

The Society of Thoracic Surgeons General Thoracic Surgery Database Data Quality Report

Participant ID:

File Submission:
Date of Report:

This Data Quality Report provides information about your most recent data file. See the date listed above.

- Review each section to ensure that your data are accurately represented. Use the report as a guide for making any necessary changes to your database. Suggestions on how to handle issues are provided.
- If you have any questions, please contact your Data Submission Coordinator:

Name:
Phone:
E-mail:

What to do:

If you are not absolutely satisfied with this Data Quality Report, make any data corrections and resubmit your data file as often as time allows. Once you are satisfied with the quality of your data, there are no additional steps needed to complete your harvest. Any data that has been submitted and accepted at the time of the Database Lock will be used in the current analysis unless you notify your Data Submission Coordinator that you do not want your data included in the analysis. The Database Lock date is the last day of each harvest.

If you DO NOT want your data included in the analysis, you must email your Data Submission Coordinator BY THE END OF THE HARVEST, September 29, 2017 and indicate that you want to “OPT OUT” of the current analysis period.

If you choose to Opt Out, all data submitted during this submission window will be dropped **and you will NOT receive a report for that harvest.** In addition, you will need to resubmit all data for that period during the next submission window.

How to navigate this document:

This Data Quality Report contains links for ease of navigation when viewing it on a computer. [Blue underlined text](#) throughout the report represents a link to another portion of the report that contains relevant information. For instance, the entire Table of Contents on the next page is made up of links to each of the sections of the report. By following the link you will be taken directly to that section of the report. Throughout the report there are also links back to the Table of Contents (<TOC>).

‘Clicking’ on the links:

How you can use your mouse and/or keyboard to follow the links depends upon your computer’s settings in Microsoft Word™:

- Click -** One option is to use the mouse to place the cursor over the link and then click the left mouse button once to follow the link.
- Ctrl + Click -** A different option is to first push and hold the ‘Ctrl’ key on your keyboard while simultaneously clicking the left mouse button to follow the link.

To check/change this hyperlink setting go to Tools>Options>Edit tab in Microsoft Word™.

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Section 1: Harvest Summary: [<TOC>](#)

This section contains a general summary of the most recent data file submitted.

What to do:

Review record counts and dates to confirm this is what you intended to submit. If there are any discrepancies, these should be corrected and your data file resubmitted.

1. Raw Data File Characteristics: [<TOC>](#)

The earliest and latest surgery dates in your data file are shown below along with the total number of procedures. Please note that this does not necessarily represent the actual data accepted into the Database (see below).

Please review this section of the Data Quality Report carefully since a mismatch between the dates in the Raw Data File and the dates entered via the secure website could result in the unanticipated exclusion of cases from the STS Data Warehouse.

Raw Data File			
	Raw Data File	Harvest Verification Form	Note
Earliest Surgery Date			
Latest Surgery Date			
Record Count			

2. Data Accepted into the Database:

Records are accepted into the Database if they contain a valid surgery date and if they are within the dates you specified. **Non-Analyzable Operations are operations that contain ONLY non-analyzable procedures. Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).**

Specified Minimum Date	Specified Maximum Date	Record Count

a. Reason(s) data were not accepted:

See the Itemized Observations [Appendix](#) (pg. 16).

Reason	Count

3. Data Eligible for Analysis: [<TOC>](#)

Count of records that are eligible for analysis and inclusion in the National Reports. A record is eligible if it was accepted into the Database (see above) and it has a valid value in all required fields.

Record Count

a. Reason(s) data were not eligible:

See the Itemized Observations [Appendix](#) (pg. 16).

Reason	Count

4. **Months with no historic or current data.** [<TOC>](#)

There are currently no observations with surgery dates in the following months in the STS Data Warehouse.

What to do:

Review your database and the specified dates (see Data Accepted into the Database (pg. 4) to ensure that your data file submission was complete. If discrepancies are found, correct and resubmit your data file.

Year	Month

Section 2: Issues with submission: [<TOC>](#)

Items in this section typically relate to systematic issues with your software and should be addressed and/or corrected by your vendor.

1. Incorrect File Name. [<TOC>](#)

Incorrect file names require manual intervention and delay data processing as well as reporting to your site.

Submitted Name	Correct Name

2. Core Fields Not Included: [<TOC>](#)

Even if you do not collect data for the core fields, they should still be included in your software and data file.

What to do:

Contact your vendor to ensure that all core fields are included in your software export and harvest transmissions.

Short Name	Field Name

3. Invalid Record IDs in Related Tables: [<TOC>](#)

Each Procedures record has a Record ID field that the Warehouse needs to determine to which Operation it is related. Below, the Table Name specifies a table related to the Operations table and Count indicates number of records it contains with a missing or invalid Record ID. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).** Please note that records with an invalid or missing Record ID are not transferred to the STS Thoracic Database. See the [Itemized Observations Appendix](#) (pg 16) for a list of each record deleted due to an invalid or missing Record ID.

What to do:

Contact your vendor to ensure all tables related to the Operations table contain valid Record IDs.

Table Name	Count

4. Invalid Patient IDs in Related Tables: [<TOC>](#)

Each Operations record has a Patient ID field that links it with the appropriate Demographics record. The Table Name specifies a table related to the Demographics table and Count indicates number of records it contains with a missing or invalid Patient ID. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).** See the [Itemized Observations Appendix](#) (pg. 16) for a list of each record deleted due to an invalid or missing Patient ID.

What to do:

Contact your vendor to ensure all tables related to the Demographics table contain valid Patient IDs.

Table Name	Count

5. Operations Data Missing Related Records: [<TOC>](#)

Each Operations record should be associated with one or more record in the Procedures and Demographics tables. The table below lists the number of Operation records missing a related record in the specified table. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).** See the [Itemized Observations Appendix](#) (pg. 20) for a list of the Operation records missing records in one or more of these related tables.

What to do:

Contact your vendor to ensure each Operation record has at least one associated record in the Procedures and Demographics table.

Missing Record	Count

Section 3: Summary of data accepted: [<TOC>](#)

This section summarizes the observations that were accepted into the Database. Records that were not accepted due to missing or incorrect information (see Harvest Summary) are not included in these counts. Counts by surgery year and data version are provided to assist you in assessing your data quality status and targeting your data cleanup effort.

PLEASE NOTE Not all observations accepted into the Database are eligible for inclusion in analysis. See Section 1 and the Appendix for information about observations not eligible for analysis.

What to do:

- Review this information to ensure that it accurately represents what you intended to submit. If there are any discrepancies that impact the quality or limit the extent of your harvested data file, these should be corrected and your data file resubmitted.
- For issues potentially related to your software, contact your vendor for assistance.

1. Operation Records per Surgery Year: [<TOC>](#)

This section displays the number of operation records for each year of surgery.

Year	Count

2. Case Eligibility for Inclusion in Mortality Analysis

If a participant has more than 10% missing data for the Operative Mortality (MtDCStat, Mt30Stat) variables, they will be excluded from mortality analyses. In order for a Participant's data to be included in the mortality analysis, **no more than 10% of the operation records contained in the reporting period** can have an invalid, missing or "Unknown" value for any one (or more) of the Operative Mortality variables.

PLEASE NOTE: The STS is making a concerted effort to improve data completeness for operative mortality. The STS is now implementing additional thresholds for 'missing' or 'unknown' operative mortality fields (MtDCStat, Mt30Stat). Although in-hospital mortality data are recorded with high completeness and fidelity, some programs often choose "unknown" as the response for 30-day status, which may impact the accuracy of operative mortality determinations. **Therefore, in order to assure the highest level of accuracy when reporting operative mortality, additional data thresholds are now being implemented to determine eligibility for a composite score (star rating):**

1. For all cases performed from January 1, 2015 through December 31, 2015, the operative mortality fields must not have more than 10% missing. If your % Ineligible is greater than 7% your data are at risk of being ineligible for a composite score (star rating).
2. For all cases performed from January 1, 2016 through December 31, 2016, the operative mortality fields must not have more than 5% missing. If your % Ineligible is greater than 3% your data are at risk of being ineligible for a composite score (star rating).
3. For all cases performed on or after January 1, 2017, the operative mortality fields must not have more than 2% missing.

If one or more of the operative mortality fields (**MtDCStat, Mt30Stat**) is missing or coded as "unknown", the record will be considered incomplete. **Participants who do not meet the operative mortality related data completeness thresholds for a particular harvest will NOT be eligible to receive a composite score (star rating).**

If more than 10% of the overall submitted operation records for a given Participant have one or more of the Operative Mortality fields (MtDCStat, MT30Stat) missing (this includes historical data submitted during previous data harvests), then that Participant's data are excluded from the mortality analysis.

Refer to the Itemized Observations [Appendix](#) (pg. 17) for a list of each observation ineligible for analysis.

What to do:

The table below provides a summary of your Case Eligibility for Inclusion in Mortality Analysis. This table includes ALL data accepted into the database and may include data from both your current submission and previous harvest submissions of historical data. The N represents the total number of cases.

Please note these percentages indicated in the table below are not taking into account additional exclusions that will occur in analysis. If you are within a couple percentage points (for example: 7% for the 10% missing threshold or 3% for the 5% missing threshold) of the threshold, your data are at risk of being excluded from the mortality analysis and/or the composite score (star rating). This threshold is calculated based on ‘% missing’ as described above. “Unknown” is considered as missing data in analysis.

Time Period	Total Number of Records	Number of Ineligible Cases	% Missing or “Unknown”

3. Discharge Mortalities (MtDCStat) per Surgery Year: [<TOC>](#)

This section displays, for each surgery year, the number of operation records that indicate a discharge status of dead as well as the number of patients who were discharged dead. In determining the record count value, patients who had multiple operations during one admission will be counted multiple times. This value should be used only to verify that your data was received correctly by the warehouse. The patient count value shows the number of individual patients who had a discharge status of dead. See the Itemized Observations [Appendix](#) (pg. 17) for a list of each observation with a discharge status of dead.

What to do:

The table below provides a summary of your Discharge Mortalities for the upcoming reporting period, which may include data from both your current submission and previous harvest submissions of historical data. Compare these counts to your database to ensure that your data for this important field are accurately represented. Review discrepancies and correct any errors in your data, then resubmit your data file.

Data Source	Year	Record Count	Patient Count

4. 30-Day Mortalities (Mt30Stat) per Surgery Year: [<TOC>](#)

This section displays, for each surgery year, the number of operation records that indicate a 30-Day status of dead as well as the number of patients who have a 30-day status of dead. In determining the record count value, patients who had multiple operations during one admission will be counted multiple times. This value should be used only to verify that your data was received correctly by the warehouse. The patient count value shows the number of individual patients who had a 30-day status of dead.

What to do:

The table below provides a summary of your 30-Day Mortalities for the upcoming reporting period, which may include data from both your current submission and previous harvest submissions of historical data. Compare these counts to your database to ensure that your data for this important field are accurately represented. Review discrepancies and correct any errors in your data, then resubmit your data file.

Data Source	Year	Record Count	Patient Count

5. Observations per Data Version per surgery year: [<TOC>](#)

"Raw Data Version value" shows what was contained in the data version field in your data file and "Interpreted Data Version value" shows the version recognized by the STS Data Warehouse.

What to do:

If any non-matching interpretations are indicated below, contact your vendor to ensure that the data version field is correctly populated for each observation. Observations with a missing or invalid Data Version value will not be accepted into the Database. If there are any discrepancies that impact the quality or limit the extent of your harvested data file, they should be corrected and your data file resubmitted.

Year	Raw Data Version Value	Interpreted Data Version Value	Count

6. Observations per Surgeon NPI (Data version 2.081 or later): <TOC>

This list contains all of the Surgeon Name/ Surgeon NPI combinations found in your current data file submission. Note that a Surgeon name may show up on this list more than once due to misspellings or variations on a name, or due to multiple NPI values.

Ideally there should be a drop down box provided in your software to prevent the need for manual data entry in this field. Your software vendor can assist you with these issues. This list also shows the Surgeon Name affiliated with each Surgeon NPI as recorded in the STS administrative contact database.

If there is a value of <Yes> under the NPI Match column, this indicates that the Surgeon NPI submitted in the data record during the current data harvest is a Surgeon NPI that the STS has on file. If there is a value of <No> under the NPI Match column, this indicates that the Surgeon NPI submitted in the data record during the current data harvest is not a Surgeon NPI that the STS has on file.

What to do:

Verify that the Surgeon Name on the data record corresponds to the correct Surgeon NPI and associated Surgeon Name in the STS Contact database.

Surgeon NPI, Harvest Data	Surgeon Name, Harvest Data	NPI Match	Surgeon Name affiliated with Surgeon NPI in the STS Contact Database	Count

7. Hospital Name and Hospital NPI# at STS: <TOC>

Please note: Beginning with the start of continuous harvesting in July 2017 for the General Thoracic Surgery Database, if any Hospital name or Hospital NPI # submitted in the data file does not match the information on file with the STS, **the file will be rejected**.

Hospital NPI	STS Hospital Name

What to do:

- a. Confirm Hospital NPI # at STS.
 - (1) If **NPI # is incorrect**, please contact Elizabeth Watkins at ewatkins@sts.org to make this change
- b. Is the STS Hospital Name correct?
 - (1) **If NO:** Contact Elizabeth Watkins at ewatkins@sts.org to change the hospital name on file for your site(s).
 - *Please identify the reason why the hospital name is different – such as new ownership, rebranding, or typo.

Ideally there should be a drop down box provided in your software to prevent the need for manual data entry in this field. Your software vendor can assist you with these issues.

8. Hospital information in the Data Warehouse: <TOC>

The table below lists the Hospital NPI(s) and Hospital Name(s) for all data in the current report period, which may include data from your current data file and historic data previously submitted. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).**

Source	HospNPI	Hospital Name in Data Warehouse	Min SurgDt	Max SurgDt	Count	Match?

What to do:

- a. Confirm NPI # in Data Warehouse.
- b. Make sure the Hospital Name in YOUR database AND Hospital Name in the Data Warehouse matches the STS Hospital Name. If the data does not match, you must correct the hospital name in your data to EXACTLY match the STS name and **resubmit your data for that entire period**. It is the name in the data warehouse that will be used in any analysis reporting. If necessary, please contact your software vendor for assistance.
- c. If all information is accurate and matches, then you should not need to change anything, but keep in mind that if you do change something in the future, your file could be automatically rejected

It is important that the Hospital Name in YOUR DATABASE matches the Hospital Name and Hospital NPI # on file with the STS and DCRI **EXACTLY**. This includes punctuation, spelling, abbreviations etc. **If the two names do NOT match exactly, your file will be rejected.**

9. Observations per Vendor ID: <TOC>

This list contains the software vendor(s) associated with your records. The vendor ID is provided along with the number of records that were submitted to the Data Warehouse with that vendor ID.

Vendor ID	Count

Section 4: Edits made on your data: <TOC>

The Data Warehouse performs certain edits on harvested data based on established rules that increase the consistency and analyzability of the data. This information is provided to you so that you are aware that changes have been made and that the Data Warehouse data will be different from your site database.

What to do:

Review these edits for accuracy and, as needed, make the appropriate changes in your database. PLEASE NOTE! If edits performed by the STS Data Warehouse impact the accuracy of your data, corrections should be made in your database and the file should be resubmitted.

1. Data Consistency Edits: <TOC>

Consistency edits are modifications to field values to make them consistent with other field values in the data record. Consistency edits are performed on a field after comparison between the field and related fields. For example, if Mortality Discharge Status is “Alive” or missing, but Mortality Date is specified and it is between the Admit and Discharge Dates, Mortality Discharge Status is changed to “Dead”. See the Itemized Observations [Appendix](#) (pg. 18) for a list of each observation affected by consistency edits.

(A ¹ indicates variables used in reports. A ² indicates that a variable is used in the risk adjustment model.)

What to do:

Make the same edits in your database to synchronize your database with the Data Warehouse.

Data Version	Surgery Year	Short Name	Field Name	Description	Count

2. Parent/Child Edits: <TOC>

Parent/child edits are modifications to field values that are required as a result of a parent/child relationship with other fields on the data record. For example, if Diabetes (a parent field) is No but Diabetes Control (child field) is specified, Diabetes Control is changed to Null. See the Itemized Observations [Appendix](#) (pg. 18) for a list of each observation affected by an edit.

(A ¹ indicates variables used in reports. A ² indicates that a variable is used in the risk adjustment model.)

What to do:

Contact your vendor to have the Parent/Child dependency relationships reviewed and have your data corrected.

Data Version	Surgery Year	Short Name	Field Name	Description	Count

Section 5: Data Information and Completeness Issues: <TOC>

This section identifies important field-specific data quality issues that affect the completeness of your harvest and may impact analysis and reporting of your data in the National Report. The data version, surgery year, short name and field name are shown for each issue to help you target and prioritize your data review and clean-up activity. Information on missing data is only reported for variables used in reports or risk-adjustment models. **PLEASE NOTE Not all observations accepted into the Database are eligible for inclusion in analysis. See Section 1 and the Appendix for information about observations not eligible for analysis.**

1. The following variables used in reports or risk models had greater than 0% missing in your data file.

[<TOC>](#)

The percentage of missing data for the following fields warrants further review. The information provided in the 'N' column to the far right = the number of records with this item missing / the number of records for which a value is expected. **PLEASE NOTE that missing data for those variables (MtDCStat and Mt30Stat) involved in the mortality calculation could result in all or some of your records being excluded from the calculation of these measures.**

(A ¹ indicates variables used in reports. A ² indicates that a variable is used in the risk adjustment model. Fields identified with ** will be 100% missing if the site extracted the data with the option not to harvest these fields).

Data Version	Surgery Year	Short Name	Field Name	% Missing	N

2. Operation Records with NO Primary Procedure <TOC>

This section displays the number of operation records with no Primary Procedure indicated. Each Operations record should be associated with one primary Procedure record in the Procedures table. **Any record with NO procedure listed will be treated as an Analyzable record.**

See the Itemized Observations [Appendix](#) (pg. 19) for a list of each observation with no primary procedure indicated.

What to do:

Review this information in your database to ensure that your data are accurately represented. If there are any discrepancies that impact the quality or limit the extent of your harvested data file, these should be corrected and your data file resubmitted.

Data Version	Surgery Year	Count

3. Operation Records with Multiple Primary Procedures <TOC> This section displays the number of operation records with more than one Primary Procedure indicated. Each Operations record should be associated with one or more record in the Procedures table, but only one related procedure should be designated as the Primary Procedure. **If any record has more than one Primary Procedure indicated when moved over to analysis, the primary procedure for that record will be set to "missing" if it is not corrected during the harvest.**

See the Itemized Observations [Appendix](#) (pg. 19) for a list of each observation with more than one primary procedure indicated..

What to do:

Review this information in your database to ensure that your data are accurately represented. If there are any discrepancies that impact the quality or limit the extent of your harvested data file, these should be corrected and your data file resubmitted.

Data Version	Surgery Year	Count

4. Values Not Interpreted. <TOC>

Any values unable to be interpreted are set to missing. See the Itemized Observations [Appendix](#) (pg. 18) for a list of each observation affected by the edit. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).**

(A ¹ indicates variables used in reports. A ² indicates that a variable is used in the risk adjustment model.)

What to do:

Review these fields for nonstandard values. Note that you may need to consult your software vendor to correct the manner in which your data are collected or harvested. Discrepancies that impact the quality or limit the extent of your harvested data file should be corrected and your data file resubmitted.

Data Version	Surgery Year	Short Name	Field Name	Count

5. Data inconsistencies. <TOC>

The Data Warehouse reviews data for certain inconsistencies, such as dates out of chronological order (e.g., a Discharge Date that is earlier than the Admit Date). See the Itemized Observations [Appendix](#) (pg. 19) for a list of each observation with data inconsistencies.

Please NOTE: As of the Spring 2010 harvest, the DCRI has introduced several new inconsistency warnings to let you know about data that appear inconsistent. Please make sure that you review all of the inconsistencies listed in this section of the report (as well as the Itemized Observations) to ensure that your data are correct. In addition, we have introduced several checks for items that the STS General Thoracic Database Task Force is now **requiring** for data submissions starting with the Spring 2011 harvest. These checks are as follows:

If pneumonectomy is performed as the primary procedure, PFT information (PFT/FEV/FEVPred) should be collected.

If the patient has lung cancer (*LungCancer* = Yes) then clinical staging information must be complete.

If patient has esophageal cancer (*EsophCancer* = Yes) then clinical staging information must be complete.

What to do:

Review and correct these inconsistencies and resubmit your data file.

Data Version	Surgery Year	Inconsistency	Count

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Data Version	Surgery Year	Inconsistency	Count

Appendix: Itemized Observations [<TOC>](#)

This section is designed to help participants identify the specific records with data quality issues as previously described in this report. Use this list to identify problems that need to be corrected in your database. The Record ID may be used to locate the specific record in your database. **If you are unable to locate the Record ID field in your database, contact your vendor for assistance.**

1. Records not accepted into the Database: [<Summary>](#) [<TOC>](#)

The following records were not accepted into the Database due to the indicated reason. **Non-Analyzable Operations are operations that contain ONLY non-analyzable procedures. Non-Analyzable Operations will be removed from the database.**

Reason not Accepted into the Database	Record ID

2. Records not eligible for analysis: [<Summary>](#) [<TOC>](#)

The following records were not eligible for analysis due to the indicated reason.

(A ¹ indicates variables used in reports. A ² indicates that a variable is used in the risk adjustment model.)

Surg Year	Data Vrsn	Record ID	Pat ID	Missing Field(s)	Field Name

3. Invalid Record IDs: [<Summary>](#) [<TOC>](#)

Each Procedures record has a Record ID field that allows the Warehouse to determine which Operation it relates to. Below are records that are missing a Record ID or have a Record ID that does not exist in the Operations table. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).** Please note records with an invalid or missing Record ID are not transferred to the STS Thoracic Database. Table Name, ID Field, and ID Value identify the table and record that contains the indicated Invalid Record ID.

Table Name	ID Field	ID Value	Invalid Record ID

4. Invalid Patient IDs: [<Summary>](#) [<TOC>](#)

Each Operations record has a Patient ID field that allows the Warehouse to determine which Demographics record it relates to. Below are records that are missing a Patient ID or have a Patient ID that does not exist in the Demographics table. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).** Please note that records with an invalid or missing Patient ID are not transferred to the STS Thoracic Database. Table Name, ID Field, and ID Value identify the table and record that contains the indicated Invalid Patient ID.

Table Name	ID Field	ID Value	Invalid Patient ID

5. Discharge Mortalities: [<Summary>](#) [<TOC>](#)

The following records represent the discharge mortalities for the current reporting period as determined by the Data Warehouse. If there are any discrepancies between this list and the data in your database, determine the cause, make any corrections and, if necessary, resubmit your data file. . In the table below, a DataSource of 'Current' indicates the record is in the current data file. A DataSource of 'Historic' indicates the record is from previously submitted data. To resolve issues with historic data you will need to correct and resubmit the historic data.

Data Source	Surgery Year	Record ID	Patient ID

6. 30 Day Mortalities: [<Summary>](#) [<TOC>](#)

The following records represent the 30 Day mortalities for the current reporting period as determined by the Data Warehouse. If there are any discrepancies between this list and the data in your database, determine the cause, make any corrections and, if necessary, resubmit your data file. . In the table below, a DataSource of 'Current' indicates the record is in the current data file. A DataSource of 'Historic' indicates the record is from previously submitted data. To resolve issues with historic data you will need to correct and resubmit the historic data..

Data Source	Surgery Year	Record ID	Patient ID

7. Ineligible for Mortality Analysis: Detailed Listing [<Summary>](#) [<TOC>](#)

The STS is now implementing the following threshold for 'missing' or 'unknown' mortality fields (MtDCStat, Mt30Stat).

1. For all cases performed from January 1, 2015 through December 31, 2015, the operative mortality fields must not have more than 10% missing. If your % Ineligible is greater than 7% your data are at risk of being ineligible for a composite score (star rating).
2. For all cases performed from January 1, 2016 through December 31, 2016, the operative mortality fields must not have more than 5% missing. If your % Ineligible is greater than 3% your data are at risk of being ineligible for a composite score (star rating).
3. For all cases performed on or after January 1, 2017, the operative mortality fields must not have more than 2% missing.

If one or more of the following fields is missing or coded as "unknown", the record will be considered incomplete. Going forward, participants who do not meet the mortality-related data completeness thresholds for a particular harvest will not be eligible to receive a composite score (star rating). Please refer to [<Summary>](#) (Section 3. Item 2) for additional information.

What to do:

The table below lists the records missing key data elements which affect your Eligibility for Inclusion in Mortality Analysis for the upcoming reporting period, which may include data from both your current submission and previous submissions of historical data. You may need to clean and resubmit historical data to reduce your % Ineligible.

(Note: In the table below a value of 1 = Alive, 2 = Dead, 3 = Unknown)

Data Source	Surgery Year	Data Vrsn	Record ID	Patient ID	MtDCStat	Mt30Stat

Data Source	Surgery Year	Data Vrsn	Record ID	Patient ID	MtDCStat	Mt30Stat

8. Data Consistency Edits: The following field values were modified to make them consistent with other field values on the data record. [<Summary>](#) [<TOC>](#)

Consistency edits are performed on a field after comparison between the field and related fields. The table indicates each observation with a consistency edit, where the Submitted Value was changed per the edit description.

(A ¹ indicates variables used in reports. A ² indicates that a variable is used in the risk adjustment model.)

What to do:

If these consistency edits were incorrectly made at the STS Data Warehouse due to data entry errors in other fields, changes need to be made to the affected records in your database and your data file resubmitted. If the edits were correctly made, make the same edits in your database to synchronize your database with the STS Data Warehouse.

Data Version	Surgery Year	Short Name	Field Name	Description	Record ID	Patient ID

9. Itemized Parent/Child Edits – The following field values were modified as a result of a parent/child relationship with other fields on the data record. [<Summary>](#) [<TOC>](#)

Parent/child edits are performed on a child field if the related parent field indicates that the child should be blank. This table indicates each observation with a parent/child edit.

(A ¹ indicates variables used in reports. A ² indicates that a variable is used in the risk adjustment model.)

What to do:

If these parent/child edits were incorrectly made at the Data Warehouse due to data entry errors in other fields, changes need to be made to the affected records in your database and your data file resubmitted. If these edits were correctly made, make the same edits in your database to synchronize your database with the STS Data Warehouse.

Data Version	Surgery Year	Short Name	Field Name	Description	Record ID

10. Values not interpreted. [<Summary>](#) [<TOC>](#)

Any values unable to be interpreted are set to missing. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).**

(A ¹ indicates variables used in reports . A ² indicates that a variable is used in the risk adjustment model.)

What to do:

Review these fields for nonstandard values. **A “Y” in the N-A Op column identifies the Non-Analyzable operations.** Note that you may need to consult your software vendor to correct the manner in which your data are collected or harvested. Discrepancies that impact the quality or limit the extent of your harvested data file should be corrected and your data file resubmitted.

Data Version	Surgery Year	Short Name	Record ID	Patient ID	Submitted Value	N-A Op

11. Data Inconsistencies: [<Summary>](#) [<TOC>](#)

The following records contain the indicated inconsistencies, such as dates out of chronological order (e.g., a Discharge Date that is earlier than the Admit Date).

Please NOTE: As of the Spring 2010 harvest, the DCRI has introduced several new inconsistency warnings to let you know about data that appear inconsistent. Please make sure that you review all of the inconsistencies listed in this section of the report (as well as the Itemized Observations) to ensure that your data are correct. In addition, we have introduced several checks for items that the STS General Thoracic Database Task Force is now **requiring** for data submissions starting with the Spring 2011 harvest. These checks are as follows:

If pneumonectomy is performed as the primary procedure, PFT information should be collected.

If the patient has lung cancer (*LungCancer* = Yes) then clinical staging information must be complete.

If patient has esophageal cancer (*EsophCancer* = Yes) then clinical staging information must be complete.

What to do:

Review and correct these inconsistencies and resubmit your data file.

Inconsistency	Data Version	Surgery Year	Record ID	Patient ID

12. NO Primary Procedure Indicated: [<Summary>](#) [<TOC>](#)

Each Operations record should be associated with one Primary Procedure in the Procedures table. **Any record with NO procedure listed will be treated as an Analyzable record.** The table below lists the Record ID of Operation records with NO Primary Procedure in the Procedures table.

What to do:

Please review the operations listed below and ensure that a primary procedure is indicated.

Record ID

13. Multiple Primary Procedures Indicated: [<Summary>](#) [<TOC>](#)

Each Operations record should be associated with one or more record in the Procedures table, but only one related procedure should be designated as the Primary Procedure. **If any record has more than one Primary Procedure indicated when moved over to analysis, the primary procedure for that record will be set to "missing" if it is not corrected during the harvest.** The table below lists the Record ID of Operation records with more than one related Primary Procedure in the Procedures table.

What to do:

Please review the operations listed below and ensure that only one of the procedures performed is flagged as the primary procedure.

Record ID	Count of Primary Procedures

14. Operation Data Missing Related Records: [<Summary>](#) [<TOC>](#)

Each Operations record should be associated with one or more record in the Procedures and Demographics tables. **Non-Analyzable Operations will be removed from the database, but are included in contractual checks (NPI), and checks related to systemic software issues (duplicate record id's, invalid values, missing/invalid patient ids).** The table below lists the Record ID of Operation records missing a related record in the specified table.

What to do:

Contact your vendor to ensure that each Operation record has at least one associated record in the Procedures and Demographics tables.

Record ID	Missing Record

Finalizing Your Harvest

Once you are satisfied with the quality of your data, there are no additional steps needed to complete your harvest. Any data that has been submitted and accepted at the time of the Database Lock will be used in the current analysis unless you notify your Data Submission Coordinator that you do not want your data included in the analysis. The Database Lock date is the last day of each harvest.

If you DO NOT want your data included in the analysis, you must email your Data Submission Coordinator BY THE END OF THE HARVEST, September 29, 2017 and indicate that you want to “OPT OUT” of the current analysis period.

If you choose to Opt Out, all data submitted during this submission window will be dropped **and you will NOT receive a report for that harvest.** In addition, you will need to resubmit all data for that period during the next submission window.