

The STS National Database™ News

The Society of
Thoracic Surgeons

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STS Data Managers Meeting... A GREAT Success

By Barbara A. Garren, RN, MJ
and Meghan Carey

We're off and running in 2003! In February the STS Data Managers met during the STS 39th Annual Meeting in San Diego. With a total of 349 Adult Cardiac Database attendees and 46 Congenital Database attendees, it was the largest attendance for an annual database meeting to date.

The STS National Database received important national recognition during the STS Annual Meeting. During his address to the STS general membership, Secretary of Health and Human Services Tommy Thompson had high praises for the quality improvement efforts taking place as a result of database participation and activity. He also strongly encouraged further and greater efforts by all involved in cardiac surgery.

Further evidence of local and regional quality improvement efforts was displayed during the inaugural Data Managers' Poster Session. The poster session was an overwhelming success, and

the STS would like to congratulate all presenters on a job well done. The posters reflected hard work and dedication to the practice of cardiac surgery as well as important results in improving patient care. Based on the success of the poster session, the STS has asked all presenters to develop an abstract based on their posters. The initial plan is to post the abstracts on the STS website. Monitor the Database Manager section of www.sts.org to learn more about when the poster abstracts will be available

The Sunday morning session began with a warm welcome from President William A. Baumgartner, who acknowledged the growth and success of the National Database over the past five years. We thank Dr. Baumgartner for a wonderful speech and his overall strong support of the Database during his presidency.

The morning session included discussion of such topics as HIPAA, clinical trials, and Thoracic and Congenital Database updates. Mary Eiken noted that in January, members from the ACC and the

STS met to standardize definitions for all data elements that overlap between the organizations' registries. Dr. Omar Latouf gave an insightful presentation of new trends in Cardiac Surgery. Rachel Dokholyan and Paul Meehan from the Duke Clinical Research Institute gave a database update and offered insight into the proposed national report changes and upcoming STS certified software upgrades. The afternoon closed with the ever-rousing patient vignettes and a wonderfully insightful talk from Dr. John Doty on collecting operative data.

Although the Data Manager Training Manual did not make its scheduled debut, a brief progress report was given. With the content of the manual near completion, it was decided to incorporate ACC/STS combined definitions and to have a thorough physician review of content. The STS regrets the delay but anticipates a more useful manual will be the result.

We appreciate the participation of so many Data Managers in this meeting.

quality and higher reporting standards.

As we have learned from the adult cardiac surgery model, the rationale for a congenital heart surgery database is compelling. Information can be organized in an efficient way to allow consistent monitoring and reporting of outcomes for the purpose of programmatic evaluation, government reporting, and quality improvement.

Efforts to implement a widely

(continued, p. 6)

STS Congenital Heart Surgery Database Update

By Karen Graham and
Melanie Gevitz

In addition to the session highlighted above, a special Congenital Data Managers Meeting was held in San Diego, California on February 2, 2003. Nearly 50 Congenital Data Managers and vendor representatives attended the meeting to share experiences, trade data entry tips, and discuss the challenges facing participating centers. This dynamic group is ready to embark on a more structured approach to data quality improvement and reporting initiatives!

Although many important topics were discussed at the user meeting, attendees quickly confirmed that their highest priority is receiving an outcome report from the initial harvest conducted at the Duke Clinical Research Institute (DCRI) in late 2002. Representatives from DCRI presented a proposed report format and provided valuable information regarding quality improvement. The report will encompass the years 1998-2001 and provide a roadmap for future quality improvement initiatives. In the meantime, our top priority is to improve communication among users. We hope the result will be improved data

Inside this issue:

New information and tips from DCRI 2

Data Manager Poster Session 3

How to submit your clinical questions 4

Regional Efforts: The Delaware Valley STS Quality Improvement Initiative 5

Did you know:

You too can contribute to the STS National Database News!

If you have ideas for future articles and are interested in writing, please contact Barbara Garren by e-mail at bgarren@sts.org.

But what about the Patient Extubated in the OR?

By Paul Meehan

Data Managers may be aware of problems with the intubation and ICU time fields of the version 2.41 Adult CV Data Specifications. Specifically, the fields for collecting this information will not accept values of zero. For example, if a patient was extubated in the operating room or if the patient did not go to an Intensive Care Unit, a zero cannot be entered. These fields must be left blank.

Leaving the intubation and ICU time fields blank results in inaccuracies in sites' data completeness reports. Fields that should display zero values report as missing data. Many users have expressed the need for the STS Data Specifications to allow zero values so that they may more accurately track when data is actually missing rather than intentionally left blank. Additionally, many users want to be able to collect data for intubation and ICU time in fractions of hours

and not just whole hours.

By the time these issues were discovered, the version 2.41 specifications had been released. It was clear that an interim solution was needed.

To alleviate the problem, the changes described in the table below can be made to your data collection software now. The

goal of the modifications is to allow users to enter zero values in these fields and to record the data in decimal rather than integer format.

These changes will be required in the next version upgrade of the STS data specifications. Each site is encouraged to contact their vendor to determine if the time and resources are available to

make these changes to your data collection software now, rather than waiting until the next version upgrade.

It is hoped that these changes will assist data managers in collecting and recording their data as accurately and completely as possible.

SeqNo	Field Name	Change	Change Description
354	Initial ICU Hours	Valid data from "1 - 5000" to "0.0 - 5000.0"	Include value of 0 and allow decimal format
356	Additional ICU Hours	Valid data from "1 - 5000" to "1.0 - 5000.0"	Allow decimal format
357	Total Hours ICU	Valid data from "1 - 9999" to "0.0 - 9999.0"	Include value of 0 and allow decimal format
1230	Prev Non Surg - Stent	Parent field from null to "Prev CV Intervent"	
4350	Cross Clamp Time (min)	Valid data from "1 - 600" to "0 - 600"	Include value of 0
4360	Perfusion Time (min)	Valid data from "1 - 999" to "0 - 999"	Include value of 0
4676	Initial Hours Ventilated	Valid data from "1 - 5000" to "0.0 - 5000.0"	Include value of 0 and allow decimal format
4679	Additional Hours Ventilated	Valid data from "1 - 5000" to "1.0 - 5000.0"	Allow decimal format
4680	Post-op Vent Hours - Total	Valid data from "1 - 5000" to "0.0 - 9999.0"	Include value of 0 and allow decimal format. Also increase the range to allow for all total values.



Data Quality Tip: The Harvest Verification Form

By Haywood Allen, Carolyn Lumpkins and Leigh Ann Jones

One of the main goals of the STS National Adult Cardiac Surgery Database is to provide the highest quality research database possible. Therefore, it is important that all cardiac procedures performed by the participating organizations are entered into their database and subsequently transferred to the Data Warehouse at the DCRI.

Key questions to be answered include the following:

- Were all the eligible procedures submitted to the warehouse?
- Were any ineligible procedures submitted to the warehouse?
- Do the procedures in the data file accurately reflect those being performed at the site?

These questions can be answered by comparing the number of records by procedure type submitted on the Database Harvest Verification form to the number of records by procedure reported back to you in the Initial Data Quality Report from the Data Warehouse.

NOTE: A new Harvest Verification form MUST be completed and faxed to the Data Warehouse with each data file submitted for processing.

This comparison should become a routine step in your internal data quality protocol, and any discrepancies noted during this review should be resolved. If necessary, your Clinical Data Specialist at the DCRI is available to assist you in the resolution process. Comparing the record counts from your database with the counts generated by the Data Warehouse is an optimal way to ensure your data is received correctly and that your site is being accurately represented in the National Database.

Many of the vendors have developed reports that can provide you with the information needed to complete the Harvest Verification form. These reports are based on queries developed utilizing the Procedure Identification Table. This table is part of the harvest documentation that can be found on the STS website at www.sts.org. Click on Database in the left tool bar and then scroll to Database Managers Section. Be sure that you submit the Data Warehouse Harvest Verification form and not the report generated by your vendor.



1st Annual STS Data Manager Poster Session Debuts in San Diego

By Syma Prince, RN, BSN

Data Managers involved in the STS National Database were invited by STS to participate in an inaugural poster presentation in San Diego at the 2003 National Data Managers Meeting, held in conjunction with the Annual Meeting of the STS. The posters demonstrated how use of the STS National Database has resulted in significant improvement in cardiothoracic practice and outcomes at local and/or regional levels. The response was overwhelming, and 12 posters were accepted for presentation at the reception. The turnout for the event was exceptional, with more than 200 people in attendance. Comments from several of the physician attendees suggested that all of the posters contained extremely valuable information. The Workforce on National Databases would like to thank all those who successfully participated this year and encourage others to consider presenting a poster at the next STS Data Manager meeting. The following table indicates the accomplishments displayed during the 2003 Data Managers Poster Session.



The Rocky Mountain Regional Data Managers present their poster at the Data Manager poster session in San Diego

Presenter(s)	Title	Institution	City, State
Jean Sesing, RN/Paul Seifert, MD	Analysis of Off vs. On Pump CABG in a Community Hospital	Waukesha Memorial Hospital	Waukesha, WI
Marlene Griffith, RD/Cyndi Babish, CCPT/Deb Wilcox, RN, MSN/Tanya Dorobiala, RHIT CRT/Jerry Greenwood, RN, PA	Development of a Regional Quality Improvement Process by Data Managers – Rocky Mountain Region	Rocky Mountain Region	14 sites in CO, NM, WY
Lana Crafts, RN, MS/Karen Davidson	CV Surgery High Risk Algorithm	Hillcrest Medical Center	Tulsa, OK
Linda Heystek, RN, BS, CPHQ/Lois VanDonselaar, RN, MSN/Mark Marbey, MD	Improved Cardiac Surgery Clinical Outcomes Through Process Redesign Using STS Data	Bronson Methodist Hospital	Kalamazoo, MI
Audrey Schlund, RN, BSN	Care Management in Open Heart Surgery	Wausau Hospital	Wausau, WI
James Beachy	Use of the STS Database and Statistical Comparisons to Generate Blinded and Benchmarked Physician Performance Reports	INOVA Fairfax Hospital	Falls Church, VA
James Beachy	Use of the STS Data to Decrease the Incidence of Postop Atrial Fibrillation	INOVA Fairfax Hospital	Falls Church, VA
Christine Martini, RN/Lamont Yoder/Susan Gallagher	The Ohio Thoracic and Cardiovascular Data Management Group	St Elizabeth Health Center/Riverside Methodist Hospital/Grant Medical Center	OH
Terry Barnhart/Mary Ann Megimose-McClay/Lamont Yoder/Susan Gallagher	Collaborative Data Flow	Grant Medical Center/Riverside Methodist Hospital	OH
Dorothy Latham, RN/Gail Bell, RN, BSN/Tonda Brayfield, RN/Ben DePeters, RN, BAS/Jaelene Williams, RN, MS/Richard Prager, MD	CAB Predicted Risk Score Validation in Michigan	Michigan Data Managers Group	MI
Society of Thoracic Surgeons	CQI in CABG: A National Randomized Trial in Quality Improvement	STS	Chicago, IL
Syma Prince, RN, BSN/Morley Herbert PhD/Mitchell Magee, MD	A Quality Control Review of Discrepancy Rates in Recording Patient Data	CRSTI	22 surgeons in 18 facilities in TX



Clinical Questions: STS National Databases

By Barbara A. Garren, RN MJ

One of the top priorities of the Society of Thoracic Surgeons Workforce on National Databases is to provide consistent definitions to the over 500 sites that contribute to the National Databases. As many of you know, patients do not always present in a consistent manner, which can make proper coding a challenge for everyone.

To assist with this challenge, Dr. Fred Grover, Chair of the Workforce on National Databases, has appointed Dr. John Mitchell to chair the Task Force on Definitions and Data Specifications. This Task Force will benefit from the contributions of physicians, data managers, and STS staff. Their goal will be to review and give input into the clinical questions received from Data Managers, work through and resolve data definition inconsistencies, and periodically change and up-

date data specifications.

As communicated at the 2003 Data Managers' meeting, a mailbox dedicated to all National Database clinical questions has been initiated. The address is STSDB-FAQ@sts.org. In conjunction with this mailbox, an STS Clinical Question Request Form will soon be available. This request form will be completed electronically by Data Managers and then submitted to STSDB-FAQ@sts.org. The information that Data Managers provide on the form will help to streamline the process of getting questions answered. Data Managers will receive answers via e-mail but are encouraged to check the Data Manager section of the sts.org web page for updates. Electronic submission of the official STS Clinical Question Request Form is required for Task Force review of clinical questions.

Once the Task Force is up and

running, we anticipate that the questions will be answered within a one month period if not sooner. Questions will be answered in the order received. Questions that are deemed beneficial to all Data Managers will be added to the FAQ Document on the Web site, which will be updated on a monthly basis.

As always, questions pertaining to the harvest timelines, verifying data receipts, resolving data transmission problems, clarifying data quality report concerns, monitoring data specification questions and interpreting final report matters should be sent to your Clinical Data Specialist at DCRI.

So, what do you think of our plans? We would love to hear from you. Send your suggestions and comments to STSDB-FAQ@sts.org. Please title the subject line please: Suggestions for clinical questions. Your input will be greatly appreci-

ated, and you will be contributing to the ongoing success of the STS National Database. Thank you!

COMING SOON!

How to submit clinical questions to the STS:

1. ***Go to STS Web site: www.sts.org***
 2. ***Select from left tool bar menu: "Database"***
 3. ***Select from dropdown menu: "Data Managers Section"***
 4. ***Scroll down to: "Clinical Question Submission"***
-

STS National Database Facts

By Lauracyn Mayfield

HIPAA Update:

At the February Data Managers' Meeting, The Society of Thoracic Surgeons publicly released a draft version of the proposed Standard Form Business Associate Contract and Data Use Agreement. The purpose of the document, dated January 14, 2003, is to help sites ensure that their continued submission of data to the STS National Database complies with the Department of Health and Human Services' Final Privacy Rule governing the use and disclosure of Protected (patient) Health Information under the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

The Standard Form Business Associate Contract and Data Use Agreement was e-mailed to all primary data and file contacts on February 26th. Included in the e-mail was a letter asking each Database Participant to review the Standard Form Agreement and provide written comment to the Society. Comments have been received, and are currently being reviewed by the STS. A final document will be sent to participant sites for execution in the near future. If you would like to review the letter and/or the Standard Form Agreement, please visit our Web site <http://www.sts.org> and click Database – Data Managers Section -HIPAA.

Participation Fee for the Adult Cardiac Database:

Invoices for 2003 were mailed to all active participants on December 20, 2002, with a pay date of January 31, 2003. If you have not submitted payment, please do so soon. Past due invoices will be mailed in April.

Let's Keep our Contacts Current

If there has been a change in personnel at your organization, a new surgeon is on board or another surgeon has left, please contact Lauracyn Mayfield via e-mail at lmayfield@sts.org and request a contact edit form. This is the most efficient and effective way of updating your site's information. Thank you!

Delaware Valley Society of Thoracic Surgeons' Quality Improvement Initiative: A Regional Effort

By Katherine Cornelius, BSN, RN and Mary Ann Wertan, RN

Cardiothoracic Surgeons and STS Data Managers from Southeastern Pennsylvania and surrounding communities, including Harrisburg, Reading, Allentown, and Bethlehem as well as Delaware and South Jersey, have voluntarily come together to participate in the Delaware Valley Society of Thoracic Surgeons Quality Improvement Initiative (DV STS QII). The goal of the DV STS QII is to improve the quality and efficiency of cardiac surgery in the Delaware Valley region by utilizing the participants' STS clinical data for quality improvement.

The initiative was spearheaded initially by Francis P. Sutter, D.O., of Lankenau Hospital, Main Line Health System, Robert S. Boova, M.D., of Bryn Mawr Hospital, Main Line Health System, and Timothy J. Gardner, M.D., of the University of Pennsylvania Health System. The Delaware Valley effort has been modeled on the experiences and methods used by the Minnesota STS Group as well as the Northern New England Cardiovascular Disease Study Group.

The first meetings of the DV STS QII in 1998 and 1999 focused on recruiting the area's surgeons in the organization and planning the initiative. The initial

guest speakers included Kit Arom, M.D. William Nugent, M.D. and Robert Repogle, M.D., who addressed the goals and methods of successful regional quality improvement and peer review efforts elsewhere.

The STS data managers, the key individuals involved in data acquisition, data input and accurate interpretation of data definitions, and data integrity for outcomes reporting, attend and actively participate in the meetings.

Other speakers, both regional consultants and national speakers, including Delos M. Cosgrove, M.D. and Cary W. Akins, M.D. have discussed specific clinical quality improvement goals such as stroke prevention, arrhythmia treatment, prevention and management of infection, and new surgical developments for reducing lengths of stay and improving surgical outcomes.

At the Fall 2002 meeting, T. Bruce Ferguson, Chair of the STS Council on Quality Assurance and Patient Advo-

cacy, discussed current quality of care, process analysis, and benchmarking practices used in the Agency for Health Quality Research-funded projects by STS members. Dr. Ferguson also assisted in leading the first blinded review of the DV STS QII regional STS harvest data.

The STS Data Managers, the key individuals involved in data acquisition, data input and accurate interpretation of data definitions, and data integrity for outcomes reporting, attend and actively participate in the meetings. The STS 2002 Spring harvest led way to the first DV STS QII Regional review, involving seven participating institutions.

In the initial data review, various postoperative complications were examined and the institution-specific but blinded trends were discussed, with each participating institution aware of its own outcomes. The complications reviewed included postoperative stroke, sternal wound infection, atrial fibrillation, prolonged ventilation and risk adjusted mortality.

The goal of the upcoming meeting will be to focus on the five identified outcomes and five policies or procedures that each "best trends" institution has instituted to achieve their decreasing complication rates. Data Managers will meet to review the STS National Database data definitions for the five identified complications. The Data Managers will further focus on

postoperative stroke and present a "questionable" postoperative stroke patient for review.

Participation in the Delaware Valley regional effort has grown from 7 to 9 institutions as of March, 2003. The success of the DV STS QII is a direct result of the time, commitment, and trust of all participating physicians and Data Managers. Although institutional data harvested for the Delaware Valley effort and regional reports maintain anonymity, a cohort of members open to discussion and dissection of processes has allowed the initiative to move forward. Studies have proven that sharing results improves outcomes for cardiac surgical patients; a goal to which the Delaware Valley Society of Thoracic Surgeons is committed.



**THE SOCIETY OF THORACIC SURGEONS**633 N. Saint Clair Street, Suite 2320, Chicago, IL, 60611-3658
Phone: 312.202.5800 Fax: 312.202.5801 E-mail: sts@sts.org*President*ROBERT A. GUYTON
robert_guyton@emoryhealthcare.org*Chair, Congenital Heart Surgery Task Force*
MARSHALL L. JACOBS*First Vice President*PETER C. PAIROLERO
pairolero.peter@mayo.edu*Chair, General Thoracic Surgery Database Task Force*
DAVID H. HARPOLE, JR.*Second Vice President*SIDNEY LEVITSKY
slevitsk@caregroup.harvard.edu*Chairs, Marketing/Participant Relations & Regional Development Task Force*
LAWRENCE I. BONCHEK
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gmurray@hsc.wvu.edu*Chair, Access and Publications Task Force*
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dmathisen@partners.org*Chair, International Relations Task Force*
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JOHN D. MITCHELL*Immediate Past President*WILLIAM A. BAUMGARTNER
wbaumgar@csurg.jhmi.edu*Director of Quality Research and Development*
MARY C. EIKEN
meiken@sts.org*Executive Director & General Counsel*ROBERT A. WYNBRANDT
rwybrandt@sts.org*Clinical Nurse Manager*
BARBARA A. GARREN, RN, MI
bgarren@sts.org*Chair, Council on Quality Assurance & Patient Safety*T. BRUCE FERGUSON, JR.
tbruceferg732@pol.net*Coordinator of Quality Research and Development*
LAURACYN B. MAYFIELD
lmayfield@sts.org*Chair, Workforce on National Databases*FREDERICK L. GROVER
Frederick.Grover@uchsc.edu*Coordinator of Quality Research and Development*
MEGHAN E. CAREY
mcarey@sts.org**STS Congenital Heart Surgery Database Update
(continued from page 1)**

used congenital heart surgery database have been attempted by various groups over the past two decades. Wide acceptance of a single system has been hampered by a number of problems including lack of consensus among surgeons regarding nomenclature, concurrent development at a number of institutions, and rapidly changing technology.

The International Congenital Heart Surgery Nomenclature and STS Congenital Database Project, composed of members from The Society of Thoracic Surgeons (STS), the European Association of Cardiothoracic Surgeons (EACTS), and the European Congenital Heart Surgeons Foundation (ECHSF), was formed in 1997 to address the inherent roadblocks to international participation in such an endeavor. In the past five years, dramatic steps have been taken to consolidate efforts and move towards an international reporting system. The committee initially focused on development and definition of a standardized nomenclature that would be accepted by the worldwide congenital heart surgery community. A minimum data set was developed consisting of 23 mandatory and 12 optional data entry fields. The minimum data set is a series of five short lists consisting of: (1) non-cardiac abnormalities, (2) general preoperative risk factors, (3) diagnoses, (4) procedures, and (5) complications. The lists are available for downloading at the various Society Web sites, along with detailed information about committee members and ongoing projects.

Among the proposed suggestions for improving information sharing are regular meetings in conjunction with the Adult Cardiac Data Managers Meetings and a chat room on CTSNet. If you have any questions, comments, or suggestions please contact Barbara Garren at bgarren@sts.org and title the subject line, Congenital DB Suggestions.

REGISTER NOW for the 2003 STS Spring Coding Workshop!!!***THE SOCIETY OF THORACIC SURGEONS
2003 SPRING CODING WORKSHOP**April 4-5, 2003
Austin, TX**Marriott at The Capitol • 701 East 11th Street •
Austin, TX 78701 • 800-228-9290 or 512-478-1111**

The STS Spring Coding Workshop will be held April 4-5, 2003, in Austin, Texas, at the Marriott at the Capitol. This workshop will consist of up-to-date information regarding *CT Coding, Compliance and Practice Management* strategies for the physician's practice.

For more information, please see www.sts.org or contact Carolyn Majors at cmajors@sts.org.

*Registration form enclosed.

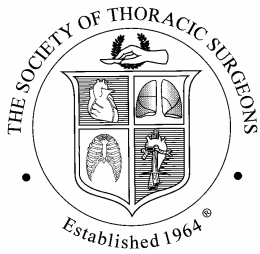
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**THE SOCIETY OF THORACIC SURGEONS
SPRING CODING WORKSHOP 2003
REGISTRATION FORM**

April 4-5, 2003

Austin, TX

MAIL FORM WITH CHECK:

The Society of Thoracic Surgeons
PO BOX 809308
Chicago, IL 60680-9380

or

FAX FORM & CREDIT CARD INFORMATION:

The Society of Thoracic Surgeons
Attn: Carolyn Majors
Fax: (312)-202-5801

Make check payable to: The Society of Thoracic Surgeons

REGISTRANT INFORMATION: (Please print)

First Name **Last Name** **Degree**

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REGISTRATION FEE: (Please check the appropriate box below)

\$375 per person for STS members and their employees

****Staff members please designate the STS surgeon(s) you work for: _____**

\$550 per person for individuals not associated with an STS Member

PAYMENT INFORMATION:

Check One: Check Visa MasterCard American Express **Amount \$** _____

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MEETING REGISTRATION: A \$50 administrative fee will be charged for cancellations. No refunds will be given.

HOTEL ARRANGEMENTS: A block of rooms for seminar attendees has been reserved on a first-come, first-serve basis at the Marriott at The Capitol in Austin, Texas, 701 East 11th Street, Austin, TX. To make your reservations, please call the hotel directly and reference The Society of Thoracic Surgeons Coding Workshop. The number is: 800-228-9290 or 512-478-1111 (local). Participants are encouraged to register early as space is limited.