weekend of March 26

GTSD Risk Adjusted Dashboard Report – Lung Cancer Resection Reports

The Lung Cancer Resection Composite Reports were released and available for users to review.

The Lung Cancer Resection reports will enable starting with the Fall 2021 harvest results.

**Prior harvests will display the Lung Cancer Morb/Mort and the Lung Cancer Morb/Mort Detail reports.

IQVIA Release March 2022

IQVIA Updates - March 2022

Items below were released the weekend of March 26

GTSD Risk Adjusted Dashboard Report – Fall 2021 Harvest Results – Legacy Reports

STS-7983 - All Legacy Report calculations were updated and are now displaying the expected results based on the PID dataset.

GTSD Risk Adjusted Dashboard Report – Lobectomy STS/NIS Compare

STS-6909 – The Minimally Invasive Lobectomy for Clinical Stage I Lung Cancer calculation was updated on the STS/NIS Comparison report

STS-8101 – The Fall Harvest 2021 NIS results were updated to use the 2019 NIS database results.

IQVIA Update

Please note: Submitted tickets are currently under review and the IQVIA support team will follow up on resolution and/or target release confirmation.

The IQVIA Team is currently reviewing items to be targeted for an upcoming release. Those items will be posted to the Notifications section.

Analysis Report Questions

- Please contact IQVIA Support
  - gtsdtechsupport@iqvia.com

- STS/DCRI will be looped in as needed when tickets are escalated to Tier 2

Contact Information

Leigh Ann Jones, STS National Database Manager, Congenital and General Thoracic

- Ljones@sts.org
- 312-202-5822

Database Operational Questions

- STSDB@sts.org

Upcoming GTSD Webinars

User Group Call

- April 27 @2:30CT
- May 25 @ 2:30CT

Monthly Webinar

- May 11 @ 1:30CT
- June 8 @ 1:30CT

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!

THANK YOU FOR JOINING!