STS Congenital Heart Surgery Database Data Specifications

Version 3.22

This document current as of: Friday, May 24, 2013

Note: **- ALL fields defined in these specifications with "Core: Yes" are to be collected by all sites.**

- A Data Collection Form must be created for each operation.

- Fields indicated with a gray background are no longer being collected.

Long Name: Participant ID *SeqNo:* 10

Short Name: **ParticID** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName Operations

Definition: Participant ID is a unique number assigned to each database participant by the STS. A database participant is defined as one entity that signs a Participation Agreement with the STS, submits one data file to the harvest, and gets back one report on their data. The participant ID must be entered into each record.
Each participant's data, if submitted to harvest, must be in one data file. If one participant keeps their data in more than one file (e.g., at two sites), then the participant must combine them back into one file for harvest submission.
If two or more participants share a single purchased software, and enter cases into one database, then the data must be extracted into two different files, one for each participant ID, with each record having the correct participant ID number.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 5

ParentValue: *Data Source:* User or Automatic

ParentHarvestCodes:

Long Name: STS Data Version *SeqNo:* 20

Short Name: **DataVrsn** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName Operations

Definition: Version number of the STS Data Specifications/Dictionary, to which each record conforms. It will identify which fields should have data, and what are the valid data for each field. This must be entered into the record automatically by the software at the time the record is created.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 8

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: On-Demand Files Version Number *SeqNo:* 30

Short Name: **OnDemandVrsn** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName Operations

Definition: The version number of the On-Demand lists in use at the time this data record was created or edited. The value is inserted into the record at the time the record is created or is modified by the user. The version numbers will be specified by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Software Vendor Identifier *SeqNo:* 40

Short Name: **VendorID** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName Operations

Definition: Identifying code (assigned by STS) given to identify software vendor (up to 8 characters). Vendors should use standard name identification across sites. Changes to Software Vendor Identifier must be approved by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 8

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Software Version *SeqNo:* 50

Short Name: **SoftVrsn** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName Operations

Definition: Vendor's software product name and version number identifying the software which created this record. Vendor controls the value in this field.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 20

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Operation Table Record Identifier *SeqNo:* 60

Short Name: **OperationID** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName Operations

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. The value of the identifier is a combination of a code assigned to the software developer by the STS, and a value generated by the software to create a unique value. Once assigned to a record, this number can never be changed or reused. The data warehouse will use this value to communicate issues about individual records with the participant. This field is the primary key that links this record with the associated records in the Diagnosis, Risk Factors, Preoperative Factors, Procedures, Complications, Anesthesia Adverse Events, Preoperative Medications, Intraoperative Pharmacology, and ICU Pharmacology tables.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Operations Link to Demographics Table *SeqNo:* 70

Short Name: **PatID** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName Operations

Definition: An arbitrary, unique value generated by the software that permanently identifies each patient demographic record in the participant's database. This field is the foreign key that links this record with the associated record in the Demographics table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: STS Trial Link Number *SeqNo:* 80

Short Name: **STSTLink** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName Operations

Definition: The unique identification number assigned by the STS indicating the clinical trial in which this patient is participating. This field should be left blank if the patient is not participating in a clinical trial associated with the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Demographics Table Patient Identifier *SeqNo:* 90

Short Name: **PatID** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: An arbitrary value (not a recognizable ID like Social Security Number or Medical Record Number) that uniquely and permanently identifies each patient. The value of the identifier is a combination of a code assigned to the software developer by the STS, and a value generated by the software to create a unique value. Once assigned to a patient, this can never be changed or reused.

This field is the primary key that links this demographics record with the associated records in the Non-Cardiac Abnormalities, Noncardiac Congenital Anatomic Abnormalities, Chromosomal Abnormalities, and Syndromes tables.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Demographics Table Data Version *SeqNo:* 100

Short Name: **DemogDataVrsn** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Version number of the STS Data Specifications/Dictionary, to which this Demographics record conforms as assigned by the software. This value will determine which fields should have data and what are the valid data for each field. This must be entered into the record automatically by the software at the time the record is created. See Software Specifications document for description of how this value can be modified after the record was created.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Patient National Identification (Social Security Number) *SeqNo:* 110

Short Name: **PatNationalID** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the patient's Social Security Number (SSN). Although this is the Social Security Number in the USA, other countries may have a different National Patient Identifier Number. For example in Canada, this would be the Social Insurance Number.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Medical Record Number *SeqNo:* 120

Short Name: **MedRecN** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the patient's medical record number at the hospital where surgery occurred.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 25

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Health Insurance Claim Number *SeqNo:* 130

Short Name: **HICNumber** *Core:* No

Section Name: Demographics *Harvest:* No

DBTableName Demographics

Definition: Indicate the Health Insurance Claim (HIC) number of the primary beneficiary. The HIC number consists of the Social Security number and an alpha-numeric identifier (usually one digit but may be two digits). It is the number found on a patient's Medicare card.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 11

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Patient Last Name *SeqNo:* 140

Short Name: **PatLName** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the patient's last name documented in the medical record.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 50

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Patient First Name *SeqNo:* 150

Short Name: **PatFName** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the patient's first name documented in the medical record.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 50

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Patient Middle Initial *SeqNo:* 160

Short Name: **PatMInit** *Core:* No

Section Name: Demographics *Harvest:* No

DBTableName Demographics

Definition: Indicate the patient's middle initial documented in the medical record. Leave "blank" if no middle name.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 1

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Patient Middle Name *SeqNo:* 170

Short Name: **PatMName** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the patient's middle name or middle initial as documented in the medical record. Leave "blank" if no middle name.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 50

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Patient's Region *SeqNo:* 180

Short Name: **PatRegion** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the region of the country (i.e., state or province) in which the patient permanently resides at time of admission.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 50

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Patient's Postal Code *SeqNo:* 190

Short Name: **PatPostalCode** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the ZIP Code of the patient's residence. Outside the USA, this data may be known by other names such as Postal Code.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 20

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Patient's Country *SeqNo:* 200

Short Name: PatCountry *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the patient's country of permanent residence at time of admission.

Previous STS Database country list updated to include all new countries listed in the latest list of countries provided by the United Nations, which is the following list:
United Nations Statistics Division, 15 April 2009
(http://unstats.un.org/unsd/methods/m49/m49alpha.htm)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
AFG	AFGHANISTAN
ALA	ÅLAND ISLANDS
ALB	ALBANIA
DZA	ALGERIA
ASM	AMERICAN SAMOA
AND	ANDORRA
AGO	ANGOLA
AIA	ANGUILLA
ATG	ANTIGUA AND BARBUDA
ARG	ARGENTINA
ARM	ARMENIA
ABW	ARUBA
AUS	AUSTRALIA
AUT	AUSTRIA
AZE	AZERBAIJAN
BHS	BAHAMAS
BHR	BAHRAIN
BGD	BANGLADESH
BRB	BARBADOS
BLR	BELARUS

BEL	BELGIUM
BLZ	BELIZE
BEN	BENIN
BMU	BERMUDA
BTN	BHUTAN
BOL	BOLIVIA (PLURINATIONAL STATE OF)
BES	BONAIRE, SAINT EUSTATIUS AND SABA
BIH	BOSNIA AND HERZEGOVINA
BWA	BOTSWANA
BRA	BRAZIL
VGB	BRITISH VIRGIN ISLANDS
BRN	BRUNEI DARUSSALAM
BGR	BULGARIA
BFA	BURKINA FASO
BDI	BURUNDI
KHM	CAMBODIA
CMR	CAMEROON
CAN	CANADA
CPV	CAPE VERDE
CYM	CAYMAN ISLANDS
CAF	CENTRAL AFRICAN REPUBLIC
TCD	CHAD
CHL	CHILE
CHN	CHINA
COL	COLOMBIA
COM	COMOROS
COG	CONGO
COK	COOK ISLANDS
CRI	COSTA RICA
CIV	CÔTE D'IVOIRE
HRV	CROATIA
CUB	CUBA
CUW	CURAÇAO
CYP	CYPRUS

CZE	CZECH REPUBLIC
PRK	DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
COD	DEMOCRATIC REPUBLIC OF THE CONGO
DNK	DENMARK
DJI	DJIBOUTI
DMA	DOMINICA
DOM	DOMINICAN REPUBLIC
ECU	ECUADOR
EGY	EGYPT
SLV	EL SALVADOR
GNQ	EQUATORIAL GUINEA
ERI	ERITREA
EST	ESTONIA
ETH	ETHIOPIA
FRO	FAEROE ISLANDS
FLK	FALKLAND ISLANDS (MALVINAS)
FJI	FIJI
FIN	FINLAND
FRA	FRANCE
GUF	FRENCH GUIANA
PYF	FRENCH POLYNESIA
GAB	GABON
GMB	GAMBIA
GEO	GEORGIA
DEU	GERMANY
GHA	GHANA
GIB	GIBRALTAR
GRC	GREECE
GRL	GREENLAND
GRD	GRENADA
GLP	GUADELOUPE
GUM	GUAM
GTM	GUATEMALA
GGY	GUERNSEY
GIN	GUINEA
GNB	GUINEA-BISSAU

GUY	GUYANA
HTI	HAITI
VAT	HOLY SEE
HND	HONDURAS
HKG	CHINA, HONG KONG SPECIAL ADMINISTRATIVE REGION
HUN	HUNGARY
ISL	ICELAND
IND	INDIA
IDN	INDONESIA
IRN	IRAN (ISLAMIC REPUBLIC OF)
IRQ	IRAQ
IRL	IRELAND
IMN	ISLE OF MAN
ISR	ISRAEL
ITA	ITALY
JAM	JAMAICA
JPN	JAPAN
JEY	JERSEY
JOR	JORDAN
KAZ	KAZAKHSTAN
KEN	KENYA
KIR	KIRIBATI
KWT	KUWAIT
KGZ	KYRGYZSTAN
LAO	LAO PEOPLE'S DEMOCRATIC REPUBLIC
LVA	LATVIA
LBN	LEBANON
LSO	LESOTHO
LBR	LIBERIA
LBY	LIBYA
LIE	LIECHTENSTEIN
LTU	LITHUANIA
LUX	LUXEMBOURG
MAC	CHINA, MACAO SPECIAL ADMINISTRATIVE

	REGION
MDG	MADAGASCAR
MWI	MALAWI
MYS	MALAYSIA
MDV	MALDIVES
MLI	MALI
MLT	MALTA
MHL	MARSHALL ISLANDS
MTQ	MARTINIQUE
MRT	MAURITANIA
MUS	MAURITIUS
MYT	MAYOTTE
MEX	MEXICO
FSM	MICRONESIA (FEDERATED STATES OF)
MCO	MONACO
MNG	MONGOLIA
MNE	MONTENEGRO
MSR	MONTSERRAT
MAR	MOROCCO
MOZ	MOZAMBIQUE
MMR	MYANMAR
NAM	NAMIBIA
NRU	NAURU
NPL	NEPAL
NLD	NETHERLANDS
NCL	NEW CALEDONIA
NZL	NEW ZEALAND
NIC	NICARAGUA
NER	NIGER
NGA	NIGERIA
NIU	NIUE
NFK	NORFOLK ISLAND
MNP	NORTHERN MARIANA ISLANDS
NOR	NORWAY
PSE	OCCUPIED PALESTINIAN TERRITORY
OMN	OMAN

PAK	PAKISTAN
PLW	PALAU
PAN	PANAMA
PNG	PAPUA NEW GUINEA
PRY	PARAGUAY
PER	PERU
PHL	PHILIPPINES
PCN	PITCAIRN
POL	POLAND
PRT	PORTUGAL
PRI	PUERTO RICO
QAT	QATAR
KOR	REPUBLIC OF KOREA
MDA	REPUBLIC OF MOLDOVA
REU	RÉUNION
ROU	ROMANIA
RUS	RUSSIAN FEDERATION
RWA	RWANDA
SHN	SAINT HELENA
KNA	SAINT KITTS AND NEVIS
LCA	SAINT LUCIA
SPM	SAINT PIERRE AND MIQUELON
VCT	SAINT VINCENT AND THE GRENADINES
BLM	SAINT-BARTHÉLEMY
MAF	SAINT-MARTIN (FRENCH PART)
WSM	SAMOA
SMR	SAN MARINO
STP	SAO TOME AND PRINCIPE
SAU	SAUDI ARABIA
SEN	SENEGAL
SRB	SERBIA
SYC	SEYCHELLES
SLE	SIERRA LEONE
SGP	SINGAPORE
SXM	SINT MAARTEN (DUTCH PART)

SVK	SLOVAKIA
SVN	SLOVENIA
SLB	SOLOMON ISLANDS
SOM	SOMALIA
ZAF	SOUTH AFRICA
SSD	SOUTH SUDAN
ESP	SPAIN
LKA	SRI LANKA
SDN	SUDAN
SUR	SURINAME
SJM	SVALBARD AND JAN MAYEN ISLANDS
SWZ	SWAZILAND
SWE	SWEDEN
CHE	SWITZERLAND
SYR	SYRIAN ARAB REPUBLIC
TJK	TAJIKISTAN
THA	THAILAND
MKD	THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
TLS	TIMOR-LESTE
TGO	TOGO
TKL	TOKELAU
TON	TONGA
TTO	TRINIDAD AND TOBAGO
TUN	TUNISIA
TUR	TURKEY
TKM	TURKMENISTAN
TCA	TURKS AND CAICOS ISLANDS
TUV	TUVALU
UGA	UGANDA
UKR	UKRAINE
ARE	UNITED ARAB EMIRATES
GBR	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
TZA	UNITED REPUBLIC OF TANZANIA

USA	UNITED STATES OF AMERICA
VIR	UNITED STATES VIRGIN ISLANDS
URY	URUGUAY
UZB	UZBEKISTAN
VUT	VANUATU
VEN	VENEZUELA (BOLIVARIAN REPUBLIC OF)
VNM	VIET NAM
WLF	WALLIS AND FUTUNA ISLANDS
ESH	WESTERN SAHARA
YEM	YEMEN
ZMB	ZAMBIA
ZWE	ZIMBABWE
OTH	Other

Long Name: City of Birth *SeqNo:* 210

Short Name: **BirthCit** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the city in which the patient was born.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Birth Region *SeqNo:* 220

Short Name: **BirthSta** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the region of the country (i.e., state or province) in which the patient was born.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 50

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Country of Birth *SeqNo:* 230

Short Name: **BirthCou** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the country in which patient was born.

Source: United Nations Statistics Division, 15 April 2009
(http://unstats.un.org/unsd/methods/m49/m49alpha.htm)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
AFG	AFGHANISTAN
ALA	ÅLAND ISLANDS
ALB	ALBANIA
DZA	ALGERIA
ASM	AMERICAN SAMOA
AND	ANDORRA
AGO	ANGOLA
AIA	ANGUILLA
ATG	ANTIGUA AND BARBUDA

ARG	ARGENTINA
ARM	ARMENIA
ABW	ARUBA
AUS	AUSTRALIA
AUT	AUSTRIA
AZE	AZERBAIJAN
BHS	BAHAMAS
BHR	BAHRAIN
BGD	BANGLADESH
BRB	BARBADOS
BLR	BELARUS
BEL	BELGIUM
BLZ	BELIZE
BEN	BENIN
BMU	BERMUDA
BTN	BHUTAN
BOL	BOLIVIA (PLURINATIONAL STATE OF)
BES	BONAIRE, SAINT EUSTATIUS AND SABA
BIH	BOSNIA AND HERZEGOVINA
BWA	BOTSWANA
BRA	BRAZIL
VGB	BRITISH VIRGIN ISLANDS
BRN	BRUNEI DARUSSALAM
BGR	BULGARIA
BFA	BURKINA FASO
BDI	BURUNDI
KHM	CAMBODIA
CMR	CAMEROON
CAN	CANADA
CPV	CAPE VERDE
CYM	CAYMAN ISLANDS
CAF	CENTRAL AFRICAN REPUBLIC
TCD	CHAD
CHL	CHILE

CHN	CHINA
COL	COLOMBIA
COM	COMOROS
COG	CONGO
COK	COOK ISLANDS
CRI	COSTA RICA
CIV	CÔTE D'IVOIRE
HRV	CROATIA
CUB	CUBA
CUW	CURAÇAO
CYP	CYPRUS
CZE	CZECH REPUBLIC
PRK	DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
COD	DEMOCRATIC REPUBLIC OF THE CONGO
DNK	DENMARK
DJI	DJIBOUTI
DMA	DOMINICA
DOM	DOMINICAN REPUBLIC
ECU	ECUADOR
EGY	EGYPT
SLV	EL SALVADOR
GNQ	EQUATORIAL GUINEA
ERI	ERITREA
EST	ESTONIA
ETH	ETHIOPIA
FRO	FAEROE ISLANDS
FLK	FALKLAND ISLANDS (MALVINAS)
FJI	FIJI
FIN	FINLAND
FRA	FRANCE
GUF	FRENCH GUIANA
PYF	FRENCH POLYNESIA
GAB	GABON
GMB	GAMBIA
GEO	GEORGIA
DEU	GERMANY

GHA	GHANA
GIB	GIBRALTAR
GRC	GREECE
GRL	GREENLAND
GRD	GRENADA
GLP	GUADELOUPE
GUM	GUAM
GTM	GUATEMALA
GGY	GUERNSEY
GIN	GUINEA
GNB	GUINEA-BISSAU
GUY	GUYANA
HTI	HAITI
VAT	HOLY SEE
HND	HONDURAS
HKG	CHINA, HONG KONG SPECIAL ADMINISTRATIVE REGION
HUN	HUNGARY
ISL	ICELAND
IND	INDIA
IDN	INDONESIA
IRN	IRAN (ISLAMIC REPUBLIC OF)
IRQ	IRAQ
IRL	IRELAND
IMN	ISLE OF MAN
ISR	ISRAEL
ITA	ITALY
JAM	JAMAICA
JPN	JAPAN
JEY	JERSEY
JOR	JORDAN
KAZ	KAZAKHSTAN
KEN	KENYA
KIR	KIRIBATI
KWT	KUWAIT
KGZ	KYRGYZSTAN

LAO	LAO PEOPLE'S DEMOCRATIC REPUBLIC
LVA	LATVIA
LBN	LEBANON
LSO	LESOTHO
LBR	LIBERIA
LBY	LIBYA
LIE	LIECHTENSTEIN
LTU	LITHUANIA
LUX	LUXEMBOURG
MAC	CHINA, MACAO SPECIAL ADMINISTRATIVE REGION
MDG	MADAGASCAR
MWI	MALAWI
MYS	MALAYSIA
MDV	MALDIVES
MLI	MALI
MLT	MALTA
MHL	MARSHALL ISLANDS
MTQ	MARTINIQUE
MRT	MAURITANIA
MUS	MAURITIUS
MYT	MAYOTTE
MEX	MEXICO
FSM	MICRONESIA (FEDERATED STATES OF)
MCO	MONACO
MNG	MONGOLIA
MNE	MONTENEGRO
MSR	MONTSERRAT
MAR	MOROCCO
MOZ	MOZAMBIQUE
MMR	MYANMAR
NAM	NAMIBIA
NRU	NAURU
NPL	NEPAL
NLD	NETHERLANDS
NCL	NEW CALEDONIA

NZL	NEW ZEALAND
NIC	NICARAGUA
NER	NIGER
NGA	NIGERIA
NIU	NIUE
NFK	NORFOLK ISLAND
MNP	NORTHERN MARIANA ISLANDS
NOR	NORWAY
PSE	OCCUPIED PALESTINIAN TERRITORY
OMN	OMAN
PAK	PAKISTAN
PLW	PALAU
PAN	PANAMA
PNG	PAPUA NEW GUINEA
PRY	PARAGUAY
PER	PERU
PHL	PHILIPPINES
PCN	PITCAIRN
POL	POLAND
PRT	PORTUGAL
PRI	PUERTO RICO
QAT	QATAR
KOR	REPUBLIC OF KOREA
MDA	REPUBLIC OF MOLDOVA
REU	RÉUNION
ROU	ROMANIA
RUS	RUSSIAN FEDERATION
RWA	RWANDA
SHN	SAINT HELENA
KNA	SAINT KITTS AND NEVIS
LCA	SAINT LUCIA
SPM	SAINT PIERRE AND MIQUELON
VCT	SAINT VINCENT AND THE GRENADINES
BLM	SAINT-BARTHÉLEMY
MAF	SAINT-MARTIN (FRENCH

	PART)
WSM	SAMOA
SMR	SAN MARINO
STP	SAO TOME AND PRINCIPE
SAU	SAUDI ARABIA
SEN	SENEGAL
SRB	SERBIA
SYC	SEYCHELLES
SLE	SIERRA LEONE
SGP	SINGAPORE
SXM	SINT MAARTEN (DUTCH PART)
SVK	SLOVAKIA
SVN	SLOVENIA
SLB	SOLOMON ISLANDS
SOM	SOMALIA
ZAF	SOUTH AFRICA
SSD	SOUTH SUDAN
ESP	SPAIN
LKA	SRI LANKA
SDN	SUDAN
SUR	SURINAME
SJM	SVALBARD AND JAN MAYEN ISLANDS
SWZ	SWAZILAND
SWE	SWEDEN
CHE	SWITZERLAND
SYR	SYRIAN ARAB REPUBLIC
TJK	TAJIKISTAN
THA	THAILAND
MKD	THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
TLS	TIMOR-LESTE
TGO	TOGO
TKL	TOKELAU
TON	TONGA
TTO	TRINIDAD AND TOBAGO
TUN	TUNISIA

TUR	TURKEY
TKM	TURKMENISTAN
TCA	TURKS AND CAICOS ISLANDS
TUV	TUVALU
UGA	UGANDA
UKR	UKRAINE
ARE	UNITED ARAB EMIRATES
GBR	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
TZA	UNITED REPUBLIC OF TANZANIA
USA	UNITED STATES OF AMERICA
VIR	UNITED STATES VIRGIN ISLANDS
URY	URUGUAY
UZB	UZBEKISTAN
VUT	VANUATU
VEN	VENEZUELA (BOLIVARIAN REPUBLIC OF)
VNM	VIET NAM
WLF	WALLIS AND FUTUNA ISLANDS
ESH	WESTERN SAHARA
YEM	YEMEN
ZMB	ZAMBIA
ZWE	ZIMBABWE
OTH	Other

Long Name: Mother's Name Known *SeqNo:* 240

Short Name: **MatNameKnown** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the name of patient's biological mother at time of patient's birth is known. If the patient is adopted and the name of the patient's biological mother is not known, indicate whether the name of the patient's adopted mother is known.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Mother's Last Name *SeqNo:* 250

Short Name: **MatLName** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the last name of patient's biological mother at time of patient's birth, if it is known.

If the patient is adopted, if the last name of the patient's biological mother is known, please enter the last initial of the patient's biological mother.

If the patient is adopted, if the last name of the patient's biological mother is not known, please enter the last name of the patient's adopted mother.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mother's Name Known *Format:* Text

ParentShortName: MatNameKnown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Mother's First Name *SeqNo:* 260

Short Name: **MatFName** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the first name of patient's biological mother at time of patient's birth, if it is known.

If the patient is adopted, if the first name of the patient's biological mother is known, please enter the first name of the patient's biological mother.

If the patient is adopted, if the first name of the patient's biological mother is not known, please enter the first name of the patient's adopted mother.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mother's Name Known *Format:* Text

ParentShortName: MatNameKnown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Mother's Middle Initial *SeqNo:* 270

Short Name: **MatMInit** *Core:* No

Section Name: Demographics *Harvest:* No

DBTableName Demographics

Definition: Indicate the middle initial of patient's biological mother at time of patient's birth, if it is known.

If the patient is adopted, if the middle initial of the patient's biological mother is known, please enter the middle initial of the patient's biological mother.

If the patient is adopted, if the middle initial of the patient's biological mother is not known, please enter the middle initial of the patient's adopted mother.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Mother's Middle Name *SeqNo:* 280

Short Name: **MatMName** *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the middle name of patient's biological mother at time of patient's birth, if it is known.

If the patient is adopted, if the middle name of the patient's biological mother is known, please enter the middle name of the patient's biological mother.

If the patient is adopted, if the middle name of the patient's biological mother is not known, please enter the middle name of the patient's adopted mother.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mother's Name Known *Format:* Text

ParentShortName: MatNameKnown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Mother's National Identification (Social Security Number) Known *SeqNo:* 290

Short Name: **MatSSNKnown** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the Social Security Number (SSN) of patient's biological mother at time of patient's birth is known.

If the patient is adopted and the SSN of the patient's biological mother is not known, please indicate whether the SSN of the patient's adopted mother is known.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Yes	The mother's national identification number (such as Social Security Number) is known and will be collected.

2	No	The mother's national identification number (such as Social Security Number) is not known and will be not collected.
3	Refused	Patient chose not to provide this information.

Long Name: Mother's National Identification (Social Security Number) *SeqNo:* 300

Short Name: MatSSN *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the Social Security Number (SSN) of patient's biological mother at time of patient's birth, if it is known. Although this is the SSN in the USA, other countries may have a different National Patient Identifier Number. For example in Canada, this would be the Social Insurance Number.

If the patient is adopted, if the SSN of the patient's biological mother is known, please enter the SSN of the patient's biological mother.

If the patient is adopted, if the SSN of the patient's biological mother is not known, please enter the SSN of the patient's adopted mother.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mother's National Identification (Social Security Number) Known *Format:* Text

ParentShortName: MatSSNKnown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Date of Birth *SeqNo:* 310

Short Name: DOB *Core:* Yes

Section Name: Demographics *Harvest:* Optional

DBTableName Demographics

Definition: Indicate the patient's date of birth using 4-digit format for year. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date - mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Birth Weight Known *SeqNo:* 320

Short Name: **BirthWtKnown** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient's birth weight is known.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Birth Weight *SeqNo:* 330

Short Name: **BirthWtKg** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the weight in kilograms of the patient at birth.

LowValue: 0.100 *UsualRangeLow:*

HighValue: 10.000 *UsualRangeHigh:*

Parent Long Name: Birth Weight Known *Format:* Real, at least 3 decimal places

ParentShortName: BirthWtKnown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Gender *SeqNo:* 340

Short Name: **Gender** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the patient's gender at birth as male, female or ambiguous.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Male
2	Female
3	Ambiguous

Long Name: Premature Birth *SeqNo:* 350

Short Name: **Premature** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient was born prematurely as defined by a gestational period of less than 37 weeks.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name: Gestational Age At Birth Known *SeqNo:* 360

Short Name: **GestAgeKnown** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient's gestational age at birth is known.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Gestational Age At Birth In Weeks *SeqNo:* 370

Short Name: **GestAgeWeeks** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the patient's estimated gestational age at birth in weeks. This field is a required field for neonates and infants and is an optional field for children and adults.

LowValue: 16 *UsualRangeLow:*

HighValue: 44 *UsualRangeHigh:*

Parent Long Name: Gestational Age At Birth Known *Format:* Integer

ParentShortName: GestAgeKnown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Multiple Gestation *SeqNo:* 380

Short Name: **MultGest** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient was part of a multiple gestation, such as twins or triplets.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name: Antenatal Diagnosis of Congenital Heart Disease *SeqNo:* 381

Short Name: **AntenatalDiag** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether a cardiac anomaly was diagnosed antenatally (e.g., fetal ultrasound).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No
3	Unknown

Long Name: Fundamental Diagnosis *SeqNo:* 382

Short Name: **FundDiagnosis** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: The fundamental diagnosis is a diagnosis that is carried with a patient throughout life, through all operations and hospitalizations. The fundamental diagnosis is the most complex cardiac anomaly or condition (congenital or acquired) of the patient.

Most frequently, the primary diagnosis will also be the fundamental diagnosis. For some operations, however, the fundamental diagnosis and primary diagnosis will be different.

For example, consider a child who underwent repair of subaortic stenosis, subsequently develops complete atrioventricular (AV) block, and undergoes pacemaker placement within the same hospitalization. The primary diagnosis for the pacemaker surgery is "Arrhythmia, Heart block, Acquired", while the fundamental diagnosis is "Aortic stenosis, Subvalvar".

Similarly, a patient who has a complete AV canal defect and undergoes either palliation or repair of the defect has a primary and fundamental diagnosis of "AVC (AVSD), Complete CAVSD". Subsequently, the child develops mitral insufficiency and is re-hospitalized for mitral valve replacement. The primary diagnosis for the mitral valve replacement operation is "Mitral regurgitation", but the fundamental diagnosis is "AVC (AVSD), Complete CAVSD."

The utilization of the fundamental diagnosis field, it is hoped, will clarify designation of a primary diagnosis, and enable greater specificity in the lesion specific report analyses.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
10	PFO
20	ASD, Secundum
30	ASD, Sinus venosus
40	ASD, Coronary sinus
50	ASD, Common atrium (single atrium)
71	VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular)
73	VSD, Type 2 (Perimembranous) (Paramembranous)

(Conoventricular)

75 VSD, Type 3 (Inlet) (AV canal type)

77 VSD, Type 4 (Muscular)

79 VSD, Type: Gerbode type (LV-RA communication)

80 VSD, Multiple

100 AVC (AVSD), Complete (CAVSD)

110 AVC (AVSD), Intermediate (transitional)

120 AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)

140 AP window (aortopulmonary window)

150 Pulmonary artery origin from ascending aorta (hemitruncus)

160 Truncus arteriosus

170 Truncal valve insufficiency

2010 Truncus arteriosus + Interrupted aortic arch

180 Partial anomalous pulmonary venous connection (PAPVC)

190 Partial anomalous pulmonary venous connection (PAPVC), scimitar

200 Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac)

210 Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)

220 Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac)

230 Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)

250 Cor triatriatum

260 Pulmonary venous stenosis

270 Systemic venous anomaly

280 Systemic venous obstruction

290 TOF

2140	TOF, Pulmonary stenosis
300	TOF, AVC (AVSD)
310	TOF, Absent pulmonary valve
320	Pulmonary atresia
330	Pulmonary atresia, IVS
340	Pulmonary atresia, VSD (Including TOF, PA)
350	Pulmonary atresia, VSD-MAPCA
360	MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD)
370	Ebstein's anomaly
380	Tricuspid regurgitation, non-Ebstein's related
390	Tricuspid stenosis
400	Tricuspid regurgitation and tricuspid stenosis
410	Tricuspid valve, Other
420	Pulmonary stenosis, Valvar
430	Pulmonary artery stenosis (hypoplasia), Main (trunk)
440	Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)
450	Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)
470	Pulmonary artery, Discontinuous
490	Pulmonary stenosis, Subvalvar
500	DCRV
510	Pulmonary valve, Other
530	Pulmonary insufficiency
540	Pulmonary insufficiency and pulmonary stenosis
550	Aortic stenosis, Subvalvar
560	Aortic stenosis, Valvar
570	Aortic stenosis, Supravalvar
590	Aortic valve atresia
600	Aortic insufficiency
610	Aortic insufficiency and

	aortic stenosis
620	Aortic valve, Other
630	Sinus of Valsalva aneurysm
640	LV to aorta tunnel
650	Mitral stenosis, Supravalvar mitral ring
660	Mitral stenosis, Valvar
670	Mitral stenosis, Subvalvar
680	Mitral stenosis, Subvalvar, Parachute
695	Mitral stenosis
700	Mitral regurgitation and mitral stenosis
710	Mitral regurgitation
720	Mitral valve, Other
730	Hypoplastic left heart syndrome (HLHS)
2080	Shone's syndrome
740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)
750	Cardiomyopathy, End-stage congenital heart disease
760	Pericardial effusion
770	Pericarditis
780	Pericardial disease, Other
790	Single ventricle, DILV
800	Single ventricle, DIRV
810	Single ventricle, Mitral atresia
820	Single ventricle, Tricuspid atresia
830	Single ventricle, Unbalanced AV canal
840	Single ventricle, Heterotaxia syndrome
850	Single ventricle, Other
851	Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)
870	Congenitally corrected TGA
872	Congenitally corrected TGA, IVS

874	Congenitally corrected TGA, IVS-LVOTO
876	Congenitally corrected TGA, VSD
878	Congenitally corrected TGA, VSD-LVOTO
880	TGA, IVS
890	TGA, IVS-LVOTO
900	TGA, VSD
910	TGA, VSD-LVOTO
930	DORV, VSD type
940	DORV, TOF type
950	DORV, TGA type
960	DORV, Remote VSD (uncommitted VSD)
2030	DORV + AVSD (AV Canal)
975	DORV, IVS
980	DOLV
990	Coarctation of aorta
1000	Aortic arch hypoplasia
92	VSD + Aortic arch hypoplasia
94	VSD + Coarctation of aorta
1010	Coronary artery anomaly, Anomalous aortic origin of coronary artery (AAOCA)
1020	Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)
1030	Coronary artery anomaly, Fistula
1040	Coronary artery anomaly, Aneurysm
1050	Coronary artery anomaly, Other
1070	Interrupted aortic arch
2020	Interrupted aortic arch + VSD
2000	Interrupted aortic arch + AP window (aortopulmonary window)
1080	Patent ductus arteriosus
1090	Vascular ring
1100	Pulmonary artery sling

1110	Aortic aneurysm (including pseudoaneurysm)
1120	Aortic dissection
1130	Lung disease, Benign
1140	Lung disease, Malignant
1160	Tracheal stenosis
1170	Airway disease
1430	Pleural disease, Benign
1440	Pleural disease, Malignant
1450	Pneumothorax
1460	Pleural effusion
1470	Chylothorax
1480	Empyema
1490	Esophageal disease, Benign
1500	Esophageal disease, Malignant
1505	Mediastinal disease
1510	Mediastinal disease, Benign
1520	Mediastinal disease, Malignant
1540	Diaphragm paralysis
1550	Diaphragm disease, Other
2160	Rib tumor, Benign
2170	Rib tumor, Malignant
2180	Rib tumor, Metastatic
2190	Sternal tumor, Benign
2200	Sternal tumor, Malignant
2210	Sternal tumor, Metastatic
2220	Pectus carinatum
2230	Pectus excavatum
2240	Thoracic outlet syndrome
1180	Arrhythmia
2040	Arrhythmia, Atrial
2050	Arrhythmia, Junctional
2060	Arrhythmia, Ventricular
1185	Arrhythmia, Heart block
1190	Arrhythmia, Heart block, Acquired
1200	Arrhythmia, Heart block, Congenital

1250	Aneurysm, Ventricular, Right (including pseudoaneurysm)
1260	Aneurysm, Ventricular, Left (including pseudoaneurysm)
1270	Aneurysm, Pulmonary artery
1280	Aneurysm, Other
1290	Hypoplastic RV
1300	Hypoplastic LV
1310	Mediastinitis
1320	Endocarditis
1340	Myocardial infarction
1350	Cardiac tumor
1360	Pulmonary AV fistula
1370	Pulmonary embolism
1385	Pulmonary vascular obstructive disease
1390	Pulmonary vascular obstructive disease (Eisenmenger's)
1400	Primary pulmonary hypertension
1410	Persistent fetal circulation
1420	Meconium aspiration
2250	Kawasaki disease
1560	Cardiac, Other
1570	Thoracic and/or mediastinal, Other
1580	Peripheral vascular, Other
2400	Trauma, Blunt
2410	Trauma, Penetrating
7000	Normal heart
7777	Miscellaneous, Other

Long Name: Race - Caucasian *SeqNo:* 390

Short Name: **RaceCaucasian** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: 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)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name:

Format: Text (categorical values specified by STS)

ParentShortName:

DataLength:

ParentValue:

Data Source: User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Race - Black / African American *SeqNo:* 400

Short Name: **RaceBlack** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Black / African American. This includes a person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."

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)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name:

Format: Text (categorical values specified by STS)

ParentShortName:

DataLength:

ParentValue:

Data Source: User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Race - Asian *SeqNo:* 410

Short Name: **RaceAsian** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Asian. This includes a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

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)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Race - American Indian / Alaskan Native *SeqNo:* 420

Short Name: **RaceNativeAm** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient's race, as determined by the patient or family, includes American Indian / Alaskan Native. This includes a person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

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)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Race - Native Hawaiian / Pacific Islander *SeqNo:* 430

Short Name: **RaceNativePacific** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Native Hawaiian / Pacific Islander. This includes a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

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)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Race - Other *SeqNo:* 440

Short Name: **RaceOther** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate whether the patient's race, as determined by the patient or family, includes any other race.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Hispanic Or Latino Ethnicity *SeqNo:* 450

Short Name: **Ethnicity** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate if the patient is of Hispanic or Latino ethnicity as determined by the patient / family. Hispanic or Latino ethnicity includes patient report of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Date of Last Follow-Up *SeqNo:* 460

Short Name: **LFUDate** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the date on which the last follow-up was made. If patient dies in the hospital, this value will be the same as the date of death. If no follow-up is made after patient is discharged, this value will be the same as the discharge date.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date - mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Last Follow-Up New York Heart Association Classification *SeqNo:* 470

Short Name: LFUNYHA *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the patient's New York Heart Association (NYHA) classification at the time of the last follow-up. If no follow-up is made after patient is discharged, this value will be the same as the classification at the time of their last discharge.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
5	Not assessed	The NYHA Classification was not assessed/documented at last follow-up
1	NYHA 1	Asymptomatic.
2	NYHA 2	Symptomatic with exertion.
3	NYHA 3	Symptomatic with activities of daily living.
4	NYHA 4	Symptomatic at rest.

Long Name: Mortality Status At Last Follow-Up *SeqNo:* 480

Short Name: LFUMortStat *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the mortality status of the patient at the time of the last follow-up. If no follow-up is made after patient is discharged, this value will be the same as the Mortality Status At Hospital Discharge.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Alive

2 Dead

Long Name: Mortality Date *SeqNo:* 490

Short Name: **MtDate** *Core:* Yes

Section Name: Demographics *Harvest:* Yes

DBTableName Demographics

Definition: Indicate the patient's date of death.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date - mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Noncardiac Congenital Anatomic Abnormalities Table Unique Record Identifier *SeqNo:* 510

Short Name: **NCAAUniqueID** *Core:* Yes

Section Name: Noncardiac Congenital Anatomic Abnormalities *Harvest:* Yes

DBTableName NCAA

Definition: Unique identifier for the record in the Noncardiac Congenital Anatomic Abnormalities table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Noncardiac Congenital Anatomic Abnormalities Link to Demographics Table *SeqNo:* 520

Short Name: **PatID** *Core:* Yes

Section Name: Noncardiac Congenital Anatomic Abnormalities *Harvest:* Yes

DBTableName NCAA

Definition: An arbitrary, unique value generated by the software that permanently identifies each patient demographic record in the participant's database. This field is the foreign key that links this record with the associated record in the Demographics table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Major Noncardiac Abnormality *SeqNo:* 530

Short Name: **NCAA** *Core:* Yes

Section Name: Noncardiac Congenital Anatomic Abnormalities *Harvest:* Yes

DBTableName NCAA

Definition: Indicate all of the major noncardiac abnormalities the patient has or select None.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
5	None	No known major noncardiac abnormality
80	Major abnormality of head, Choanal atresia	A congenital anomaly in which a bony or membranous occlusion blocks the passageway between the nose and pharynx. The condition,caused by the failure of the nasopharyngeal septum to rupture during embryonic development, may result in ventilation problems in the neonate and requires surgical correction.
90	Major abnormality of head, Cleft lip	A congenital anomaly consisting of one or more clefts in the upper lip that result from the failure of the maxillary and median nasal processes to close during embryonic development. Treatment is surgical repair in infancy.

100	Major abnormality of head, Cleft palate	A congenital fissure in the roof of the mouth, resulting from incomplete fusion of the palate during embryonic development. It may involve only the uvula or extend through the entire palate.
110	Major abnormality of head	Major abnormaility of the head, other than choices listed here
120	Major abnormality of brain, Hydrocephalus	Hydrocephalus is excessive CSF accumulation in the brain creating potentially harmful pressure. It may be congenital or acquired. Congenital hydrocephalus is present at birth and may be caused by either events or influences that occur during fetal development, or genetic abnormalities. Acquired hydrocephalus develops at the time of birth or at some point afterward. This type of hydrocephalus can affect individuals of all ages and may be caused by injury or disease.
130	Major abnormality of brain, Macrocephaly	Macrocephaly is defined as a head circumference which is greater than 2 standard deviations larger than the average for a given age and sex. It refers to an abnormally large head inclusive of the scalp, cranial bone and intracranial contents. Macrocephaly may be due to megalencephaly (true enlargement of the brain) or due to other conditions such as hydrocephalus or cranial thickening.
140	Major abnormality of brain, Microcephaly	Microcephaly is defined as smaller than normal circumference of the head because the cerebral cortex has not developed properly or has stopped growing. Microcephaly can be present at birth or may develop in the first few years of life.
150	Major abnormality of brain	Major abnormaility of the brain, other than choices listed here
160	Major abnormality of spinal cord, Myelomeningocele	Developmental defect of the central nervous systemprotrude through a gap in the vertebral column; frequently accompanied by hydrocephalus and mental retardation. A hernial sac containing a portion of the spinal cord, its meninges, and cerebrospinal fluid protrudes through a congenital cleft in the vertebral column. The defect is covered by a thin membrane or skin.
170	Major abnormality of spinal cord, Spina bifida	Charadcterized by defective closure of the vertebral canal with herniation of the spinal cord and/or meninges. May cause skull enlargement due to an accumulation of cerebrospinal fluid. In its most severe form, termed spinal rachischisis, the entire spinal canal is open, exposing the spinal cord and nerves. More commonly, the abnormality appears as a localized mass on the back that is covered by skin or by the meninges.
180	Major abnormality of spinal cord	Major abnormaility of the spinal cord, other than choices listed here
190	Major abnormality of spine, Scoliosis	Scoliosis is a lateral (side-to-side) curve in the spine, usually combined with a rotation of the vertebrae.

		"Most commonly presents as idiopathic (90%) but can present as a congenital or acquired defect.
200	Major abnormality of spine	Major abnormaility of the spine, other than choices listed here
210	Major abnormality of larynx - trachea - or bronchus, Laryngomalacia	Abnormal laxity of the laryngeal support cartilage resulting in excessive inward collapse and collapse of the lumen with inspiration during spontaneous ventilation. Characterized by inspiratory stridor.
220	Major abnormality of larynx - trachea - or bronchus, Congenital tracheal stenosis	Primary Tracheal narrowing at any level between the larynx and carina with significantly smaller than expected luminal diameter (not secondary to trauma or prolonged intubation). Frequently related to complete cartilagenous tracheal rings.
230	Major abnormality of larynx - trachea - or bronchus, Tracheomalacia	Abnormal laxity of the tracheal supporting structures resulting in inward collapse of the lumen during expiration during spontaneous ventilation. Characterized by expiratory stridor. May extend down into bronchi (tracheobronchial malacia).
70	Major abnormality of larynx - trachea - or bronchus, Tracheoesophageal fistula (TEF)	Presence of any type of patent communication below the larynx connecting the tracheo-bronchial tree to the esophagus. May be associated with other anomalies, including VATER, VACTERL and tracheal clefts. Typically congenital, but may occur due to trauma or pressure necrosis.
240	Major abnormality of larynx - trachea - or bronchus, Bronchomalacia	A deficiency in the cartilaginous wall of the bronchus that may lead to atelectasis or obstructive emphysema.
250	Major abnormality of larynx - trachea - or bronchus	Major abnormaility of the larynx, trachea or bronchus, other than choices listed here
260	Major abnormality of lung, Congenital lobar emphysema (CLE)	A developmental anomaly of the lower respiratory tract characterized by isolated hyperinflation of a lobe in the absence of extrinsic bronchial obstruction
270	Major abnormality of lung, Cystic congenital adenomatous malformation of the lung (CAM)	Cystic congenital adenomatous malformation of the lung (CAM): A spectrum of cystic and solid lesions of the lung that result from abnormal embryogenesis and typically present with symptoms of respiratory distress in newborns and infants.
280	Major abnormality of lung, Cystic fibrosis	Cystic fibrosis (also known as CF or mucoviscidosis) is an autosomal recessive genetic disorder affecting most critically the lungs, and also the pancreas, liver, and intestine. It is characterized by abnormal transport of chloride and sodium across an epithelium, leading to thick, viscous secretions
290	Major abnormality of lung, Pulmonary lymphangiectasia	Pulmonary lymphangiectasia (PL) is a rare developmental disorder involving the lung characterized by pulmonary subpleural, interlobar, perivascular and peribronchial lymphatic dilatation. PL presents at birth with severe respiratory distress, tachypnea and cyanosis, with a very high mortality rate at or within a few hours

		of birth. Secondary PL may be caused by a cardiac lesion.
300	Major abnormality of lung	Major abnormaility of the lung, other than choices listed here
20	Major abnormality of abdominal wall, Congenital diaphragmatic hernia (CDH)	A developmental defect of the diaphragm that allows abdominal viscera to herniate into the chest. The volume of herniated contents may be small or large enough to contain most of the gut, spleen, or liver.
30	Major abnormality of abdominal wall, Gastroschisis	A congenital defect characterized by a defect in the anterior abdominal wall through which the intestines protrude. There is no sac covering the intestines. The defect is usually located to the right of the umbilicus.
60	Major abnormality of abdominal wall, Omphalocele	A defect in the medial anterior abdominal wall through which intraabdominal contents are extruded. The defect is covered by amnion and peritoneum and usually occurs at the base of the umbilical cord. The abdominal herniation usually includes small bowel and may include large bowel and/or liver.
310	Major abnormality of gastrointestinal system, Biliary atresia	Biliary atresia is characterized by absence or discontinuity of the extrahepatic biliary system, resulting in obstruction to bile flow.
320	Major abnormality of gastrointestinal system, Duodenal atresia	Congenital absence or closure of a portion of the duodenum.
330	Major abnormality of gastrointestinal system, Duodenal stenosis	Stricture or narrowing of a portion of the duodenum.
340	Major abnormality of gastrointestinal system, Jujenal atresia	The congenital absence or closure of the middle section of the small intestine.
350	Major abnormality of gastrointestinal system, Jujenal stenosis	A constriction or narrowing of the middle section of the small intestine.
360	Major abnormality of gastrointestinal system, Ileal atresia	Congenital absence or closure of a portion of the ileum.
370	Major abnormality of gastrointestinal system, Ileal stenosis	Stricture or narrowing of a portion of the ileum.
50	Major abnormality of gastrointestinal system, Intestinal malrotation	Abnormal placement and fixation of intestines.
40	Major abnormality of gastrointestinal system, Hirschsprung's disease (Congenital aganglionic megacolon)	A disorder of the enteric nervous system characterized by an absence of ganglion cells in the distal colon resulting in a functional obstruction.
380	Major abnormality of	A constriction or narrowing of the distal portion of the

	gastrointestinal system, Stenosis of large intestine	intestine, extending from its junction with the small intestine to the anus and comprising the cecum, colon, rectum, and anal canal.
390	Major abnormality of gastrointestinal system, Atresia of large intestine	Colonic atresia is usually segmental, most often involving the ascending colon, and may be accompanied of the small intestine, rectum, or anal canal.
400	Major abnormality of gastrointestinal system, Atresia of rectum	Congenital absence or closure of a portion of the rectum. Atresia of the rectum proper, or a portion of the rectum, is very rare. It can occur with or without anomalies of the small intestine, colon, or anal canal.
410	Major abnormality of gastrointestinal system, Stenosis of rectum	A constriction or narrowing of the terminal portion of the large intestine, extending from the sigmoid flexure to the anal canal.
10	Major abnormality of gastrointestinal system, Anal Atresia (imperforate anus)	Anal atresia, or imperforate anus, is a specific type of what are commonly referred to as anorectal malformations. Atresia of the anal canal occurs with or without a fistulous opening to an ectopic location on the perineum, within the urinary system, or into the vaginal vestibule.
420	Major abnormality of gastrointestinal system	Major abnormaility of the gastrointestinal system, other than choices listed here
430	Major abnormality of kidney - ureter - or bladder	Major abnormaility of the kindey(s), ureter(s) or bladder
990	Other	Other major noncardiac abnormality

Long Name: Major Noncardiac Abnormality - Other - Specify *SeqNo:* 540

Short Name: NCAAOthSp *Core:* Yes

Section Name: Noncardiac Congenital Anatomic Abnormalities *Harvest:* Yes

DBTableName NCAA

Definition: Indicate the other major noncardiac abnormality.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Major Noncardiac Abnormality *Format:* Text

ParentShortName: NCAA *DataLength:* 100

ParentValue: = "Other" *Data Source:* User

ParentHarvestCodes: 990

Long Name: Chromosomal Abnormalities Table Unique Record Identifier *SeqNo:* 550

Short Name: **ChromAbUniqueID** *Core:* Yes

Section Name: Chromosomal Abnormalities *Harvest:* Yes

DBTableName ChromAbnormalities

Definition: Unique identifier for the record in the Chromosomal Abnormalities table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Chromosomal Abnormalities Link to Demographics Table *SeqNo:* 560

Short Name: **PatID** *Core:* Yes

Section Name: Chromosomal Abnormalities *Harvest:* Yes

DBTableName ChromAbnormalities

Definition: An arbitrary, unique value generated by the software that permanently identifies each patient demographic record in the participant's database. This field is the foreign key that links this record with the associated record in the Demographics table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Chromosomal Abnormality *SeqNo:* 570

Short Name: ChromAb *Core:* Yes

Section Name: Chromosomal Abnormalities *Harvest:* Yes

DBTableName ChromAbnormalities

Definition: Indicate whether the patient has one of the following chromosomal abnormalities.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
5	No chromosomal abnormality identified	This patient has no chromosomal abnormality identified.
10	11p15.5	
20	11q	
30	12p1.21	
40	12p12.1	
50	12q24	
60	15q21.1	
70	1q42.1	
80	20p12	
90	22q11 deletion	Deletions or mutations involving the long arm of chromosome 22 (critical region 22q11.2) are associated with the DiGeorge sequence, velocardiofacial syndrome, conotruncal face anomaly syndrome, CATCH 22, and some isolated conotruncal malformations.
100	2p21	
110	3p22	
120	45X0	Turner syndrome (45XO) is a chromosomal deletion abnormality, which occurs in 1:5000 live female births. Although common in first trimester, most 45XO conceptuses are spontaneously aborted. Affected individuals are missing one X chromosome. The major features include short stature, primary amenorrhea due to ovarian dysgenesis, webbed neck, congenital lymphedema, and cubitus valgus. Cardiovascular abnormalities occur in 20-40% of cases, the most common of which is coarctation of the aorta (70%). Additional defects include bicommissural aortic valve,

		aortic stenosis, a spectrum of left-sided obstructive defects and/or hypoplastic defects, hypoplastic left heart syndrome; aortic dilation, dissection, and rupture.
130	47,XXY	Klinefelter, or 47XXY syndrome, is a sporadic chromosomal abnormality in which males have at least two X chromosomes and at least one Y chromosome. Incidence is 1:500 males or 1:1000 births. Klinefelter syndrome occurs usually in association with advanced maternal age at conception. It is the most common sex chromosome disorder and the most common cause of hypogonadism and infertility. Cardiovascular abnormalities in more than 50% of cases include mitral valve prolapse, varicose veins and deep venous thrombosis.
140	4p	
150	4p16	
160	5p	
170	6p12	
180	7q11	
190	7q11.23	
200	7q32	
210	7q34	
220	8q12	
240	TGFBR1 or 2	
250	Trisomy 08	Trisomy 8, or Warkany syndrome, is a chromosomal abnormality, which is a frequent cause of first trimester spontaneous abortions. Complete Trisomy 8 is usually an early lethal disorder. Incidence is 1:25,000-50,000 births. Affected individuals have an extra (or third) copy of chromosome 8. Cardiovascular abnormalities include septal defects and great vessel anomalies.
260	Trisomy 09	Trisomy 9, or Rethore syndrome, is a rare chromosomal abnormality, which is a frequent cause of first trimester spontaneous abortions. Incidence is 1:100,000 births. Affected individuals have an extra (or third) copy of chromosome 9. Most affected individuals die during infancy or early childhood. Cardiovascular abnormalities occur in 75% of cases and include VSD, ASD, PDA, valve defects, DORV, persistent left SVC, and endocardial fibroelastosis.
270	Trisomy 13	Patau or Bartholin-Patau syndrome, or Trisomy 13, is a chromosomal abnormality. Incidence is 1:5000-10,000 births. Sporadic cases occur usually in association with advanced maternal age at conception. Affected individuals have an extra (or third) copy of chromosome 13. More than 90% of individuals with Trisomy 13 die within their first days or weeks of life. Only 5-10% survive beyond 1 year of age.

		Cardiovascular abnormalities in 80% of cases include VSD, PDA, ASD; dextrocardia in more than 50% of cases; and anomalous pulmonary venous connection, overriding aorta, pulmonary stenosis, hypoplastic aorta, mitral valve atresia, aortic valve atresia, and bicuspid aortic valve in fewer than 50% of cases.
280	Trisomy 18	Edwards syndrome, or Trisomy 18, is a chromosomal abnormality. Incidence is 1:3000-5000 births. Sporadic cases of Edwards syndrome occur usually in association with advanced maternal age at conception. Affected individuals have an extra (or third) copy of chromosome 18. Approximately 50% of infants with Trisomy 18 die within the first week of life, approximately 40% die within the first month of life, only 5-10% survive beyond the first year. Cardiovascular abnormalities in more than 50% of cases include VSD, ASD and PDA; bicuspid aortic and/or pulmonary valves, nodularity of valve leaflets, pulmonic stenosis, coarctation of the aorta in 10-50% of cases; and anomalous coronary artery, TGA, TOF, dextrocardia and aberrant subclavian artery in less than 10% of cases.
290	Trisomy 21	Down syndrome, or Trisomy 21, is the most frequent chromosomal abnormality. Incidence is 1:600-1000 live births. Sporadic cases of Down syndrome occur in strong association with advanced maternal age at conception. Affected individuals have an extra (or third) copy of chromosome 21. Cardiovascular abnormalities in 40-50% of cases, in decreasing order of frequency, include AVSD, VSD, TOF and PDA. Left-sided obstructive defects, such as coarctation and aortic valve stenosis, are rare.
310	Other chromosomal abnormality	This patient has other chromosomal abnormality(ies) that are not on this list.

Long Name: Chromosomal Abnormality - Other - Specify *SeqNo:* 580

Short Name: **ChromAbOthSp** *Core:* Yes

Section Name: Chromosomal Abnormalities *Harvest:* Yes

DBTableName ChromAbnormalities

Definition: Indicate the other chromosomal abnormalities.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Chromosomal Abnormality *Format:* Text

ParentShortName: ChromAb *DataLength:* 100

ParentValue: = "Other chromosomal abnormality" *Data Source:* User

ParentHarvestCodes: 310

Long Name: Syndromes Table Unique Record Identifier *SeqNo:* 590

Short Name: **SynUniqueID** *Core:* Yes

Section Name: Syndromes *Harvest:* Yes

DBTableName Syndromes

Definition: Unique identifier for the record in the Syndromes table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Syndromes Link to Demographics Table *SeqNo:* 600

Short Name: PatID *Core:* Yes

Section Name: Syndromes *Harvest:* Yes

DBTableName Syndromes

Definition: An arbitrary, unique value generated by the software that permanently identifies each patient demographic record in the participant's database. This field is the foreign key that links this record with the associated record in the Demographics table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Syndrome *SeqNo:* 610

Short Name: Syndrome *Core:* Yes

Section Name: Syndromes *Harvest:* Yes

DBTableName Syndromes

Definition: Indicate whether the patient has a “Syndrome” or “Syndromic abnormality”. A “syndrome” is defined as a group of signs and symptoms that occur together, and characterize a particular abnormality [1]. [1]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. Cardiology in the Young, 2006; 16(4): 339–368, August 2006.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
5	No syndromic abnormality identified	This patient has no syndromic abnormality identified.
10	Alagille syndrome (intrahepatic biliary duct agenesis)	Alagille syndrome, or Alagille-Watson syndrome, is an autosomal dominant condition [mapped to 20p12 & 1p13-p11] of intrahepatic biliary duct agenesis or arteriohepatic dysplasia. Incidence is 1:70,000 births. The 20-year predicted life expectancy is 75% for all patients, 80% for those not requiring a liver transplant,

		and 60% for those requiring a liver transplant. Typical manifestations include intrahepatic cholestasis, distinctive facies, anterior chamber abnormalities of the eye, and butterfly hemiverterbrae. The most common cardiovascular abnormality is peripheral pulmonary artery stenosis. Additional defects include ASD, VSD, coarctation of the aorta and TOF. .
20	Apert syndrome	Apert syndrome, also known as Apert-Crouzon disease or Vogt cephalodactyly, is an autosomal dominant condition [mapped to 10q26] of acrocephalosyndactyly. Incidence is 1:65,000-88,000 births; it occurs in strong association with advanced paternal age at conception. Apert syndrome is similar to Crouzon and Pfeiffer syndromes. Cardiovascular abnormalities include pulmonic stenosis, VSD, overriding aorta, and endocardial fibroelastosis.
30	Brugada syndrome (Sudden unexplained nocturnal death syndrome) (SUNDS)	Brugada syndrome, also known as sudden unexplained nocturnal death syndrome (SUNDS), is an autosomal dominant condition [mapped to 3p21, 3p22.3, 12p13.3 & 10p12], occurring in 1:2000 births. Brugada syndrome is associated with the risk of sudden cardiac death. Mean age of sudden death is approximately 40 years. Symptoms include right bundle branch block and ST segment elevation on ECG, idiopathic ventricular fibrillation, and cardiac arrest. Brugada syndrome, in its typical form is sinus rhythm with anterior raised ST segment in V1 and V2 due to a genetic ion-channel defect involving a sodium-channel defect isolated to SCN5A gene. Brugada syndrome is a type of “Channelopathy”. A ventricular tachycardia due to a genetic ion-channel defect is also known as a "Channelopathy" or "Ion channelopathy". This diagnosis is most commonly Long QT syndrome, but also includes Brugada syndrome, Jervell and Lange-Nielsen syndrome, Romano-Ward syndrome, Andersen syndrome, etc.
40	Cardiofaciocutaneous syndrome	Cardiofaciocutaneous syndrome (CFC) is a sporadic condition [mapped to 7q34] affecting the heart, face, skin and hair. Incidence is 1:333,000-500,000 births. CFC is similar to Noonan and Costello syndromes. Cardiovascular abnormalities include pulmonary valve stenosis, ASD and hypertrophic cardiomyopathy.
50	Carpenter syndrome	Carpenter syndrome is an autosomal recessive condition [mapped to 6p11] of acrocephalopolysyndactyly, type II. Incidence is 1:1,000,000 births. Cardiovascular abnormalities in 50% of cases include ASD, VSD, pulmonic stenosis, TOF, TGA and PDA.
60	Cat-eye syndrome	The cat-eye syndrome, or Schmid-Fraccaro syndrome, is an autosomal dominant condition [mapped to 22q11], associated with coloboma of the iris. Incidence is 1:50,000-150,000 births. The classic pattern of malformations includes mild mental deficiency,

		hypertelorism, down-slanting palpebral fissures, iris coloboma, pre-auricular pits or tags, and anal and renal malformations. Cardiovascular abnormalities in 40% of cases include TAPVC, ASD, VSD, persistent left superior vena cava, TOF, interruption of the inferior vena cava, and tricuspid atresia.
70	CHARGE Association	CHARGE syndrome, or Hall-Hittner syndrome, is an autosomal dominant condition [mapped to 8q12.1 & 7q21.11]; some sporadic cases have been reported. Incidence is 1:8500-10,000 births. CHARGE syndrome is a nonrandom association of congenital anomalies which may include Coloboma, Heart defects, Atresia choanae, Retarded growth and development and/or central nervous system anomalies, Genital anomalies and/or hypogonadism and Ear anomalies and/or deafness. Diagnosis is made if 4/6 major (or 3 major & 3 minor) defects are present. Heart defects are present in 75% to 80% of cases. Of those with heart defects, most have conotruncal anomalies (TOF, DORV, truncus arteriosus) and aortic arch anomalies (vascular ring, aberrant subclavian artery, IAA, coarctation of the aorta, right aortic arch, aortic valve stenosis). Other cardiovascular abnormalities include PDA, AVSD, VSD, and ASD.
80	Cornelia de Lange syndrome	Cornelia de Lange syndrome (CDLS), also known as de Lange or Brachmann-de Lange syndrome, is an autosomal dominant condition [mapped to 5p13.1, Xp11.22-11.21 & 10q25]; some X-linked and sporadic cases have been reported. Incidence is 1:10,000-30,000 births. Cardiovascular abnormalities in 25% of cases most commonly include VSD and ASD.
90	Costello syndrome	Costello syndrome is an autosomal dominant condition [mapped to 12p12.1 & 11p15.5]; some sporadic cases have been reported. Incidence is 1:1,000,000 births. Cardiovascular abnormalities include ASD, VSD, pulmonic stenosis, mitral valve prolapse, hypertrophic cardiomyopathy and arrhythmias.
100	Cri-du-chat syndrome	Cri-du-chat (cat cry), or LeJeune syndrome, is a chromosome deletion syndrome [mapped to 5p15.2]. Incidence is 1:20,000-50,000 births. Cri-du-chat refers to the distinctive cry of children with this disorder, caused by abnormal larynx development. Cardiovascular abnormalities in 30% of cases most commonly include VSD and ASD. Rare defects include TOF and AVSD.
110	Deletion 10p syndrome	Deletions on the short arm of chromosome 10 are associated with septal defects, particularly ASDs, and DiGeorge/velocardiofacial 2 syndrome.
120	Deletion 8p syndrome	Deletions on the short arm of chromosome 8 are associated with ASD, AVSC, conotruncal abnormalities, pulmonic valve stenosis and Tetralogy of

		Fallot.
130	DiGeorge syndrome (velocardiofacial syndrome) (conotruncal anomaly face syndrome) (22q11 deletion)	DiGeorge syndrome, also known as Shprintzen, Takao, velocardiofacial, or conotruncal anomaly face syndrome, is an autosomal dominant condition [mapped to 22q11.2]. Incidence is 1:4000 births. Cardiovascular anomalies are seen in association with hypoplasia or aplasia of the thymus and parathyroid gland, which are derivatives of pharyngeal pouches III and IV, and which can result in abnormalities of the immune system and calcium metabolism respectively. Cardiovascular abnormalities include conotruncal or outflow tract defects of the heart, such as tetralogy of Fallot, truncus arteriosus, and interrupted aortic arch, particularly type B IAA. Additional defects include VSD, right aortic arch, aberrant right subclavian artery, and PDA.
140	Down syndrome (Trisomy 21)	Down syndrome, or Trisomy 21, is the most frequent chromosomal abnormality. Incidence is 1:600-1000 live births. Sporadic cases of Down syndrome occur in strong association with advanced maternal age at conception. Affected individuals have an extra (or third) copy of chromosome 21. Cardiovascular abnormalities in 40-50% of cases, in decreasing order of frequency, include AVSD, VSD, TOF and PDA. Left-sided obstructive defects, such as coarctation and aortic valve stenosis, are rare.
150	Edwards syndrome (Trisomy 18)	Edwards syndrome, or Trisomy 18, is a chromosomal abnormality. Incidence is 1:3000-5000 births. Sporadic cases of Edwards syndrome occur usually in association with advanced maternal age at conception. Affected individuals have an extra (or third) copy of chromosome 18. Approximately 50% of infants with Trisomy 18 die within the first week of life, approximately 40% die within the first month of life, only 5-10% survive beyond the first year. Cardiovascular abnormalities in more than 50% of cases include VSD, ASD and PDA; bicuspid aortic and/or pulmonary valves, nodularity of valve leaflets, pulmonic stenosis, coarctation of the aorta in 10-50% of cases; and anomalous coronary artery, TGA, TOF, dextrocardia and aberrant subclavian artery in less than 10% of cases.
570	Ehlers-Danlos Syndrome	Ehlers-Danlos syndrome is a group of inherited disorders marked by extremely loose joints, hyperelastic skin that bruises easily, and easily damaged blood vessels. A variety of gene mutations involve collagen of the skin, bone, blood vessels, and internal organs. The abnormal collagen leads to the symptom which can include rupture of internal organs or abnormal heart valves.
160	Ellis-van Creveld syndrome	Ellis-van Creveld syndrome, or chondroectodermal dysplasia, is an autosomal recessive condition [mapped to 4p16] of skeletal dysplasia. Incidence is 1:60,000-

		200,000 births. Major features include short stature of prenatal onset (short limbs), hypoplastic nails and dental anomalies, postaxial polydactyly, narrow thorax, and cardiac defects. Cardiovascular abnormalities in more than 50% of cases most commonly include ASD or common atrium. Additional defects include PDA, persistent left superior vena cava, hypoplastic left heart defects, coarctation of the aorta, TAPVC, and TGA.
165	Fetal alcohol syndrome (FAS)	Indicate whether the patient has a history of Fetal alcohol syndrome (FAS). Fetal alcohol syndrome (FAS) is a condition that results from prenatal alcohol exposure. FAS is a group of problems that can include mental retardation, birth defects, abnormal facial features, growth problems, problems with the central nervous system, trouble remembering and/or learning, vision or hearing problems, and behavior problems. Mothers who consume large quantities of alcohol during pregnancy may have babies who are born with Fetal Alcohol Syndrome (or FAS). A diagnosis of FAS is based on three factors: 1) prenatal and postnatal growth retardation; 2) central nervous system abnormalities, and, 3) abnormalities of the face. Many of these children display significant disabilities, learning disorders, and emotional problems as they
166	Fetal drug exposure	Indicate whether the patient has a history of Fetal drug exposure. Fetal drug exposure can lead to numerous problems including low birth weight, prematurity, small for Gestational Age (SGA), failure to Thrive (FTT), neurobehavioral symptoms, infectious diseases, and Sudden Infant Death Syndrome (SIDS).
380	Fetal rubella syndrome (Congenital rubella syndrome)	Indicate whether the patient has a history of maternal rubella virus infection during first trimester of pregnancy. Fetal rubella syndrome is associated with PDA, peripheral pulmonary stenosis, fibromuscular and intimal proliferation of medium and large arteries, VSD and ASD.
170	Goldenhar syndrome	Goldenhar syndrome, also known as hemifacial microsomia, oculoauriculovertebral dysplasia or spectrum, and facioauriculovertebral sequence, is an autosomal dominant condition [mapped to 14q32]. Incidence is 1:3000-5000 births. Cardiovascular abnormalities include VSD, PDA, TOF and coarctation
180	Heterotaxy syndrome	Heterotaxy is synonymous with ‘visceral heterotaxy’ and ‘heterotaxy syndrome’. Heterotaxy is defined as an abnormality where the internal thoraco-abdominal organs demonstrate abnormal arrangement across the left-right axis of the body. By convention, heterotaxy does not include patients with either the expected usual or normal arrangement of the internal organs along the left-right axis, also known as ‘situs solitus’, nor patients with complete mirror-imaged arrangement of the internal organs along the left-right axis also known as

		'situs inversus'.
190	Heterotaxy syndrome, Asplenia syndrome	"Asplenia syndrome" can be defined as a subset of heterotaxy with components of bilateral right-sidedness, usually associated with absence of the spleen.
200	Heterotaxy syndrome, Polysplenia syndrome	"Polysplenia syndrome" can be defined as a subset of heterotaxy with components of bilateral left-sidedness, usually associated with multiple spleens.
210	Holt-Oram syndrome	Holt-Oram, or heart hand, syndrome is an autosomal dominant condition [mapped to 12q24.1]. Incidence is 1:100,000 births. Holt-Oram syndrome was first described in 1960 by Holt and Oram who noted the association of radial anomalies with atrial septal defects. Cardiovascular abnormalities in 75% of cases most commonly include ASD. Additional defects include first degree AV block, bradycardia, fibrillation, AVSD, VSD, HLHS and PDA.
220	Jacobsen syndrome	Jacobsen syndrome is a chromosome deletion syndrome [mapped to 11q23]. Incidence is 1:100,000 births. Associated cardiovascular abnormalities include VSD and ASD.
230	Kabuki syndrome	Kabuki, or Niikawa-Kuroki, syndrome is an autosomal dominant condition. Incidence is 1:32,000 births. Affected individuals have a facial appearance similar to Japanese Kabuki theatre actors. Cardiovascular abnormalities in 50% of cases include ASD, VSD, coarctation of the aorta, bicuspid aortic valve, mitral valve prolapse, TOF, single ventricle with common atrium, DORV, TGA, and pulmonic, aortic and mitral valve stenoses.
240	Kartagener syndrome (Siewert syndrome) (Primary ciliary dyskinesia)	Kartagener syndrome, also known as Siewert syndrome or primary ciliary dyskinesia, is an autosomal recessive condition [mapped to 9p21-p13]. Incidence is 1:30,000 births. Features include situs inversus and asplenia. Cardiovascular abnormalities include dextrocardia.
250	Klinefelter syndrome (XXY Syndrome)	Klinefelter, or 47XXY syndrome, is a sporadic chromosomal abnormality in which males have at least two X chromosomes and at least one Y chromosome. Incidence is 1:500 males or 1:1000 births. Klinefelter syndrome occurs usually in association with advanced maternal age at conception. It is the most common sex chromosome disorder and the most common cause of hypogonadism and infertility. Cardiovascular abnormalities in more than 50% of cases include mitral valve prolapse, varicose veins and deep venous thrombosis.
260	LEOPARD syndrome	LEOPARD is an acronym for multiple Lentigines, Electrocardiographic conduction abnormalities, Ocular hypertelorism, Pulmonic stenosis, Abnormal genitalia, Retardation of growth, and sensorineural Deafness. LEOPARD syndrome is an autosomal dominant

		condition [mapped to 12q24.1 & 3p25]. Cardiovascular abnormalities include pulmonic stenosis in 40% of cases, and hypertrophic cardiomyopathy in 20% of cases. Additional defects include subaortic stenosis, complete heart block, bundle branch block, prolonged P-R and QRS, and abnormal P waves.
270	Loeys-Dietz syndrome	Loeys-Dietz syndrome is an autosomal dominant condition [mapped to 3p22 & 9q22]. Cardiovascular abnormalities include aortic and arterial aneurysms/dissections with tortuosity of the arteries, PDA, ASD, bicuspid aortic and pulmonic valves, and mitral valve prolapse.
280	Long QT syndrome (Ward Romano syndrome)	Long QT syndrome (LQTS), or Ward Romano syndrome, is an autosomal dominant condition [LQTS1 mapped to 11p15.5]. There are at least 11 known mutations for LQTS which have been mapped to at least 7 chromosomes. Long QT syndrome is characterized by a prolonged QT interval on EKG and is associated with the risk of sudden cardiac death. Incidence is 1:2000 births. Symptoms include ventricular arrhythmias, recurrent syncope, ventricular fibrillation, torsade de pointes, and cardiac arrest. Long QT syndrome (Ward Romano syndrome) is a ventricular tachycardia occurring in the setting of prolonged Q-T interval. Long QT syndrome is a type of "Channelopathy". A ventricular tachycardia due to a genetic ion-channel defect is also known as a "Channelopathy" or "Ion channelopathy". This diagnosis is most commonly Long QT syndrome, but also includes Brugada syndrome, Jervell and Lange-Nielsen syndrome, Romano-Ward syndrome, Andersen syndrome, etc.
290	Marfan syndrome	Marfan syndrome is an autosomal dominant condition [mapped to 15q21.1]. Incidence is 1:5000 births. Marfan syndrome is the most common connective tissue disorder, and is associated with the risk of sudden cardiac death. Cardiovascular abnormalities include aortic root dilation, aortic dissection and rupture, aortic regurgitation, ascending aortic aneurysm, mitral valve prolapse, mitral regurgitation, tricuspid valve prolapse, premature calcification of the mitral annulus, pulmonary artery dilatation and CHF.
300	Marfan-like syndrome	Marfan-like syndrome is a connective tissue disorder, resembling Marfan syndrome.
310	Mucopolysaccharidosis type IH (Hurler syndrome)	Hurler syndrome, also known as mucopolysaccharidosis type IH (MPS IH), is an autosomal recessive condition [mapped to 4p16.3]. Incidence is 1:100,000 births. MPS is a lysosomal storage disease. Affected individuals appear normal at birth; subtle changes may be evident during the first 6 months. Survival beyond 10 years of age is unusual. Cardiovascular abnormalities include valve anomalies, coronary artery

		narrowing, and mitral and atrial regurgitation.
320	Mucopolysaccharidosis type IH/S (Hurler-Scheie syndrome)	Hurler-Scheie syndrome, also known as mucopolysaccharidosis type IH/S (MPS IH/S), is an autosomal recessive disorder [mapped to 4p16.3]. Incidence is 1:500,000 births. MPS is a lysosomal storage disease. Onset of symptoms occurs between ages 3 and 8 years. Survival to adulthood is typical. Cardiovascular abnormalities include mitral valve anomalies.
330	Mucopolysaccharidosis type II (Hunter syndrome)	Hunter syndrome, also known as mucopolysaccharidosis type II (MPS 2), is an X-linked recessive disorder [mapped to Xq28]. Incidence is 1:100,000-170,000 births. MPS is a lysosomal storage disease. Individuals with Hunter syndrome appear normal at birth. Symptoms emerge between ages 2 and 4. Life expectancy is 10-20 years. Cardiovascular abnormalities include valve anomalies, ischemic heart disease, ventricular hypertrophy and CHF.
340	Mucopolysaccharidosis type IS (Scheie syndrome)	Scheie syndrome, also known as mucopolysaccharidosis type IS (MPS IS), is an autosomal recessive disorder [mapped to 4p16.3], which occurs in 1:500,000 births. Scheie syndrome is a lysosomal storage disease. Survival to a late age is typical. Cardiovascular abnormalities include aortic regurgitation, aortic and mitral valve abnormalities.
350	Noonan syndrome	Noonan syndrome is an autosomal dominant condition [mapped to 12q24.1]. Incidence is 1:1000-2500 births. Major features include short stature, seen in about half, mental retardation (usually mild), characteristic facial features, a shield chest deformity, cubitus valgus, and a short webbed neck. Cardiovascular abnormalities occur in at least 50% of cases and include pulmonary valve stenosis (75%) secondary to a dysplastic pulmonary valve with thickened valve leaflets, ASD (30%) usually associated with pulmonary stenosis, PDA (10%), VSD (10%), and hypertrophic cardiomyopathy (10-20%) that can involve both ventricles. Rare lesions include TOF, coarctation of the aorta, subaortic stenosis, and Ebstein malformation. Hypertrophic cardiomyopathy is observed in 10% to 20% and can involve both
360	Patau syndrome (Trisomy 13)	Patau or Bartholin-Patau syndrome, or Trisomy 13, is a chromosomal abnormality. Incidence is 1:5000-10,000 births. Sporadic cases occur usually in association with advanced maternal age at conception. Affected individuals have an extra (or third) copy of chromosome 13. More than 90% of individuals with Trisomy 13 die within their first days or weeks of life. Only 5-10% survive beyond 1 year of age. Cardiovascular abnormalities in 80% of cases include VSD, PDA, ASD; dextrocardia in more than 50% of cases; and anomalous pulmonary venous connection, overriding aorta, pulmonary stenosis, hypoplastic aorta,

		mitral valve atresia, aortic valve atresia, and bicuspid aortic valve in fewer than 50% of cases.
540	Pierre Robin syndrome	Pierre Robin Syndrome is characterized by an unusually small mandible (micrognathia), posterior displacement or retraction of the tongue (glossoptosis), and upper airway obstruction. Incomplete closure of the roof of the mouth (cleft palate) is present in the majority of patients, and is commonly U-shaped.
530	Prune Belly Syndrome	Prune belly syndrome, also known as Eagle-Barrett syndrome, is characterized by three main features: Anterior abdominal wall musculature ("stomach muscles") deficient or absent, urinary tract anomalies (such as a very large bladder) and bilateral cryptorchidism (two undescended testicles.) The incidence of prune belly syndrome is about 1 in 40,000 births; 95% of cases occur in males. It is thought that prune belly syndrome is a multisystem disease complex that derives from a primary defect in mesodermal development at about 8 weeks' gestation. The major prognostic factor is the degree of dilation of the urinary tract; 20% of patients are stillborn, 30% die of renal failure or urosepsis within the first two years of life, and the remaining 50% have varying degrees of urinary pathology.
370	Rethore syndrome (Trisomy 9)	Trisomy 9, or Rethore syndrome, is a rare chromosomal abnormality, which is a frequent cause of first trimester spontaneous abortions. Incidence is 1:100,000 births. Affected individuals have an extra (or third) copy of chromosome 9. Most affected individuals die during infancy or early childhood. Cardiovascular abnormalities occur in 75% of cases and include VSD, ASD, PDA, valve defects, DORV, persistent left SVC, and endocardial fibroelastosis.
390	Rubinstein-Taybi syndrome	Rubinstein-Taybi or Rubinstein syndrome is an autosomal dominant condition [mapped to 16p13.3 & 22q13]. Incidence is 1:100,000-125,000 births. Cardiovascular abnormalities occur in 30% of cases and include ASD, VSD and PDA.
400	Short QT syndrome	Short QT syndrome appears to be an autosomal dominant condition [mapped to 7q35-q36, 11p15.5, 17q23.1-q24.2]. Short QT syndrome is characterized by a shortened QT interval on EKG and is associated with the risk of sudden cardiac death. Symptoms include episodes of syncope, palpitations, paroxysmal atrial fibrillation, ventricular fibrillation, and cardiac arrest. Short QT syndrome is a ventricular tachycardia occurring in the setting of short Q-T interval. Short QT syndrome is a type of “Channelopathy”. A ventricular tachycardia due to a genetic ion-channel defect is also known as a "Channelopathy" or "Ion channelopathy". This diagnosis is most commonly Long QT syndrome, but also includes Brugada syndrome, Jervell and Lange-

		Nielsen syndrome, Romano-Ward syndrome, Andersen syndrome, etc.
550	Sickle cell disease	Sickle-cell disease (SCD), or sickle-cell anemia (SCA) is an autosomal recessive genetic blood disorder with overdominance, characterized by red blood cells that assume an abnormal, rigid, sickle shape. Sickling decreases the cells' flexibility and results in a risk of various complications. The sickling occurs because of a mutation in the hemoglobin gene. Sickle-cell disease occurs more commonly in people (or their descendants) from parts of tropical and sub-tropical regions where malaria is or was common.
560	Sickle cell trait	Sickle cell trait describes a condition in which a person has one abnormal allele of the hemoglobin beta gene (is heterozygous), but does not display the severe symptoms of sickle cell disease that occur in a person who has two copies of that allele (is homozygous). Those who are heterozygous for the sickle cell allele produce both normal and abnormal hemoglobin (the two alleles are co-dominant). Sickle cell disease is a blood disorder in which the body produces an abnormal type of the oxygen-carrying substance hemoglobin in the red blood cells. Sickling and sickle cell disease also confer some resistance to malaria parasitization of red blood cells, so that individuals with sickle-cell trait (heterozygotes) have a selective advantage in some environments.
410	Situs inversus	Situs inversus is defined as an abnormality where the internal thoraco-abdominal organs demonstrate mirror-imaged atrial arrangement across the left-right axis of the body.
420	Smith-Lemli-Opitz syndrome	Smith-Lemli-Opitz syndrome is an autosomal recessive condition [mapped to 11q12-q13]. Incidence is 1:20,000-40,000 births. Cardiovascular abnormalities include VSD, ASD, coarctation of the aorta, and PDA.
430	Turner syndrome (45XO)	Turner syndrome (45XO) is a chromosomal deletion abnormality, which occurs in 1:5000 live female births. Although common in first trimester, most 45XO conceptuses are spontaneously aborted. Affected individuals are missing one X chromosome. The major features include short stature, primary amenorrhea due to ovarian dysgenesis, webbed neck, congenital lymphedema, and cubitus valgus. Cardiovascular abnormalities occur in 20-40% of cases, the most common of which is coarctation of the aorta (70%). Additional defects include bicommissural aortic valve, aortic stenosis, a spectrum of left-sided obstructive defects and/or hypoplastic defects, hypoplastic left heart syndrome; aortic dilation, dissection, and rupture.
440	VACTERL syndrome (VACTER/VATER/VATERR	VACTERL syndrome is a nonrandom association of defects, including Vertebral anomalies, Anal atresia,

	syndrome)	Cardiovascular anomalies, Tracheoesophageal fistula, Esophageal atresia, Renal and/or Radial anomalies, and Limb anomalies. Diagnosis is made if 3/7 defects are present. Incidence is 1:6000 births. Cardiovascular malformations include VSD, TOF, TGA and PDA.
450	VACTERL-H syndrome (VATER association with hydrocephalus) (Briard-Evans syndrome)	VACTERL-H association is also known as VATER association with hydrocephalus, Briard-Evans syndrome, David-O'Callaghan syndrome (autosomal recessive type), and Hunter-MacMurray syndrome (X-linked type) [mapped to 10q23.31 & Xp22.31]. VACTERL-H is an autosomal recessive condition; some X-linked cases have been reported. VACTERL-H is a nonrandom association of defects, including Vertebral anomalies, Anal atresia, Cardiac malformations, TracheoEsophageal fistula, Renal anomalies, Limb anomalies and Hydrocephalus. Diagnosis is made if 3/7 defects are present with hydrocephalus. Cardiovascular abnormalities include VSD, TOF, TGA and PDA.
520	von Willebrand disease (vWD)	Von Willebrand disease (vWD) is the most common hereditary coagulation abnormality described in humans, although it can also be acquired as a result of other medical conditions. It arises from a qualitative or quantitative deficiency of von Willebrand factor (vWF), a multimeric protein that is required for platelet adhesion. There are three forms of vWD: inherited, acquired and pseudo or platelet type. There are three types of hereditary vWD: vWD Type I, vWD Type II and vWD III. Within the three inherited types of vWD there are various subtypes. Platelet type vWD is also an inherited condition. vWD Type I is the most common type of the disorder and those that have it are typically asymptomatic or may experience mild symptoms such as nosebleeds although there may be severe symptoms in some cases. There are various factors that affect the presentation and severity of symptoms of vWD such as blood type.
460	Warkany syndrome (Trisomy 8)	Trisomy 8, or Warkany syndrome, is a chromosomal abnormality, which is a frequent cause of first trimester spontaneous abortions. Complete Trisomy 8 is usually an early lethal disorder. Incidence is 1:25,000-50,000 births. Affected individuals have an extra (or third) copy of chromosome 8. Cardiovascular abnormalities include septal defects and great vessel anomalies.
470	Williams syndrome (Williams-Beuren syndrome)	Williams syndrome, or Williams-Beuren syndrome, is an autosomal dominant condition [mapped to 7q11.23]. Incidence is 1:7500 births. Williams syndrome was initially described by Williams and colleagues in four unrelated children with mental retardation, an unusual facial appearance, and supravalvar stenosis. Cardiovascular abnormalities occur in at least 50% of cases and include supravalvar aortic stenosis, bicuspid

		aortic valve, mitral valve prolapse, mitral regurgitation, coronary artery stenosis, pulmonary valve stenosis, ASD, VSD and peripheral pulmonary artery stenosis. Supravalvar aortic stenosis is the most frequent single defect, but any of the systemic or pulmonary arteries can be affected.
480	Wolff-Parkinson-White syndrome (WPW syndrome)	Wolff-Parkinson-White (WPW) syndrome is a condition in which there is an extra electrical pathway or circuit in the heart. Incidence is 1:500. WPW is one of the most common causes of tachycardia in infants and children. Symptoms may include chest pain, syncope, palpitations, shortness of breath, and can lead to episodes of tachycardia with heart rate >230 bpm. The “Wolff-Parkinson-White Syndrome (WPW syndrome)” is an "accessory connection-mediated tachycardia". An “accessory connection-mediated tachycardia" is a tachycardia secondary to accessory connection(s) or pathway(s). Typical accessory pathways are extra nodal pathways that connect the myocardium of the atrium and the ventricle across the AV groove and are classified by location, type of conduction (decremental versus nondecremental), and whether they are capable of anterograde (manifest, demonstrating pre-excitation on standard ECG) or retrograde (concealed) conduction, or both. The “Wolff-Parkinson-White Syndrome (WPW syndrome)” diagnosis is reserved for patients who have both pre-excitation on ECG (manifest conduction) and tachyarrhythmias.
490	Wolf-Hirschhorn syndrome	Wolf-Hirschhorn syndrome is a chromosome deletion syndrome [mapped to 4p16.3]. Incidence is 1:96,000 births. Affected individuals have a 35% risk of mortality prior to age 2. Cardiovascular abnormalities include ASD and VSD.
510	Other syndromic abnormality	This patient has other syndromic abnormality(ies) that are not on this list.

Long Name: Syndrome - Other - Specify *SeqNo:* 620

Short Name: **SyndromeOthSp** *Core:* Yes

Section Name: Syndromes *Harvest:* Yes

DBTableName Syndromes

Definition: Indicate the other “Syndrome” or “Syndromic abnormality”.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Syndrome *Format:* Text

ParentShortName: Syndrome *DataLength:* 100

ParentValue: = "Other syndromic abnormality" *Data Source:* User

ParentHarvestCodes: 510

Long Name: Hospital Name *SeqNo:* 630

Short Name: **HospName** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate the full name of the facility where the procedure was performed. Values should be full, official hospital names with no abbreviations or variations in spelling for a single hospital. Values should also be in mixed-case.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by user)

ParentShortName: *DataLength:* 100

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Hospital Zip Code *SeqNo:* 640

Short Name: **HospZIP** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate the ZIP Code of the hospital. Outside the USA, these data may be known by other names such as Postal Code.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 20

ParentValue: *Data Source:* Lookup

ParentHarvestCodes:

Long Name: Hospital State *SeqNo:* 650

Short Name: **HospStat** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate the region of the country (i.e., state or province) in which the hospital is located.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:* 50

ParentValue: *Data Source:* Lookup

ParentHarvestCodes:

Long Name: Hospital National Provider Identifier *SeqNo:* 660

Short Name: **HospNPI** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate the hospital's National Provider Identifier (NPI). This number, assigned by the Center for Medicare and Medicaid Services (CMS), is used to uniquely identify facilities for Medicare billing purposes.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Lookup

ParentHarvestCodes:

Long Name: Payor - Government Health Insurance *SeqNo:* 670

Short Name: **PayorGov** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether government insurance was used by the patient to pay for part or all of this admission. Government insurance refers to patients who are covered by government-reimbursed care. This includes Medicare, Medicaid, Military Health Care (e.g., TriCare), State-Specific Plan, and Indian Health Service.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Payor - Government Health Insurance - Medicare *SeqNo:* 680

Short Name: **PayorGovMcare** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Medicare.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Medicare Fee For Service *SeqNo:* 690

Short Name: **MedicareFFS** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient is a Medicare Fee For Service (FFS) patient.

Medicare FFS = Medicare Part B.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Payor - Government Health Insurance - Medicare *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGovMcare *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Medicare Health Insurance Claim Number *SeqNo:* 695

Short Name: **MHICNumber** *Core:* Yes

Section Name: Hospitalization *Harvest:* Optional

DBTableName Operations

Definition: Indicate the Health Insurance Claim (HIC) number of the primary beneficiary. The HIC number consists of the Social Security number and an alpha-numeric identifier (usually one digit but may be two digits). It is the number found on a patient's Medicare card.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Payor - Government Health Insurance - Medicare *Format:* Text

ParentShortName: PayorGovMcare *DataLength:* 25

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Payor - Government Health Insurance - Medicaid *SeqNo:* 700

Short Name: **PayorGovMcaid** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Medicaid.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Payor - Government Health Insurance - Military Health Care *SeqNo:* 710

Short Name: **PayorGovMil** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Military Health Care.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Payor - Government Health Insurance - State-Specific Plan *SeqNo:* 720

Short Name: **PayorGovState** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included State-Specific Plan.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Payor - Government Health Insurance - Indian Health Service *SeqNo:* 730

Short Name: **PayorGovIHS** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Indian Health Service.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Payor - Commercial Health Insurance *SeqNo:* 740

Short Name: **PayorCom** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether commercial insurance was used by the patient to pay for part or all of this admission. Commercial insurance refers to all indemnity (fee-for-service) carriers and Preferred Provider Organizations (PPOs), (e.g., Blue Cross and Blue Shield).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Payor - Health Maintenance Organization *SeqNo:* 750

Short Name: **PayorHMO** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a Health Maintenance Organization (HMO) insurance was used by the patient to pay for part or all of this admission. HMO refers to a Health Maintenance Organization characterized by coverage that provides health care services for members on a pre-paid basis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Payor - Non-U.S. Insurance *SeqNo:* 760

Short Name: **PayorNonUS** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether any non-U.S. insurance was used by the patient to pay for part or all of this admission.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Payor - None / Self *SeqNo:* 770

Short Name: **PayorNS** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether no insurance was used by the patient to pay for this admission. None refers to individuals with no or limited health insurance; thus, the individual is the payor regardless of ability to pay. Only mark "None" when "self" or "none" is denoted as the first insurance in the medical record.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Date of Admission *SeqNo:* 780

Short Name: **AdmitDt** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date the patient was admitted to the hospital. For those patients who originally enter the hospital in an out-patient capacity (i.e., catheterization), but then are not discharged, the admit date is the date of the patients entry into the hospital.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date - mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Date of Surgery *SeqNo:* 790
Short Name: SurgDt *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes
DBTableName Operations
Definition: Indicate the date of surgery which equals the date the patient enters the OR or equivalent.
LowValue: *UsualRangeLow:*
HighValue: *UsualRangeHigh:*
Parent Long Name: *Format:* Date - mm/dd/yyyy
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User
ParentHarvestCodes:

Long Name: Height in Centimeters *SeqNo:* 800
Short Name: HeightCm *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes
DBTableName Operations
Definition: Indicate the height of the patient in centimeters at the time of surgery.
LowValue: 15.0 *UsualRangeLow:*
HighValue: 250.0 *UsualRangeHigh:*
Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User
ParentHarvestCodes:

Long Name: Weight in Kilograms *SeqNo:* 810
Short Name: WeightKg *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes
DBTableName Operations
Definition: Indicate the weight of the patient in kilograms at the time of surgery.
LowValue: 0.001 *UsualRangeLow:*
HighValue: 200.000 *UsualRangeHigh:*
Parent Long Name: *Format:* Real, at least 3 decimal places
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User
ParentHarvestCodes:

Long Name: Patient Age In Days *SeqNo:* 820

Short Name: **AgeDays** *Core:* Yes

Section Name: Hospitalization *Harvest:* Yes

DBTableName Operations

Definition: Calculate the patient's age in days at the time of the surgery procedure. The patient's age will be calculated by the software from the date of birth and the date of surgery.

LowValue: 0 *UsualRangeLow:*

HighValue: 40150 *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User or Automatic

ParentHarvestCodes:

Long Name: Preoperative Factor Table Unique Record Identifier *SeqNo:* 830

Short Name: **PoFUniqueID** *Core:* Yes

Section Name: Preoperative Factors *Harvest:* Yes

DBTableName PreopFactors

Definition: Unique identifier for the record in the Preoperative Factors table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Preoperative Factor Link to Operations Table *SeqNo:* 840

Short Name: **OperationID** *Core:* Yes

Section Name: Preoperative Factors *Harvest:* Yes

DBTableName PreopFactors

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. This field is the foreign key that links the Preoperative Factor record with the associated record in the Operations table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Preoperative Factor *SeqNo:* 850

Short Name: **PreopFactor** *Core:* Yes

Section Name: Preoperative Factors *Harvest:* Yes

DBTableName PreopFactors

Definition: Indicate the factors that are present preoperatively that may impact the patient's outcome.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	No preoperative factors identified	This patient has no preoperative factors identified.
200	Cardio-pulmonary resuscitation	Chest compression with medications within 48 hours prior to surgery. Select this factor if chest compression took place during the 48 hours prior to OR Entry Date and Time, or at the time of OR Entry Date and Time.
210	Preoperative complete AV block	Arrhythmia-Atrioventricular conduction disorder, AV block, Third degree ROOT Definition = Third degree AV block is defined as the absence of AV node conduction. This factor should be selected if it developed before OR Entry Date and Time and was present at the time of OR Entry Date and Time.
220	Preoperative/Preprocedural	Code this factor if the patient is supported with

	mechanical circulatory support (IABP, VAD, ECMO, or CPS)	mechanical support, of any type (IABP, VAD, ECMO, or CPS), for resuscitation/CPR or support, at the time of OR Entry Date and Time.
230	Shock, Persistent at time of surgery	Shock ROOT Definition = Shock is defined as "a state of inadequate tissue perfusion". A modern definition according to Simeone states that shock is a "clinical condition characterized by signs and symptoms which arise when the cardiac output is insufficient to fill the arterial tree with blood under sufficient pressure to provide organs and tissues with adequate blood flow." A historic definition according to Blalock in 1940 is that "Shock is a peripheral circulatory failure, resulting from a discrepancy in the size of the vascular bed and the volume of the intravascular fluid". Code this factor if the patient had a metabolic acidosis with pH < 7.2 and/or Lactate > 4 mmol / liter at the time of OR Entry Date and Time.
240	Shock, Resolved at time of surgery	Shock ROOT Definition = Shock is defined as "a state of inadequate tissue perfusion". A modern definition according to Simeone states that shock is a "clinical condition characterized by signs and symptoms which arise when the cardiac output is insufficient to fill the arterial tree with blood under sufficient pressure to provide organs and tissues with adequate blood flow." A historic definition according to Blalock in 1940 is that "Shock is a peripheral circulatory failure, resulting from a discrepancy in the size of the vascular bed and the volume of the intravascular fluid". Code this factor if the patient had a metabolic acidosis with pH < 7.2 and/or Lactate > 4 mmol / liter at any time after the date and time of admission to the hospital but not at the time of OR Entry Date and Time. This factor should be coded if shock was present at any time after the date and time of admission to the hospital but not at the time of OR Entry Date and Time, including situations where shock was present after admission to the hospital where this operation was performed, and situations where shock was present while the patient was hospitalized at another “transferring facility” that subsequently transferred the patient who ultimately arrived at this hospital in this same hospitalization.
250	Diabetes mellitus, Insulin dependent	Code this factor if the patient has evidence of insulin dependent diabetes mellitus at the time OR Entry Date and Time as manifested by the fact that the patient has the diagnosis of diabetes mellitus that is controlled with insulin.
260	Diabetes mellitus, Non-insulin dependent	Code this factor if the patient has evidence of non-insulin dependent diabetes mellitus at the time OR Entry Date and Time as manifested by the fact that the patient has the diagnosis of diabetes mellitus that is controlled with dietary modification with or without oral medications (oral antihyperglycemic agents).

270	Hypothyroidism	Hypothyroidism refers to decreased levels of triiodothyronine (T3) and thyroxine (T4), and reverse triiodothyronine (reverse T3), with high levels of thyroid-stimulating hormone (TSH). Symptoms of hypothyroidism include bradycardia, pericardial effusions, hypertension and a narrowed pulse pressure and myxedema. Studies have also shown decreases in cardiac output and cardiac contractility, decreased diastolic relaxation and diastolic filling. In those with congestive heart failure (CHF), decreased levels of T3 have been shown to be proportional to New York Heart Association class, poor outcomes, mortality, poor hemodynamics, and hyponatremia. This factor may be coded (1) if the TSH > 20 mU / liter, or (2) if the patient has pituitary failure with hypothyroidism, or (3) if the patient is receiving medication to treat hypothyroidism.
280	Currently taking steroids as treatment for adrenal insufficiency	Code this factor if the patient is taking steroids (as treatment for adrenal insufficiency) at the time of OR Entry Date and Time.
290	Currently taking steroids for any reason other than treatment of adrenal insufficiency	Code this factor if the patient is taking steroids (for any reason other than treatment of adrenal insufficiency) at the time of OR Entry Date and Time.
295	Colostomy present	Code this factor if the patient has a colostomy (involving the large intestine) present at the time of OR Entry Date and Time.
300	Enterostomy of small intestine present	Code this factor if the patient has an enterostomy (involving the small intestine) present at the time of OR Entry Date and Time.
305	Esophagostomy present	Code this factor if the patient has an esophagostomy present at the time of OR Entry Date and Time.
307	Gastrostomy present	Code this factor if the patient has a gastrostomy present at the time of OR Entry Date and Time.
310	Hepatic dysfunction	Hepatic dysfunction is defined as dysfunction of the liver that results in hypoalbuminemia (<2 grams/dL), coagulopathy (PT > 1.5 x upper limits of normal), and hyperbilirubinemia (> 3.0 x upper limits of normal). Select this factor if the patient develops 2 out of these 3 laboratory abnormalities. Code this factor if the patient has evidence of hepatic dysfunction at the time OR Entry Date and Time
320	Necrotizing entero-colitis, Treated medically	Necrotizing enterocolitis (NEC) ROOT Definition = Necrotizing enterocolitis is defined as an acute reduction in the supply of oxygenated blood to the small intestine or large intestine, typically resulting in acidosis, abdominal distention, pneumatosis, and/or intestinal perforation, that prompts initiation of antibiotics or exploratory laparotomy. Select this factor if NEC is present during the same hospitalization as this operation and was managed without surgery to treat the

		NEC.
330	Necrotizing entero-colitis, Treated surgically	Necrotizing enterocolitis (NEC) ROOT Definition = Necrotizing enterocolitis is defined as an acute reduction in the supply of oxygenated blood to the small intestine or large intestine, typically resulting in acidosis, abdominal distention, pneumatosis, and/or intestinal perforation, that prompts initiation of antibiotics or exploratory laparotomy. Select this factor if NEC is present during the same hospitalization as this operation and was managed with surgery to treat the NEC.
340	Coagulation disorder, Hypercoagulable state	Code this factor if the patient has evidence of a hypercoagulable state at the time OR Entry Date and Time.
350	Coagulation disorder, Hypocoagulable state not secondary to medication (intrinsic hypocoagulable state)	Code this factor if the patient has evidence of a coagulopathy at the time OR Entry Date and Time as manifest by PT/PTT above normal, Thrombocytopenia <100,000,ot Fibrinogen split products positive (>10%) and the coagulopathy is NOT secondary to medications such as Heparin or Warfarin.
360	Coagulation disorder, Hypocoagulable state secondary to medication	Code this factor if the patient has evidence of a coagulopathy at the time OR Entry Date and Time as manifest by PT/PTT above normal, Thrombocytopenia <100,000,ot Fibrinogen split products positive (>10%) and the coagulopathy is secondary to medications such as Heparin or Warfarin.
370	Endocarditis	This factor should be coded if endocarditis present at any time after the date and time of admission to the hospital and prior to OR Entry Date and Time, including situations where endocarditis was present after admission to the hospital where this operation was performed, and situations where endocarditis was present while the patient was hospitalized at another "transferring facility" that subsequently transferred the patient who ultimately arrived at this hospital in this same hospitalization. Code this factor if endocarditis is diagnosed prior to OR Entry Date and Time, using the Duke Criteria for the Diagnosis of Infective Endocarditis (IE): The definitive diagnosis of infective endocarditis requires one of the following four situations: 1) Histologic and/or microbiologic evidence of infection at surgery or autopsy such as positive valve culture or histology; 2) Two major criteria; 3) One major criterion and three minor criteria; 4) Five minor criteria. The two major criteria are: 1) Blood cultures positive for IE 2) Evidence of endocardial involvement. Blood cultures positive for IE requires: 1) Typical microorganism consistent with IE isolated from 2 separate blood cultures, as noted in number two below (viridans streptococci, Streptococcus bovis, Staphylococcus aureus, or HACEK group [HACEK, Haemophilus species {H. aprophilus and H.

		paraaphrophilus}, Actinobacillus actinoinycetemcomitans, Cardiobacterium hominis, Eikenella corrodens, and Kingella kingae.]) or (Community-acquired enterococci in the absence of a primary focus); 2) Microorganisms consistent with IE isolated from persistently positive blood cultures defined as: (At least 2 positive cultures of blood samples obtained > 12 hours apart) or (All of 3 or a majority of 4 or more separate cultures of blood, the first and the last sample obtained > 1 hr apart); 3) Single blood culture positive for Coxiella burnetii or an antiphase I IgG antibody titer of >1 :800. Evidence of endocardial involvement requires 1) Positive results of echocardiography for IE defined as: (Oscillating intracardiac mass on the valve or supporting structures in the path of regurgitant jets or on implanted material in the absence of an alternative anatomic explanation) or (Abscess) or (New partial dehiscence of a valvar prosthesis) or 2) New valvar regurgitation (worsening or changing or preexisting murmur not sufficient). The six minor criteria are: 1) Predisposing heart disease or injection drug use (IVDA); 2) Temperature of > 38C; 3) Vascular phenomenon (major arterial emboli, septic pulmonary infarcts, mycotic aneurysm, intracranial or conjunctival hemorrhage, Janeway's lesions); 4) Immunologic phenomenon (glomerulonephritis, Osler's nodes, Roth's spots, rheumatoid factor); 5) Microbiologic evidence (a positive blood culture that does not meet a major criterion as noted above) or serologic evidence of active infection with an organism consistent with IE; 6) Echocardiographic findings that are consistent with IE but do not meet a major criterion as noted above. References: 1) Dhawan VK Infectious Endocarditis in Elderly Patients. Clin. Infect. Dis. 2002;34:806-812. 2) Durack DT, Lukes AS, Bright DK. New criteria for diagnosis of infective endocarditis: utilization of specific echocardiographic findings. Duke Endocarditis Service. Am. J. Med. 1994;96:200-209. 3) Li IS, Sexton DJ, Mick N, et al. Proposed modifications to the Duke criteria for the diagnosis of infective endocarditis. Clin. Infect. Dis. 2000;30:633-638. 4) http://gold.aecom.yu.edu/id/almanac/dukeendocarditis.htm, accessed July 5, 2006.
380	Sepsis	Sepsis ROOT Definition = Sepsis is defined as "evidence of serious infection accompanied by a deleterious systemic response". Sepsis may be diagnosed by the presence of a Systemic Inflammatory Response Syndrome (SIRS) resulting from suspected or proven infection. A systemic inflammatory response syndrome (SIRS) is present when at least two of the following criteria are present: hypo- or hyperthermia (>38.5 or <36.0), tachycardia or bradycardia, tachypnea, leukocytosis or leukopenia, and

		thrombocytopenia. Code this factor if the patient has signs of sepsis within 48 hours of OR Entry Date and Time.
390	Sepsis with positive blood culture	Code this factor if the patient has a positive blood culture within 48 hours of OR Entry Date and Time, combined with the diagnosis of sepsis. Sepsis ROOT Definition = Sepsis is defined as "evidence of serious infection accompanied by a deleterious systemic response". Sepsis may be diagnosed by the presence of a Systemic Inflammatory Response Syndrome (SIRS) resulting from suspected or proven infection. A systemic inflammatory response syndrome (SIRS) is present when at least two of the following criteria are present: hypo- or hyperthermia (>38.5 or <36.0), tachycardia or bradycardia, tachypnea, leukocytosis or leukopenia, and thrombocytopenia. Code this factor if the patient has signs of sepsis and a positive blood culture within 48 hours of OR Entry Date and Time.
400	Preoperative neurological deficit	Code this factor if the patient has any deficit of neurologic function identified by the care team (during the hospitalization of this operation prior to the time of OR Entry Date and Time).
410	Seizure during lifetime	Seizure ROOT Definition = A seizure is defined as the clinical and/or electroencephalographic recognition of epileptiform activity. Select this preoperative factor for any prior seizure during the lifetime of the patient.
420	Seizure within 48 hours prior to surgery	Seizure ROOT Definition = A seizure is defined as the clinical and/or electroencephalographic recognition of epileptiform activity. Select this preoperative factor for any prior seizure during the 48 hours prior to surgery.
430	Stroke, CVA, or Intracranial hemorrhage > Grade 2 during lifetime	Indicate whether the patient had a stroke, CVA, or intracranial hemorrhage > Grade 2 at any time during the patient's lifetime. Stroke ROOT Definition = A stroke is any confirmed neurological deficit of abrupt onset caused by a disturbance in blood flow to the brain, when the neurologic deficit does not resolve within 24 hours. An IVH (Intraventricular hemorrhage) is diagnosed by the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that may extend to include an intraparenchymal component. A Grade 1 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage with a limited germinal matrix involvement. A Grade 2 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that involves an area of up to, but not more than 50% of the ventricular cross-sectional area in sagittal view. A Grade 3 IVH requires the existence of a neurologic imaging study indicating a new or previously

		unsuspected collection of intraventricular hemorrhage that involves at least 50% of the ventricular cross-sectional area in sagittal view but not an intraparenchymal component. A Grade 4 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that includes an intraparenchymal component extending beyond the germinal matrix.
440	Stroke, CVA, or Intracranial hemorrhage > Grade 2 within 48 hours prior to surgery	Indicate whether the patient had a stroke, CVA, or intracranial hemorrhage > Grade 2 occurring within the 48 hours prior to surgery. Stroke ROOT Definition = A stroke is any confirmed neurological deficit of abrupt onset caused by a disturbance in blood flow to the brain, when the neurologic deficit does not resolve within 24 hours. An IVH (Intraventricular hemorrhage) is diagnosed by the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that may extend to include an intraparenchymal component. A Grade 1 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage with a limited germinal matrix involvement. A Grade 2 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that involves an area of up to, but not more than 50% of the ventricular cross-sectional area in sagittal view. A Grade 3 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that involves at least 50% of the ventricular cross-sectional area in sagittal view but not an intraparenchymal component. A Grade 4 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that includes an intraparenchymal component extending beyond the germinal matrix.
450	Renal dysfunction	Renal dysfunction is defined as the oliguria with sustained urine output < 0.5 cc/kg/hr for 24 hours and/or a rise in creatinine > 1.5 times upper limits of normal for age, without needing dialysis (including peritoneal dialysis and/or hemodialysis) or hemofiltration.
460	Renal failure requiring dialysis	Renal failure is defined as oliguria with sustained urine output < 0.5 cc/kg/hr for 24 hours and/or a rise in creatinine > 1.5 times upper limits of normal for age, with need for dialysis (including peritoneal dialysis and/or hemodialysis) or hemofiltration.
470	Mechanical ventilation to	This patient was supported with mechanical ventilation

	treat cardiorespiratory failure	to treat cardiorespiratory failure during the hospitalization of this operation and prior to OR Entry Date and Time.
480	Respiratory Syncytial Virus	Code this factor if the patient is diagnosed with Respiratory Syncytial Virus (RSV) during the hospitalization of this operation prior to the time of OR Entry Date and time and was present at the time of OR Entry Date and Time.
490	Single lung	Code this factor if the patient has only one lung present at the time of OR Entry Date and Time.
500	Tracheostomy present	Code this factor if the patient has a tracheostomy present at the time of OR Entry Date and Time.
510	Asthma	Asthma is the common chronic inflammatory disease of the airways characterized by variable and recurring symptoms, reversible airflow obstruction, and bronchospasm. Symptoms include wheezing, coughing, chest tightness, and shortness of breath. Asthma is clinically classified according to the frequency of symptoms, forced expiratory volume in 1 second (FEV1), and peak expiratory flow rate. Asthma may also be classified as atopic (extrinsic) or non-atopic (intrinsic). It is thought to be caused by a combination of genetic and environmental factors. Treatment of acute symptoms is usually with an inhaled short-acting beta-2 agonist (such as salbutamol). Symptoms can be prevented by avoiding triggers, such as allergens and irritants, and by inhaled corticosteroids.
520	Bronchopulmonary dysplasia (BPD)	Bronchopulmonary dysplasia (BPD) is a chronic lung disorder that is most common among children who were born prematurely, with low birth weights and who received prolonged mechanical ventilation to treat respiratory distress syndrome. BPD is characterized by inflammation and scarring in the lungs. The high pressures of oxygen delivery result in necrotizing bronchiolitis and alveolar septal injury, further compromising oxygenation of blood. Today, with the advent of surfactant therapy and high frequency nasal ventilation and oxygen supplementation, infants with BPD experience much milder injury without necrotizing bronchiolitis or alveolar septal fibrosis. It develops most commonly in the first 4 weeks after birth.
530	ICD (AICD) ([automatic] implantable cardioverter defibrillator) present	An implantable cardioverter-defibrillator (ICD) is a small battery-powered electrical impulse generator that is implanted in patients who are at risk of sudden cardiac death due to ventricular fibrillation and ventricular tachycardia. The device is programmed to detect cardiac arrhythmia and correct it by delivering a jolt of electricity. In current models, the ability to convert tachyarrhythmias has been extended to include both atrial and ventricular arrhythmias. There also exists the ability to perform biventricular pacing for asystole

		or bradycardia.
540	Pacemaker present	A pacemaker is a medical device that uses electrical impulses, delivered by electrodes contacting the heart muscles, to regulate the beating of the heart. The purpose of a pacemaker is to maintain an adequate heart rate, either because the heart's native pacemaker is not fast enough, or there is a block in the heart's electrical conduction system. Pacemakers are externally programmable and allow the physician to select the optimum pacing modes for individual patients. Some have multiple electrodes stimulating differing positions within the heart to improve synchronization of the upper (atria) and lower (ventricles) chambers of the
570	Tobacco use	Current or previous use of any tobacco product, including cigarettes, cigars, pipes, and chewing tobacco.
580	Family History of Coronary artery disease	Indicate if the patient has/had any direct blood relatives (i.e., parents, siblings, children) who have had any of the following diagnosed at age less than 55 years for male relatives or less than 65 years for female relatives: - Coronary artery disease (i.e., angina, previous CABG or PCI) - MI - Sudden cardiac death without obvious cause
590	Dyslipidemia	Current or previous diagnosis of dyslipidemia according to National Cholesterol Education Program criteria, defined as any 1 of the following: - Total cholesterol greater than or equal to 200 mg/dL (5.18 mmol/L) - LDL greater than or equal to 130 mg/dL (3.37 mmol/L) - HDL less than or equal to 40 mg/dL (1.04 mmol/L) in males and less than or equal to 50 mg/dL (1.30 mmol/L) in females
777	Other preoperative factors	This patient has other preoperative factor(s) that are not on this list.

Long Name: Antenatal Diagnosis of Congenital Heart Disease *SeqNo:* 860

Short Name: **AntDiag** *Core:* No

Section Name: Diagnosis *Harvest:* No

DBTableName Operations

Definition: Indicate whether a cardiac anomaly was diagnosed antenatally (e.g., fetal ultrasound).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Diagnosis Table Unique Record Identifier *SeqNo:* 870

Short Name: **DiagUniqueID** *Core:* Yes

Section Name: Diagnosis *Harvest:* Yes

DBTableName Diagnosis

Definition: Unique identifier for the record in the Diagnosis table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Diagnosis Link to Operations Table *SeqNo:* 880

Short Name: **OperationID** *Core:* Yes

Section Name: Diagnosis *Harvest:* Yes

DBTableName Diagnosis

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. This field is the foreign key that links the Diagnosis record with the associated record in the Operations table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Diagnoses *SeqNo:* 890

Short Name: **Diagnosis** *Core:* Yes

Section Name: Diagnosis *Harvest:* Yes

DBTableName Diagnosis

Definition: Indicate all diagnoses noted at the time of the surgical procedure or documented by preoperative studies. This entry may duplicate the Fundamental Diagnosis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	PFO	A small interatrial communication (or potential communication) confined to the region of the oval fossa (fossa ovalis) characterized by no deficiency of the primary atrial septum (septum primum) and a normal limbus with no deficiency of the septum secundum (superior interatrial fold).
20	ASD, Secundum	A congenital cardiac malformation in which there is an interatrial communication confined to the region of the oval fossa (fossa ovalis), most commonly due to a deficiency of the primary atrial septum (septum primum) but deficiency of the septum secundum (superior interatrial fold) may also contribute.

30	ASD, Sinus venosus	A congenital cardiac malformation in which there is a caval vein (vena cava) and/or pulmonary vein (or veins) that overrides the atrial septum or the septum secundum (superior interatrial fold) producing an interatrial or anomalous venoatrial communication Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the atrial septum.
40	ASD, Coronary sinus	A congenital cardiac malformation in which there is a deficiency of the walls separating the left atrium from the coronary sinus allowing interatrial communication through the coronary sinus ostium.
50	ASD, Common atrium (single atrium)	Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated malformation of the atrioventricular valves.
2150	ASD, Postoperative interatrial communication	A surgically created communication between the atria.
71	VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular)	A VSD that lies beneath the semilunar valve(s) in the conal or outlet septum.
73	VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.
75	VSD, Type 3 (Inlet) (AV canal type)	A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.
77	VSD, Type 4 (Muscular)	A VSD completely surrounded by muscle.
79	VSD, Type: Gerbode type (LV-RA communication)	A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.
80	VSD, Multiple	More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.
100	AVC (AVSD), Complete (CAVSD)	Indicate if the patient has the diagnosis of “AVC (AVSD), Complete (CAVSD)”. An “AVC (AVSD), Complete (CAVSD)” is a “complete atrioventricular canal” or a “complete atrioventricular septal defect” and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An “AVC (AVSD), Complete (CAVSD)” is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart.

		Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which floats freely (often termed a "free-floater") over the ventricular septum without chordal attachment to the crest of the ventricular septum.
110	AVC (AVSD), Intermediate (transitional)	An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.
120	AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)	An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.
140	AP window (aortopulmonary window)	Indicate if the patient has the diagnosis of “AP window (aortopulmonary window)”. An “AP window (aortopulmonary window)” is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves,

		with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)
150	Pulmonary artery origin from ascending aorta (hemitruncus)	One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.
160	Truncus arteriosus	Indicate if the patient has the diagnosis of "Truncus arteriosus". A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.
170	Truncal valve insufficiency	Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).
2010	Truncus arteriosus + Interrupted aortic arch	Indicate if the patient has the diagnosis of "Truncus arteriosus + Interrupted aortic arch". {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is

		virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}
180	Partial anomalous pulmonary venous connection (PAPVC)	Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).
190	Partial anomalous pulmonary venous connection (PAPVC), scimitar	The right pulmonary vein(s) connect anomalously to the inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.
200	Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.
210	Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.
220	Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac

		level (below the diaphragm), with the pulmonary venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.
230	Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.
250	Cor triatriatum	In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supravalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supravalvar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
260	Pulmonary venous stenosis	Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).
270	Systemic venous anomaly	Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.
280	Systemic venous obstruction	Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC),

		brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
290	TOF	Indicate if the patient has the diagnosis of "TOF". Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). "TOF, Pulmonary stenosis", (2). "TOF, AVC (AVSD)", (3). "TOF, Absent pulmonary valve", (4). "Pulmonary atresia, VSD (Including TOF, PA)", or (5). "Pulmonary atresia, VSD-MAPCA (pseudotruncus)".{"TOF" is "Tetralogy of Fallot" and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy.} (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")
2140	TOF, Pulmonary stenosis	Indicate if the patient has the diagnosis of "TOF, Pulmonary stenosis". Use this diagnosis if the patient

		has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}
300	TOF, AVC (AVSD)	TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.
310	TOF, Absent pulmonary valve	Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is "Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior

		deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semi-lunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilatation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with pulmonary `valve stenosis and regurgitation, comprise the physiologic conditions which predispose to central pulmonary artery dilatation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)
320	Pulmonary atresia	Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.
330	Pulmonary atresia, IVS	Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.
340	Pulmonary atresia, VSD (Including TOF, PA)	Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance) and the pulmonary artery, in a biventricular heart that

		has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code should not be used; instead, Pulmonary atresia, VSD-MAPCA (pseudotruncus) should be used.
350	Pulmonary atresia, VSD-MAPCA	MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.
360	MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD)	Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.
370	Ebstein's anomaly	Indicate if the patient has the diagnosis of “Ebstein's anomaly”. Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of

		the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilatation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases of Ebstein's anomaly with pulmonary atresia should be coded with a Primary Diagnosis of "Ebstein's anomaly", and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebstein-like deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in right-sided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)
380	Tricuspid regurgitation, non-Ebstein's related	Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).
390	Tricuspid stenosis	Tricuspid stenosis may be due to congenital factors (valvar hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).
400	Tricuspid regurgitation and tricuspid stenosis	Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.
410	Tricuspid valve, Other	Tricuspid valve pathology not otherwise specified in diagnosis definitions 370, 380, 390 and 400.
420	Pulmonary stenosis, Valvar	Pulmonary stenosis, Valvar ranges from critical

		neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.
430	Pulmonary artery stenosis (hypoplasia), Main (trunk)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis (hypoplasia), Main (trunk)". "Pulmonary artery stenosis (hypoplasia), Main (trunk)" is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Since the narrowing is distal to the pulmonic valve, it may also be known as supravalvar pulmonary stenosis.
440	Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)" is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.
450	Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)". "Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)" is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.
470	Pulmonary artery, Discontinuous	Indicate if the patient has the diagnosis of "Pulmonary artery, Discontinuous". Pulmonary artery, Discontinuous" is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.
490	Pulmonary stenosis, Subvalvar	Subvalvar (infundibular) pulmonary stenosis is a narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing

		muscle bundle or to a long narrow fibromuscular channel.
500	DCRV	The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.
510	Pulmonary valve, Other	Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.
530	Pulmonary insufficiency	Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired (for example, post cardiac surgery for repair of tetralogy of Fallot, etc.).
540	Pulmonary insufficiency and pulmonary stenosis	Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supravalvar stenosis.
2130	Shunt failure	Indicate if the patient has the diagnosis of "Shunt failure". This diagnostic subgroup includes failure of any of a variety of shunts ("Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)", "Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)", "Shunt, Systemic to pulmonary, Other", and "Sano Shunt"), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis ("Shunt failure") would be the primary diagnosis in a patient with, for example, "Hypoplastic left heart syndrome (HLHS)" who underwent a "Norwood procedure" with a "Modified Blalock-Taussig Shunt" and now requires reoperation for thrombosis of the "Modified Blalock-Taussig Shunt". The underlying or fundamental diagnosis in this patient is "Hypoplastic left heart syndrome (HLHS)", but the primary diagnosis for the operation to be performed to treat the thrombosis of the "Modified Blalock-Taussig Shunt" would be "Shunt failure". Please note that the choice "2130 Shunt failure" does not include "520 Conduit failure".
520	Conduit failure	Indicate if the patient has the diagnosis of "Conduit failure". This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-

		PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis ("Conduit failure") would be the primary diagnosis in a patient with, for example, "Truncus arteriosus" repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is "Truncus arteriosus", but the primary diagnosis for the operation to be performed during the hospitalization (in this case, "Conduit reoperation") would be "Conduit failure". Please note that the choice "520 Conduit failure" does not include "2130 Shunt failure".
550	Aortic stenosis, Subvalvar	Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral valve tissue, abnormal insertion of the mitral anterior leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supravalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also known as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.
560	Aortic stenosis, Valvar	Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and

		eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.
570	Aortic stenosis, Supravalvar	Congenital supravalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure to thrive, and occasionally infantile hypercalcemia. Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.
590	Aortic valve atresia	Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.
600	Aortic insufficiency	Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet abnormality; (2) in association with a VSD (especially in supracristal or conal type I VSD, more commonly seen in Asian populations); (3) secondary to aortic-left ventricular tunnel; (4) secondary to tethering or

		retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neo-aorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annulo-aortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be coded first as either conduit failure or prosthetic valve failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.
610	Aortic insufficiency and aortic stenosis	Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.
620	Aortic valve, Other	This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (normal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.
630	Sinus of Valsalva aneurysm	The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a

		single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.
640	LV to aorta tunnel	The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity of a valve) communication between the aorta and left ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.
650	Mitral stenosis, Supravalvar mitral ring	Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains

		only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
660	Mitral stenosis, Valvar	Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
670	Mitral stenosis, Subvalvar	Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
680	Mitral stenosis, Subvalvar, Parachute	In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilatation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supravalvar mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
695	Mitral stenosis	Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.
700	Mitral regurgitation and mitral stenosis	Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.

710	Mitral regurgitation	Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilatation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae tendineae anomalies (agenesis, rupture, elongation, or shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
720	Mitral valve, Other	Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.
730	Hypoplastic left heart syndrome (HLHS)	Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.
2080	Shone’s syndrome	Shone’s syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supravalvar ring of the left atrium, (2) a parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases

		exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of "parachute mitral valve", supravalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. Am J Cardiol 1963; 11: 714–725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. Cardiology in the Young, 2006; 16(4): 339–368, August 2006. Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however, the term "2080 Shone's syndrome" may not be the "Primary Diagnosis" of an operation. The term "2080 Shone's syndrome" may be a "Secondary Diagnosis" of an operation.
740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)	Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be divided into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilatation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3) spongiform cardiomyopathy.
750	Cardiomyopathy, End-stage congenital heart disease	Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
760	Pericardial effusion	Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in

		cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	A congenital cardiac malformation in which both atria connect to a single, morphologically left ventricle. The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart". Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.
800	Single ventricle, DIRV	A congenital cardiac malformation in which both atria connect to a single, morphologically right ventricle

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810	Single ventricle, Mitral atresia	A congenital cardiac malformation in which there is no orifice of mitral valve The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the

		systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart". Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.
820	Single ventricle, Tricuspid atresia	A congenital cardiac malformation in which there is no orifice of tricuspid valve. The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart

		include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart". Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.
830	Single ventricle, Unbalanced AV canal	Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)–type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)–type or RV-dominant AV septal defect. The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected

		transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart".
840	Single ventricle, Heterotaxia syndrome	"Heterotaxia syndrome" is synonymous with "heterotaxy", "visceral heterotaxy", and "heterotaxy syndrome". Heterotaxy is defined as an abnormality where the internal thoraco-abdominal organs demonstrate abnormal arrangement across the left-right axis of the body. By convention, heterotaxy does not include patients with either the expected usual or normal arrangement of the internal organs along the left-right axis, also known as ‘situs solitus’, nor patients with complete mirror-imaged arrangement of the internal organs along the left-right axis also known as ‘situs inversus’. The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart". Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young:

		Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.
850	Single ventricle, Other	If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions. The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart". Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the

		Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.
851	Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)	Indicate if the patient has the diagnosis of "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)". In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code "Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)", and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {"Total anomalous pulmonary venous connection (TAPVC)" is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.} The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term "single ventricle" as synonymous for the "functionally univentricular heart". The term "functionally univentricular heart" describes a spectrum of congenital cardiovascular malformations in which the ventricular mass may not readily lend itself to partitioning that commits one ventricular pump to the systemic circulation, and another to the pulmonary circulation. A heart may be functionally univentricular because of its anatomy or because of the lack of feasibility or lack of advisability of surgically partitioning the ventricular mass. Common lesions in this category typically include double inlet right ventricle (DIRV), double inlet left ventricle (DILV), tricuspid atresia, mitral atresia, and hypoplastic left heart syndrome. Other lesions which sometimes may be considered to be a functionally univentricular heart include complex forms of atrioventricular septal defect, double outlet right ventricle, congenitally corrected transposition, pulmonary atresia with intact ventricular septum, and other cardiovascular malformations. Specific diagnostic codes should be used whenever possible, and not the term "functionally univentricular heart". Reference: Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor

		JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16, Supplement 1: 9 - 21, February 2006.
870	Congenitally corrected TGA	Indicate if the patient has the diagnosis of "Congenitally corrected TGA". Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.
872	Congenitally corrected TGA, IVS	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS". "Congenitally corrected TGA, IVS" is "Congenitally corrected transposition with an intact ventricular septum", in other words, "Congenitally corrected transposition with no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other

		Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)
874	Congenitally corrected TGA, IVS-LVOTO	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction", in other words, "Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)
876	Congenitally corrected TGA, VSD	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular

		Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)
878	Congenitally corrected TGA, VSD-LVOTO	Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD-LVOTO". "Congenitally corrected TGA, VSD-LVOTO" is "Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)
880	TGA, IVS	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
890	TGA, IVS-LVOTO	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected

		transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
900	TGA, VSD	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
910	TGA, VSD-LVOTO	A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
930	DORV, VSD type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
940	DORV, TOF type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed

		VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.
950	DORV, TGA type	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
960	DORV, Remote VSD (uncommitted VSD)	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
2030	DORV + AVSD (AV Canal)	Indicate if the patient has the diagnosis of “DORV +

		AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional (secondary) diagnostic codes to describe the DORV and the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.
975	DORV, IVS	Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
980	DOLV	Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
990	Coarctation of aorta	Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.
1000	Aortic arch hypoplasia	Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate

		and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and 50%, respectively, of the diameter of the ascending aorta.
92	VSD + Aortic arch hypoplasia	A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)
94	VSD + Coarctation of aorta	Indicate if the patient has the diagnosis of "VSD + Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}
1010	Coronary artery anomaly, Anomalous aortic origin of coronary artery (AAOCA)	Anomalous aortic origins of the coronary arteries include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.
1020	Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)	In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.
1030	Coronary artery anomaly, Fistula	The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary

		arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin, and are mostly commonly seen singly, but occasionally multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.
1040	Coronary artery anomaly, Aneurysm	Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.
1050	Coronary artery anomaly, Other	Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).
1070	Interrupted aortic arch	Indicate if the patient has the diagnosis of "Interrupted aortic arch". Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.
2020	Interrupted aortic arch + VSD	Indicate if the patient has the diagnosis of "Interrupted aortic arch + VSD". In the event of interrupted aortic arch occurring in association with VSD, code "Interrupted aortic arch + VSD", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most

		cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}
2000	Interrupted aortic arch + AP window (aortopulmonary window)	Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal

		defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)}
1080	Patent ductus arteriosus	Indicate if the patient has the diagnosis of "Patent ductus arteriosus". The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with the main pulmonary artery. Origination and insertion sites can be variable, however.)
1090	Vascular ring	The term vascular ring refers to a group of congenital vascular anomalies that encircle and compress the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).
1100	Pulmonary artery sling	In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.
1110	Aortic aneurysm (including pseudoaneurysm)	An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic

		wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include postoperative or post-procedure false aneurysms at anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days).
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplasm, etc.) which may result in death or lung or heart-lung transplant.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final benign/malignant pathology determination.

1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
2160	Rib tumor, Benign	Non-cancerous tumor of rib(s) (e.g., fibrous dysplasia)
2170	Rib tumor, Malignant	Cancerous tumor of rib(s)- primary (e.g., osteosarcoma, chondrosarcoma)
2180	Rib tumor, Metastatic	Cancerous tumor metastasized to rib(s)from a different primary location
2190	Sternal tumor, Benign	Non-cancerous tumor of sternum (e.g., fibrous dysplasia)
2200	Sternal tumor, Malignant	Cancerous tumor of sternum - primary (e.g., osteosarcoma, chondrosarcoma)
2210	Sternal tumor, Metastatic	Cancerous tumor metastasized to sternum from a different primary location
2220	Pectus carinatum	Pectus carinatum represents a spectrum of protrusion abnormalities of the anterior chest wall. Severe deformity may result in dyspnea and decreased endurance. Some patients develop rigidity of the chest wall with decreased lung compliance, progressive emphysema, and increased frequency of respiratory tract infections.
2230	Pectus excavatum	Pectus excavatum is a congenital chest wall deformity in which several ribs and the sternum grow abnormally, producing a concave, or caved-in, appearance in the anterior chest wall. Pectus excavatum is the most common type of congenital chest wall abnormality. It occurs in an estimated 1 in 300-400 births, with male predominance (male-to-female ratio of 3:1). The condition is typically noticed at birth, and more than 90% of cases are diagnosed within the first year of life. Worsening of the chest's appearance and the onset of respiratory symptoms are usually reported during rapid bone growth in the early teenage years.
2240	Thoracic outlet syndrome	Thoracic outlet syndrome (TOS) is caused by compression at the superior thoracic outlet wherein excess pressure is placed on a neurovascular bundle passing between the anterior scalene and middle scalene muscles. It can affect the brachial plexus (nerves that pass into the arm from the neck), the subclavian artery, and - rarely - the vein, which does not normally pass through the scalene hiatus. TOS may occur due to a positional cause - for example, by abnormal compression from the clavicle (collarbone) and shoulder girdle on arm movement. There are also several static forms, caused by abnormalities, enlargement, or spasm of the various muscles surrounding the arteries, veins, and/or brachial plexus, a fixation of a first rib, or a

		cervical rib. The most common causes of thoracic outlet syndrome include physical trauma from a car accident, repetitive injuries from a job such as frequent non-ergonomic use of a keyboard, sports-related activities, anatomical defects such as having an extra rib, and pregnancy.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of ''Arrhythmia, Atrial''. ''Arrhythmia, Atrial'' ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 373.
2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of ''Arrhythmia, Junctional''. "Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of ''Arrhythmia, Ventricular''. "Arrhythmia, Ventricular'' ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post-surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.
1220	Arrhythmia, Pacemaker,	Indications for pacemaker replacement may include end

	Indication for replacement	of generator life, malfunction, or infection.
1230	Atrial Isomerism, Left	In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.
1240	Atrial Isomerism, Right	In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.
2090	Dextrocardia	Indicate if the patient has the diagnosis of ‘‘Dextrocardia’’. “Dextrocardia’’ is most usually considered synonymous with a right-sided ventricular mass, whilst ‘‘dextroversion’’ is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2100	Levocardia	Indicate if the patient has the diagnosis of ‘‘Levocardia’’. ‘‘Levocardia’’ usually considered synonymous with a left-sided ventricular mass, whilst ‘‘levoversion’’ is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2110	Mesocardia	Indicate if the patient has the diagnosis of ‘‘Mesocardia’’. “Mesocardia’’ is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan

		SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2120	Situs inversus	Indicate if the patient has the diagnosis of "Situs inversus" of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as ''situs solitus''. The mirror-imaged arrangement is also known as ''situs inversus''. The term ''visceroatrial situs'' is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
1250	Aneurysm, Ventricular, Right (including pseudoaneurysm)	An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
1260	Aneurysm, Ventricular, Left (including pseudoaneurysm)	An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.
1270	Aneurysm, Pulmonary artery	An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).
1280	Aneurysm, Other	A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left ventricular aneurysm, or pulmonary artery aneurysm.

1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
2070	Postoperative bleeding	Indicate if the patient has the diagnosis of "Postoperative bleeding".
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinitis occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvar (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of "Prosthetic valve failure". This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis "Prosthetic valve failure", as a secondary diagnosis "Pulmonary insufficiency", and as a fundamental diagnosis "Tetralogy of Fallot".
1340	Myocardial infarction	A myocardial infarction is the development of

		myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).
1350	Cardiac tumor	An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothesioloma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.
1360	Pulmonary AV fistula	An abnormal intrapulmonary connection (fistula) between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.
1370	Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.
1385	Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collage vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.
1390	Pulmonary vascular obstructive disease (Eisenmenger’s)	"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)". Eisenmenger syndrome is an acquired condition. In Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a

		ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.
2250	Kawasaki disease	Kawasaki disease, also known as Kawasaki syndrome, is an acute febrile illness of unknown etiology that primarily affects children younger than 5 years of age. it was first described in Japan in 1967, and the first cases outside of Japan were reported in Hawaii in 1976. It is characterized by fever, rash, swelling of the hands and feet, irritation and redness of the whites of the eyes, swollen lymph glands in the neck, and irritation and inflammation of the mouth, lips, and throat. Serious complications of Kawasaki disease include coronary artery dilatations and aneurysms, and Kawasaki disease is a leading cause of acquired heart disease in children in the United States. The standard treatment with intravenous immunoglobulin and aspirin substantially decreases the development of coronary artery abnormalities.
1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels

		involved may include, but are not limited to femoral artery, femoral vein, iliac artery, brachial artery, etc.
2260	Complication of cardiovascular catheterization procedure	Unspecified complication of cardiovascular catheterization procedure
2270	Complication of cardiovascular catheterization procedure, Device embolization	Migration or movement of device introduced during a cardiac catheterization procedure to an unintended location
2280	Complication of cardiovascular catheterization procedure, Device malfunction	Malfunction of a device introduced during a cardiac catheterization procedure
2290	Complication of cardiovascular catheterization procedure, Perforation	Perforation or puncture caused by a device introduced during a cardiac catheterization procedure
2300	Complication of interventional radiology procedure	Unspecified complication of interventional radiology procedure
2310	Complication of interventional radiology procedure, Device embolization	Migration or movement of device introduced during an interventional radiology procedure to an unintended location
2320	Complication of interventional radiology procedure, Device malfunction	Malfunction of a device introduced during an interventional radiology procedure
2330	Complication of interventional radiology procedure, Perforation	Perforation or puncture caused by a device introduced during an interventional radiology procedure
2340	Foreign body, Intracardiac foreign body	Presence of a foreign body within the heart
2350	Foreign body, Intravascular foreign body	Presence of a foreign body within an artery or vein
2360	Open sternum with closed skin	Sternotomy edges not re-approximated prior to closure of skin incision
2370	Open sternum with open skin (includes membrane placed to close skin)	Sternotomy and skin incision left open following surgery, covered with a membrane or dressing
2380	Retained sternal wire causing irritation	Surgically placed wire causing soft tissue irritation, pain or swelling (not infected)
2390	Syncope	A transient, self-limited loss of consciousness with an inability to maintain postural tone that is followed by spontaneous recovery. The term syncope excludes seizures, coma, shock, or other states of altered consciousness.
2400	Trauma, Blunt	Injury (ies) sustained from blunt force, caused by motor

		vehicle accidents, falls, blows or crush injuries
2410	Trauma, Penetrating	Injury (ies) sustained as a result of sharp force, including cutting or piercing instruments or objects, bites, or firearm injuries from projectiles.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	
4020	Status post - ASD repair, Primary closure	
4030	Status post - ASD repair, Patch	
4040	Status post - ASD repair, Device	
6110	Status post - ASD repair, Patch + PAPVC repair	
4050	Status post - ASD, Common atrium (single atrium), Septation	
4060	Status post - ASD creation/enlargement	
4070	Status post - ASD partial closure	
4080	Status post - Atrial septal fenestration	
4085	Status post - Atrial fenestration closure	
4100	Status post - VSD repair, Primary closure	
4110	Status post - VSD repair, Patch	
4120	Status post - VSD repair, Device	
4130	Status post - VSD, Multiple, Repair	
4140	Status post - VSD creation/enlargement	
4150	Status post - Ventricular septal fenestration	
4170	Status post - AVC (AVSD) repair, Complete (CAVSD)	
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)	

4190 Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)

6300 Status post - Valvuloplasty, Common atrioventricular valve

6250 Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve

6230 Status post - Valve replacement, Common atrioventricular valve

4210 Status post - AP window repair

4220 Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair

4230 Status post - Truncus arteriosus repair

4240 Status post - Valvuloplasty, Truncal valve

6290 Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve

4250 Status post - Valve replacement, Truncal valve

6220 Status post - Truncus + Interrupted aortic arch repair (IAA) repair

4260 Status post - PAPVC repair

4270 Status post - PAPVC, Scimitar, Repair

6120 Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)

4280 Status post - TAPVC repair

6200 Status post - TAPVC repair + Shunt - systemic-to-pulmonary

4290 Status post - Cor triatriatum repair

4300 Status post - Pulmonary

venous stenosis repair

4310 Status post - Atrial baffle procedure (non-Mustard, non-Senning)

4330 Status post - Anomalous systemic venous connection repair

4340 Status post - Systemic venous stenosis repair

4350 Status post - TOF repair, No ventriculotomy

4360 Status post - TOF repair, Ventriculotomy, Nontransanular patch

4370 Status post - TOF repair, Ventriculotomy, Transanular patch

4380 Status post - TOF repair, RV-PA conduit

4390 Status post - TOF - AVC (AVSD) repair

4400 Status post - TOF - Absent pulmonary valve repair

4420 Status post - Pulmonary atresia - VSD (including TOF, PA) repair

6700 Status post - Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

6710 Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])

6720 Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization +

	VSD closure + RV to PA connection [with or without conduit])
6730	Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated)
6740	Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated)
6750	Status post - Unifocalization MAPCA(s), Unilateral pulmonary unifocalization
4440	Status post - Unifocalization MAPCA(s)
4450	Status post - Occlusion of MAPCA(s)
4460	Status post - Valvuloplasty, Tricuspid
6280	Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid
4465	Status post - Ebstein's repair
4470	Status post - Valve replacement, Tricuspid (TVR)
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)
4490	Status post - Valve excision, Tricuspid (without replacement)
4500	Status post - Valve surgery, Other, Tricuspid
4510	Status post - RVOT procedure
4520	Status post - 1 1/2 ventricular repair
4530	Status post - PA, reconstruction (plasty), Main (trunk)
4540	Status post - PA, reconstruction (plasty),

	Branch, Central (within the hilar bifurcation)
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)
4570	Status post - DCRV repair
4590	Status post - Valvuloplasty, Pulmonic
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic
4600	Status post - Valve replacement, Pulmonic (PVR)
4630	Status post - Valve excision, Pulmonary (without replacement)
4640	Status post - Valve closure, Semilunar
4650	Status post - Valve surgery, Other, Pulmonic
4610	Status post - Conduit placement, RV to PA
4620	Status post - Conduit placement, LV to PA
5774	Status post - Conduit placement, Ventricle to aorta
5772	Status post - Conduit placement, Other
4580	Status post - Conduit reoperation
4660	Status post - Valvuloplasty, Aortic
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-

	Konno procedure
4670	Status post - Valve replacement, Aortic (AVR)
4680	Status post - Valve replacement, Aortic (AVR), Mechanical
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic
4700	Status post - Valve replacement, Aortic (AVR), Homograft
4715	Status post - Aortic root replacement, Bioprosthetic
4720	Status post - Aortic root replacement, Mechanical
4730	Status post - Aortic root replacement, Homograft
4735	Status post - Aortic root replacement, Valve sparing
4740	Status post - Ross procedure
4750	Status post - Konno procedure
4760	Status post - Ross-Konno procedure
4770	Status post - Other annular enlargement procedure
4780	Status post - Aortic stenosis, Subvalvar, Repair
6100	Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS
4790	Status post - Aortic stenosis, Supravalvar, Repair
4800	Status post - Valve surgery, Other, Aortic
4810	Status post - Sinus of Valsalva, Aneurysm repair
4820	Status post - LV to aorta tunnel repair
4830	Status post - Valvuloplasty, Mitral
6260	Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral

4840	Status post - Mitral stenosis, Supravalvar mitral ring repair
4850	Status post - Valve replacement, Mitral (MVR)
4860	Status post - Valve surgery, Other, Mitral
4870	Status post - Norwood procedure
4880	Status post - HLHS biventricular repair
6755	Status post - Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neoaorta + Arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui)
6160	Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands
6170	Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)
6180	Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands
6140	Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)
6150	Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair
6760	Status post - Hybrid

	Approach, Transcardiac balloon dilation
6770	Status post - Hybrid Approach, Transcardiac transcatheter device placement
1590	Status post - Transplant, Heart
1610	Status post - Transplant, Heart and lung
4910	Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista)
4920	Status post - Pericardial drainage procedure
4930	Status post - Pericardiectomy
4940	Status post - Pericardial procedure, Other
4950	Status post - Fontan, Atrio-pulmonary connection
4960	Status post - Fontan, Atrio-ventricular connection
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated
5000	Status post - Fontan, TCPC, External conduit, Fenestrated
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated
6780	Status post - Fontan, TCPC, Intra/extracardiac conduit, Fenestrated
6790	Status post - Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated
5025	Status post - Fontan revision or conversion (Re-do Fontan)
5030	Status post - Fontan, Other
6340	Status post - Fontan + Atrioventricular valvuloplasty
5035	Status post - Ventricular septation
5050	Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double

switch)

5060 Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli

5070 Status post - Congenitally corrected TGA repair, VSD closure

5080 Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit

5090 Status post - Congenitally corrected TGA repair, Other

5110 Status post - Arterial switch operation (ASO)

5120 Status post - Arterial switch operation (ASO) and VSD repair

5123 Status post - Arterial switch procedure + Aortic arch repair

5125 Status post - Arterial switch procedure and VSD repair + Aortic arch repair

5130 Status post - Senning

5140 Status post - Mustard

5145 Status post - Atrial baffle procedure, Mustard or Senning revision

5150 Status post - Rastelli

5160 Status post - REV

6190 Status post - Aortic root translocation over left ventricle (Including Nikaidoh procedure)

6210 Status post - TGA, Other procedures (Kawashima, LV-PA conduit, other)

5180 Status post - DORV, Intraventricular tunnel repair

5200 Status post - DOLV repair

5210 Status post - Coarctation repair, End to end

5220 Status post - Coarctation repair, End to end, Extended

5230 Status post - Coarctation repair, Subclavian flap

5240	Status post - Coarctation repair, Patch aortoplasty
5250	Status post - Coarctation repair, Interposition graft
5260	Status post - Coarctation repair, Other
5275	Status post - Coarctation repair + VSD repair
5280	Status post - Aortic arch repair
5285	Status post - Aortic arch repair + VSD repair
5290	Status post - Coronary artery fistula ligation
5291	Status post - Anomalous origin of coronary artery from pulmonary artery repair
5300	Status post - Coronary artery bypass
5305	Status post - Anomalous aortic origin of coronary artery (AAOCA) repair
5310	Status post - Coronary artery procedure, Other
5320	Status post - Interrupted aortic arch repair
5330	Status post - PDA closure, Surgical
5340	Status post - PDA closure, Device
5360	Status post - Vascular ring repair
5365	Status post - Aortopexy
5370	Status post - Pulmonary artery sling repair
5380	Status post - Aortic aneurysm repair
5390	Status post - Aortic dissection repair
5400	Status post - Lung biopsy
1600	Status post - Transplant, Lung(s)
5420	Status post - Lung procedure, Other
5440	Status post - Tracheal

procedure

6800 Status post - Muscle flap, Trunk (i.e., intercostal, pectus, or serratus muscle)

6810 Status post - Muscle flap, Trunk (i.e. latissimus dorsi)

6820 Status post - Removal, Sternal wire

6830 Status post - Rib excision, Complete

6840 Status post - Rib excision, Partial

6850 Status post - Sternal fracture - open treatment

6860 Status post - Sternal resection, Radical resection of sternum

6870 Status post - Sternal resection, Radical resection of sternum with mediastinal lymphadenectomy

6880 Status post - Tumor of chest wall - Excision including ribs

6890 Status post - Tumor of chest wall - Excision including ribs, With reconstruction

6900 Status post - Tumor of soft tissue of thorax - Excision of deep subfascial or intramuscular tumor

6910 Status post - Tumor of soft tissue of thorax - Excision of subcutaneous tumor

6920 Status post - Tumor of soft tissue of thorax - Radical resection

6930 Status post - Hyoid myotomy and suspension

6940 Status post - Muscle flap, Neck

6950 Status post - Procedure on neck

6960 Status post - Tumor of soft tissue of neck - Excision of deep subfascial or intramuscular tumor

6970 Status post - Tumor of soft

	tissue of neck - Excision of subcutaneous tumor
6980	Status post - Tumor of soft tissue of neck - Radical resection
6990	Status post - Pectus bar removal
7005	Status post - Pectus bar repositioning
7010	Status post - Pectus repair, Minimally invasive repair (Nuss), With thoracoscopy
7020	Status post - Pectus repair, Minimally invasive repair (Nuss), Without thoracoscopy
7030	Status post - Pectus repair, Open repair
7040	Status post - Division of scalenus anticus, With resection of a cervical rib
7050	Status post - Division of scalenus anticus, Without resection of a cervical rib
7060	Status post - Rib excision, Excision of cervical rib
7070	Status post - Rib excision, Excision of cervical rib, With sympathectomy
7080	Status post - Rib excision, Excision of first rib
7090	Status post - Rib excision, Excision of first rib, With sympathectomy
7100	Status post - Procedure on thorax
5450	Status post - Pacemaker implantation, Permanent
5460	Status post - Pacemaker procedure
6350	Status post - Explantation of pacing system
5470	Status post - ICD (AICD) implantation
5480	Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator)

procedure

5490 Status post - Arrhythmia surgery - atrial, Surgical Ablation

5500 Status post - Arrhythmia surgery - ventricular, Surgical Ablation

6500 Status post - Cardiovascular catheterization procedure, Diagnostic

6520 Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained

6550 Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration

6540 Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration

6510 Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained

6530 Status post - Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion

6410 Status post - Cardiovascular catheterization procedure, Therapeutic

6670 Status post - Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy

6570 Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon dilation

6590 Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy

6600 Status post - Cardiovascular catheterization procedure, Therapeutic, Coil implantation

6610 Status post - Cardiovascular

	catheterization procedure, Therapeutic, Device implantation
7110	Status post - Cardiovascular catheterization procedure, Therapeutic, Device implantation attempted
6690	Status post - Cardiovascular catheterization procedure, Therapeutic, Electrophysiological ablation
7120	Status post - Cardiovascular catheterization procedure, Therapeutic, Intravascular foreign body removal
6640	Status post - Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)
6580	Status post - Cardiovascular catheterization procedure, Therapeutic, Septostomy
6620	Status post - Cardiovascular catheterization procedure, Therapeutic, Stent insertion
6630	Status post - Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation
6650	Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion
6660	Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve
5590	Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
5600	Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta)
7130	Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta), Central shunt with an end-to-side

	connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt)
5610	Status post - Shunt, Systemic to pulmonary, Other
5630	Status post - Shunt, Ligation and takedown
6095	Status post - Shunt, Reoperation
5640	Status post - PA banding (PAB)
5650	Status post - PA debanding
5660	Status post - Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)
5670	Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
5680	Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
5690	Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
5700	Status post - HemiFontan
6330	Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty
6130	Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction
7140	Status post - Hepatic vein to azygous vein connection, Direct
7150	Status post - Hepatic vein to azygous vein connection, Interposition graft
7160	Status post - Kawashima

operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation)

5710 Status post - Palliation, Other

6360 Status post - ECMO cannulation

6370 Status post - ECMO decannulation

5910 Status post - ECMO procedure

5900 Status post - Intraaortic balloon pump (IABP) insertion

5920 Status post - Right/left heart assist device procedure

6390 Status post - VAD explantation

6380 Status post - VAD implantation

7170 Status post - VAD change out

6420 Status post - Echocardiography procedure, Sedated transesophageal echocardiogram

6430 Status post - Echocardiography procedure, Sedated transthoracic echocardiogram

6435 Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia

6440 Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)

6450 Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)

6460 Status post - Radiology procedure on cardiac patient, Diagnostic radiology

6470 Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac

	patient
6480	Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient
6490	Status post - Radiology procedure on cardiac patient, Therapeutic radiology
5720	Status post - Aneurysm, Ventricular, Right, Repair
5730	Status post - Aneurysm, Ventricular, Left, Repair
5740	Status post - Aneurysm, Pulmonary artery, Repair
5760	Status post - Cardiac tumor resection
5780	Status post - Pulmonary AV fistula repair/occlusion
5790	Status post - Ligation, Pulmonary artery
5802	Status post - Pulmonary embolectomy, Acute pulmonary embolus
5804	Status post - Pulmonary embolectomy, Chronic pulmonary embolus
5810	Status post - Pleural drainage procedure
5820	Status post - Pleural procedure, Other
5830	Status post - Ligation, Thoracic duct
5840	Status post - Decortication
5850	Status post - Esophageal procedure
5860	Status post - Mediastinal procedure
5870	Status post - Bronchoscopy
5880	Status post - Diaphragm plication
5890	Status post - Diaphragm procedure, Other
5930	Status post - VATS (video-assisted thoracoscopic

	surgery)
5940	Status post - Minimally invasive procedure
5950	Status post - Bypass for noncardiac lesion
5960	Status post - Delayed sternal closure
5970	Status post - Mediastinal exploration
5980	Status post - Sternotomy wound drainage
7180	Status post - Intravascular stent removal
5990	Status post - Thoracotomy, Other
6000	Status post - Cardiotomy, Other
6010	Status post - Cardiac procedure, Other
6020	Status post - Thoracic and/or mediastinal procedure, Other
6030	Status post - Peripheral vascular procedure, Other
6040	Status post - Miscellaneous procedure, Other
11777	Status post - Other procedure

Long Name: Primary Diagnosis Indicator *SeqNo:* 900

Short Name: **PrimDiag** *Core:* Yes

Section Name: Diagnosis *Harvest:* Yes

DBTableName Diagnosis

Definition: Indicate the diagnosis of primary importance at the time of this surgical procedure. Example: fundamental diagnosis of Tetralogy of Fallot. The current Diagnoses are both pulmonary insufficiency and residual ventricular septal defect. In this case, pulmonary insufficiency will be flagged as the primary diagnosis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedures Table Unique Record Identifier *SeqNo:* 910

Short Name: **ProcUniqueID** *Core:* Yes

Section Name: Procedures *Harvest:* Yes

DBTableName Procedures

Definition: Unique identifier for the record in the Procedures table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Procedures Link to Operations Table *SeqNo:* 920

Short Name: **OperationID** *Core:* Yes

Section Name: Procedures *Harvest:* Yes

DBTableName Procedures

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. This field is the foreign key that links the Procedure record with the associated record in the Operations table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Procedures *SeqNo:* 930

Short Name: **Procedure** *Core:* Yes

Section Name: Procedures *Harvest:* Yes

DBTableName Procedures

Definition: Indicate ALL procedures that were performed during this surgical procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	PFO, Primary closure	Suture closure of patent foramen ovale (PFO).
20	ASD repair, Primary closure	Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
30	ASD repair, Patch	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
40	ASD repair, Device	Closure of any type ASD (including PFO) using a device.
2110	ASD repair, Patch + PAPVC repair	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD plus PAPVC repair, any type
50	ASD, Common atrium (single atrium), Septation	Septation of common (single) atrium using any type patch material.

60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.
130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
2300	Valvuloplasty, Common atrioventricular valve	Common AV valve repair, any type
2250	Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	Common AV valve repair attempted, converted to valve replacement with prosthetic valve during the same operation

2230	Valve replacement, Common atrioventricular valve	Replacement of the common AV valve with a prosthetic valve
210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	Truncal valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	Truncus arteriosus repair usually includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. (Very rarely, there is no VSD) plus repair of interrupted aortic arch
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation	An intracardiac baffle is created to redirect pulmonary venous return to the left atrium and SVC sewn to right atrial appendage)

	(Warden) (SVC sewn to right atrial appendage)	
280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
2200	TAPVC repair + Shunt - systemic-to-pulmonary	Repair of TAPVC, any type plus a systemic to pulmonary shunt creation
290	Cor triatriatum repair	Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
300	Pulmonary venous stenosis repair	Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
310	Atrial baffle procedure (non-Mustard, non-Senning)	The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
330	Anomalous systemic venous connection repair	With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
340	Systemic venous stenosis repair	Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
350	TOF repair, No ventriculotomy	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.

360	TOF repair, Ventriculotomy, Nontransanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
370	TOF repair, Ventriculotomy, Transanular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
2700	Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage	1-stage repair that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

	that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])	
2710	Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])	VSD closure + RV to PA connection [with or without conduit])
2720	Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])	Completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalization
2730	Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated)	Complete unifocalization , all usable MAPCA[s] are incorporated
2740	Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated)	Incomplete unifocalization, not all usable MAPCA[s] are incorporated
2750	Unifocalization MAPCA(s), Unilateral pulmonary unifocalization	MAPCA(s), Unilateral pulmonary unifocalization (one side)
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
450	Occlusion of MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, and papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring

		placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	Tricuspid valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a prosthetic valve.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this

		code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	Pulmonic valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary (without replacement)	Excision of the pulmonary valve without placement of a prosthetic valve.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other, Pulmonic	Other pulmonic valve surgery not specified in procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc.).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or

		insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	Aortic valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	Aortic valve repair attempted, converted to valve replacement with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit during the same operation
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	Aortic valve repair attempted, converted to Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.
690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.
700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with

		a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manouguian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	Subvalvar aortic stenosis repair including excision and myectomy
790	Aortic stenosis, Supravalvar, Repair	Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV,

		PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissuorotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	Mitral valve repair attempted, converted to valve replacement with prosthetic valve during the same operation
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection. When coding the procedure “Norwood procedure”, the primary procedure of the operation should be “Norwood procedure”. The second procedure that is coded as part of the Norwood (Stage 1) operation (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices: 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery) 3. Shunt, Systemic to pulmonary, Other 4. Conduit placement, RV to PA

		5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) 8. HemiFontan
880	HLHS biventricular repair	Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.
2755	Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neoaorta + Arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui)	
2160	Hybrid Approach "Stage 1", Application of RPA & LPA bands	A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
2170	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)	A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
2180	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands	A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid

		Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2140	Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
2150	Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair	A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
2760	Hybrid Approach, Transcardiac balloon dilation	
2770	Hybrid Approach, Transcardiac transcatheter device placement	
890	Transplant, Heart	Heart transplantation, any technique, allograft or xenograft.
900	Transplant, Heart and lung	Heart and lung (single or double) transplantation.
910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.

920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	The atrio-pulmonary Fontan is a type of Fontan with connection of the atrium to the pulmonary artery. “The Fontan” is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
960	Fontan, Atrio-ventricular connection	The atrio-ventricular Fontan is a type of Fontan with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	The lateral tunnel Fontan is a TCPC type of Fontan Procedure created with anastomosis of SVC and right atrium to the branch pulmonary artery and an intra-atrial baffle to direct IVC flow to pulmonary artery. “The Fontan” is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A “TCPC” is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	The lateral tunnel Fontan is a TCPC type of Fontan Procedure created with anastomosis of SVC and right atrium to the branch pulmonary artery and an intra-atrial baffle to direct IVC flow to pulmonary artery. “The Fontan” is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A “TCPC” is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and

		pulmonary venous chambers.
1000	Fontan, TCPC, External conduit, Fenestrated	The external conduit Fontan is a TCPC type of Fontan operation created with anastomosis of SVC to the branch pulmonary artery a conduit outside of the heart to connect the infradiaphragmatic systemic venous return to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1010	Fontan, TCPC, External conduit, Nonfenestrated	The external conduit Fontan is a TCPC type of Fontan operation created with anastomosis of SVC to the branch pulmonary artery a conduit outside of the heart to connect the infradiaphragmatic systemic venous return to the pulmonary artery. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
2780	Fontan, TCPC, Intra/extracardiac conduit, Fenestrated	The TCPC with Intra/extracardiac conduit is a TCPC type of Fontan operation created with a tube where the tube is attached to the inferior caval vein inside of the heart, and then the tube passes outside of the heart and is attached to the pulmonary artery outside of the heart. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
2790	Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated	The TCPC with Intra/extracardiac conduit is a TCPC type of Fontan operation created with a tube where the tube is attached to the inferior caval vein inside of the heart, and then the tube passes outside of the heart and is attached to the pulmonary artery outside of the heart.

		"The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways. A fenestration of a Fontan is defined as a communication that is created to allow flow of blood between the systemic and pulmonary venous chambers.
1025	Fontan revision or conversion (Re-do Fontan)	"Fontan revision or conversion (Re-do Fontan)" is defined as an operation where a previously created Fontan circuit is either modified or taken down and changed into a different type of Fontan. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart. A "TCPC" is a Fontan where both the superior caval vein and the inferior caval vein are connected to the pulmonary circulation through separate connections that are either direct connections or tubular pathways.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
2340	Fontan + Atrioventricular valvuloplasty	"Fontan + Atrioventricular valvuloplasty" is defined as an operation to repair the systemic atrioventricular valve combined with a Fontan operation. Please also code the type of Fontan operation performed as the second procedure of this operation. "The Fontan" is defined as an operation or intervention that results in caval flow from both the upper and lower body draining to the pulmonary circulation in a patient with a functionally univentricular heart.
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
1060	Congenitally corrected TGA repair, Atrial switch and Rastelli	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA	Repair of congenitally corrected TGA by VSD closure

	repair, VSD closure	only.
1080	Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA resulting in a “physiological repair”. The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA resulting in a “physiological repair”. The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure, Mustard or Senning revision	Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
1160	REV	The Lecompte (REV) intraventricular repair is designed

		for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
2190	Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
2210	TGA, Other procedures (Kawashima, LV-PA conduit, other)	
1180	DORV, Intraventricular tunnel repair	Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
1200	DOLV repair	Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
1210	Coarctation repair, End to end	Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.

1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, or bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.

1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc.). Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc.).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.
1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
2800	Muscle flap, Trunk (i.e. intercostal, pectus, or serratus muscle)	A trunk muscle flap (intercostal, pectus, or serratus muscle) is rotated to buttress or augment a suture line, anastomosis or fill the pleural space.
2810	Muscle flap, Trunk (i.e. latissimus dorsi)	A trunk muscle flap (latissimus dorsi) is rotated to buttress or augment a suture line, anastomosis or fill the pleural space.
2820	Removal, Sternal wire	Excision of wire used to approximate sternum, previous sternotomy
2830	Rib excision, Complete	Complete excision of rib(s)
2840	Rib excision, Partial	Partial excision of rib(s)
2850	Sternal fracture - open treatment	Repair of a sternal fracture with sutures, wires, plates or bars.
2860	Sternal resection, Radical resection of sternum	Involves removal of the sternum with complex reconstructive requirements for either a tumor or severe sternal infection.

2870	Sternal resection, Radical resection of sternum with mediastinal lymphadenectomy	Involves resection of the sternum and mediastinal lymph node dissection.
2880	Tumor of chest wall - Excision including ribs	Excision of ribs and attached muscles for a benign or malignant tumor of the chest wall. When three or less ribs are taken or if the defect is covered by the scapula, reconstruction may not be necessary.
2890	Tumor of chest wall - Excision including ribs, With reconstruction	Resection of the chest wall tumor with reconstruction of the defect, usually with plastic mesh (marlex, prolene), methylmethracralate/mesh sandwich or a muscle flap.
2900	Tumor of soft tissue of thorax - Excision of deep subfascial or intramuscular tumor	Excision of a deep chest wall tumor that involves the muscles but not the ribs. These would usually be benign tumors such as a fibroma or a deep lipoma.
2910	Tumor of soft tissue of thorax - Excision of subcutaneous tumor	Excision of tumor in the skin/fat of the chest wall-typically a lipoma.
2920	Tumor of soft tissue of thorax - Radical resection	En-bloc, radical excision of a cancer of the chest wall muscles, involving the skin, fat and muscles. Typically it would be a desmoid tumor or a sarcoma malignant fibrous histiocytoma, rhabdomyosarcoma.
2930	Hyoid myotomy and suspension	Typically done as a suprahyoid laryngeal release to reduce tension on a cervical tracheal resection anastomosis. The hyoid bone is cut laterally on both sides to allow it to drop down and thus lower the larynx and trachea.
2940	Muscle flap, Neck	A neck muscle flap is rotated to buttress or augment a suture line, anastomosis or fill a space. Commonly used neck muscles are strap muscles, sternocleidomastoid muscle, levator scapulae.
2950	Procedure on neck	Unlisted procedure of the neck
2960	Tumor of soft tissue of neck - Excision of deep subfascial or intramuscular tumor	Excision of a tumor that involves the muscles of the neck. These would usually be benign tumors such as a fibroma or a deep lipoma.
2970	Tumor of soft tissue of neck - Excision of subcutaneous tumor	Excision of a tumor in the skin/fat of the neck-typically a lipoma.
2980	Tumor of soft tissue of neck - Radical resection	A surgical procedure in which the fibrofatty contents of the neck are removed for the treatment of cervical lymphatic metastases. Neck dissection is most commonly used in the management of cancers of the upper aerodigestive tract. It is also used for malignancies of the skin of the head and neck area, the thyroid, and the salivary glands.
2990	Pectus bar removal	Removal of a previously implanted chest wall bar
3000	Pectus bar repositioning	Repositioning of a previously implanted chest wall bar
3010	Pectus repair, Minimally invasive repair (Nuss), With	Placement of a Nuss transverse chest wall bar to push the sternum forward to repair a pectus deformity, with

	thoracoscopy	thoracoscopy
3020	Pectus repair, Minimally invasive repair (Nuss), Without thoracoscopy	Placement of a Nuss transverse chest wall bar to push the sternum forward to repair a pectus deformity, without thoracoscopy
3030	Pectus repair, Open repair	Resection of several costal cartilages, a partial osteotomy of the sternum, and often placement of a temporary bar for stabilization of pectus chest wall deformity
3040	Division of scalenus anticus, With resection of a cervical rib	Repair of Thoracic Outlet Syndrome variant where the scalenus anticus muscle or a band from it impinges on the brachial plexus along with resection of the abnormal cervical rib
3050	Division of scalenus anticus, Without resection of a cervical rib	Repair of Thoracic Outlet Syndrome variant where the scalenus anticus muscle or a band from it impinges on the brachial plexus along without resection of the abnormal cervical rib
3060	Rib excision, Excision of cervical rib	Removal of the first rib or a cervical rib for treatment of Thoracic Outlet Syndrome
3070	Rib excision, Excision of cervical rib, With sympathectomy	Removal of the first rib or a cervical rib and sympathectomy for treatment of Thoracic Outlet Syndrome
3080	Rib excision, Excision of first rib	Removal of the first rib
3090	Rib excision, Excision of first rib, With sympathectomy	Removal of the first rib and sympathectomy
3100	Procedure on thorax	Unlisted procedure on thorax
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc.).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	Removal of pacemaker generator and wires
1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular	Invasive diagnostic procedure involving the heart and

	catheterization procedure, Diagnostic	great vessels
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	Invasive diagnostic procedure involving the heart and great vessels using angiography
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	Invasive diagnostic procedure involving pressure or flow alteration in the cardiovascular system
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	Invasive diagnostic procedure involving pressure and flow assessment of the heart and great vessels
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	Invasive therapeutic procedure involving the heart and great vessels
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	Invasive therapeutic procedure involving balloon dilatation of a cardiovascular structure
2590	Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy	Invasive therapeutic procedure involving balloon dilatation of a valve
1580	Cardiovascular catheterization procedure, Therapeutic, Coil implantation	Invasive therapeutic procedure involving implantation of a coil
1560	Cardiovascular catheterization procedure, Therapeutic, Device implantation	Invasive therapeutic procedure involving implantation of a device
3110	Cardiovascular catheterization procedure, Therapeutic, Device implantation attempted	Invasive therapeutic procedure involving attempted but unsuccessful implantation of a device
2690	Cardiovascular	Invasive therapeutic procedure involving Catheter based

	catheterization procedure, Therapeutic, Electrophysiological ablation.	creation of lesions in the heart with radiofrequency energy, cryotherapy , or ultrasound energy to cure or control arrhythmias
3120	Cardiovascular catheterization procedure, Therapeutic, Intravascular foreign body removal	Invasive therapeutic procedure involving removal of an intravascular foreign body
2640	Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)	Invasive therapeutic procedure establishing interchamber and/or intervessel communication
2580	Cardiovascular catheterization procedure, Therapeutic, Septostomy	Invasive therapeutic procedure establishing an intracardiac septal communication
1550	Cardiovascular catheterization procedure, Therapeutic, Stent insertion	Invasive therapeutic procedure involving implantation of a stent
2630	Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	Invasive therapeutic procedure involving dilatation of a previously implanted stent
2650	Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
2660	Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	Invasive therapeutic procedure involving deployment/ implantation of a valve
1590	Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1600	Shunt, Systemic to pulmonary, Central (shunt from aorta)	A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
3130	Shunt, Systemic to pulmonary, Central (shunt from aorta), Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt)	Creation of a central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta
1610	Shunt, Systemic to pulmonary, Other	Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary

		artery shunt.
1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	Revision or replacement of a previously created shunt
1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction	
3140	Hepatic vein to azygous vein connection, Direct	

3150	Hepatic vein to azygous vein connection, Interposition graft	
3160	Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation)	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	Insertion of cannulas for extracorporeal membrane oxygenation
2370	ECMO decannulation	Removal of cannulas for extracorporeal membrane oxygenation
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump (IABP) insertion	Insertion of intraaortic balloon pump by any technique.
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	Removal of ventricular assist device
2380	VAD implantation	Insertion of a ventricular assist device
3170	VAD change out	Removal of previously inserted ventricular assist device and insertion of a new device
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	Procedural sedation for echocardiogram
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	Procedural sedation for echocardiogram, transthoracic
2435	Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	Anesthesia provided by cardiac anesthesiologist for patient with congenital heart disease undergoing a non-cardiovascular, non-thoracic procedure
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	A patient with congenital heart disease undergoing cardiac CT scan
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	A patient with congenital heart disease undergoing cardiac MRI
2460	Radiology procedure on cardiac patient, Diagnostic radiology	A patient with congenital heart disease undergoing a diagnostic radiology procedure
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	A patient with congenital heart disease undergoing a non-cardiac CT scan

2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	A patient with congenital heart disease undergoing non-cardiac MRI
2490	Radiology procedure on cardiac patient, Therapeutic radiology	A patient with congenital heart disease undergoing a therapeutic radiology procedure
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.
1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.
1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific

		procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.
3180	Intravascular stent removal	Removal of a previously placed intravascular stent
1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.
7800	Operation canceled before skin incision	Surgical procedure canceled after patient enters the operating room but prior to skin incision
7810	Operation aborted after skin incision	Surgical procedure canceled after skin incision made

Long Name: Primary Procedure Indicator *SeqNo:* 940

Short Name: **PrimProc** *Core:* Yes

Section Name: Procedures *Harvest:* Yes

DBTableName Procedures

Definition: Indicate whether this procedure is considered the PRIMARY Procedure performed during this operation. Note that the primary procedure is determined at the data warehouse using the methodology published in the Journal of Thoracic and Cardiovascular Surgery ("An empirically based tool for analyzing mortality associated with congenital heart surgery" Sean M. O'Brien, David R. Clarke, Jeffrey P. Jacobs, Marshall L. Jacobs, Francois G. Lacour-Gayet, Christian Pizarro, Karl F. Welke, Bohdan Maruszewski, Zdzislaw Tobota, Weldon J. Miller, Leslie Hamilton, Eric D. Peterson, Constantine Mavroudis and Fred H. Edwards J Thorac Cardiovasc Surg 2009;138:1139-1153 DOI: 10.1016/j.jtcvs.2009.03.071). If the above methodology does not return a primary procedure, this field will be used to designate primary procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *SeqNo:* 949

Short Name: **PSFPrimProc** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate which, if any, of the following "benchmark operations" was the primary procedure for this operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:

10	None of the listed procedures
100	VSD repair, Primary closure
110	VSD repair, Patch
120	VSD repair, Device
390	TOF - AVC (AVSD) repair
350	TOF repair, No ventriculotomy
360	TOF repair, Ventriculotomy, Nontransanular patch
370	TOF repair, Ventriculotomy, Transanular patch
380	TOF repair, RV-PA conduit
400	TOF - Absent pulmonary valve repair
2700	Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])
2710	Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])
2720	Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])
420	Pulmonary atresia - VSD (including TOF, PA) repair
170	AVC (AVSD) repair, Complete (CAVSD)
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)

1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
1700	HemiFontan
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty
2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction
950	Fontan, Atrio-pulmonary connection
960	Fontan, Atrio-ventricular connection
970	Fontan, TCPC, Lateral tunnel, Fenestrated
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated
1000	Fontan, TCPC, External conduit, Fenestrated
1010	Fontan, TCPC, External conduit, Nonfenestrated
2780	Fontan, TCPC, Intra/extracardiac conduit, Fenestrated
2790	Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated
1030	Fontan, Other
2340	Fontan + Atrioventricular valvuloplasty
1025	Fontan revision or conversion (Re-do Fontan)
1110	Arterial switch operation (ASO)
1123	Arterial switch procedure + Aortic arch repair
1120	Arterial switch operation (ASO) and VSD repair
1125	Arterial switch procedure and VSD repair + Aortic arch repair
230	Truncus arteriosus repair

2220	Truncus + Interrupted aortic arch repair (IAA) repair
870	Norwood procedure

Long Name: Procedure-Specific Factors - Apical VSD *SeqNo:* 950

Short Name: **PSFApicalVSD** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Apical VSD was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "VSD repair, Primary closure", "VSD repair, Patch", "VSD repair, Device", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 100|110|120|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Straddling AV valve *SeqNo:* 951

Short Name: **PSFStradAVVal** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Straddling AV valve was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "VSD repair, Primary closure", "VSD repair, Patch", "VSD repair, Device", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 100|110|120|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Major coronary crossing RVOT - Coronary anomaly restricting RVOT enlargement, (LAD from RCA etc.) *SeqNo:* 952

Short Name: **PSFMajCorRVOT** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Major coronary crossing RVOT - Coronary anomaly restricting RVOT enlargement, (LAD from RCA etc.) was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "TOF - AVC (AVSD) repair", "TOF repair, No ventriculotomy", "TOF repair, Ventriculotomy, Nontransanular patch", "TOF repair, Ventriculotomy, Transanular patch", "TOF repair, RV-PA conduit", "TOF - Absent pulmonary valve repair", "Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])" or "Pulmonary atresia - VSD (including TOF, PA) repair"

Data Source: User

ParentHarvestCodes: 390|350|360|370|380|400|2

700|2710|2720|420

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - VSD, Multiple, Repair *SeqNo:* 953

Short Name: **PSFVSDMultRep** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether VSD, Multiple, Repair was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "TOF - AVC (AVSD) repair", "TOF repair, No ventriculotomy", "TOF repair, Ventriculotomy, Nontransanular patch", "TOF repair, Ventriculotomy, Transanular patch", "TOF repair, RV-PA conduit", "TOF - Absent pulmonary valve repair", "Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])" or "Pulmonary atresia - VSD (including TOF, PA) repair"

Data Source: User

ParentHarvestCodes: 390|350|360|370|380|400|2700|2710|2720|420

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Restrictive VSD *SeqNo:* 954

Short Name: **PSFRestrictVSD** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Restrictive VSD was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "TOF - AVC (AVSD) repair", "TOF repair, No ventriculotomy", "TOF repair, Ventriculotomy, Nontransanular patch", "TOF repair, Ventriculotomy, Transanular patch", "TOF repair, RV-PA conduit", "TOF - Absent pulmonary valve repair", "Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])" or "Pulmonary atresia - VSD (including TOF, PA) repair"

Data Source: User

ParentHarvestCodes: 390|350|360|370|380|400|2700|2710|2720|420

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Hypoplastic branch pulmonary arteries (diminished pulmonary vascular bed) *SeqNo:* 955

Short Name: **PSFHypoBrPulmArt** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Hypoplastic branch pulmonary arteries (diminished pulmonary vascular bed) was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "TOF - AVC (AVSD) repair", "TOF repair, No ventriculotomy", "TOF repair, Ventriculotomy, Nontransanular patch", "TOF repair, Ventriculotomy, Transanular patch", "TOF repair, RV-PA conduit", "TOF - Absent pulmonary valve repair", "Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalizarion (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])", "Pulmonary atresia - VSD (including TOF, PA) repair", "Bidirectional

Data Source: User

cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)", "Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)", "Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)", "HemiFontan", "Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty", "Superior Cavopulmonary anastomosis(es) + PA reconstruction", "Fontan, Atrio-pulmonary connection", "Fontan, Atrio-ventricular connection", "Fontan, TCPC, Lateral tunnel, Fenestrated", "Fontan, TCPC, Lateral tunnel, Nonfenestrated", "Fontan, TCPC, External conduit, Fenestrated", "Fontan, TCPC, External conduit, Nonfenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Fenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated", "Fontan, Other", "Fontan + Atrioventricular valvuloplasty" or "Fontan revision or conversion (Re-do Fontan)"

ParentHarvestCodes: 390|350|360|370|380|400|2700|2710|2720|420|1670|1680|1690|1700|2330|2130|950|960|970|980|1000|1010|2780|2790|1030|2340|1025

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - AV Valve regurgitation grade 3 and 4 (Severe AV Valve regurgitation) *SeqNo:* 956

Short Name: **PSFAVRegurg34** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether AV Valve regurgitation grade 3 and 4 (Severe AV Valve regurgitation) was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "TOF - AVC (AVSD) repair", "AVC (AVSD) repair, Complete (CAVSD)", "Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)", "Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)", "Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)", "HemiFontan", "Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty", "Superior Cavopulmonary anastomosis(es) + PA reconstruction", "Fontan, Atrio-pulmonary connection", "Fontan, Atrio-ventricular connection", "Fontan, TCPC, Lateral tunnel, Fenestrated", "Fontan, TCPC, Lateral tunnel, Nonfenestrated", "Fontan, TCPC, External conduit, Fenestrated", "Fontan, TCPC, External conduit, Nonfenestrated", "Fontan, TCPC, Intra/extracardiac conduit,

Data Source: User

Fenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated", "Fontan, Other", "Fontan + Atrioventricular valvuloplasty", "Fontan revision or conversion (Re-do Fontan)" or "Norwood procedure"

ParentHarvestCodes: 390|170|1670|1680|1690|1700|2330|2130|950|960|970|980|1000|1010|2780|2790|1030|2340|1025|870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Double orifice left atrioventricular valve *SeqNo:* 957

Short Name: **PSFDoubOrif** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Double orifice left atrioventricular valve was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "TOF - AVC (AVSD) repair" or "AVC (AVSD) repair, Complete (CAVSD)"

Data Source: User

ParentHarvestCodes: 390|170

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Single papillary muscle in the left ventricle and/or parachute left atrioventricular valve *SeqNo:* 958

Short Name: **PSFSingPap** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Single papillary muscle in the left ventricle and/or parachute left atrioventricular valve was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "TOF - AVC (AVSD) repair" or "AVC (AVSD) repair, Complete (CAVSD)" *Data Source:* User

ParentHarvestCodes: 390|170

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Hypoplastic posterior mural leaflet *SeqNo:* 959

Short Name: **PSFHypoPostMLeaf** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Hypoplastic posterior mural leaflet was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "TOF - AVC (AVSD) repair" or "AVC (AVSD) repair, Complete (CAVSD)" *Data Source:* User

ParentHarvestCodes: 390|170

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: Procedure-Specific Factors - Atrioventricular septal defect with ventricular imbalance: dominant left ventricle, hypoplastic right ventricle *SeqNo:* 960

Short Name: **PSFASDDomLeft** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Atrioventricular septal defect with ventricular imbalance: dominant left ventricle and hypoplastic right ventricle was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "TOF - AVC (AVSD) repair" or "AVC (AVSD) repair, Complete (CAVSD)" *Data Source:* User

ParentHarvestCodes: 390|170

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Atrioventricular septal defect with ventricular imbalance: dominant right ventricle, hypoplastic left ventricle *SeqNo:* 961

Short Name: **PSFASDDomRight** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Atrioventricular septal defect with ventricular imbalance: dominant right ventricle and hypoplastic left ventricle was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "TOF - AVC (AVSD) repair" or "AVC (AVSD) repair, Complete (CAVSD)" *Data Source:* User

ParentHarvestCodes: 390|170

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Common atrioventricular valve with unbalanced commitment of valve to left ventricle *SeqNo:* 962

Short Name: **PSFCAVLeft** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Common atrioventricular valve with unbalanced commitment of valve to left ventricle was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "TOF - AVC (AVSD) repair" or "AVC (AVSD) repair, Complete (CAVSD)" *Data Source:* User

ParentHarvestCodes: 390|170

Harvest Codes:

Code:	Value:

1	Yes
2	No

Long Name: Procedure-Specific Factors - Common atrioventricular valve with unbalanced commitment of valve to right ventricle *SeqNo:* 963

Short Name: **PSFCAVRight** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Common atrioventricular valve with unbalanced commitment of valve to right ventricle was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "TOF - AVC (AVSD) repair" or "AVC (AVSD) repair, Complete (CAVSD)"

Data Source: User

ParentHarvestCodes: 390|170

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Procedure-Specific Factors - Moderate to severe systemic ventricular dysfunction	*SeqNo:*	964
Short Name:	PSFModSevSVD	*Core:*	Yes
Section Name:	Procedure-Specific Factors	*Harvest:*	Yes

DBTableName Operations

Definition: Indicate whether Moderate to severe systemic ventricular dysfunction was a factor.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PSFPrimProc	*DataLength:*	
ParentValue:	= "Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)", "Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)", "Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)", "HemiFontan", "Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty", "Superior Cavopulmonary anastomosis(es) + PA reconstruction", "Fontan, Atrio-pulmonary connection", "Fontan, Atrio-ventricular connection", "Fontan, TCPC, Lateral tunnel, Fenestrated", "Fontan, TCPC, Lateral tunnel, Nonfenestrated", "Fontan, TCPC, External conduit, Fenestrated", "Fontan, TCPC, External conduit, Nonfenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Fenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated", "Fontan, Other", "Fontan +	*Data Source:*	User

Atrioventricular valvuloplasty" or "Fontan revision or conversion (Re-do Fontan)"

ParentHarvestCodes: 1670|1680|1690|1700|2330|2130|950|960|970|980|1000|1010|2780|2790|1030|2340|1025

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name:	Procedure-Specific Factors - Systemic ventricular outflow tract obstruction (subaortic obstruction)	*SeqNo:*	965
Short Name:	**PSFSysVentObs**	*Core:*	Yes
Section Name:	Procedure-Specific Factors	*Harvest:*	Yes

DBTableName Operations

Definition: Indicate whether Systemic ventricular outflow tract obstruction (subaortic obstruction) was a factor.

LowValue:	*UsualRangeLow:*		
HighValue:	*UsualRangeHigh:*		
Parent Long Name:	Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure	*Format:*	Text (categorical values specified by STS)
ParentShortName:	PSFPrimProc	*DataLength:*	
ParentValue:	= "Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)", "Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)", "Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)", "HemiFontan", "Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty", "Superior Cavopulmonary anastomosis(es) + PA reconstruction", "Fontan, Atrio-pulmonary connection", "Fontan, Atrio-ventricular connection", "Fontan, TCPC, Lateral tunnel, Fenestrated", "Fontan, TCPC, Lateral tunnel, Nonfenestrated", "Fontan, TCPC, External conduit, Fenestrated", "Fontan, TCPC, External conduit, Nonfenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Fenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated", "Fontan, Other", "Fontan +	*Data Source:*	User

Atrioventricular valvuloplasty" or "Fontan revision or conversion (Re-do Fontan)"

ParentHarvestCodes: 1670|1680|1690|1700|2330|2130|950|960|970|980|1000|1010|2780|2790|1030|2340|1025

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Ventricular dominance *SeqNo:* 966

Short Name: **PSFVentDom** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate ventricular dominance.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)", "Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)", "Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)", "HemiFontan", "Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty", "Superior Cavopulmonary anastomosis(es) + PA reconstruction", "Fontan, Atrio-pulmonary connection", "Fontan, Atrio-ventricular connection", "Fontan, TCPC, Lateral tunnel, Fenestrated", "Fontan, TCPC, Lateral tunnel, Nonfenestrated", "Fontan, TCPC, External conduit, Fenestrated", "Fontan, TCPC, External conduit, Nonfenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Fenestrated", "Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated", "Fontan, Other", "Fontan + Atrioventricular

Data Source: User

valvuloplasty", "Fontan revision or conversion (Re-do Fontan)" or "Norwood procedure"

ParentHarvestCodes: 1670|1680|1690|1700|2330|2130|950|960|970|980|1000|1010|2780|2790|1030|2340|1025|870

Harvest Codes:

Code:	Value:
1	Left ventricular dominance
2	Right ventricular dominance
3	Balanced
4	Indeterminate ventricular dominance

Long Name: Procedure-Specific Factors - Posterior coronary loop: circumflex coming off the RCA *SeqNo:* 970

Short Name: **PSFPostLoopCirc** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Posterior coronary loop: circumflex coming off the RCA was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair" *Data Source:* User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Posterior Coronary Loop: left trunk coming off the RCA *SeqNo:* 971

Short Name: **PSFPostLoopLeftTrunc** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Posterior Coronary Loop: left trunk coming off the RCA was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair" *Data Source:* User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Double Coronary Loops *SeqNo:* 972

Short Name: **PSFDoubleLoops** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Double Coronary Loops (inverted origin of right and left coronary arteries) was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Single Coronary Ostium *SeqNo:* 973

Short Name: **PSFSingOst** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Single coronary ostium was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Intramural coronary *SeqNo:* 974

Short Name: **PSFIntramuralCor** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Intramural coronary was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Large infundibular coronary artery from LAD *SeqNo:* 975

Short Name: **PSFLgInfundArt** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Large infundibular coronary artery from LAD was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Malaligned commissures *SeqNo:* 976

Short Name: **PSFMalComm** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Malaligned commissures was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Take down of a commissure *SeqNo:* 977

Short Name: **PSFTakeDownComm** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Take down of a commissure was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Aorto-pulmonary diameter mismatch *SeqNo:* 978

Short Name: **PSFAortoPulMis** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Aorto-pulmonary diameter mismatch was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Side by side vessels *SeqNo:* 979

Short Name: **PSFSideBySide** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Side by side vessels was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Posterior native aorta *SeqNo:* 980

Short Name: **PSFPostNatAorta** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Posterior native aorta was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Subaortic obstruction/ conal septum malalignment *SeqNo:* 981

Short Name: **PSFSubAObs** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Subaortic obstruction / conal septum malalignment was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Bicuspid native aortic valve (Bicuspid neopulmonary valve) *SeqNo:* 982

Short Name: **PSFBicusNatAortic** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Bicuspid native aortic valve (Bicuspid neopulmonary valve) was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Bicuspid native pulmonary valve (Bicuspid neoaortic valve) *SeqNo:* 983

Short Name: **PSFBicusNatPulm** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Bicuspid native pulmonary valve (Bicuspid neoaortic valve) was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Arterial switch operation (ASO)", "Arterial switch procedure + Aortic arch repair", "Arterial switch operation (ASO) and VSD repair" or "Arterial switch procedure and VSD repair + Aortic arch repair"

Data Source: User

ParentHarvestCodes: 1110|1123|1120|1125

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Truncus type 3 (PA Branches from PDA or descending aorta) *SeqNo:* 984

Short Name: **PSFTruncType3** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Truncus type 3 (PA Branches from PDA or descending aorta) was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Truncus arteriosus repair" or "Truncus + Interrupted aortic arch repair (IAA) repair"

Data Source: User

ParentHarvestCodes: 230|2220

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Abnormal coronary *SeqNo:* 985

Short Name: **PSFAbnormalCor** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Abnormal coronary was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Truncus arteriosus repair" or "Truncus + Interrupted aortic arch repair (IAA) repair"

Data Source: User

ParentHarvestCodes: 230|2220

Harvest Codes:

Code:	Value:
1	Yes

2	No

Long Name: Procedure-Specific Factors - Truncal valve regurgitation (moderate to severe) *SeqNo:* 986

Short Name: **PSFTruncValRegurg** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Truncal valve regurgitation (moderate to severe) was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc

DataLength:

ParentValue: = "Truncus arteriosus repair" or "Truncus + Interrupted aortic arch repair (IAA) repair"

Data Source: User

ParentHarvestCodes: 230|2220

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Source of pulmonary blood flow: Shunt - systemic artery-to-pulmonary artery *SeqNo:* 987

Short Name: **PSFSrcPulFloShuntSys** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Source of pulmonary blood flow: Shunt - systemic artery-to-pulmonary artery was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Source of pulmonary blood flow: Shunt - ventricle-to-pulmonary artery *SeqNo:* 988

Short Name: **PSFSrcPulFloShuntVent** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Source of pulmonary blood flow: Shunt - ventricle-to-pulmonary artery was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: Procedure-Specific Factors - Source of pulmonary blood flow: Superior caval vein-to-pulmonary artery *SeqNo:* 989

Short Name: **PSFSrcPulFloSuper** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Source of pulmonary blood flow: Superior caval vein-to-pulmonary artery was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Ascending aorta < 2 mm *SeqNo:* 990

Short Name: **PSFAscAortaLT2** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Ascending aorta < 2 mm was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Aortic atresia *SeqNo:* 991

Short Name: **PSFAortAtresia** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Aortic atresia was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Aortic stenosis *SeqNo:* 992

Short Name: **PSFAortSten** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Aortic stenosis was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Mitral atresia *SeqNo:* 993

Short Name: **PSFMitralAtresia** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Mitral atresia was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Mitral stenosis *SeqNo:* 994

Short Name: **PSFMitralSten** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Mitral stenosis was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Sinusoids *SeqNo:* 995

Short Name: **PSFSinusoids** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the presence of sinusoids was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Intact atrial septum *SeqNo:* 996

Short Name: **PSFIntactAtrSep** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Intact atrial septum was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure

Format: Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Obstructed pulmonary venous return with severely restrictive ASD *SeqNo:* 997

Short Name: **PSFObsPulVenRet** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Obstructed pulmonary venous return with severely restrictive ASD was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure-Specific Factors - Aberrant right subclavian artery *SeqNo:* 998

Short Name: **PSFAberrantRtSubclav** *Core:* Yes

Section Name: Procedure-Specific Factors *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether Aberrant right subclavian artery was a factor.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Procedure-Specific Factors - Procedure-Specific Factors - Primary Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: PSFPrimProc *DataLength:*

ParentValue: = "Norwood procedure" *Data Source:* User

ParentHarvestCodes: 870

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Procedure Location *SeqNo:* 1000

Short Name: **ProcLoc** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the location where the operation/procedure was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
9	Cardiac OR	Indicate if the operation/procedure was performed in the following location: Cardiac OR (Cardiac Operating Room).
10	General OR	Indicate if the operation/procedure was performed in the following location: General OR (General Operating Room).
3	Hybrid Suite	Indicate if the operation/procedure was performed in the following location: Hybrid Suite. A "Hybrid Suite" is defined as a room that is designed for both surgical procedure s and transcatheter interventional procedures. A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
2	Cath lab	Indicate if the operation/procedure was performed in the following location: Cath lab (Cardiac catheterization laboratory).
11	ICU	Indicate if the operation/procedure was performed in the following location: ICU (Intensive Care Unit).
4	CVICU	Indicate if the operation/procedure was performed in the following location: CVICU (CardioVascular Intensive Care Unit).
5	NICU	Indicate if the operation/procedure was performed in the following location: NICU (Neonatal Intensive Care Unit).

6	PICU	Indicate if the operation/procedure was performed in the following location: PICU (Pediatric Intensive Care Unit).
7	SICU	Indicate if the operation/procedure was performed in the following location: SICU (Surgical Intensive Care Unit).
12	Radiology Suite	Indicate if the operation/procedure was performed in the following location: Radiology Suite
13	Procedure Room	Indicate if the operation/procedure was performed in the following location: Procedure Room
8	Other	Indicate if the operation/procedure was performed in the following location: Other (Any location not contained in this list).

Long Name: Status *SeqNo:* 1001

Short Name: **Status** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the clinical status of the patient prior to entering the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Elective	The patient's cardiovascular status has been stable in the days or weeks prior to the operation. The procedure could be deferred without increased risk of compromised outcome.
2	Urgent	Procedure required during same hospitalization in order to minimize chance of further clinical deterioration.
3	Emergent	Patients requiring emergency operations will have ongoing severe caridovascular compromise, not responsive to any form of therapy except cardiac surgery. An emergency operation is one in which there should be no delay in providing operative intervention.
4	Salvage	The patient is undergoing CPR en route to the OR or prior to anesthesia induction or has ongoing ECMO support to maintain life.

Long Name: Operation Type *SeqNo:* 1002

Short Name: **OpType** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of primary surgical procedure performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	CPB	If cardiopulmonary bypass is used, this must be chosen as the case category whether the procedure is thoracic (e.g., tracheal reconstruction) or cardiovascular in nature.
2	No CPB Cardiovascular	If the procedure is cardiovascular, but cardiopulmonary bypass is not used, this must be chosen as the case category. This includes any procedure that includes the heart, great vessels, or any of the branches from the great vessels, where CPB is not used. Examples include but are not limited to: coarctation of the aorta repair, creation of a systemic-to-pulmonary artery shunt, patent ductus arteriosus ligation. A delayed sternal closure is included in this category. If a pericardial window done for cancer, it should be classified as a Cardiac Operation (Operation type = No CPB Cardiovascular).
3	ECMO	If ECMO cannulation or decannulation is the primary procedure performed, this category must be chosen. However, if ECMO is initiated for support at the end of another type procedure (i.e., CPB, No CPB Cardiovascular), that procedure takes precedence and the category code would not be ECMO.
4	Thoracic	If a procedure is performed on a structure within the chest cavity but does not involve the cardiac chambers or vessels, it would be a Thoracic category case (for example, lobectomy, pectus excavatum/carinatum repair, anterior spine exposure). There will be thoracic cases that require cardiopulmonary bypass (e.g., some types of tracheal reconstructions). In those cases, the use of cardiopulmonary bypass takes precedence and the case would not be Thoracic, but CPB.
5	Interventional Cardiology	If an interventional device (e.g., occluder, stent) is placed in the operating room as the primary procedure

		performed, this category must be chosen. However, if in the course of another type procedure (i.e., CPB, No CPB Cardiovascular), an interventional device is placed in addition to the other procedure, the other category takes precedence and the case would not be Interventional Cardiology.
6	VAD Operation Done With CPB	Ventricular Assist Device procedure done with CPB. This includes operations to insert the VAD or to remove the VAD.
7	VAD Operation Done Without CPB.	Ventricular Assist Device procedure done without CPB.This includes operations to insert the VAD, to remove the VAD, or any procedure performed while on the VAD.
8	Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia	Any non-cardiac or non-thoracic procedure such as a general surgical procedure with anesthesia provided by cardiac anesthesiology because of the patient's underlying cardiac physiology.
777	Other	All other procedures that do not fall within the above definitions should be coded as category Other. This would include but not be limited to supportive minor procedures (e.g., line placements)

Long Name: Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *SeqNo:* 1005

Short Name: NIRSCerUsed *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether cerebral oximetry was monitored.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used - Preoperatively *SeqNo:* 1006

Short Name: **NIRSCerPre** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether cerebral oximetry was monitored during the preoperative period.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: NIRSCerUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used - Intraoperatively *SeqNo:* 1007

Short Name: **NIRSCerIntra** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether cerebral oximetry was monitored during the intraoperative period.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: NIRSCerUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used - Postoperatively *SeqNo:* 1008

Short Name: **NIRSCerPost** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether cerebral oximetry was monitored during the postoperative period.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: NIRSCerUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *SeqNo:* 1009

Short Name: **NIRSSomUsed** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether somatic oximetry was monitored.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Near Infrared Spectroscopy (NIRS) Somatic Metrics Used - Preoperatively *SeqNo:* 1010

Short Name: **NIRSSomPre** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether somatic oximetry was monitored during the preoperative period.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: NIRSSomUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Near Infrared Spectroscopy (NIRS) Somatic Metrics Used - Intraoperatively *SeqNo:* 1011

Short Name: **NIRSSomIntra** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether somatic oximetry was monitored during the intraoperative period.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: NIRSSomUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Near Infrared Spectroscopy (NIRS) Somatic Metrics Used - Postoperatively *SeqNo:* 1012

Short Name: **NIRSSomPost** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether somatic oximetry was monitored during the postoperative period.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: NIRSSomUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Time Patient Entered the OR *SeqNo:* 1013

Short Name: **OREntryT** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate to the nearest minute (using 24-hour clock) the time the patient entered the OR. If the procedure was performed in a location other than the OR, record the time when the sterile field was set up.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Time - hh:mm (24-hour clock)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Skin Incision Start Time *SeqNo:* 1014

Short Name: **SIStartT** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate to the nearest minute (using 24-hour clock) the time the skin incision was made.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Time - hh:mm (24-hour clock)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Endotracheal Intubation was Performed *SeqNo:* 1015

Short Name: **Intubate** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an endotracheal intubation was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intubation Date and Time *SeqNo:* 1016

Short Name: IntubateDT *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support started. Capture the intubation closest to the surgical start time.

If the patient was intubated upon admission and remained intubated until the surgical start time, capture this intubations date and time.

If the patient was admitted intubated (intubated at another institution) and remained continually intubated until the surgical start time, capture the patient's admission date and time.

If the patient was admitted with a tracheostomy in place without ventilatory support, capture the date and time closest to the surgical start time that ventilatory support was initiated.

If the patient was admitted with a tracheostomy in place receiving chronic ventilatory support, capture the admission date and time.

If the intubation date and time is otherwise unknown, enter the date and time the patient entered the operating room.
Do not alter the previously established date and time that ventilatory support was initiated for scenarios including, but not limited to, interruptions in ventilatory support due to accidental extubation/de-cannulation, elective tube change etc.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Endotracheal Intubation was Performed *Format:* Date/Time - mm/dd/yyyy hh:mm

ParentShortName: Intubate *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Initial Extubation Date and Time *SeqNo:* 1017

Short Name: **ExtubateDT** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support initially ceased after surgery. Capture the extubation closest to the surgical stop time.

If the patient has a tracheostomy and is separated from the mechanical ventilator postoperatively within the hospital admission, capture the date and time of separation from the mechanical ventilator closest to the surgical stop time.

If the patient expires while intubated or /cannulated and on the ventilator, capture the date and time of expiration.

If patient discharged on chronic ventilatory support, capture the date and time of discharge.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Endotracheal Intubation was Performed *Format:* Date/Time - mm/dd/yyyy hh:mm

ParentShortName: Intubate *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Extubated In The Operating Room *SeqNo:* 1018

Short Name: **ExtubInOR** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the endotracheal tube was removed in the OR or at the end of the procedure if it was performed in another location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Endotracheal Intubation was Performed *Format:* Text (categorical values specified by STS)

ParentShortName: Intubate *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Re-Intubated After Initial Postoperative Extubation *SeqNo:* 1019

Short Name: **ReIntubate** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient was re-intubated after the initial postoperative extubation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Endotracheal Intubation was Performed *Format:* Text (categorical values specified by STS)

ParentShortName: Intubate *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Final Extubation Date and Time *SeqNo:* 1020

Short Name: **FinExtubDT** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support last ceased prior to discharge after surgery. Capture the extubation time closest to discharge.

If the patient has a tracheostomy and is separated from the mechanical ventilator more than once postoperatively within the hospital admission, capture the date and time of separation from the mechanical ventilator closest to the hospital discharge.

If the patient expires while intubated or cannulated and on the ventilator, capture the date and time of expiration.

If the patient was discharged on chronic ventilatory support, capture the date and time of discharge.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Re-Intubated After Initial Postoperative Extubation *Format:* Date/Time - mm/dd/yyyy hh:mm

ParentShortName: ReIntubate *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Time of Skin Closure *SeqNo:* 1021

Short Name: **SIStopT** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate to the nearest minute (using 24-hour clock) the time the skin incision was closed. If patient leaves the operating room with an open incision, collect the time dressings were applied to the incision.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Time - hh:mm (24-hour clock)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Time Patient Exited the OR *SeqNo:* 1022

Short Name: **ORExitT** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate to the nearest minute (using 24-hour clock) the time the patient exits the operating room. If the procedure was performed in a location other than the OR, record the time when the sterile field was taken down.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Time - hh:mm (24-hour clock)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Procedure Extended Through Midnight *SeqNo:* 1023

Short Name: **MultiDay** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the procedure continued through midnight from one day to the next.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Surgeon *SeqNo:* 1030

Short Name: **Surgeon** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the name of the primary surgeon performing this surgical procedure.

The name, NPI and signature of all surgeons contributing data to the database must be on file with the STS for data files to be accepted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by user)

ParentShortName: OpType *DataLength:* 100

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Long Name: Surgeon National Provider Identifier *SeqNo:* 1031

Short Name: **SurgNPI** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the individual-level National Provider Identifier (NPI) of the surgeon performing the procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* Lookup

ParentHarvestCodes: 1|2|3|4|6|7|777

Long Name: Taxpayer Identification Number *SeqNo:* 1032

Short Name: **TIN** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the group-level Taxpayer Identification Number for the Taxpayer holder of record for the Surgeon's National Provider Identifier that performed the procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Long Name: Assisting Surgeon *SeqNo:* 1033

Short Name: **AsstSurgeon** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the surgeon assisting in performing this surgical procedure.

This field must have controlled data entry where a user selects the surgeon name from a user list. This will remove variation in spelling, abbreviations and punctuation within the field. Note: Assisting surgeon name is encrypted at the data warehouse. Punctuation, abbreviations and spacing differences can not be corrected at the warehouse.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by user)

ParentShortName: OpType *DataLength:* 100

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Long Name: Assisting Surgeon National Provider Identifier *SeqNo:* 1034

Short Name: **AsstSurgNPI** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the individual-level National Provider Identifier (NPI) of the assistant surgeon performing the procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* Lookup

ParentHarvestCodes: <>8

Long Name: Resident Surgeon *SeqNo:* 1035

Short Name: **Resident** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the resident surgeon assisting or performing this surgical procedure.

This field must have controlled data entry where a user selects the surgeon name from a user list. This will remove variation in spelling, abbreviations and punctuation within the field. Note: Assisting resident surgeon name is encrypted at the data warehouse. Punctuation, abbreviations and spacing differences can not be corrected at the warehouse.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by user)

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Long Name: Resident Surgeon Identifier *SeqNo:* 1036

Short Name: **ResidentID** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the unique identifier assigned to the resident surgeon by the participant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* Lookup

ParentHarvestCodes: <>8

Long Name: Consultant Attending *SeqNo:* 1040

Short Name: CnsltAttnd *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate, by name, the consultant attending. In non-United States countries, this field should be completed as per custom.

In the United States, this field may be used to indicate the patient's primary congenital cardiothoracic surgeon throughout the hospitalization.

This field must have controlled data entry where a user selects the surgeon name from a user list. This will remove variation in spelling, abbreviations and punctuation within the field. Note: Consultant attending name is encrypted at the data warehouse. Punctuation, abbreviations and spacing differences can not be corrected at the warehouse.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by user)

ParentShortName: OpType *DataLength:* 100

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Long Name: Consultant Attending Identifier *SeqNo:* 1050

Short Name: CnsltAttndID *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the unique identifier assigned to the consultant attending by the participant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* Lookup

ParentHarvestCodes: <>8

Long Name: Referring Cardiologist *SeqNo:* 1060

Short Name: **RefCard** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the referring cardiologist's name using the format last name, first name, middle initial.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by user)

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Long Name: Referring Physician *SeqNo:* 1070

Short Name: **RefPhys** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the referring physician's name using the format last name, first name, middle initial.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by user)

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Long Name: Reoperation Within This Admission *SeqNo:* 1080

Short Name: **ReOpInAdm** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether this is a second, or third (or more) operation within the same hospital admission.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Yes - Planned reoperation	Indicate whether this operation is a second, or third (or more) operation within the same hospital admission that was planned. The following operations will always be coded as "Planned Reoperation": (1) Delayed Sternal Closure, (2) ECMO Decannulation, (3) VAD Decannulation, (4) Removal of Broviac catheter. The following operations will always be coded as "Unplanned Reoperation": (1) Reoperation for bleeding, (2) Reoperation for infection, (3) Reoperation for hemodynamic instability, (4) Reoperation for initiation of ECMO or VAD, (5) Reoperation for residual or recurrent lesion.
3	Yes - Unplanned reoperation	Indicate whether this operation is a second, or third (or more) operation within the same hospital admission that was not planned. The following operations will always be coded as "Planned Reoperation": (1) Delayed Sternal Closure, (2) ECMO Decannulation, (3) VAD Decannulation, (4) Removal of Broviac catheter. The following operations will always be coded as "Unplanned Reoperation": (1) Reoperation for bleeding, (2) Reoperation for infection, (3) Reoperation for hemodynamic instability, (4) Reoperation for initiation of ECMO or VAD, (5) Reoperation for residual or recurrent lesion.
2	No	Indicate whether this operation is NOT a second, or third (or more) operation within the same hospital admission.

Long Name: Number of Prior Cardiothoracic Operations *SeqNo:* 1090

Short Name: **PrvCtOpN** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate, prior to this admission's surgical procedure, how many cardiothoracic (heart or great vessels) surgical precedures were performed with or without cardiopulmonary bypass (CPB). Also include lung procedures utilizing CPB or tracheal procedures utilizing CPB. See Operation Type for further clarification.

LowValue: 0 *UsualRangeLow:*

HighValue: 200 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Integer

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Long Name: Number of Prior CPB Cardiothoracic Operations *SeqNo:* 1100

Short Name: **PrvOCtOpN** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate how many cardiothoracic surgical procedures were performed on this patient, prior to this surgical procedure, utilizing CPB (do not include CPB support or ECMO support).

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Integer

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Long Name: Cross Clamp Time - No CPB *SeqNo:* 1130

Short Name: **XClampTmNC** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the total number of minutes the aorta is completely cross-clamped during this surgical procedure. Enter zero if no cross-clamp was used.

LowValue: 0 *UsualRangeLow:*

HighValue: 600 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Integer

ParentShortName: OpType *DataLength:*

ParentValue: = "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 2

Long Name: CPB Blood Prime *SeqNo:* 1140

Short Name: **CPBPrimed** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the CPB circuit was primed with blood other than the patient's own blood.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cardiopulmonary Bypass Time *SeqNo:* 1150

Short Name: **CPBTm** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the total number of minutes that systemic return is diverted into the cardiopulmonary bypass (CPB) circuit and returned to the systemic system. This time period (Cardiopulmonary Bypass Time) includes all periods of cerebral perfusion and sucker bypass. This time period (Cardiopulmonary Bypass Time) excludes any circulatory arrest and modified ultrafiltration periods. If more than one period of CPB is required during the surgical procedure, the sum of all the CPB periods will equal the total number of CPB minutes. Enter zero if cardiopulmonary bypass technique was not used.

LowValue: 0 *UsualRangeLow:*

HighValue: 999 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Integer

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Cross Clamp Time - CPB *SeqNo:* 1160

Short Name: **XClampTm** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the total number of minutes that the coronary circulation is mechanically isolated from systemic circulation, either by an aortic cross clamp or systemic circulatory arrest. This time period (Cross Clamp Time) includes all intervals of intermittent or continuous cardioplegia administration. If more than one cross clamp period is required during this surgical procedure, the sum of the cross clamp periods is equal to the total number of cross clamp minutes. Enter zero if the coronary circulation was never mechanically isolated from systemic circulation, either by an aortic cross clamp or systemic circulatory arrest. For the following two operations: (1) “Transplant, Heart”, and (2) “Transplant, Heart and lung”, the field “Cross Clamp Time” will be defined as the cross clamp time of the donor heart. Therefore, these two operations represent the only operations where the field “Cross Clamp Time” can be greater than the field “Cardiopulmonary Bypass Time”.

LowValue: 0 *UsualRangeLow:*

HighValue: 600 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Integer

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Circulatory Arrest Time *SeqNo:* 1170

Short Name: **DHCATm** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the total number of minutes of complete cessation of blood flow to the patient. This time period (Circulatory Arrest Time) excludes any periods of cerebral perfusion. If more than one period of circulatory arrest is required during this surgical procedure, the sum of these periods is equal to the total duration of circulatory arrest. Enter zero if circulatory arrest technique was not used.

LowValue: 0 *UsualRangeLow:*

HighValue: 200 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Integer

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Patient Temperature Monitoring Site - Bladder *SeqNo:* 1180

Short Name: **TempSiteBla** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the bladder monitoring site was utilized during this procedure to determine lowest and highest patient temperature during cardiopulmonary bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Lowest Core Temperature - Bladder *SeqNo:* 1190

Short Name: **LowCTmpBla** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the lowest temperature (Celsius) achieved during cardiopulmonary bypass as recorded using the bladder monitoring site.

LowValue: 1.0 *UsualRangeLow:*

HighValue: 37.0 *UsualRangeHigh:*

Parent Long Name: Patient Temperature Monitoring Site - Bladder *Format:* Real

ParentShortName: TempSiteBla *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Patient Temperature Monitoring Site - Esophageal *SeqNo:* 1200

Short Name: **TempSiteEso** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the esophageal monitoring site was utilized during this procedure to determine lowest and highest patient temperature during cardiopulmonary bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Lowest Core Temperature - Esophageal *SeqNo:* 1210

Short Name: **LowCTmpEso** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the lowest temperature (Celsius) achieved during cardiopulmonary bypass as recorded using the esophageal monitoring site.

LowValue: 1.0 *UsualRangeLow:*

HighValue: 37.0 *UsualRangeHigh:*

Parent Long Name: Patient Temperature Monitoring Site - Esophageal *Format:* Real

ParentShortName: TempSiteEso *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Patient Temperature Monitoring Site - Nasopharyngeal *SeqNo:* 1220

Short Name: **TempSiteNas** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the nasopharyngeal monitoring site was utilized during this procedure to determine lowest and highest patient temperature during cardiopulmonary bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Lowest Core Temperature - Nasopharyngeal *SeqNo:* 1230

Short Name: **LowCTmpNas** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the lowest temperature (Celsius) achieved during cardiopulmonary bypass as recorded using the nasopharyngeal monitoring site.

LowValue: 1.0 *UsualRangeLow:*

HighValue: 37.0 *UsualRangeHigh:*

Parent Long Name: Patient Temperature Monitoring Site - Nasopharyngeal *Format:* Real

ParentShortName: TempSiteNas *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Patient Temperature Monitoring Site - Rectal *SeqNo:* 1240

Short Name: **TempSiteRec** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the rectal monitoring site was utilized during this procedure to determine lowest and highest patient temperature during cardiopulmonary bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Lowest Core Temperature - Rectal *SeqNo:* 1250

Short Name: **LowCTmpRec** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the lowest temperature (Celsius) achieved during cardiopulmonary bypass as recorded using the rectal monitoring site.

LowValue: 1.0 *UsualRangeLow:*

HighValue: 37.0 *UsualRangeHigh:*

Parent Long Name: Patient Temperature Monitoring Site - Rectal *Format:* Real

ParentShortName: TempSiteRec *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Patient Temperature Monitoring Site - Tympanic *SeqNo:* 1260

Short Name: **TempSiteTym** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the tympanic monitoring site was utilized during this procedure to determine lowest and highest patient temperature during cardiopulmonary bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Lowest Core Temperature - Tympanic *SeqNo:* 1270

Short Name: **LowCTmpTym** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the lowest temperature (Celsius) achieved during cardiopulmonary bypass as recorded using the tympanic monitoring site.

LowValue: 1.0 *UsualRangeLow:*

HighValue: 37.0 *UsualRangeHigh:*

Parent Long Name: Patient Temperature Monitoring Site - Tympanic *Format:* Real

ParentShortName: TempSiteTym *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Patient Temperature Monitoring Site - Other *SeqNo:* 1280

Short Name: **TempSiteOth** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether any other monitoring site was utilized during this procedure to determine lowest and highest patient temperature during cardiopulmonary bypass.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Lowest Core Temperature - Other *SeqNo:* 1290

Short Name: **LowCTmpOth** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the lowest temperature (Celsius) achieved during cardiopulmonary bypass as recorded using the other monitoring site.

LowValue: 1.0 *UsualRangeLow:*

HighValue: 37.0 *UsualRangeHigh:*

Parent Long Name: Patient Temperature Monitoring Site - Other *Format:* Real

ParentShortName: TempSiteOth *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Cooling Time *SeqNo:* 1300

Short Name: **CoolTime** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of minutes of active cooling on cardiopulmonary bypass.

LowValue: 0 *UsualRangeLow:*

HighValue: 200 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Integer

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Rewarming Time *SeqNo:* 1310

Short Name: **RewarmTime** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of minutes from the initiation of rewarming until the target rewarming temperature is achieved.

LowValue: 0 *UsualRangeLow:*

HighValue: 500 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Integer

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Cerebral Perfusion Utilized *SeqNo:* 1320

Short Name: **CPerfUtil** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether cerebral perfusion was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cerebral Perfusion Time *SeqNo:* 1330

Short Name: **CPerfTime** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the total number of minutes cerebral perfusion was performed. This would include antegrade or retrograde cerebral perfusion strategies.

LowValue: 1 *UsualRangeLow:*

HighValue: 999 *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Integer

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Cerebral Perfusion Cannulation Site - Innominate Artery *SeqNo:* 1340

Short Name: **CPerfCanInn** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the innominate artery cannulation site was utilized for cerebral perfusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Text (categorical values specified by STS)

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cerebral Perfusion Cannulation Site - Right Subclavian *SeqNo:* 1350

Short Name: **CPerfCanRSub** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the right subclavian cannulation site was utilized for cerebral perfusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Text (categorical values specified by STS)

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cerebral Perfusion Cannulation Site - Right Axillary Artery *SeqNo:* 1360

Short Name: **CPerfCanRAx** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the right axillary artery cannulation site was utilized for cerebral perfusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Text (categorical values specified by STS)

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cerebral Perfusion Cannulation Site - Right Carotid Artery *SeqNo:* 1370

Short Name: **CPerfCanRCar** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the right carotid artery cannulation site was utilized for cerebral perfusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Text (categorical values specified by STS)

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cerebral Perfusion Cannulation Site - Left Carotid Artery *SeqNo:* 1380

Short Name: **CPerfCanLCar** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the left carotid artery cannulation site was utilized for cerebral perfusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Text (categorical values specified by STS)

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cerebral Perfusion Cannulation Site - Superior Vena Cava *SeqNo:* 1390

Short Name: CPerfCanSVC *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the superior vena cava cannulation site was utilized for cerebral perfusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Text (categorical values specified by STS)

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cerebral Perfusion Periods *SeqNo:* 1400

Short Name: CPerfPer *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of periods of cerebral perfusion. For example, if the cerebral perfusion time is a total of 20 minutes and the patient received 4 separate 5 minute periods of cerebral perfusion, the cerebral perfusion periods would be 4.

LowValue: 1 *UsualRangeLow:*

HighValue: 20 *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Integer

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Cerebral Perfusion Flow Rate *SeqNo:* 1410

Short Name: **CPerfFlow** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the cerebral perfusion flow rate in milliliters per kilogram (mL/kg) per minute.

LowValue: 1 *UsualRangeLow:*

HighValue: 999 *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Integer

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Cerebral Perfusion Temperature *SeqNo:* 1420

Short Name: **CPerfTemp** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the perfusate temperature (Celsius) maintained during cerebral perfusion.

LowValue: 1 *UsualRangeLow:*

HighValue: 37 *UsualRangeHigh:*

Parent Long Name: Cerebral Perfusion Utilized *Format:* Integer

ParentShortName: CPerfUtil *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Arterial Blood Gas Management During Cooling *SeqNo:* 1430

Short Name: **ABldGasMgt** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the arterial blood gas management strategy utilized during the cooling phase of cardiopulmonary bypass prior to initiation of circulatory arrest or cerebral perfusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Alpha STAT
2	pH STAT
3	pH STAT cooling/Alpha STAT rewarming
4	Other combination

Long Name: Hematocrit Prior to Circulatory Arrest or Cerebral Perfusion *SeqNo:* 1440

Short Name: **HCTPriCircA** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the last hematocrit value prior to initiation of circulatory arrest or cerebral perfusion.

LowValue: 5.0 *UsualRangeLow:* 15.0

HighValue: 70.0 *UsualRangeHigh:* 45.0

Parent Long Name: Operation Type *Format:* Real

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Cardioplegia Delivery *SeqNo:* 1450

Short Name: **CplegiaDeliv** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the delivery method of cardioplegia if used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	None
2	Antegrade
3	Retrograde
4	Both

Long Name: Cardioplegia Type *SeqNo:* 1460

Short Name: **CplegiaType** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of cardioplegia used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Delivery *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaDeliv *DataLength:*

ParentValue: = "Antegrade", "Retrograde" or "Both" *Data Source:* User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Blood
2	Crystalloid
3	Both
4	Other

Long Name: Cardioplegia Solution *SeqNo:* 1470

Short Name: **CplegiaSolution** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the cardioplegia solution used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Delivery *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaDeliv *DataLength:*

ParentValue: = "Antegrade", "Retrograde" or "Both" *Data Source:* User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	del Nido
2	Custodiol/Bretchneider (HTK)
3	Buckberg
4	Plegisol/St. Thomas
5	University of Wisconsin
6	Celsior
7	Roe's Solution
8	Microplegia with potassium
9	Microplegia with Adenocaine
90	Other

Long Name: Cardioplegia Administered *SeqNo:* 1480

Short Name: **CplegiaAdmin** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether cardioplegia was administered.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cardioplegia Number Of Doses *SeqNo:* 1490

Short Name: **CplegiaDose** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of doses of cardioplegia administered

LowValue: 1 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Cardioplegia Delivery *Format:* Integer

ParentShortName: CplegiaDeliv *DataLength:*

ParentValue: = "Antegrade", "Retrograde" or "Both" *Data Source:* User

ParentHarvestCodes: 2|3|4

Long Name: Cardioplegia Delivery Ratio - Blood Solution *SeqNo:* 1500

Short Name: **CplegiaRatioBS** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the blood solution portion of the ratio of blood to cardioplegia solution (BS:CS) utilized during this procedure. This includes microplegia systems and cardioplegia systems utilizing a syringe pump to introduce the cardioplegic solution into the blood base solution. If only crystalloid cardioplegia was utilized in this procedure, the ratio is entered as 0:1. For microplegia and syringe pump systems enter the average ratio for all cardioplegia deliveries. For example, if a total of 300mL of blood and 10mL of cardioplegia solution were given during the entire procedure, the resultant average ratio would be 30:1.

LowValue: 1 *UsualRangeLow:*

HighValue: 30 *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Integer

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Cardioplegia Delivery Ratio - Cardioplegia Solution *SeqNo:* 1510

Short Name: **CplegiaRatioCS** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cardioplegia solution portion of the ratio of blood to cardioplegia solution (BS:CS) utilized during this procedure. This includes microplegia systems and cardioplegia systems utilizing a syringe pump to introduce the cardioplegic solution into the blood base solution. If only crystalloid cardioplegia was utilized in this procedure, the ratio is entered as 0:1. For microplegia and syringe pump systems enter the average ratio for all cardioplegia deliveries. For example, if a total of 300mL of blood and 10mL of cardioplegia solution were given during the entire procedure, the resultant average ratio would be 30:1.

LowValue: 1 *UsualRangeLow:*

HighValue: 30 *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Integer

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Initial Delivery Route Of Cardioplegia - Antegrade Aortic Root *SeqNo:* 1520

Short Name: **CplegInRtAAR** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the delivery route of the initial administration of cardioplegia included the antegrade aortic root.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Initial Delivery Route Of Cardioplegia - Antegrade Right Coronary Ostia *SeqNo:* 1530

Short Name: **CplegInRtARCO** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the delivery route of the initial administration of cardioplegia included the antegrade right coronary ostia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Initial Delivery Route Of Cardioplegia - Antegrade Left Coronary Ostia *SeqNo:* 1540

Short Name: **CplegInRtALCO** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the delivery route of the initial administration of cardioplegia included the antegrade left coronary ostia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Initial Delivery Route Of Cardioplegia - Retrograde Coronary Sinus *SeqNo:* 1550

Short Name: **CplegInRtRCS** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the delivery route of the initial administration of cardioplegia included the retrograde coronary sinus.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Subsequent Delivery Route Of Cardioplegia - Antegrade Aortic Root *SeqNo:* 1560

Short Name: **CplegSubRtAAR** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the delivery route of any subsequent administration(s) of cardioplegia included the antegrade aortic root.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Subsequent Delivery Route Of Cardioplegia - Antegrade Right Coronary Ostia *SeqNo:* 1570

Short Name: **CplegSubRtARCO** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the delivery route of any subsequent administration(s) of cardioplegia included the antegrade right coronary ostia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Subsequent Delivery Route Of Cardioplegia - Antegrade Left Coronary Ostia *SeqNo:* 1580

Short Name: **CplegSubRtALCO** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the delivery route of any subsequent administration(s) of cardioplegia included the antegrade left coronary ostia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Subsequent Delivery Route Of Cardioplegia - Retrograde Coronary Sinus *SeqNo:* 1590

Short Name: **CplegSubRtRCS** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the delivery route of any subsequent administration(s) of cardioplegia included the retrograde coronary sinus.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Longest Myocardial Ischemic Interval *SeqNo:* 1600

Short Name: **LngMyoIscInt** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the maximum time interval in minutes (min) between the cessation of cardioplegia administration and either the initiation of the subsequent administration of cardioplegia or coronary reperfusion at the removal of the aortic cross clamp.

LowValue: 0 *UsualRangeLow:*

HighValue: 300 *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Integer

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Cardioplegia Solution *SeqNo:* 1610

Short Name: **CplegSol** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the mechanism of arrest of the cardioplegia solution utilized during this procedure. Depolarizing cardioplegia would include solutions that utilize only a depolarizing agent (e.g. potassium) to arrest the heart. Hyperpolarizing cardioplegia would include solutions that utilize adenosine triphosphate–sensitive potassium channel opening agents (e.g. icorandil, pinacidil, cromakalim, minoxidil, aprilkalim, loprazolam, adenosine) to arrest the heart. Modified depolarizing cardioplegia would include solutions that combine a depolarizing agent (e.g. potassium) with additional membrane stabilizing additives (e.g. magnesium or lidocaine) to arrest the heart.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cardioplegia Administered *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaAdmin *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Hyperpolarizing
2	Depolarizing
3	Modified Depolarizing
9	None

Long Name: Lowest Hematocrit On CPB *SeqNo:* 1620

Short Name: **LowHCT** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate lowest Hematocrit (HCT) measured during CPB.

LowValue: 1 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Real

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Hematocrit - First after initiating CPB *SeqNo:* 1640

Short Name: **HCTFirst** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the first hematocrit measured after initiating CPB.

LowValue: 5.0 *UsualRangeLow:* 15.0

HighValue: 70.0 *UsualRangeHigh:* 45.0

Parent Long Name: Operation Type *Format:* Real

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Hematocrit - Last Measured During CPB *SeqNo:* 1650

Short Name: **HCTLast** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the last hematocrit measured during CPB.

LowValue: 5.0 *UsualRangeLow:* 15.0

HighValue: 70.0 *UsualRangeHigh:* 45.0

Parent Long Name: Operation Type *Format:* Real

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Hematocrit - Post-CPB and Post-Protamine *SeqNo:* 1660

Short Name: **HCTPost** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the hematocrit measured post-CPB following protamine administration.

LowValue: 5.0 *UsualRangeLow:* 15.0

HighValue: 70.0 *UsualRangeHigh:* 45.0

Parent Long Name: Operation Type *Format:* Real

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Long Name: Ultrafiltration Performed After CPB *SeqNo:* 1670

Short Name: **Ultrafiltration** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether ultrafiltration was performed after CPB.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "VAD Operation Done With CPB" *Data Source:* User

ParentHarvestCodes: 1|6

Harvest Codes:

Code:	Value:
1	No
2	Yes, Modified Ultrafiltration (MUF)
3	Yes, Conventional Ultrafiltration (CUF)
4	Yes, MUF and CUF

Long Name: Pulmonary Vascular Resistance Measured *SeqNo:* 1770

Short Name: **PVRMeas** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the Pulmonary Vascular Resistance (PVR) in Woods units was measured by cardiac catheterization prior to this operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Pulmonary Vascular Resistance *SeqNo:* 1780

Short Name: **PVR** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: If the patient's weight is greater than or equal to 40 kilograms, indicate the pulmonary vascular resistance (in Wood units) as measured by cardiac catheterization.

LowValue: 0.0 *UsualRangeLow:* 1.0

HighValue: 100.0 *UsualRangeHigh:* 3.0

Parent Long Name: *Format:* Real

ParentShortName: PVRMeas|WeightKg *DataLength:*

ParentValue: = "Yes"|>=40 *Data Source:* User

ParentHarvestCodes: 1|>=40

Long Name: Pulmonary Vascular Resistance Index *SeqNo:* 1790

Short Name: **PVRI** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: If the patient's weight is less than 40 kilograms, indicate the Pulmonary Vascular Resistance Index (in Wood units x m2) as measured by cardiac catheterization.

LowValue: 0.0 *UsualRangeLow:* 1.0

HighValue: 100.0 *UsualRangeHigh:* 3.0

Parent Long Name: *Format:* Real

ParentShortName: PVRMeas|WeightKg *DataLength:*

ParentValue: = "Yes"|<40 *Data Source:* User

ParentHarvestCodes: 1|<40

Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *SeqNo:* 1880

Short Name: **IOCOx** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether cerebral oximetry was used for operative collection.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraoperative - Cerebral Metrics - Oximeter Provided First Indication *SeqNo:* 1890

Short Name: **IOCOxFirst** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the cerebral oximeter provided the first indication of a technical problem or physiological change in the patient that could potentially lead to an adverse patient outcome. If no technical problem is identified or change in therapy is initiated secondary to the cerebral oximetry reading, please mark this field as "No".

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used

Format: Text (categorical values specified by STS)

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraoperative - Pre-Induction Baseline Cerebral Regional Oxygen Saturation - Left *SeqNo:* 1900

Short Name: **IOCPrL** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the percent baseline left cerebral regional oxygen saturation (rSO2) values at the beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the oximeter will automatically select a baseline value from the first few minutes of the procedure. Units are %.

LowValue: 1 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used

Format: Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Pre-Induction Baseline Cerebral Regional Oxygen Saturation - Right *SeqNo:* 1910

Short Name: **IOCPrR** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the percent baseline right cerebral regional oxygen saturation (rSO2) values at the beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the oximeter will automatically select a baseline value from the first few minutes of the procedure. Units are %.

LowValue: 1 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Pre-Induction Baseline Cerebral Regional Oxygen Saturation - Center *SeqNo:* 1920

Short Name: **IOCPrC** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the percent baseline center, single sensor cerebral regional oxygen saturation (rSO2) values at the beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the oximeter will automatically select a baseline value from the first few minutes of the procedure. Units are %.

LowValue: 1 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cumulative Cerebral Saturation Below Threshold - Left *SeqNo:* 1930

Short Name: **IOCCrL** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 50% for the left rSO2. Calculated by the oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cumulative Cerebral Saturation Below Threshold - Right *SeqNo:* 1940

Short Name: **IOCCrR** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 50% for the right rSO2. Calculated by the oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cumulative Cerebral Saturation Below Threshold - Center *SeqNo:* 1950

Short Name: **IOCCrC** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 50% for the center, single sensor rSO2. Calculated by the oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Skin Closure Cerebral Regional Oxygen Saturation - Left *SeqNo:* 1960

Short Name: **IOCSCL** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the left cerebral regional oxygen saturation of blood (rSO2) value at the time of skin closure at the end of the operation. Units are %.

LowValue: 1 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Skin Closure Cerebral Regional Oxygen Saturation - Right *SeqNo:* 1970

Short Name: **IOCSCR** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the right cerebral regional oxygen saturation of blood (rSO2) value at the time of skin closure at the end of the operation. Units are %.

LowValue: 1 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Skin Closure Cerebral Regional Oxygen Saturation - Center *SeqNo:* 1980

Short Name: **IOCSCC** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the center, single sensor cerebral regional oxygen saturation of blood (rSO2) value at the time of skin closure at the end of the operation. Units are %.

LowValue: 1 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - >90 *SeqNo:* 1990

Short Name: **IOCSat90** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture cerebral rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is greater than 90.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 81-90 *SeqNo:* 2000

Short Name: **IOCSat81** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture cerebral rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 81 and 90.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 71-80 *SeqNo:* 2010

Short Name: **IOCSat71** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture cerebral rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 71 and 80.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 61-70 *SeqNo:* 2020

Short Name: **IOCSat61** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture cerebral rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 61 and 70.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 51-60 *SeqNo:* 2030

Short Name: IOCSat51 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture cerebral rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 51 and 60.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 41-50 *SeqNo:* 2040

Short Name: IOCSat41 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture cerebral rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 41 and 50.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 31-40 *SeqNo:* 2050

Short Name: IOCSat31 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture cerebral rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 31 and 40.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - <=30 *SeqNo:* 2060

Short Name: IOCSat30 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture cerebral rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is less than or equal to 30.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: IOCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *SeqNo:* 2070

Short Name: **IOSOx** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether somatic oximetry was used for operative collection.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraoperative - Somatic Metrics - Somatic Oximeter provided First Indication *SeqNo:* 2080

Short Name: **IOSOxFirst** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the somatic oximeter provided the first indication of a technical problem or physiological change in the patient that could potentially lead to an adverse patient outcome. If no technical problem is identified or change in therapy is initiated secondary to the cerebral oximetry reading, please mark this field as “No”.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: Intraoperative - Somatic Sensor Location *SeqNo:* 2090

Short Name: **IOSLoc** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the location of the measured somatic tissue bed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used

Format: Text (categorical values specified by STS)

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Renal (flank)
2	Mesenteric (abdominal)

Long Name: Intraoperative - Pre-Induction Baseline Somatic Regional Oxygen Saturation *SeqNo:* 2100

Short Name: **IOSBL** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the percent baseline somatic regional oxygen saturation (rSO2) values at the beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the oximeter will automatically select a baseline value from the first few minutes of the procedure.

LowValue: 1 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used

Format: Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Cumulative Somatic Saturation Below Threshold *SeqNo:* 2110

Short Name: **IOSCu** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cumulative integral of time and depth of desaturation events when somatic rSO2 is less than cerebral rSO2. Calculated by the oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Somatic Regional Oxygen Saturation Percentile Ranges - >90 *SeqNo:* 2120

Short Name: **IOSSat90** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic Rso2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is greater than 90.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 81-90 *SeqNo:* 2130

Short Name: IOSSat81 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 81 and 90.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 71-80 *SeqNo:* 2140

Short Name: IOSSat71 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 71 and 80.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 61-70 *SeqNo:* 2150

Short Name: IOSSat61 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 61 and 70.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 51-60 *SeqNo:* 2160

Short Name: IOSSat51 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 51 and 60.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 41-50 *SeqNo:* 2170

Short Name: IOSSat41 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 41 and 50.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 31-40 *SeqNo:* 2180

Short Name: IOSSat31 *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 31 and 40.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative - Somatic Regional Oxygen Saturation Percentile Ranges - <=30 *SeqNo:* 2190

Short Name: **IOSSat30** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is less than or equal to 30.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Intraoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: IOSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *SeqNo:* 2200

Short Name: **POCOx** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether cerebral oximetry was used for post-operative collection.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postoperative - Cerebral Metrics - Cerebral Oximeter Provided First Indication *SeqNo:* 2210

Short Name: **POCOxFirst** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the cerebral oximeter provided the first indication of a technical problem or physiological change in the patient that could potentially lead to an adverse patient outcome. If no technical problem is identified or change in therapy is initiated secondary to the cerebral oximetry reading, please mark this field as "No".

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postoperative - Cumulative Cerebral Saturation Below Threshold - Left *SeqNo:* 2220

Short Name: **POCSL** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 50% for the left rSO2. Calculated by the oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first. Units are minute-%. This is also called area under the curve (AUC). Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cumulative Cerebral Saturation Below Threshold - Right *SeqNo:* 2230

Short Name: **POCSR** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 50% for the right rSO2. Calculated by the oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first. Units are minute-%. This is also called area under the curve (AUC). Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cumulative Cerebral Saturation Below Threshold - Center *SeqNo:* 2240

Short Name: **POCSC** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 50% for the center rSO2. Calculated by the oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first. Units are minute-%. This is also called area under the curve (AUC). Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - >90 *SeqNo:* 2250

Short Name: **POCSat90** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is greater than 90. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 81-90 *SeqNo:* 2260

Short Name: **POCSat81** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 81 and 90. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 71-80 *SeqNo:* 2270

Short Name: **POCSat71** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 71 and 80. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 61-70 *SeqNo:* 2280

Short Name: **POCSat61** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 61 and 70. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 51-60 *SeqNo:* 2290

Short Name: **POCSat51** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 51 and 60. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 41-50 *SeqNo:* 2300

Short Name: **POCSat41** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 41 and 50. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - 31-40 *SeqNo:* 2310

Short Name: **POCSat31** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is between 31 and 40. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Cerebral Regional Oxygen Saturation Percentile Ranges - <=30 *SeqNo:* 2320

Short Name: **POCSat30** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the cerebral regional oxygen saturation percentile range is less than or equal to 30. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used *Format:* Integer

ParentShortName: POCOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *SeqNo:* 2330

Short Name: **POSOx** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether somatic oximetry was used for post-operative collection.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: <>"Non-cardiac, Non-thoracic procedure on cardiac patient with cardiac anesthesia" *Data Source:* User

ParentHarvestCodes: <>8

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postoperative - Somatic Metrics - Somatic Oximeter Provided First Indication *SeqNo:* 2340

Short Name: **POSOxFirst** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate whether the somatic oximeter provided the first indication of a technical problem or physiological change in the patient that could potentially lead to an adverse patient outcome. If no technical problem is identified or change in therapy is initiated secondary to the cerebral oximetry reading, please mark this field as “No”.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Text (categorical values specified by STS)

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: Postoperative - Somatic Sensor Location *SeqNo:* 2350

Short Name: **POSLoc** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the location of the measured somatic tissue bed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used

Format: Text (categorical values specified by STS)

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Renal (flank)
2	Mesenteric (abdominal)

Long Name: Postoperative - Cumulative Somatic Saturation Below Threshold *SeqNo:* 2360

Short Name: **POSS** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the cumulative integral of time and depth of desaturation events when somatic rSO2 is less than cerebral rSO2. Calculated by the oximeter by multiplying the difference between the threshold and current rSO2 values times the duration that rSO2 is below the threshold. Values are accumulated from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first. Units are minute-%. This is also called area under the curve (AUC). Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used

Format: Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Somatic Regional Oxygen Saturation Percentile Ranges - >90 *SeqNo:* 2370

Short Name: **POSSat90** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is greater than 90. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 81-90 *SeqNo:* 2380

Short Name: **POSSat81** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 81 and 90. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 71-80 *SeqNo:* 2390

Short Name: **POSSat71** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 71 and 80. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 61-70 *SeqNo:* 2400

Short Name: **POSSat61** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 61 and 70. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 51-60 *SeqNo:* 2410

Short Name: **POSSat51** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 51 and 60. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 41-50 *SeqNo:* 2420

Short Name: **POSSat41** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 41 and 50. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Somatic Regional Oxygen Saturation Percentile Ranges - 31-40 *SeqNo:* 2430

Short Name: **POSSat31** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is between 31 and 40. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postoperative - Somatic Regional Oxygen Saturation Percentile Ranges - <=30 *SeqNo:* 2440

Short Name: **POSSat30** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Capture somatic rSO2 values segmented by percentile ranges. Calculated by the oximeter, units are minutes. For this field, enter the number of minutes that the somatic regional oxygen saturation percentile range is less than or equal to 30. Data is collected from patient arrival in the postoperative care unit for the first 24 hours or until the patient is extubated, whichever occurs first.

LowValue: 0 *UsualRangeLow:*

HighValue: 9999 *UsualRangeHigh:*

Parent Long Name: Postoperative Near Infrared Spectroscopy (NIRS) Somatic Metrics Used *Format:* Integer

ParentShortName: POSOx *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products *SeqNo:* 2450

Short Name: **IBldProd** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether blood products were transfused any time intraoperatively during the initial surgery. Intraoperatively is defined as any blood started inside of the OR.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products Refused *SeqNo:* 2460

Short Name: **IBldProdRef** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient or family refused blood products.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: IBldProd *DataLength:*

ParentValue: = "No" *Data Source:* User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products - Packed Red Blood Cells (RBC) *SeqNo:* 2470

Short Name: IBdRBC *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether packed red blood cells (RBC) were transfused any time intraoperatively during the initial surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products - RBC Donor Exposures *SeqNo:* 2480

Short Name: IBdRBCDE *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for packed red blood cells (RBC) for this procedure during the intraoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Packed Red Blood Cells (RBC) *Format:* Integer

ParentShortName: IBdRBC *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - RBC Units *SeqNo:* 2490

Short Name: **IBdRBCU** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of packed red blood cells that were transfused intraoperatively.

Do not include autologous, cell-saver, pump-residual or chest tube recirculated blood.

LowValue: 0 *UsualRangeLow:* 0

HighValue: 50 *UsualRangeHigh:* 10

Parent Long Name: Intraop Blood Products - Packed Red Blood Cells (RBC) *Format:* Integer

ParentShortName: IBdRBC *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - RBC Milliliters *SeqNo:* 2500

Short Name: **IBdRBCM** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of packed red blood cells that were transfused intraoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Packed Red Blood Cells (RBC) *Format:* Integer

ParentShortName: IBdRBC *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Fresh Frozen Plasma (FFP) *SeqNo:* 2510

Short Name: **IBdFFP** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether fresh frozen plasma (FFP) was transfused any time intraoperatively during the initial surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products - FFP Donor Exposures *SeqNo:* 2520

Short Name: **IBdFFPDE** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for fresh frozen plasma (FFP) for this procedure during the intraoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Fresh Frozen Plasma (FFP) *Format:* Integer

ParentShortName: IBdFFP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - FFP Units *SeqNo:* 2530

Short Name: **IBdFFPU** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of fresh frozen plasma that were transfused intraoperatively.

LowValue: 0 *UsualRangeLow:* 0

HighValue: 50 *UsualRangeHigh:* 10

Parent Long Name: Intraop Blood Products - Fresh Frozen Plasma (FFP) *Format:* Integer

ParentShortName: IBdFFP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - FFP Milliliters *SeqNo:* 2540

Short Name: **IBdFFPM** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of fresh frozen plasma (FFP) that were transfused intraoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Fresh Frozen Plasma (FFP) *Format:* Integer

ParentShortName: IBdFFP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Cryoprecipitate *SeqNo:* 2550

Short Name: **IBdCryo** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether cryoprecipitate was transfused any time intraoperatively during the initial surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products - Cryo Donor Exposures *SeqNo:* 2560

Short Name: **IBdCryoDE** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for cryoprecipitate for this procedure during the intraoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Cryoprecipitate *Format:* Integer

ParentShortName: IBdCryo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Cryo Units *SeqNo:* 2570

Short Name: **IBdCryoU** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of cryoprecipitate that were transfused intraoperatively.

One bag of cryo = one unit.
The number of units is not volume dependent.

LowValue: 0 *UsualRangeLow:* 0

HighValue: 50 *UsualRangeHigh:* 10

Parent Long Name: Intraop Blood Products - Cryoprecipitate *Format:* Integer

ParentShortName: IBdCryo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Cryo Milliliters *SeqNo:* 2580

Short Name: **IBdCryoM** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of cryoprecipitate that were transfused intraoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Cryoprecipitate *Format:* Integer

ParentShortName: IBdCryo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Platelets *SeqNo:* 2590

Short Name: **IBdPlat** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether platelets were transfused any time intraoperatively during the initial surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products - Platelets Donor Exposures *SeqNo:* 2600

Short Name: **IBdPlatDE** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for platelets for this procedure during the intraoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Platelets *Format:* Integer

ParentShortName: IBdPlat *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Platelets Units *SeqNo:* 2610

Short Name: **IBdPlatU** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of platelets that were transfused intraoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor platelets obtained. The number of units coded is not volume dependent.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Platelets *Format:* Integer

ParentShortName: IBdPlat *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Platelets Milliliters *SeqNo:* 2620

Short Name: **IBdPlatM** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of platelets that were transfused intraoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Platelets *Format:* Integer

ParentShortName: IBdPlat *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Whole Blood *SeqNo:* 2630

Short Name: **IBdWB** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether whole blood was transfused any time intraoperatively during the initial surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products - Whole Blood Fresh *SeqNo:* 2640

Short Name: **IBdWBFresh** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the whole blood was transfused within 48 hours of donation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Whole Blood *Format:* Text (categorical values specified by STS)

ParentShortName: IBdWB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products - Whole Blood Donor Exposures *SeqNo:* 2650

Short Name: IBdWBDE *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for whole blood for this procedure during the intraoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Whole Blood *Format:* Integer

ParentShortName: IBdWB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Whole Blood Units *SeqNo:* 2660

Short Name: IBdWBU *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of whole blood that were transfused intraoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Whole Blood *Format:* Integer

ParentShortName: IBdWB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Whole Blood Milliliters *SeqNo:* 2670

Short Name: IBdWBM *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of whole blood that were transfused intraoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Whole Blood *Format:* Integer

ParentShortName: IBdWB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Blood Products - Factor VIIa *SeqNo:* 2680

Short Name: IBdFVIIa *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether factor VIIa was transfused any time intraoperatively during the initial surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Blood Products - Factor VIIa Total Dose *SeqNo:* 2690

Short Name: **IBdFVIIaD** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of Factor VII that were transfused intraoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor platelets obtained. The number of units coded is not volume dependent.

LowValue: 0 *UsualRangeLow:*

HighValue: 500 *UsualRangeHigh:*

Parent Long Name: Intraop Blood Products - Factor VIIa *Format:* Integer

ParentShortName: IBdFVIIa *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Medications - Aprotinin *SeqNo:* 2700

Short Name: **IMedAprot** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Aprotinin in the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Medications - Aprotinin - Dose *SeqNo:* 2710

Short Name: IMedAprotD *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the dosage of the Aprotinin the patient received in the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Intraop Medications - Aprotinin *Format:* Text (categorical values specified by STS)

ParentShortName: IMedAprot *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Full dose
2	Half dose

Long Name: Intraop Medications - Epsilon Amino-Caproic Acid *SeqNo:* 2720

Short Name: IMedEACA *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Epsilon Amino-Caproic Acid in the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Medications - Epsilon Amino-Caproic Acid - Dose *SeqNo:* 2730

Short Name: IMedEACAD *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the dosage in milligrams per kilogram (mg/kg) of the epsilon amino-caproic acid the patient received in the operating room.

LowValue: 1 *UsualRangeLow:*

HighValue: 1000 *UsualRangeHigh:*

Parent Long Name: Intraop Medications - Epsilon Amino-Caproic Acid *Format:* Integer

ParentShortName: IMedEACA *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Medications - Desmopressin *SeqNo:* 2740

Short Name: IMedDesmo *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Desmopressin in the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Medications - Desmopressin (DDAVP) - Dose *SeqNo:* 2750

Short Name: **IMedDesmoD** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the dosage in milligrams per kilogram (mg/kg) of the desmopressin (DDAVP) the patient received in the operating room.

LowValue: 0.0 *UsualRangeLow:* 0.2

HighValue: 10.0 *UsualRangeHigh:* 0.4

Parent Long Name: Intraop Medications - Desmopressin *Format:* Real

ParentShortName: IMedDesmo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraop Medications - Tranexamic Acid *SeqNo:* 2760

Short Name: **IMedTran** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Tranexamic Acid in the operating room.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraop Medications - Tranexamic Acid - Dose *SeqNo:* 2770

Short Name: **IMedTranD** *Core:* No

Section Name: Operative *Harvest:* No

DBTableName Operations

Definition: Indicate the dosage in milligrams per kilogram (mg/kg) of the tranexamic acid the patient received in the operating room.

LowValue: 1 *UsualRangeLow:*

HighValue: 1000 *UsualRangeHigh:*

Parent Long Name: Intraop Medications - Tranexamic Acid *Format:* Integer

ParentShortName: IMedTran *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: CAB *SeqNo:* 2780

Short Name: **OpCAB** *Core:* Yes

Section Name: CABG Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether coronary artery bypass grafting was done.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Dist Anast - Art # *SeqNo:* 2790

Short Name: **DistArt** *Core:* Yes

Section Name: CABG Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the total number of distal anastomoses with arterial conduits, whether IMA, radial artery, etc.

LowValue: 0 *UsualRangeLow:*

HighValue: 9 *UsualRangeHigh:*

Parent Long Name: CAB *Format:* Integer

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Dist Anast - Vein # *SeqNo:* 2800

Short Name: **DistVein** *Core:* Yes

Section Name: CABG Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the total number of distal anastomoses with venous conduits.

LowValue: 0 *UsualRangeLow:*

HighValue: 9 *UsualRangeHigh:*

Parent Long Name: CAB *Format:* Integer

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Dist Anast - Vein Harvest Technique *SeqNo:* 2810

Short Name: **DistVeinHTech** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the technique used to harvest the vein graft(s).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Dist Anast - Vein # *Format:* Text (categorical values specified by STS)

ParentShortName: DistVein *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Harvest Codes:

Code:	Value:
1	Endovascular
2	Direct Vision
3	Both

Long Name: Saphenous Vein Harvest Time *SeqNo:* 2820

Short Name: **SaphHrvstT** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the total time in minutes for saphenous vein harvest.

LowValue: 1 *UsualRangeLow:*

HighValue: 99 *UsualRangeHigh:*

Parent Long Name: Dist Anast - Vein # *Format:* Integer

ParentShortName: DistVein *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Anastomotic Device Used *SeqNo:* 2830

Short Name: **AnasDevU** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether an anastomotic device/material was used for proximal or distal anastomoses such as glue, magnets, clips, stapler, etc. Exclude sutures.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Anastomotic Device *SeqNo:* 2840

Short Name: **AnasDev** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate which type of anastomotic device was used. If more than one device used, indicate device used on Distal Anastomosis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Anastomotic Device Used *Format:* Text (categorical values specified by STS)

ParentShortName: AnasDevU *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Glue
2	Magnets
3	Clips
4	Staples
9	Other

Long Name: IMA Artery Used *SeqNo:* 2850

Short Name: **IMAArtUs** *Core:* Yes

Section Name: CABG Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate which, if any, Internal Mammary Artery(ies) (IMA) were used for grafts.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Left IMA
2	Right IMA
3	Both IMAs
4	No IMA

Long Name: IMA Harvest Technique *SeqNo:* 2860

Short Name: **IMATechn** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the technique of IMA harvest.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: IMA Artery Used *Format:* Text (categorical values specified by STS)

ParentShortName: IMAArtUs *DataLength:*

ParentValue: = "Left IMA", "Right IMA", or "Both IMAs" *Data Source:* User

ParentHarvestCodes: 1|2|3

Harvest Codes:

Code:	Value:
2	Direct Vision
3	Thoracoscopy
4	Combination
5	Robotic Assisted

Long Name: IMA Dist Anast # *SeqNo:* 2870

Short Name: **NumIMADA** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the total number of distal anastomoses done using IMA grafts.

LowValue: 0 *UsualRangeLow:*

HighValue: 6 *UsualRangeHigh:*

Parent Long Name: IMA Artery Used *Format:* Integer

ParentShortName: IMAArtUs *DataLength:*

ParentValue: = "Left IMA", "Right IMA", or "Both IMAs" *Data Source:* User

ParentHarvestCodes: 1|2|3

Long Name: Radial Artery Used *SeqNo:* 2880

Short Name: **RadArtUs** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate which radial artery(ies) was/were used for grafts.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No Radial
2	Left Radial
3	Right Radial
4	Both Radials

Long Name: Radial Dist Anast # *SeqNo:* 2890

Short Name: **NumRadDA** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the total number of distal anastomoses done using radial artery grafts.

LowValue: 0 *UsualRangeLow:*

HighValue: 6 *UsualRangeHigh:*

Parent Long Name: Radial Artery Used *Format:* Integer

ParentShortName: RadArtUs *DataLength:*

ParentValue: = "Left Radial", "Right Radial", or "Both Radials" *Data Source:* User

ParentHarvestCodes: 2|3|4

Long Name: Radial Dist Anast Harvest Technique *SeqNo:* 2900

Short Name: **RadHTech** *Core:* No

Section Name: CABG Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the technique used to harvest the radial artery(s).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Radial Dist Anast # *Format:* Text (categorical values specified by STS)

ParentShortName: NumRadDA *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Harvest Codes:

Code:	Value:
1	Endovascular
2	Direct Vision
3	Both

Long Name: Radial Artery Harvest Time *SeqNo:* 2910
Short Name: **RadHrvstT** *Core:* No
Section Name: CABG Procedures *Harvest:* No
DBTableName Operations
Definition: Indicate the total time in minutes for radial artery harvesting.
LowValue: 1 *UsualRangeLow:*
HighValue: 99 *UsualRangeHigh:*
Parent Long Name: Radial Dist Anast # *Format:* Integer
ParentShortName: NumRadDA *DataLength:*
ParentValue: >0 *Data Source:* User
ParentHarvestCodes: >0

Long Name: GEPA Dist Anast # *SeqNo:* 2920
Short Name: **NumGEPDA** *Core:* No
Section Name: CABG Procedures *Harvest:* No
DBTableName Operations
Definition: Indicate the total number of distal anastomoses done using gastro-epiploic artery grafts.
LowValue: 0 *UsualRangeLow:*
HighValue: 6 *UsualRangeHigh:*
Parent Long Name: CAB *Format:* Integer
ParentShortName: OpCAB *DataLength:*
ParentValue: = "Yes" *Data Source:* User
ParentHarvestCodes: 1

Long Name: Other Arterial Distal Anastomoses # *SeqNo:* 2930
Short Name: **NumOArtD** *Core:* No
Section Name: CABG Procedures *Harvest:* No
DBTableName Operations
Definition: Indicate the number of arterial distal anastomoses that were used, other than radial, GEPA or IMA.
LowValue: 0 *UsualRangeLow:*
HighValue: 6 *UsualRangeHigh:*
Parent Long Name: CAB *Format:* Integer
ParentShortName: OpCAB *DataLength:*
ParentValue: = "Yes" *Data Source:* User
ParentHarvestCodes: 1

Long Name: Valve *SeqNo:* 2940

Short Name: **OpValve** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a surgical procedure was done on the Aortic, Mitral, Tricuspid, Pulmonic, common AV valve or truncal valves.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VS-Aortic Proc-Procedure *SeqNo:* 2950

Short Name: **OpAortic** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether a surgical procedure was done or not done on the Aortic Valve.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Replacement
3	Repair/Reconstruction
4	Root Reconstruction with Valve Conduit

8	Replacement + Aortic Graft Conduit (not a valve conduit)
5	Root Reconstruction with Valve Sparing
9	Resuspension Aortic Valve with Replacement of Ascending aorta
10	Resuspension Aortic Valve without Replacement of Ascending aorta
7	Resection Sub-Aortic Stenosis

Long Name: VS-Mitral Proc-Procedure *SeqNo:* 2960

Short Name: **OpMitral** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether a surgical procedure was done or not done on the Mitral Valve.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Annuloplasty Only
3	Replacement
4	Reconstruction with Annuloplasty
5	Reconstruction without Annuloplasty

Long Name: VS-Mitral Repair Attempt *SeqNo:* 2970

Short Name: **MitralIntent** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether a Mitral Valve Repair was attempted prior to the Mitral Valve Replacement.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpMitral *DataLength:*

ParentValue: = "Replacement" *Data Source:* User

ParentHarvestCodes: 3

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VS-Tricuspid Proc-Procedure *SeqNo:* 2980

Short Name: **OpTricus** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether a surgical procedure was done or not done on the Tricuspid Valve.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Annuloplasty Only
3	Replacement
4	Reconstruction with Annuloplasty
5	Reconstruction without Annuloplasty
6	Valvectomy

Long Name: VS-Pulmonic Proc-Procedure *SeqNo:* 2990

Short Name: **OpPulm** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether a surgical procedure was done or not done on the Pulmonic Valve.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Replacement
3	Reconstruction

Long Name: VS-Aortic Proc-Aortic Annular enlargement *SeqNo:* 3000

Short Name: **AnlrEnl** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether an annular enlargement procedure was performed on the Aortic Valve. An aortic annular enlargement is defined as incision of the aortic annulus to enlarge the aortic orifice. Annular enlargement techniques, include but are not limited to Manouguian, Konno and Nicks.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VS-Aortic Proc-Imp-Type *SeqNo:* 3010

Short Name: **VSAoImTy** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the type of implant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpAortic *DataLength:*

ParentValue: <>"No" *Data Source:* User

ParentHarvestCodes: <>1

Harvest Codes:

Code:	Value:
1	None
2	Mechanical
3	Bioprosthesis
4	Homograft
5	Autograft (Ross)
6	Ring/Annuloplasty
7	Band/Annuloplasty

Long Name: VS-Aortic Proc-Imp *SeqNo:* 3020

Short Name: **VSAoIm** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the name of the prosthesis implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Aortic Proc-Imp-Type *Format:* Text (categorical values specified by STS)

ParentShortName: VSAoImTy *DataLength:*

ParentValue: <>"None" *Data Source:* User

ParentHarvestCodes: <>1

Harvest Codes:

Code:	Value:
2	ATS Mechanical Prosthesis
3	Björk-Shiley Convex-

	Concave Mechanical Prosthesis
4	Björk-Shiley Monostrut Mechanical Prosthesis
6	CarboMedics Mechanical Prosthesis
57	CarboMedics Carbo-Seal Ascending Aortic Valved Conduit Prosthesis
58	CarboMedics Carbo-Seal Valsalva Ascending Aortic Valved Conduit Prosthesis
59	CarboMedics Reduced Cuff Aortic Valve
60	CarboMedics Standard Aortic Valve
61	CarboMedics Top-Hat Supra-annular Aortic Valve
62	CarboMedics OptiForm Mitral Valve
63	CarboMedics Standard Mitral Valve
64	CarboMedics Orbis Universal Valve
65	CarboMedics Small Adult Aortic and Mitral Valves
53	Lillehei-Kaster Mechanical Prosthesis
10	MCRI On-X Mechanical Prosthesis
8	Medtronic-Hall/Hall Easy-Fit Mechanical Prosthesis
66	Medtronic ADVANTAGE Mechanical Prosthesis
9	OmniCarbon Mechanical Prosthesis
54	OmniScience Mechanical Prosthesis
11	Sorin Bicarbon (Baxter Mira) Mechanical Prosthesis
12	Sorin Monoleaflet Allcarbon Mechanical Prosthesis
13	St. Jude Medical Mechanical Heart Valve
67	St. Jude Medical Masters

	Series Mechanical Heart Valve
68	St. Jude Medical Masters Series Aortic Valve Graft Prosthesis
69	St. Jude Medical Mechanical Heart Valve Hemodynamic Plus (HP) Series
70	St. Jude Medical Masters Series Hemodynamic Plus Valve with FlexCuff Sewing Ring
71	St. Jude Medical Regent Valve
14	Starr-Edwards Caged-Ball Prosthesis
15	Ultracor Mechanical Prosthesis
108	ATS 3f Aortic Bioprosthesis
72	Edwards Prima Stentless Porcine Bioprosthesis - Subcoronary
73	Edwards Prima Stentless Porcine Bioprosthesis - Root
19	Biocor Porcine Bioprosthesis
74	Biocor Stentless Porcine Bioprosthesis - Subcoronary
75	Biocor Stentless Porcine Bioprosthesis - Root
21	CarboMedics PhotoFix Pericardial Bioprosthesis
76	Carpentier-Edwards Duraflex Porcine Bioprosthesis
77	Carpentier-Edwards Prima Plus Stentless Porcine Bioprosthesis - Subcoronary
78	Carpentier-Edwards Prima Plus Stentless Porcine Bioprosthesis - Root
22	Carpentier-Edwards PERIMOUNT Pericardial Bioprosthesis
103	Carpentier-Edwards PERIMOUNT Pericardial Magna Bioprosthesis
23	Carpentier-Edwards Standard

	Porcine Bioprosthesis
25	Carpentier-Edwards Supra-Annular Aortic Porcine Bioprosthesis
79	Cryolife O'Brien Stentless Porcine Bioprosthesis - Subcoronary
80	Cryolife O'Brien Stentless Porcine Bioprosthesis - Root
55	Hancock Standard Porcine Bioprosthesis
28	Hancock II Porcine Bioprosthesis
29	Hancock Modified Orifice Porcine Bioprosthesis
30	Ionescu-Shiley Pericardial Bioprosthesis
31	Labcor Stented Porcine Bioprosthesis
81	Labcor Stentless Porcine Bioprosthesis - Subcoronary
82	Labcor Stentless Porcine Bioprosthesis - Root
83	Medtronic Freestyle Stentless Porcine Bioprosthesis - Subcoronary
84	Medtronic Freestyle Stentless Porcine Bioprosthesis - Root
35	Medtronic Intact Porcine Bioprosthesis
36	Medtronic Mosaic Porcine Bioprosthesis
85	Medtronic Contegra Bovine Jugular Bioprosthesis
37	Mitroflow Pericardial Bioprosthesis
39	St. Jude Medical Toronto SPV Stentless Porcine Bioprosthesis
40	St. Jude Medical-Bioimplant Porcine Bioprosthesis
86	St. Jude Medical Biocor Stented Tissue Valve
87	St. Jude Medical Epic Stented Porcine Bioprosthesis

88	St. Jude Medical Toronto Root Stentless Porcine Bioprosthesis
38	Sorin Pericarbon Stentless Pericardial Bioprosthesis
111	Carpentier-Edwards PERIMOUNT MAGNA Pericardial Bioprosthesis with Carpentier-Edwards Thermafix Tissue Process
112	Carpentier-Edwards PERIMOUNT Theon RSR Pericardial Bioprosthesis
113	Carpentier-Edwards PERIMOUNT RSR Pericardial Bioprosthesis
114	Carpentier-Edwards PERIMOUNT Theon Pericardial Bioprosthesis
115	Carpentier-Edwards S.A.V. Porcine Bioprosthesis
116	Edwards Prima Plus Stentless Bioprosthesis
117	Carpentier-Edwards PERIMOUNT Plus Pericardial Bioprosthesis with Tricentrix Holder
118	Carpentier-Edwards Duraflex Low Pressure Porcine Bioprosthesis
119	Carpentier-Edwards Duraflex Low Pressure ESR Porcine Bioprosthesis
120	Carpentier-Edwards PERIMOUNT Theon Pericardial Bioprosthesis with Tricentrix Holder.
121	St. Jude Medical Biocor Supra Stented Porcine Bioprosthesis
122	St. Jude Medical Epic Supra Stented Porcine Bioprosthesis.
89	CryoLife Aortic Homograft
90	CryoLife Pulmonary Homograft
91	CryoLife CryoValve SG(Decellularized)Aortic

	Homograft
92	CryoLife CryoValve SG Pulmonary Homograft
41	Homograft Aortic - Subcoronary
42	Homograft Aortic - Root
43	Homograft Mitral
44	Homograft Pulmonic Root
93	LifeNet CV Allografts
45	Pulmonary Autograft to aortic root (Ross Procedure)
109	ATS Simulus Flex-O Ring
110	ATS Simulus Flex-C Band
94	CarboMedics AnnuloFlo Ring
95	CarboMedics AnnuloFlex Ring
96	CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
46	Carpentier-Edwards Classic Annuloplasty Ring
104	Carpentier-Edwards Geoform Ring
105	Carpentier-Edwards IMR Etlogix Ring
47	Carpentier-Edwards Physio Annuloplasty System Ring
48	Cosgrove-Edwards Annuloplasty System Ring
97	Edwards MC³ Tricuspid Annuloplasty System G Future Band
98	Genesee Sculptor Annuloplasty Ring
49	Medtronic Sculptor Ring
50	Medtronic-Duran AnCore Ring
51	Sorin-Puig-Messana Ring
52	St. Jude Medical Séguin Annuloplasty Ring.
106	St. Jude Medical Rigid Saddle Ring
99	St. Jude Medical Tailor

	Annuloplasty Ring
123	ATS Simulus Flexible Annuloplasty ring.
124	ATS Simulus Semi-Rigid Annuloplasty ring
125	Carpentier-Edwards Classic Annuloplasty Ring with Duraflo Treatment
126	Carpentier-Edwards Physio Annuloplasty Ring with Duraflo Treatment
127	Cosgrove-Edwards Annuloplasty System with Duraflo Treatment
128	Myxo Etlogix Annuloplasty Ring
131	Sorin Memo 3D Ring
132	UNIRING, Universal Annuloplasty System
100	Medtronic Colvin Galloway Future Band
101	Medtronic Duran Band
102	Medtronic Duran - Ancore Band
107	St. Jude Medical Tailor Annuloplasty Band
777	Other

Long Name: VS-Aortic Proc-Imp-Size *SeqNo:* 3030

Short Name: **VSAoImSz** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the Aortic implant size.

LowValue: 5 *UsualRangeLow:* 10

HighValue: 50 *UsualRangeHigh:* 40

Parent Long Name: VS-Aortic Proc-Imp-Type *Format:* Integer

ParentShortName: VSAoImTy *DataLength:*

ParentValue: <>"None" *Data Source:* User

ParentHarvestCodes: <>1

Long Name: VS-Mitral Proc-Imp-Type *SeqNo:* 3040

Short Name: **VSMiImTy** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the type of implant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpMitral *DataLength:*

ParentValue: <>"No" *Data Source:* User

ParentHarvestCodes: <>1

Harvest Codes:

Code:	Value:
1	None
2	Mechanical
3	Bioprosthesis
4	Homograft
5	Autograft (Ross)
6	Ring/Annuloplasty
7	Band/Annuloplasty

Long Name: VS-Mitral Proc-Imp *SeqNo:* 3050

Short Name: **VSMiIm** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the name of the prosthesis implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Mitral Proc-Imp-Type *Format:* Text (categorical values specified by STS)

ParentShortName: VSMiImTy *DataLength:*

ParentValue: <>"None" *Data Source:* User

ParentHarvestCodes: <>1

Harvest Codes:

Code:	Value:
2	ATS Mechanical Prosthesis
3	Björk-Shiley Convex-

	Concave Mechanical Prosthesis
4	Björk-Shiley Monostrut Mechanical Prosthesis
6	CarboMedics Mechanical Prosthesis
57	CarboMedics Carbo-Seal Ascending Aortic Valved Conduit Prosthesis
58	CarboMedics Carbo-Seal Valsalva Ascending Aortic Valved Conduit Prosthesis
59	CarboMedics Reduced Cuff Aortic Valve
60	CarboMedics Standard Aortic Valve
61	CarboMedics Top-Hat Supra-annular Aortic Valve
62	CarboMedics OptiForm Mitral Valve
63	CarboMedics Standard Mitral Valve
64	CarboMedics Orbis Universal Valve
65	CarboMedics Small Adult Aortic and Mitral Valves
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10	MCRI On-X Mechanical Prosthesis
8	Medtronic-Hall/Hall Easy-Fit Mechanical Prosthesis
66	Medtronic ADVANTAGE Mechanical Prosthesis
9	OmniCarbon Mechanical Prosthesis
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11	Sorin Bicarbon (Baxter Mira) Mechanical Prosthesis
12	Sorin Monoleaflet Allcarbon Mechanical Prosthesis
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	Series Mechanical Heart Valve
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73	Edwards Prima Stentless Porcine Bioprosthesis - Root
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74	Biocor Stentless Porcine Bioprosthesis - Subcoronary
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78	Carpentier-Edwards Prima Plus Stentless Porcine Bioprosthesis - Root
22	Carpentier-Edwards PERIMOUNT Pericardial Bioprosthesis
103	Carpentier-Edwards PERIMOUNT Pericardial Magna Bioprosthesis
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	Porcine Bioprosthesis
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29	Hancock Modified Orifice Porcine Bioprosthesis
30	Ionescu-Shiley Pericardial Bioprosthesis
31	Labcor Stented Porcine Bioprosthesis
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82	Labcor Stentless Porcine Bioprosthesis - Root
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116	Edwards Prima Plus Stentless Bioprosthesis
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118	Carpentier-Edwards Duraflex Low Pressure Porcine Bioprosthesis
119	Carpentier-Edwards Duraflex Low Pressure ESR Porcine Bioprosthesis
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122	St. Jude Medical Epic Supra Stented Porcine Bioprosthesis.
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90	CryoLife Pulmonary Homograft
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95	CarboMedics AnnuloFlex Ring
96	CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
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105	Carpentier-Edwards IMR Etlogix Ring
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49	Medtronic Sculptor Ring
50	Medtronic-Duran AnCore Ring
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131	Sorin Memo 3D Ring
132	UNIRING, Universal Annuloplasty System
100	Medtronic Colvin Galloway Future Band
101	Medtronic Duran Band
102	Medtronic Duran - Ancore Band
107	St. Jude Medical Tailor Annuloplasty Band
777	Other

Long Name: VS-Mitral Proc-Imp-Size *SeqNo:* 3060

Short Name: VSMiImSz *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the Mitral implant size

LowValue: 5 *UsualRangeLow:* 10

HighValue: 50 *UsualRangeHigh:* 40

Parent Long Name: VS-Mitral Proc-Imp-Type *Format:* Integer

ParentShortName: VSMiImTy *DataLength:*

ParentValue: <>"None" *Data Source:* User

ParentHarvestCodes: <>1

Long Name: VS-Tricuspid Proc-Imp-Type *SeqNo:* 3070

Short Name: **VSTrImTy** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the type of implant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Tricuspid Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpTricus *DataLength:*

ParentValue: <>"No" *Data Source:* User

ParentHarvestCodes: <>1

Harvest Codes:

Code:	Value:
1	None
2	Mechanical
3	Bioprosthesis
4	Homograft
5	Autograft (Ross)
6	Ring/Annuloplasty
7	Band/Annuloplasty

Long Name: VS-Tricuspid Proc-Imp *SeqNo:* 3080

Short Name: **VSTrIm** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the name of the prosthesis implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Tricuspid Proc-Imp-Type *Format:* Text (categorical values specified by STS)

ParentShortName: VSTrImTy *DataLength:*

ParentValue: <>"None" *Data Source:* User

ParentHarvestCodes: <>1

Harvest Codes:

Code:	Value:
2	ATS Mechanical Prosthesis
3	Björk-Shiley Convex-

	Concave Mechanical Prosthesis
4	Björk-Shiley Monostrut Mechanical Prosthesis
6	CarboMedics Mechanical Prosthesis
57	CarboMedics Carbo-Seal Ascending Aortic Valved Conduit Prosthesis
58	CarboMedics Carbo-Seal Valsalva Ascending Aortic Valved Conduit Prosthesis
59	CarboMedics Reduced Cuff Aortic Valve
60	CarboMedics Standard Aortic Valve
61	CarboMedics Top-Hat Supra-annular Aortic Valve
62	CarboMedics OptiForm Mitral Valve
63	CarboMedics Standard Mitral Valve
64	CarboMedics Orbis Universal Valve
65	CarboMedics Small Adult Aortic and Mitral Valves
53	Lillehei-Kaster Mechanical Prosthesis
10	MCRI On-X Mechanical Prosthesis
8	Medtronic-Hall/Hall Easy-Fit Mechanical Prosthesis
66	Medtronic ADVANTAGE Mechanical Prosthesis
9	OmniCarbon Mechanical Prosthesis
54	OmniScience Mechanical Prosthesis
11	Sorin Bicarbon (Baxter Mira) Mechanical Prosthesis
12	Sorin Monoleaflet Allcarbon Mechanical Prosthesis
13	St. Jude Medical Mechanical Heart Valve
67	St. Jude Medical Masters

	Series Mechanical Heart Valve
68	St. Jude Medical Masters Series Aortic Valve Graft Prosthesis
69	St. Jude Medical Mechanical Heart Valve Hemodynamic Plus (HP) Series
70	St. Jude Medical Masters Series Hemodynamic Plus Valve with FlexCuff Sewing Ring
71	St. Jude Medical Regent Valve
14	Starr-Edwards Caged-Ball Prosthesis
15	Ultracor Mechanical Prosthesis
108	ATS 3f Aortic Bioprosthesis
72	Edwards Prima Stentless Porcine Bioprosthesis - Subcoronary
73	Edwards Prima Stentless Porcine Bioprosthesis - Root
19	Biocor Porcine Bioprosthesis
74	Biocor Stentless Porcine Bioprosthesis - Subcoronary
75	Biocor Stentless Porcine Bioprosthesis - Root
21	CarboMedics PhotoFix Pericardial Bioprosthesis
76	Carpentier-Edwards Duraflex Porcine Bioprosthesis
77	Carpentier-Edwards Prima Plus Stentless Porcine Bioprosthesis - Subcoronary
78	Carpentier-Edwards Prima Plus Stentless Porcine Bioprosthesis - Root
22	Carpentier-Edwards PERIMOUNT Pericardial Bioprosthesis
103	Carpentier-Edwards PERIMOUNT Pericardial Magna Bioprosthesis
23	Carpentier-Edwards Standard

	Porcine Bioprosthesis
25	Carpentier-Edwards Supra-Annular Aortic Porcine Bioprosthesis
79	Cryolife O'Brien Stentless Porcine Bioprosthesis - Subcoronary
80	Cryolife O'Brien Stentless Porcine Bioprosthesis - Root
55	Hancock Standard Porcine Bioprosthesis
28	Hancock II Porcine Bioprosthesis
29	Hancock Modified Orifice Porcine Bioprosthesis
30	Ionescu-Shiley Pericardial Bioprosthesis
31	Labcor Stented Porcine Bioprosthesis
81	Labcor Stentless Porcine Bioprosthesis - Subcoronary
82	Labcor Stentless Porcine Bioprosthesis - Root
83	Medtronic Freestyle Stentless Porcine Bioprosthesis - Subcoronary
84	Medtronic Freestyle Stentless Porcine Bioprosthesis - Root
35	Medtronic Intact Porcine Bioprosthesis
36	Medtronic Mosaic Porcine Bioprosthesis
85	Medtronic Contegra Bovine Jugular Bioprosthesis
37	Mitroflow Pericardial Bioprosthesis
39	St. Jude Medical Toronto SPV Stentless Porcine Bioprosthesis
40	St. Jude Medical-Bioimplant Porcine Bioprosthesis
86	St. Jude Medical Biocor Stented Tissue Valve
87	St. Jude Medical Epic Stented Porcine Bioprosthesis

88	St. Jude Medical Toronto Root Stentless Porcine Bioprosthesis
38	Sorin Pericarbon Stentless Pericardial Bioprosthesis
111	Carpentier-Edwards PERIMOUNT MAGNA Pericardial Bioprosthesis with Carpentier-Edwards Thermafix Tissue Process
112	Carpentier-Edwards PERIMOUNT Theon RSR Pericardial Bioprosthesis
113	Carpentier-Edwards PERIMOUNT RSR Pericardial Bioprosthesis
114	Carpentier-Edwards PERIMOUNT Theon Pericardial Bioprosthesis
115	Carpentier-Edwards S.A.V. Porcine Bioprosthesis
116	Edwards Prima Plus Stentless Bioprosthesis
117	Carpentier-Edwards PERIMOUNT Plus Pericardial Bioprosthesis with Tricentrix Holder
118	Carpentier-Edwards Duraflex Low Pressure Porcine Bioprosthesis
119	Carpentier-Edwards Duraflex Low Pressure ESR Porcine Bioprosthesis
120	Carpentier-Edwards PERIMOUNT Theon Pericardial Bioprosthesis with Tricentrix Holder.
121	St. Jude Medical Biocor Supra Stented Porcine Bioprosthesis
122	St. Jude Medical Epic Supra Stented Porcine Bioprosthesis.
89	CryoLife Aortic Homograft
90	CryoLife Pulmonary Homograft
91	CryoLife CryoValve SG(Decellularized)Aortic

	Homograft
92	CryoLife CryoValve SG Pulmonary Homograft
41	Homograft Aortic - Subcoronary
42	Homograft Aortic - Root
43	Homograft Mitral
44	Homograft Pulmonic Root
93	LifeNet CV Allografts
45	Pulmonary Autograft to aortic root (Ross Procedure)
109	ATS Simulus Flex-O Ring
110	ATS Simulus Flex-C Band
94	CarboMedics AnnuloFlo Ring
95	CarboMedics AnnuloFlex Ring
96	CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
46	Carpentier-Edwards Classic Annuloplasty Ring
104	Carpentier-Edwards Geoform Ring
105	Carpentier-Edwards IMR Etlogix Ring
47	Carpentier-Edwards Physio Annuloplasty System Ring
48	Cosgrove-Edwards Annuloplasty System Ring
97	Edwards MC³ Tricuspid Annuloplasty System G Future Band
98	Genesee Sculptor Annuloplasty Ring
49	Medtronic Sculptor Ring
50	Medtronic-Duran AnCore Ring
51	Sorin-Puig-Messana Ring
52	St. Jude Medical Séguin Annuloplasty Ring.
106	St. Jude Medical Rigid Saddle Ring
99	St. Jude Medical Tailor

	Annuloplasty Ring
123	ATS Simulus Flexible Annuloplasty ring.
124	ATS Simulus Semi-Rigid Annuloplasty ring
125	Carpentier-Edwards Classic Annuloplasty Ring with Duraflo Treatment
126	Carpentier-Edwards Physio Annuloplasty Ring with Duraflo Treatment
127	Cosgrove-Edwards Annuloplasty System with Duraflo Treatment
128	Myxo Etlogix Annuloplasty Ring
131	Sorin Memo 3D Ring
132	UNIRING, Universal Annuloplasty System
100	Medtronic Colvin Galloway Future Band
101	Medtronic Duran Band
102	Medtronic Duran - Ancore Band
107	St. Jude Medical Tailor Annuloplasty Band
777	Other

Long Name: VS-Tricuspid Proc-Imp-Size *SeqNo:* 3090

Short Name: **VSTrImSz** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the Tricuspid implant size.

LowValue: 5 *UsualRangeLow:* 10

HighValue: 50 *UsualRangeHigh:* 40

Parent Long Name: VS-Tricuspid Proc-Imp-Type *Format:* Integer

ParentShortName: VSTrImTy *DataLength:*

ParentValue: <>"None" *Data Source:* User

ParentHarvestCodes: <>1

Long Name: VS-Pulmonic Proc-Imp-Type *SeqNo:* 3100

Short Name: **VSPuImTy** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the type of implant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Pulmonic Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpPulm *DataLength:*

ParentValue: <>"No" *Data Source:* User

ParentHarvestCodes: <>1

Harvest Codes:

Code:	Value:
1	None
2	Mechanical
3	Bioprosthesis
4	Homograft
5	Autograft (Ross)
6	Ring/Annuloplasty
7	Band/Annuloplasty

Long Name: VS-Pulmonic Proc-Imp *SeqNo:* 3110

Short Name: **VSPuIm** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the name of the prosthesis implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VS-Pulmonic Proc-Imp-Type *Format:* Text (categorical values specified by STS)

ParentShortName: VSPuImTy *DataLength:*

ParentValue: <>"None" *Data Source:* User

ParentHarvestCodes: <>1

Harvest Codes:

Code:	Value:
2	ATS Mechanical Prosthesis
3	Björk-Shiley Convex-

	Concave Mechanical Prosthesis
4	Björk-Shiley Monostrut Mechanical Prosthesis
6	CarboMedics Mechanical Prosthesis
57	CarboMedics Carbo-Seal Ascending Aortic Valved Conduit Prosthesis
58	CarboMedics Carbo-Seal Valsalva Ascending Aortic Valved Conduit Prosthesis
59	CarboMedics Reduced Cuff Aortic Valve
60	CarboMedics Standard Aortic Valve
61	CarboMedics Top-Hat Supra-annular Aortic Valve
62	CarboMedics OptiForm Mitral Valve
63	CarboMedics Standard Mitral Valve
64	CarboMedics Orbis Universal Valve
65	CarboMedics Small Adult Aortic and Mitral Valves
53	Lillehei-Kaster Mechanical Prosthesis
10	MCRI On-X Mechanical Prosthesis
8	Medtronic-Hall/Hall Easy-Fit Mechanical Prosthesis
66	Medtronic ADVANTAGE Mechanical Prosthesis
9	OmniCarbon Mechanical Prosthesis
54	OmniScience Mechanical Prosthesis
11	Sorin Bicarbon (Baxter Mira) Mechanical Prosthesis
12	Sorin Monoleaflet Allcarbon Mechanical Prosthesis
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67	St. Jude Medical Masters

	Series Mechanical Heart Valve
68	St. Jude Medical Masters Series Aortic Valve Graft Prosthesis
69	St. Jude Medical Mechanical Heart Valve Hemodynamic Plus (HP) Series
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72	Edwards Prima Stentless Porcine Bioprosthesis - Subcoronary
73	Edwards Prima Stentless Porcine Bioprosthesis - Root
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74	Biocor Stentless Porcine Bioprosthesis - Subcoronary
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77	Carpentier-Edwards Prima Plus Stentless Porcine Bioprosthesis - Subcoronary
78	Carpentier-Edwards Prima Plus Stentless Porcine Bioprosthesis - Root
22	Carpentier-Edwards PERIMOUNT Pericardial Bioprosthesis
103	Carpentier-Edwards PERIMOUNT Pericardial Magna Bioprosthesis
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116	Edwards Prima Plus Stentless Bioprosthesis
117	Carpentier-Edwards PERIMOUNT Plus Pericardial Bioprosthesis with Tricentrix Holder
118	Carpentier-Edwards Duraflex Low Pressure Porcine Bioprosthesis
119	Carpentier-Edwards Duraflex Low Pressure ESR Porcine Bioprosthesis
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121	St. Jude Medical Biocor Supra Stented Porcine Bioprosthesis
122	St. Jude Medical Epic Supra Stented Porcine Bioprosthesis.
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90	CryoLife Pulmonary Homograft
91	CryoLife CryoValve SG(Decellularized)Aortic

	Homograft
92	CryoLife CryoValve SG Pulmonary Homograft
41	Homograft Aortic - Subcoronary
42	Homograft Aortic - Root
43	Homograft Mitral
44	Homograft Pulmonic Root
93	LifeNet CV Allografts
45	Pulmonary Autograft to aortic root (Ross Procedure)
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110	ATS Simulus Flex-C Band
94	CarboMedics AnnuloFlo Ring
95	CarboMedics AnnuloFlex Ring
96	CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
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104	Carpentier-Edwards Geoform Ring
105	Carpentier-Edwards IMR Etlogix Ring
47	Carpentier-Edwards Physio Annuloplasty System Ring
48	Cosgrove-Edwards Annuloplasty System Ring
97	Edwards MC³ Tricuspid Annuloplasty System G Future Band
98	Genesee Sculptor Annuloplasty Ring
49	Medtronic Sculptor Ring
50	Medtronic-Duran AnCore Ring
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99	St. Jude Medical Tailor

	Annuloplasty Ring
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126	Carpentier-Edwards Physio Annuloplasty Ring with Duraflo Treatment
127	Cosgrove-Edwards Annuloplasty System with Duraflo Treatment
128	Myxo Etlogix Annuloplasty Ring
131	Sorin Memo 3D Ring
132	UNIRING, Universal Annuloplasty System
100	Medtronic Colvin Galloway Future Band
101	Medtronic Duran Band
102	Medtronic Duran - Ancore Band
107	St. Jude Medical Tailor Annuloplasty Band
777	Other

Long Name: VS-Pulmonic Proc-Imp-Size *SeqNo:* 3120

Short Name: **VSPuImSz** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the Pulmonic implant size.

LowValue: 5 *UsualRangeLow:* 10

HighValue: 50 *UsualRangeHigh:* 40

Parent Long Name: VS-Pulmonic Proc-Imp-Type *Format:* Integer

ParentShortName: VSPuImTy *DataLength:*

ParentValue: <>"None" *Data Source:* User

ParentHarvestCodes: <>1

Long Name: Valve Implant List Version Number *SeqNo:* 3130

Short Name: **ValveVrsn** *Core:* No

Section Name: Valve Procedures *Harvest:* No

DBTableName Operations

Definition: The version number of the list of valve implant options. The value is inserted into the record at the time the record is created. The version numbers will be specified by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve *Format:* Text

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* Automatic

ParentHarvestCodes: 1

Long Name: Valve Device Explanted And/Or Implanted *SeqNo:* 3140

Short Name: **ValExImp** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a valve device of any type was explanted and/or implanted during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	No
2	Yes, Explanted
3	Yes, Implanted
4	Yes, Explanted and Implanted

Long Name: Valve Explant Type #1 *SeqNo:* 3150

Short Name: **ValExType1** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of the first valve or device explanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Device Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: ValExImp *DataLength:*

ParentValue: = "Yes, Explanted" or "Yes, Explanted and Implanted" *Data Source:* User

ParentHarvestCodes: 2|4

Harvest Codes:

Code:	Value:
1	Mechanical
2	Bioprosthetic
3	Homograft/Allograft
4	Autograft
5	Annuloplasty band/ring
6	Mitral clip
7	Surgeon fashioned
9	Other

Long Name: Second Valve Explanted or Device Removed *SeqNo:* 3160

Short Name: **ValEx2** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a second valve or device was explanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Device Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: ValExImp *DataLength:*

ParentValue: = "Yes, Explanted" or "Yes, Explanted and Implanted" *Data Source:* User

ParentHarvestCodes: 2|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Valve Explant Type #2 *SeqNo:* 3170

Short Name: **ValExType2** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of the second valve or device explanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Second Valve Explanted or Device Removed *Format:* Text (categorical values specified by STS)

ParentShortName: ValEx2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Mechanical
2	Bioprosthetic
3	Homograft/Allograft
4	Autograft
5	Annuloplasty band/ring
6	Mitral clip

7	Surgeon fashioned
9	Other

Long Name: Third Valve Explanted or Device Removed *SeqNo:* 3180

Short Name: **ValEx3** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a third valve or device was explanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Second Valve Explanted or Device Removed *Format:* Text (categorical values specified by STS)

ParentShortName: ValEx2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Valve Explant Type #3 *SeqNo:* 3190

Short Name: **ValExType3** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of the third valve or device explanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Third Valve Explanted or Device Removed *Format:* Text (categorical values specified by STS)

ParentShortName: ValEx3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Mechanical
2	Bioprosthetic
3	Homograft/Allograft
4	Autograft

5	Annuloplasty band/ring
6	Mitral clip
7	Surgeon fashioned
9	Other

Long Name: Fourth Valve Explanted or Device Removed *SeqNo:* 3200

Short Name: **ValEx4** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a fourth valve or device was explanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Third Valve Explanted or Device Removed *Format:* Text (categorical values specified by STS)

ParentShortName: ValEx3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Valve Explant Type #4 *SeqNo:* 3210

Short Name: **ValExType4** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of the fourth valve or device explanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Fourth Valve Explanted or Device Removed *Format:* Text (categorical values specified by STS)

ParentShortName: ValEx4 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Mechanical
2	Bioprosthetic

3	Homograft/Allograft
4	Autograft
5	Annuloplasty band/ring
6	Mitral clip
7	Surgeon fashioned
9	Other

Long Name: Valve Implant Location #1 *SeqNo:* 3220

Short Name: **ValImpLoc1** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the location of the first valve or device implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Device Explanted And/Or Implanted

Format: Text (categorical values specified by STS)

ParentShortName: ValExImp

DataLength:

ParentValue: = "Yes, Implanted" or "Yes, Explanted and Implanted"

Data Source: User

ParentHarvestCodes: 3|4

Harvest Codes:

Code:	Value:
1	Aortic
2	Mitral
3	Tricuspid
4	Pulmonic
5	Common AV
6	Truncal

Long Name: Valve Implant Type #1 *SeqNo:* 3230

Short Name: **ValImpType1** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of the first valve or device implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Device Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: ValExImp *DataLength:*

ParentValue: = "Yes, Implanted" or "Yes, Explanted and Implanted" *Data Source:* User

ParentHarvestCodes: 3|4

Harvest Codes:

Code:	Value:
1	Surgeon fashioned
2	Autograft
3	Commercially supplied device

Long Name: Valve Implant Surgeon Fashoned Material #1 *SeqNo:* 3240

Short Name: **ValImpSFMat1** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the material used to fashion the first valve or device

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Implant Type #1 *Format:* Text (categorical values specified by STS)

ParentShortName: ValImpType1 *DataLength:*

ParentValue: = "Surgeon fashioned" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	PTFE (Gore-Tex)
2	Pericardium
9	Other

Long Name: Valve Implant Commercial Device Model Number #1 *SeqNo:* 3250

Short Name: **ValImpComMod1** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size. Note that the model number is different from the serial number.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Implant Type #1 *Format:* Text (categorical values specified by STS)

ParentShortName: ValImpType1 *DataLength:*

ParentValue: = "Commercially supplied device" *Data Source:* User

ParentHarvestCodes: 3

Long Name: Valve Implant Commercial Device Size #1 *SeqNo:* 3260

Short Name: **ValImpComSz1** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the size of the first implanted valve or device

LowValue: 5 *UsualRangeLow:* 10

HighValue: 50 *UsualRangeHigh:* 40

Parent Long Name: Valve Implant Type #1 *Format:* Integer

ParentShortName: ValImpType1 *DataLength:*

ParentValue: = "Commercially supplied device" *Data Source:* User

ParentHarvestCodes: 3

Long Name: Second Valve Implant *SeqNo:* 3270

Short Name: **ValImp2** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a second valve or device was implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Device Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: ValExImp *DataLength:*

ParentValue: = "Yes, Implanted" or "Yes, Explanted and Implanted" *Data Source:* User

ParentHarvestCodes: 3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Valve Implant Location #2 *SeqNo:* 3280

Short Name: **ValImpLoc2** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the location of the second valve or device implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Second Valve Implant *Format:* Text (categorical values specified by STS)

ParentShortName: ValImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Aortic
2	Mitral
3	Tricuspid
4	Pulmonic
5	Common AV
6	Truncal

Long Name: Valve Implant Type #2 *SeqNo:* 3290

Short Name: **ValImpType2** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of the second valve or device implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Second Valve Implant *Format:* Text (categorical values specified by STS)

ParentShortName: ValImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Surgeon fashioned
2	Autograft
3	Commercially supplied device

Long Name: Valve Implant Surgeon Fashoned Material #2 *SeqNo:* 3300

Short Name: **ValImpSFMat2** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the material used to fashion the second valve or device

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Implant Type #2 *Format:* Text (categorical values specified by STS)

ParentShortName: ValImpType2 *DataLength:*

ParentValue: = "Surgeon fashioned" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	PTFE (Gore-Tex)
2	Pericardium
9	Other

Long Name: Valve Implant Commercial Device Model Number #2 *SeqNo:* 3310

Short Name: **ValImpComMod2** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Implant Type #2 *Format:* Text (categorical values specified by STS)

ParentShortName: ValImpType2 *DataLength:*

ParentValue: = "Commercially supplied device" *Data Source:* User

ParentHarvestCodes: 3

Long Name: Valve Implant Commercial Device Size #2 *SeqNo:* 3320

Short Name: **ValImpComSz2** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the size of the second implanted valve or device

LowValue: 5 *UsualRangeLow:* 10

HighValue: 50 *UsualRangeHigh:* 40

Parent Long Name: Valve Implant Type #2 *Format:* Integer

ParentShortName: ValImpType2 *DataLength:*

ParentValue: = "Commercially supplied device" *Data Source:* User

ParentHarvestCodes: 3

Long Name: Third Valve Implant *SeqNo:* 3330

Short Name: **ValImp3** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a third valve or device was implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Second Valve Implant *Format:* Text (categorical values specified by STS)

ParentShortName: ValImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Valve Implant Location #3 *SeqNo:* 3340

Short Name: **ValImpLoc3** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the location of the third valve or device implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Third Valve Implant *Format:* Text (categorical values specified by STS)

ParentShortName: ValImp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Aortic
2	Mitral
3	Tricuspid
4	Pulmonic
5	Common AV
6	Truncal

Long Name: Valve Implant Type #3 *SeqNo:* 3350

Short Name: **ValImpType3** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of the third valve or device implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Third Valve Implant *Format:* Text (categorical values specified by STS)

ParentShortName: ValImp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Surgeon fashioned
2	Autograft
3	Commercially supplied device

Long Name: Valve Implant Surgeon Fashoned Material #3 *SeqNo:* 3360

Short Name: **ValImpSFMat3** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the material used to fashion the third valve or device

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Implant Type #3 *Format:* Text (categorical values specified by STS)

ParentShortName: ValImpType3 *DataLength:*

ParentValue: = "Surgeon fashioned" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	PTFE (Gore-Tex)
2	Pericardium
9	Other

Long Name: Valve Implant Commercial Device Model Number #3 *SeqNo:* 3370

Short Name: **ValImpComMod3** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Implant Type #3 *Format:* Text (categorical values specified by STS)

ParentShortName: ValImpType3 *DataLength:*

ParentValue: = "Commercially supplied device" *Data Source:* User

ParentHarvestCodes: 3

Long Name: Valve Implant Commercial Device Size #3 *SeqNo:* 3380

Short Name: **ValImpComSz3** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the size of the third implanted valve or device

LowValue: 5 *UsualRangeLow:* 10

HighValue: 50 *UsualRangeHigh:* 40

Parent Long Name: Valve Implant Type #3 *Format:* Integer

ParentShortName: ValImpType3 *DataLength:*

ParentValue: = "Commercially supplied device" *Data Source:* User

ParentHarvestCodes: 3

Long Name: Fourth Valve Implant *SeqNo:* 3390

Short Name: **ValImp4** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a fourth valve or device was implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Third Valve Implant *Format:* Text (categorical values specified by STS)

ParentShortName: ValImp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Valve Implant Location #4 *SeqNo:* 3400

Short Name: **ValImpLoc4** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the location of the fourth valve or device implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Fourth Valve Implant *Format:* Text (categorical values specified by STS)

ParentShortName: ValImp4 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Aortic
2	Mitral
3	Tricuspid
4	Pulmonic
5	Common AV
6	Truncal

Long Name: Valve Implant Type #4 *SeqNo:* 3410

Short Name: **ValImpType4** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of the fourth valve or device implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Fourth Valve Implant *Format:* Text (categorical values specified by STS)

ParentShortName: ValImp4 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Surgeon fashioned
2	Autograft
3	Commercially supplied device

Long Name: Valve Implant Surgeon Fashoned Material #4 *SeqNo:* 3420

Short Name: **ValImpSFMat4** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the material used to fashion the fourth valve or device

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Implant Type #4 *Format:* Text (categorical values specified by STS)

ParentShortName: ValImpType4 *DataLength:*

ParentValue: = "Surgeon fashioned" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	PTFE (Gore-Tex)
2	Pericardium
9	Other

Long Name: Valve Implant Commercial Device Model Number #4 *SeqNo:* 3430

Short Name: **ValImpComMod4** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Valve Implant Type #4 *Format:* Text (categorical values specified by STS)

ParentShortName: ValImpType4 *DataLength:*

ParentValue: = "Commercially supplied device" *Data Source:* User

ParentHarvestCodes: 3

Long Name: Valve Implant Commercial Device Size #4 *SeqNo:* 3440

Short Name: **ValImpComSz4** *Core:* Yes

Section Name: Valve Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the size of the fourth implanted valve or device

LowValue: 5 *UsualRangeLow:* 10

HighValue: 50 *UsualRangeHigh:* 40

Parent Long Name: Valve Implant Type #4 *Format:* Integer

ParentShortName: ValImpType4 *DataLength:*

ParentValue: = "Commercially supplied device" *Data Source:* User

ParentHarvestCodes: 3

Long Name: VAD *SeqNo:* 3450

Short Name: **VAD** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether a ventricular assist device (VAD) was implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD Explanted And/Or Implanted *SeqNo:* 3460

Short Name: **VADExImp** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a ventricular assist device (VAD) was explanted and/or implanted during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes:

Code:	Value:
1	No
2	Yes, explanted
3	Yes, implanted

4 Yes, explanted and implanted

Long Name: VAD Product Type List Version Number *SeqNo:* 3470

Short Name: **VADListVrsn** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: The version number of the list of options available for the VAD product type fields. The value is inserted into the record at the time the record is created. The version numbers will be specified by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: VAD-Previous VAD *SeqNo:* 3480

Short Name: **PrevVAD** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate if the patient, during a previous hospitalization, received a mechanical ventricular assist device, pneumatically or electrically controlled, that supports the pumping chambers of the heart.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD *Format:* Text (categorical values specified by STS)

ParentShortName: VAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Previous VAD Facility *SeqNo:* 3490

Short Name: **PrevVADF** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate if the previously implanted assist device was implanted at another facility.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Previous VAD *Format:* Text (categorical values specified by STS)

ParentShortName: PrevVAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Indication for VAD *SeqNo:* 3500

Short Name: **VADInd** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the reason the patient is receiving the ventricular assist device (VAD).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: VADExImp *DataLength:*

ParentValue: = "Yes, implanted" or "Yes, explanted and implanted" *Data Source:* User

ParentHarvestCodes: 3|4

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Bridge to Transplantation	Includes those patients who are supported with a VAD until a heart transplant is possible.
2	Bridge to Recovery	Includes those patients who are expected to have ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant reperfusion injury)
3	Destination	Includes those patients where a heart transplant is not an

		option. The VAD is placed for permanent life sustaining support.
4	Postcardiotomy Ventricular failure (separation from CPB)	Includes those postcardiotomy patients who receive a VAD because of failure to separate from the heart-lung machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.
5	Device Malfunction	Includes those patients who are currently VAD supported and are experiencing device failure
6	End of Life	Mechanical device pump has reached functional life expectancy and requires replacement

Long Name: VAD-Intubated Pre-VAD *SeqNo:* 3510

Short Name: **IntPVAD** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate if the patient was intubated prior to the OR in which the VAD was placed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD *Format:* Text (categorical values specified by STS)

ParentShortName: VAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Hemodynamics Pre-VAD-PCWP *SeqNo:* 3520

Short Name: **HPVPCWP** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the Pulmonary Capillary Wedge Pressure (PCWP) in mm/Hg as determined prior to induction in the OR, or in an ICU immediately prior to the OR.

LowValue: 1 *UsualRangeLow:* 5

HighValue: 50 *UsualRangeHigh:* 30

Parent Long Name: VAD *Format:* Integer

ParentShortName: VAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD-Hemodynamics Pre-VAD-CVP *SeqNo:* 3530

Short Name: **HPVCVP** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the Central Venous Pressure (CVP) in mm/Hg prior to induction in the OR, or in an ICU immediately prior to the OR.

LowValue: 1 *UsualRangeLow:* 5

HighValue: 50 *UsualRangeHigh:* 10

Parent Long Name: VAD *Format:* Integer

ParentShortName: VAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD-Hemodynamics Pre-VAD-CI *SeqNo:* 3540

Short Name: **HPVCI** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the Cardiac Index (CI) in L/(min x m2) prior to induction in the OR, or in an ICU immediately prior to the OR.

LowValue: 0.5 *UsualRangeLow:* 0.5

HighValue: 5.0 *UsualRangeHigh:* 2.0

Parent Long Name: VAD *Format:* Real

ParentShortName: VAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD-Hemodynamics Pre-VAD-RVEF *SeqNo:* 3550

Short Name: **HPVRVEF** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the Right Ventricular Function prior to anesthesia induction in the OR and as close to time of the VAD implant as possible.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD *Format:* Text (categorical values specified by STS)

ParentShortName: VAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Normal
2	Mildly Impaired
3	Moderately Impaired
4	Severely Impaired

Long Name: VAD-Implant Type *SeqNo:* 3560

Short Name: **VImpTy** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the initial type of VAD implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: VADExImp *DataLength:*

ParentValue: = "Yes, implanted" or "Yes, explanted and implanted" *Data Source:* User

ParentHarvestCodes: 3|4

Harvest Codes:

Code:	Value:
1	RVAD - Right Ventricular Assist Device
2	LVAD - Left Ventricular Assist Device
3	BiVAD - BiVentricular Assist Device
4	TAH - Total Artificial Heart

Long Name: VAD-Product Type *SeqNo:* 3570

Short Name: **VProdTy** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the specific product implanted. Implant defined as physical placement of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: VADExImp *DataLength:*

ParentValue: = "Yes, implanted" or "Yes, explanted and implanted" *Data Source:* User

ParentHarvestCodes: 3|4

Long Name: VAD-Implant Date *SeqNo:* 3580

Short Name: **VImpDt** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the VAD was implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant Type *Format:* Date - mm/dd/yyyy

ParentShortName: VImpTy *DataLength:*

ParentValue: Is Not Missing *Data Source:* User

ParentHarvestCodes: Is Not Missing

Long Name: VAD-Explant *SeqNo:* 3590

Short Name: **VExp** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate if the VAD was explanted. Explant is defined as physical removal of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant Type *Format:* Text (categorical values specified by STS)

ParentShortName: VImpTy *DataLength:*

ParentValue: Is Not Missing *Data Source:* User

ParentHarvestCodes: Is Not Missing

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Explant Date *SeqNo:* 3600

Short Name: **VExpDt** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the VAD was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant *Format:* Date - mm/dd/yyyy

ParentShortName: VExp *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD-Explant Reason *SeqNo:* 3610

Short Name: **VExpRsn** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the reason the VAD was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: VADExImp *DataLength:*

ParentValue: = "Yes, explanted" or "Yes, explanted and implanted" *Data Source:* User

ParentHarvestCodes: 2|4

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Cardiac Transplant	The VAD was explanted for Cardiac Transplant.
2	Recovery	The VAD was removed after cardiac recovery.
3	Device Transfer	The VAD was explanted in order to implant another assist device.
4	Device-Related Infection	An infection within the pump pocket, driveline, VAD Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.
5	Device Malfunction	The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring

	immediate intervention or VAD replacement.
6 End of Life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: VAD-Cardiac Transplant Date *SeqNo:* 3620

Short Name: **VTxDt** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant Reason *Format:* Date - mm/dd/yyyy

ParentShortName: VExpRsn *DataLength:*

ParentValue: = "Cardiac Transplant" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD-Initial VAD Cannulation/Attach Site - LVAD Inflow *SeqNo:* 3630

Short Name: **LVADInf** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant Type *Format:* Text (categorical values specified by STS)

ParentShortName: VImpTy *DataLength:*

ParentValue: = "LVAD", "BiVAD", or "TAH" *Data Source:* User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Left Atrium
2	Left Ventricle

Long Name: VAD-Implant #2 *SeqNo:* 3640

Short Name: **VImp2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether a second ventricular assist device was implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD *Format:* Text (categorical values specified by STS)

ParentShortName: VAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Initial VAD Cannulation/Attach Site - RVAD Inflow *SeqNo:* 3650

Short Name: **RVADInf** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV). The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant Type *Format:* Text (categorical values specified by STS)

ParentShortName: VImpTy *DataLength:*

ParentValue: = "RVAD", "BiVAD", or "TAH" *Data Source:* User

ParentHarvestCodes: 1|3|4

Harvest Codes:

Code:	Value:
1	Right Atrium
2	Right Ventricle

Long Name: VAD-Implant Type #2 *SeqNo:* 3660

Short Name: **VImpTy2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the second type of ventricular assist device implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	RVAD - Right Ventricular Assist Device
2	LVAD - Left Ventricular Assist Device
3	BiVAD - BiVentricular Assist Device
4	TAH - Total Artificial Heart

Long Name: VAD-Product Type #2 *SeqNo:* 3670

Short Name: **VProdTy2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the specific product #2 implanted. Implant defined as physical placement of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	HeartQuest VAD
2	Lion Heart
3	Novacor LVAS

4	Heartsaver VAD
5	Jarvik 2000
6	DeBakey VAD
7	TandemHeart pVAD
8	AB-180 iVAD
9	CardioWest TAH
10	Thoratec IVAD
11	HeartMate VE
12	HeartMate IP LVAS
13	HeartMate SNAP-VE
14	HeartMate XVE
15	HeartMate II
16	HeartMate III
17	BVS5000i
18	AbioCor
19	Incor
20	Excor
22	Abiomed AB5000
23	Abiomed Impella
24	VentrAssist
25	Circulite LVAD
26	HeartWare - HVAD
27	Terumo - DuraHeart LVAD
28	WorldHeart - Levacor LVAD
29	Levitronix - CentriMag
21	Other

Long Name: VAD-Implant Date #2 *SeqNo:* 3680

Short Name: **VImpDt2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the VAD #2 was implanted

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2 *Format:* Date - mm/dd/yyyy

ParentShortName: VImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD-Explant #2 *SeqNo:* 3690

Short Name: **VExp2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate if the VAD #2 was explanted. Explant is defined as physical removal of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Explant Date #2 *SeqNo:* 3700

Short Name: **VExpDt2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the VAD #2 was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant #2 *Format:* Date - mm/dd/yyyy

ParentShortName: VExp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD-Explant Reason #2 *SeqNo:* 3710

Short Name: **VExpRsn2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the reason the VAD #2 was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VExp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Cardiac Transplant	The VAD was explanted for Cardiac Transplant.
2	Recovery	The VAD was removed after cardiac recovery.
3	Device Transfer	The VAD was explanted in order to implant another assist device.
4	Device-Related Infection	An infection within the pump pocket, driveline, VAD Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.
5	Device Malfunction	The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.

6	End of Life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: VAD-Cardiac Transplant Date #2 *SeqNo:* 3720

Short Name: **VTxDt2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant Reason #2 *Format:* Date - mm/dd/yyyy

ParentShortName: VExpRsn2 *DataLength:*

ParentValue: = "Cardiac Transplant" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD- #2 VAD Cannulation/Attach Site - LVAD Inflow *SeqNo:* 3730

Short Name: **LVADinf2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant Type #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImpTy2 *DataLength:*

ParentValue: = "LVAD", "BiVAD", or "TAH" *Data Source:* User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Left Atrium
2	Left Ventricle

Long Name: VAD- #2 VAD Cannulation/Attach Site - RVAD Inflow *SeqNo:* 3740

Short Name: **RVADinf2** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV). The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant Type #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImpTy2 *DataLength:*

ParentValue: = "RVAD", "BiVAD", or "TAH" *Data Source:* User

ParentHarvestCodes: 1|3|4

Harvest Codes:

Code:	Value:
1	Right Atrium
2	Right Ventricle

Long Name: VAD-Implant #3 *SeqNo:* 3750

Short Name: **VImp3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate whether a third ventricular assist device was implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Implant Type #3 *SeqNo:* 3760

Short Name: **VImpTy3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the third type of ventricular assist device implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	RVAD - Right Ventricular Assist Device
2	LVAD - Left Ventricular Assist Device
3	BiVAD - BiVentricular Assist Device
4	TAH - Total Artificial Heart

Long Name: VAD-Product Type #3 *SeqNo:* 3770

Short Name: **VProdTy3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the specific product #3 implanted. Implant defined as physical placement of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp3 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User

ParentHarvestCodes: Is Not Missing

Harvest Codes:

Code:	Value:
1	HeartQuest VAD
2	Lion Heart
3	Novacor LVAS

4	Heartsaver VAD
5	Jarvik 2000
6	DeBakey VAD
7	TandemHeart pVAD
8	AB-180 iVAD
9	CardioWest TAH
10	Thoratec IVAD
11	HeartMate VE
12	HeartMate IP LVAS
13	HeartMate SNAP-VE
14	HeartMate XVE
15	HeartMate II
16	HeartMate III
17	BVS5000i
18	AbioCor
19	Incor
20	Excor
22	Abiomed AB5000
23	Abiomed Impella
24	VentrAssist
25	Circulite LVAD
26	HeartWare - HVAD
27	Terumo - DuraHeart LVAD
28	WorldHeart - Levacor LVAD
29	Levitronix - CentriMag
21	Other

Long Name: VAD-Implant Date #3 *SeqNo:* 3780

Short Name: **VImpDt3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the VAD #3 was implanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #3 *Format:* Date - mm/dd/yyyy

ParentShortName: VImp3 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User

ParentHarvestCodes: Is Not Missing

Long Name: VAD-Explant #3 *SeqNo:* 3790

Short Name: **VExp3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate if the VAD #3 was explanted. Explant is defined as physical removal of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp3 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User

ParentHarvestCodes: Is Not Missing

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Explant Date #3 *SeqNo:* 3800

Short Name: **VExpDt3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the VAD #3 was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant #3 *Format:* Date - mm/dd/yyyy

ParentShortName: VExp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD-Explant Reason #3 *SeqNo:* 3810

Short Name: **VExpRsn3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the reason the VAD #3 was explanted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VExp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Cardiac Transplant	The VAD was explanted for Cardiac Transplant.
2	Recovery	The VAD was removed after cardiac recovery.
3	Device Transfer	The VAD was explanted in order to implant another assist device.
4	Device-Related Infection	An infection within the pump pocket, driveline, VAD Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.
5	Device Malfunction	The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.

6	End of Life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: VAD-Cardiac Transplant Date #3 *SeqNo:* 3820

Short Name: **VTxDt3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Explant Reason #3 *Format:* Date - mm/dd/yyyy

ParentShortName: VExpRsn3 *DataLength:*

ParentValue: = "Cardiac Transplant" *Data Source:* User

ParentHarvestCodes: 1

Long Name: VAD- #3 VAD Cannulation/Attach Site - LVAD Inflow *SeqNo:* 3830

Short Name: **LVADInf3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant Type #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VImpTy3 *DataLength:*

ParentValue: = "LVAD", "BiVAD", or "TAH" *Data Source:* User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Left Atrium
2	Left Ventricle

Long Name: VAD- #3 VAD Cannulation/Attach Site - RVAD Inflow *SeqNo:* 3840

Short Name: **RVADInf3** *Core:* No

Section Name: VAD Procedures *Harvest:* No

DBTableName Operations

Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV). The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD-Implant Type #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VImpTy3 *DataLength:*

ParentValue: = "RVAD", "BiVAD", or "TAH" *Data Source:* User

ParentHarvestCodes: 1|3|4

Harvest Codes:

Code:	Value:
1	Right Atrium
2	Right Ventricle

Long Name: VAD-Primary VAD Comp-Intracranial Bleed *SeqNo:* 3850

Short Name: **PVCmpBld** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate if the patient had an intracranial bleed, confirmed by CT scan or other diagnostic studies.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: VADExImp *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted" or "Yes, implanted and explanted" *Data Source:* User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Primary VAD Comp-Embolic Stroke *SeqNo:* 3860

Short Name: **PVCmpESt** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate if the patient had embolic stroke caused by a blood clot, air embolus, or tissue, confirmed by CT scan or other diagnostic studies.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted

Format: Text (categorical values specified by STS)

ParentShortName: VADExImp

DataLength:

ParentValue: = "Yes, implanted", "Yes, explanted" or "Yes, implanted and explanted"

Data Source: User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Primary VAD Comp-Driveline and/or cannula Infection *SeqNo:* 3870

Short Name: **PVCmpDCI** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate if the patient had a driveline and/or cannula infection. Driveline and/or cannula infection is defined as the presence of erythema, drainage, or purulence at the VAD connection site whether entering or exiting the body in association with leukocytosis and in the presence of positive culture.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted

Format: Text (categorical values specified by STS)

ParentShortName: VADExImp

DataLength:

ParentValue: = "Yes, implanted", "Yes, explanted" or "Yes, implanted and explanted"

Data Source: User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Primary VAD Comp-Pump Pocket Infection *SeqNo:* 3880

Short Name: **PVCmpPPI** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate if the patient had a pump pocket infection. A pump pocket infection is defined as a persistent drainage in the physical location of the pump, located preperitoneally or intra-abdominally with positive cultures from the pocket site.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted

Format: Text (categorical values specified by STS)

ParentShortName: VADExImp

DataLength:

ParentValue: = "Yes, implanted", "Yes, explanted" or "Yes, implanted and explanted"

Data Source: User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Primary VAD Comp-VAD Endocarditis *SeqNo:* 3890

Short Name: **PVCmpEnd** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate if the patient had VAD endocarditis. VAD endocarditis is defined as an infection of the blood contacting surface of the VAD device itself. This may include:
- internal surfaces;
- graft material;
- inflow/outflow valves of the VAD.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted

Format: Text (categorical values specified by STS)

ParentShortName: VADExImp

DataLength:

ParentValue: = "Yes, implanted", "Yes, explanted" or "Yes, implanted and explanted"

Data Source: User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Primary VAD Comp-Device Malfunction *SeqNo:* 3900

Short Name: **PVCmpMal** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate if the pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted

Format: Text (categorical values specified by STS)

ParentShortName: VADExImp

DataLength:

ParentValue: = "Yes, implanted", "Yes, explanted" or "Yes, implanted and explanted"

Data Source: User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: VAD-Primary VAD Comp-Bowel Obstruction *SeqNo:* 3910

Short Name: **PVCmpBO** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate if the patient was diagnosed with a bowel obstruction post VAD insertion by documentation in the medical record.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: VADExImp *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted" or "Yes, implanted and explanted" *Data Source:* User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: VAD-Primary VAD Comp-Hemolysis *SeqNo:* 3920

Short Name: **PVCmpHemo** *Core:* Yes

Section Name: VAD Procedures *Harvest:* Yes

DBTableName Operations

Definition: Indicate if the patient was diagnosed with hemolysis post VAD insertion by documentation in the medical record.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: VAD Explanted And/Or Implanted *Format:* Text (categorical values specified by STS)

ParentShortName: VADExImp *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted" or "Yes, implanted and explanted" *Data Source:* User

ParentHarvestCodes: 2|3|4

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: Postop Blood Products *SeqNo:* 3940

Short Name: **BldProd** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether blood products were transfused any time postoperatively. Postoperatively is defined as any blood started after the initial surgery. Include blood transfused after the initial surgery, including any blood transfused during a reoperative surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB", "No CPB Cardiovascular", "ECMO", "Thoracic", "VAD Operation Done With CPB", "VAD Operation Done Without CPB." or "Other" *Data Source:* User

ParentHarvestCodes: 1|2|3|4|6|7|777

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postop Blood Products - Packed Red Blood Cells (RBC) *SeqNo:* 3950

Short Name: **BdRBC** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether packed red blood cells (RBC) were transfused any time postoperatively.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: BldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:

1 Yes

2 No

Long Name: Postop Blood Products - RBC Donor Exposures *SeqNo:* 3960

Short Name: BdRBCDE *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for packed red blood cells (RBC) for this procedure during the postoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Packed Red Blood Cells (RBC) *Format:* Integer

ParentShortName: BdRBC *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - RBC Units *SeqNo:* 3970

Short Name: BdRBCU *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of packed red blood cells that were transfused any time postoperatively.

Do not include autologous, cell-saver or chest tube recirculated blood.

LowValue: 0 *UsualRangeLow:* 0

HighValue: 50 *UsualRangeHigh:* 10

Parent Long Name: Postop Blood Products - Packed Red Blood Cells (RBC) *Format:* Integer

ParentShortName: BdRBC *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - RBC Milliliters *SeqNo:* 3980

Short Name: **BdRBCM** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of packed red blood cells (RBC) that were transfused postoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Packed Red Blood Cells (RBC) *Format:* Integer

ParentShortName: BdRBC *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Fresh Frozen Plasma (FFP) *SeqNo:* 3990

Short Name: **BdFFP** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether fresh frozen plasma (FFP) was transfused any time postoperatively.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: BldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postop Blood Products - FFP Donor Exposures *SeqNo:* 4000

Short Name: **BdFFPDE** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for fresh frozen plasma (FFP) for this procedure during the postoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Fresh Frozen Plasma (FFP) *Format:* Integer

ParentShortName: BdFFP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - FFP Units *SeqNo:* 4010

Short Name: **BdFFPU** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of fresh frozen plasma that were transfused any time postoperatively.

LowValue: 0 *UsualRangeLow:* 0

HighValue: 50 *UsualRangeHigh:* 10

Parent Long Name: Postop Blood Products - Fresh Frozen Plasma (FFP) *Format:* Integer

ParentShortName: BdFFP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - FFP Milliliters *SeqNo:* 4020

Short Name: **BdFFPM** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of fresh frozen plasma (FFP) that were transfused postoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Fresh Frozen Plasma (FFP) *Format:* Integer

ParentShortName: BdFFP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Cryoprecipitate *SeqNo:* 4030

Short Name: **BdCryo** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether cryoprecipitate was transfused any time postoperatively.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: BldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postop Blood Products - Cryoprecipitate Donor Exposures *SeqNo:* 4040

Short Name: **BdCryoDE** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for cryoprecipitate for this procedure during the postoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Cryoprecipitate *Format:* Integer

ParentShortName: BdCryo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Cryoprecipitate Units *SeqNo:* 4050

Short Name: **BdCryoU** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of cryoprecipitate that were transfused any time postoperatively.

One bag of cryo = one unit.
The number of units is not volume dependent.

LowValue: 0 *UsualRangeLow:* 0

HighValue: 50 *UsualRangeHigh:* 10

Parent Long Name: Postop Blood Products - Cryoprecipitate *Format:* Integer

ParentShortName: BdCryo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Cryoprecipitate Milliliters *SeqNo:* 4060

Short Name: **BdCryoM** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of cryoprecipitate that were transfused postoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Cryoprecipitate *Format:* Integer

ParentShortName: BdCryo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Platelets *SeqNo:* 4070

Short Name: **BdPlat** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether platelets were transfused any time postoperatively.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: BldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postop Blood Products - Platelets Donor Exposures *SeqNo:* 4080

Short Name: **BdPlatDE** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for platelets for this procedure during the postoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Platelets *Format:* Integer

ParentShortName: BdPlat *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Platelets Units *SeqNo:* 4090

Short Name: **BdPlatU** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of platelets that were transfused any time postoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor platelets obtained. The number of units coded is not volume dependent.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Platelets *Format:* Integer

ParentShortName: BdPlat *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Platelets Milliliters *SeqNo:* 4100

Short Name: **BdPlatM** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of platelets that were transfused postoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Platelets *Format:* Integer

ParentShortName: BdPlat *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Whole Blood *SeqNo:* 4110

Short Name: **BdWB** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether whole blood was transfused any time postoperatively.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: BldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postop Blood Products - Whole Blood Fresh *SeqNo:* 4120

Short Name: **BdWBFresh** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the whole blood was transfused within 48 hours of donation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Whole Blood *Format:* Text (categorical values specified by STS)

ParentShortName: BdWB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postop Blood Products - Whole Blood Donor Exposures *SeqNo:* 4130

Short Name: **BdWBDE** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for whole blood for this procedure during the postoperative period. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Whole Blood *Format:* Integer

ParentShortName: BdWB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Whole Blood Units *SeqNo:* 4140

Short Name: **BdWBU** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of whole blood that were transfused any time postoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Whole Blood *Format:* Integer

ParentShortName: BdWB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Whole Blood Milliliters *SeqNo:* 4150

Short Name: **BdWBM** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of millimeters of whole blood that were transfused postoperatively.

LowValue: 0 *UsualRangeLow:*

HighValue: 100000 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Whole Blood *Format:* Integer

ParentShortName: BdWB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Postop Blood Products - Factor VIIa *SeqNo:* 4160

Short Name: **BdFVIIa** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether factor VIIa was transfused any time postoperatively.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Postop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: BldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postop Blood Products - Factor VIIa Total Dose *SeqNo:* 4170

Short Name: **BdFVIIaD** *Core:* No

Section Name: Postoperative *Harvest:* No

DBTableName Operations

Definition: Indicate the number of units of platelets that were transfused intraoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor platelets obtained. The number of units coded is not volume dependent.

LowValue: 0 *UsualRangeLow:*

HighValue: 500 *UsualRangeHigh:*

Parent Long Name: Postop Blood Products - Factor VIIa *Format:* Integer

ParentShortName: BdFVIIa *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Complications Table Unique Record Identifier *SeqNo:* 4180

Short Name: **CompUniqueID** *Core:* Yes

Section Name: Complications *Harvest:* Yes

DBTableName Complications

Definition: Unique identifier for the record in the Complications table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Complications Link to Operations Table *SeqNo:* 4190

Short Name: **OperationID** *Core:* Yes

Section Name: Complications *Harvest:* Yes

DBTableName Complications

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. This field is the foreign key that links the Complications record with the associated record in the Operations table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Complication *SeqNo:* 4200

Short Name: **Complication** *Core:* Yes

Section Name: Complications *Harvest:* Yes

DBTableName Complications

Definition: Assign complication to the operation that is most closely associated with the complication.

A complication is an event or occurrence that is associated with a disease or a healthcare intervention, is a departure from the desired course of events, and may cause, or be associated with, suboptimal outcome. A complication does not necessarily represent a breech in the standard of care that constitutes medical negligence or medical malpractice. An operative or procedural complication is any complication, regardless of cause, occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention. Operative and procedural complications include both intraoperative/intraprocedural complications and postoperative/postprocedural complications in this time interval.

An adverse event is a complication that is associated with a healthcare intervention and is associated with suboptimal outcome. Adverse events represent a subset of complications. Not all medical errors result in an adverse event; the administration of an incorrect dose of a medication is a medical error, but it does not always result in an adverse event. Similarly, not all adverse events are the result of medical error. A child may develop pneumonia after an atrial septal defect repair despite intra- and peri-operative management that is free of error. Complications of the underlying disease state, which are not related to a medical intervention, are not adverse events. For example, a patient who presents for medical care with metastatic lung cancer has already developed a complication (Metastatic spread) of the primary lung cancer without any healthcare intervention. Furthermore, complications not associated with suboptimal outcome or harm are not adverse events and are known as no harm events. The patient who receives an incorrect dose of a medication without harm has experienced a no harm event, but not an adverse event.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
15	No complications	No complications occurred. A complication is an event or occurrence that is associated with a disease or a healthcare intervention, is a departure from the desired course of events, and may cause, or be associated with, suboptimal outcome. A complication does not necessarily represent a breach in the standard of care that constitutes medical negligence or medical malpractice.
16	No complications during the intraoperative and	No intraoperative/intraprocedural or postoperative/postprocedural complication occurred

	postoperative time periods (No complications prior to discharge and no complications within < or = 30 days of surgery)	prior to hospital discharge or within < or = 30 days of surgery or intervention. A complication is an event or occurrence that is associated with a disease or a healthcare intervention, is a departure from the desired course of events, and may cause, or be associated with, suboptimal outcome. A complication does not necessarily represent a breach in the standard of care that constitutes medical negligence or medical malpractice.
350	Intraoperative death or intraprocedural death	Patient died in the operating room or procedure room (such as catheterization laboratory or hybrid suite) during the operation or procedure that is being analyzed.
360	Unplanned readmission to the hospital within 30 days of surgery or intervention	Any unplanned readmission to the hospital within 30 days of surgery or intervention
370	Multi-System Organ Failure (MSOF) = Multi-Organ Dysfunction Syndrome (MODS)	Multi-System Organ Failure (MSOF) is a condition where more than one organ system has failed (for example, respiratory failure requiring mechanical ventilation combined with renal failure requiring dialysis). Please code the individual organ system failures as well. If MSOF is associated with sepsis as well, please also code: "Sepsis, Multi-system Organ Failure". Multi-System Organ Failure (MSOF) is synonymous with Multi-Organ Dysfunction Syndrome (MODS). Only code this complication if the patient has failure of two or more than two organs. Do not code MSOF if only failing organs are the heart and lungs.
30	Unexpected cardiac arrest, Timing = Cardiac arrest (MI) during or following procedure (Perioperative/Periprocedural = Intraoperative/Intraprocedural and/or Postoperative/Postprocedural)	A cardiac arrest is the cessation of effective cardiac mechanical function. This complication should be selected if the cardiac arrest developed after OR Entry Date and Time. Do not select this complication for patients under hospice care or DNR.
80	Cardiac dysfunction resulting in low cardiac output	Low cardiac output state characterized by some of the following: tachycardia, oliguria, decreased skin perfusion, need for increased inotropic support (10% above baseline at admission), metabolic acidosis, widened Arterial - Venous oxygen saturation, need to open the chest, or need for mechanical support. If the cardiac dysfunction is of a severity that results in inotrope dependence, mechanical circulatory support, or listing for cardiac transplantation, please also code as "Cardiac failure (severe cardiac dysfunction)". A patient will be considered to have “inotrope dependence” if they cannot be weaned from inotropic support (10% above baseline at admission) after any period of 48 consecutive hours that occurs after the time of OR Exit Date and Time, and either (1) within 30 days after surgery in or out of the hospital, and (2) after 30 days during the same hospitalization subsequent to the

		operation. If patient meets criteria for severe cardiac dysfunction, only code "severe".
384	Cardiac failure (severe cardiac dysfunction)	Low cardiac output state characterized by some of the following: tachycardia, oliguria, decreased skin perfusion, need for increased inotropic support (10% above baseline at admission), metabolic acidosis, widened Arterial - Venous oxygen saturation, need to open the chest, or need for mechanical support. This complication should be selected if the cardiac dysfunction is of a severity that results in inotrope dependence, mechanical circulatory support, or listing for cardiac transplantation. A patient will be considered to have “inotrope dependence” if they cannot be weaned from inotropic support (10% above baseline at admission) after any period of 48 consecutive hours that occurs after the time of OR Exit Date and Time and either (1) within 30 days after surgery in or out of the hospital, and (2) after 30 days during the same hospitalization subsequent to the operation. If patient meets criteria for severe cardiac dysfunction, only code "severe".
280	Endocarditis-postprocedural infective endocarditis	Infective endocarditis in the setting of a heart which has been altered by surgery or intervention. Duke Criteria for the Diagnosis of Infective Endocarditis (IE): The definitive diagnosis of infective endocarditis requires one of the following four situations: 1) Histologic and/or microbiologic evidence of infection at surgery or autopsy such as positive valve culture or histology; 2) Two major criteria; 3) One major criterion and three minor criteria; 4) Five minor criteria. The two major criteria are: 1) Blood cultures positive for IE 2) Evidence of endocardial involvement. Blood cultures positive for IE requires: 1) Typical microorganism consistent with IE isolated from 2 separate blood cultures, as noted in number two below (viridans streptococci, Streptococcus bovis, Staphylococcus aureus, or HACEK group [HACEK, Haemophilus species {H. aprophilus and H. paraaphrophilus}, Actinobacillus actinoinycetemcomitans, Cardiobacterium hominis, Eikenella corrodens, and Kingella kingae.]) or (Community-acquired enterococci in the absence of a primary focus); 2) Microorganisms consistent with IE isolated from persistently positive blood cultures defined as: (At least 2 positive cultures of blood samples obtained > 12 hours apart) or (All of 3 or a majority of 4 or more separate cultures of blood, the first and the last sample obtained > 1 hr apart); 3) Single blood culture positive for Coxiella burnetii or an antiphase I IgG antibody titer of >1 :800. Evidence of endocardial involvement requires 1) Positive results of echocardiography for IE defined as: (Oscillating intracardiac mass on the valve or supporting structures in the path of regurgitant jets or on implanted material

		in the absence of an alternative anatomic explanation) or (Abscess) or (New partial dehiscence of a valvular prosthesis) or 2) New valvular regurgitation (worsening or changing or preexisting murmur not sufficient). The six minor criteria are: 1) Predisposing heart disease or injection drug use (IVDA); 2) Temperature of > 38C; 3) Vascular phenomenon (major arterial emboli, septic pulmonary infarcts, mycotic aneurysm, intracranial or conjunctival hemorrhage, Janeway's lesions); 4) Immunologic phenomenon (glomerulonephritis, Osler's nodes, Roth's spots, rheumatoid factor); 5) Microbiologic evidence (a positive blood culture that does not meet a major criterion as noted above) or serologic evidence of active infection with an organism consistent with IE; 6) Echocardiographic findings that are consistent with IE but do not meet a major criterion as noted above. References: 1) Dhawan VK Infectious Endocarditis in Elderly Patients. Clin. Infect. Dis. 2002;34:806-812. 2) Durack DT, Lukes AS, Bright DK. New criteria for diagnosis of infective endocarditis: utilization of specific echocardiographic findings. Duke Endocarditis Service. Am. J. Med. 1994;96:200-209. 3) Li IS, Sexton DJ, Mick N, et al. Proposed modifications to the Duke criteria for the diagnosis of infective endocarditis. Clin. Infect. Dis. 2000;30:633-638. 4) http://gold.aecom.yu.edu/id/almanac/dukeendocarditis.htm, accessed July 5, 2006.
110	Pericardial effusion, Requiring drainage	Abnormal accumulation of fluid in the pericardial space, Requiring drainage, By any technique.
390	Pulmonary hypertension	Clinically significant elevation of pulmonary arterial pressure, requiring intervention such as nitric oxide, or other therapies. Typically the mean pulmonary arterial pressure is greater than 25mmHg in the presence of a normal pulmonary arterial occlusion pressure (wedge pressure). A “clinically significant” event or condition is an event or condition that necessitates a change in treatment
140	Pulmonary hypertensive crisis (PA pressure > systemic pressure)	An acute state of inadequate systemic perfusion associated with pulmonary hypertension, when the pulmonary arterial pressure is greater than the systemic arterial pressure.
130	Pulmonary vein obstruction	Clinically significant stenosis or obstruction of pulmonary veins. Typically diagnosed by echocardiography or cardiac catheterization, this may present with or without symptoms. A “clinically significant” event or condition is an event or condition that necessitates a change in treatment
120	Systemic vein obstruction	Clinically significant stenosis or obstruction of any major systemic vein (e.g., superior vena cava, inferior vena cava, femoral veins, internal jugular veins, etc.). A “clinically significant” event or condition is an event or condition that necessitates a change in treatment

240	Bleeding, Requiring reoperation	Postoperative/postprocedural bleeding requiring reoperation
102	Sternum left open, Planned	Sternum was left open postoperatively with preoperative plans to leave the sternum open postoperatively (i.e., planned). The goal is for delayed sternotomy closure.
104	Sternum left open, Unplanned	Sternum was left open postoperatively without preoperative plans to leave the sternum open postoperatively (i.e., unplanned). The goal is for delayed sternotomy closure.
22	Unplanned cardiac reoperation during the postoperative or postprocedural time period, exclusive of reoperation for bleeding.	Any additional unplanned cardiac operation occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention. A cardiac operation is defined as any operation that is of the operation type of "CPB" or "No CPB Cardiovascular". The following operations will always be coded as "Planned Reoperation": (1) Delayed Sternal Closure, (2) ECMO Decannulation, (3) VAD Decannulation, (4) Removal of Broviac catheter. The following operations will always be coded as "Unplanned Reoperation": (1) Mediastinal exploration for infection, (2) Mediastinal exploration for hemodynamic instability, (3) Emergent mediastinal exploration for initiation of ECMO or VAD, (4) Reoperation for residual or recurrent lesion. Mediastinal exploration for bleeding is always coded separately as "Bleeding, Requiring reoperation".
24	Unplanned interventional cardiovascular catheterization procedure during the postoperative or postprocedural time period	Any unplanned interventional cardiovascular catheterization procedure occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention.
26	Unplanned non-cardiac reoperation during the postoperative or postprocedural time period	Any additional unplanned non-cardiac operation occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention.
40	Postoperative/Postprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS)	Utilization of postoperative/postprocedural mechanical support, of any type (IABP, VAD, ECMO, or CPS), for resuscitation/CPR or support, during the postoperative/postprocedural time period. Code this complication if it occurs (1) within 30 days after surgery or intervention regardless of the date of hospital discharge, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention.
72	Arrhythmia requiring drug therapy	Arrhythmia (ROOT Definition) + An arrhythmia requiring drug therapy
73	Arrhythmia requiring	Arrhythmia (ROOT Definition) + An arrhythmia

	electrical cardioversion or defibrillation	requiring electrical cardioversion or defibrillation
74	Arrhythmia necessitating pacemaker, Permanent pacemaker	Implantation and utilization of a permanent pacemaker for treatment of any arrhythmia including heart block (atrioventricular [AV] heart block).
75	Arrhythmia necessitating pacemaker, Temporary pacemaker	Implantation and utilization of a temporary pacemaker for treatment of any arrhythmia including heart block (atrioventricular [AV] heart block).
210	Chylothorax	Presence of lymphatic fluid in the pleural space, commonly secondary to leakage from the thoracic duct or one of its main tributaries. Thoracocentesis is the gold standard for diagnosis and generally reveals a predominance of lymphocytes and/or a triglyceride level greater than 110 mg/dL
200	Pleural effusion, Requiring drainage	Abnormal accumulation of fluid in the pleural space, Requiring drainage, By any technique. If the pleural effusion is known to be a chylothorax, please also code "Chylothorax".
180	Pneumonia	Pneumonia ROOT Definition = Pneumonia is defined as a “respiratory disease characterized by inflammation of the lung parenchyma (including alveolar spaces and interstitial tissue), most commonly caused by infection”. Pneumonia is diagnosed by appropriate clinical findings (such as fever, leukopenia or leukocytosis, and new onset of purulent sputum) and one or more of the following: positive cultures (of sputum or pulmonary secretions) and / or pulmonary infiltrate on chest x-ray. An endotracheal tube culture may or may not be positive. Patients commonly demonstrate an evolving area of focal lung consolidation accompanied by fever (>38.5). Pneumonia (pneumonitis) may affect an entire lobe (lobar pneumonia), a segment of a lobe (segmental or lobular pneumonia), alveoli contiguous to bronchi (bronchopneumonia), or interstitial tissue (interstitial pneumonia). These distinctions are generally based on x-ray observations.
190	Pneumothorax, Requiring drainage or evacuation	A collection of gas in the pleural space resulting in collapse of some or all of the lung on the affected side, requiring intervention.
150	Postoperative/Postprocedural respiratory insufficiency requiring mechanical ventilatory support > 7 days	Respiratory insufficiency requiring mechanical ventilatory support from surgery or procedure to greater than 7 days postoperatively/postproceduraly. In other words, the inability of the patient to exchange oxygen and carbon dioxide in sufficient quantities to avoid unacceptable hypercarbia, hypoxemia, or both, without mechanical ventilatory support for greater than 7 days during the postoperative or postprocedural period. The patient therefore does utilize mechanical ventilatory support for greater than 7 days during the postoperative or postprocedural period.

160	Postoperative/Postprocedural respiratory insufficiency requiring reintubation	Reintubation required after initial extubation. In other words, the need to reinstitute postoperative or postprocedural mechanical ventilation after a planned extubation and prior to discharge, or after a planned extubation and after discharge but within 30 days of surgery. The intent of this field is to capture Postoperative/Postprocedural respiratory insufficiency requiring reintubation. It is not intended to capture situations where a patient may undergo elective intubations for other additional operations or procedures (including percutaneous endoscopic gastrostomy [PEG], tube insertions, catheter placement, cardiac catheterizations, etc.). However, these elective intubations and extubations are included and counted when determining “Final Extubation Date and Time”.
170	Respiratory failure, Requiring tracheostomy	Failure to wean from mechanical ventilation necessitating the creation of a surgical airway
230	Renal failure - acute renal failure, Acute renal failure requiring dialysis at the time of hospital discharge	Renal failure - acute renal failure (ROOT Definition) + With new postoperative/postprocedural requirement for dialysis, including peritoneal dialysis and/or hemodialysis. Code this complication if the patient requires dialysis at the time of hospital discharge or death in the hospital. (This complication should be chosen only if the dialysis was associated with acute renal failure.) {"Renal failure - acute renal failure" ROOT Definition = Acute renal failure is defined as new onset oliguria with sustained urine output < 0.5 cc/kg/hr for 24 hours and/or a rise in creatinine > 1.5 times upper limits of normal for age (or twice the most recent preoperative/preprocedural values if these are available), with eventual need for dialysis (including peritoneal dialysis and/or hemodialysis) or hemofiltration. Acute renal failure that will be counted as an operative or procedural complication must occur prior to hospital discharge or after hospital discharge but within 30 days of the procedure. (An operative or procedural complication is any complication, regardless of cause, occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention. Operative and procedural complications include both intraoperative/intraprocedural complications and postoperative/postprocedural complications in this time interval.) The complication is to be coded even if the patient required dialysis, but the treatment was not instituted due to patient or family refusal.}
223	Renal failure - acute renal failure, Acute renal failure requiring temporary dialysis with the need for dialysis not present at hospital discharge	Renal failure - acute renal failure (ROOT Definition) + With new postoperative/postprocedural requirement for temporary dialysis, including peritoneal dialysis and/or hemodialysis. Code this complication if the patient does not require dialysis at the time of hospital discharge or death in the hospital. (This complication

		should be chosen only if the dialysis was associated with acute renal failure.) {"Renal failure - acute renal failure" ROOT Definition = Acute renal failure is defined as new onset oliguria with sustained urine output < 0.5 cc/kg/hr for 24 hours and/or a rise in creatinine > 1.5 times upper limits of normal for age (or twice the most recent preoperative/preprocedural values if these are available), with eventual need for dialysis (including peritoneal dialysis and/or hemodialysis) or hemofiltration. Acute renal failure that will be counted as an operative or procedural complication must occur prior to hospital discharge or after hospital discharge but within 30 days of the procedure. (An operative or procedural complication is any complication, regardless of cause, occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention. Operative and procedural complications include both intraoperative/intraprocedural complications and postoperative/postprocedural complications in this time interval.) The complication is to be coded even if the patient required dialysis, but the treatment was not instituted due to patient or family refusal.}
224	Renal failure - acute renal failure, Acute renal failure requiring temporary hemofiltration with the need for dialysis not present at hospital discharge	Renal failure - acute renal failure (ROOT Definition) + With new postoperative/postprocedural requirement for temporary hemofiltration. Code this complication if the patient does not require dialysis at the time of hospital discharge or death in the hospital. (This complication should be chosen only if the hemofiltration was associated with acute renal failure.) {"Renal failure - acute renal failure" ROOT Definition = Acute renal failure is defined as new onset oliguria with sustained urine output < 0.5 cc/kg/hr for 24 hours and/or a rise in creatinine > 1.5 times upper limits of normal for age (or twice the most recent preoperative/preprocedural values if these are available), with eventual need for dialysis (including peritoneal dialysis and/or hemodialysis) or hemofiltration. Acute renal failure that will be counted as an operative or procedural complication must occur prior to hospital discharge or after hospital discharge but within 30 days of the procedure. (An operative or procedural complication is any complication, regardless of cause, occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention. Operative and procedural complications include both intraoperative/intraprocedural complications and postoperative/postprocedural complications in this time interval.) The complication is to be coded even if the patient required dialysis, but the treatment was not instituted due to patient or family refusal.}

290	Sepsis	Sepsis ROOT Definition = Sepsis is defined as evidence of serious infection accompanied by a deleterious systemic response. In the time period of the first 48 postoperative or postprocedural hours, the diagnosis of sepsis requires the presence of a Systemic Inflammatory Response Syndrome (SIRS) resulting from a proven infection (such as bacteremia, fungemia or urinary tract infection). In the time period after the first 48 postoperative or postprocedural hours, sepsis may be diagnosed by the presence of a SIRS resulting from suspected or proven infection. During the first 48 hours, a SIRS may result from the stress associated with surgery and/or cardiopulmonary bypass. Thus, the clinical criteria for sepsis during this time period should be more stringent. A systemic inflammatory response syndrome (SIRS) is present when at least two of the following criteria are present: hypo- or hyperthermia (>38.5 or <36.0), tachycardia or bradycardia, tachypnea, leukocytosis or leukopenia, and thrombocytopenia.
320	Neurological deficit, Neurological deficit persisting at discharge	Newly recognized and/or newly acquired deficit of neurologic function leading to inpatient referral, therapy, or intervention not otherwise practiced for a similar unaffected inpatient, With a persisting neurologic deficit present at hospital discharge. In other words, new (onset intraoperatively or postoperatively - or intraprocedurally or postprocedurally) neurological deficit persisting and present at discharge from hospital.
325	Neurological deficit, Transient neurological deficit not present at discharge	Newly recognized and/or newly acquired deficit of neurologic function leading to inpatient referral, therapy, or intervention not otherwise practiced for a similar unaffected inpatient, With no persisting neurologic deficit present at hospital discharge. In other words, new (onset intraoperatively or postoperatively - or intraprocedurally or postprocedurally) neurological deficit completely resolving prior to discharge from hospital.
300	Paralyzed diaphragm (possible phrenic nerve injury)	Presence of elevated hemi-diaphragm(s) on chest radiograph in conjunction with evidence of weak, immobile, or paradoxical movement assessed by ultrasound or fluoroscopy.
400	Peripheral nerve injury, Neurological deficit persisting at discharge	Peripheral nerve injury (ROOT Definition) + With a persisting neurologic deficit present at hospital discharge. {"Peripheral nerve injury" ROOT Definition = Newly acquired or newly recognized deficit of unilateral or bilateral peripheral nerve function indicated by physical exam findings, imaging studies, or both.}
331	Seizure	Seizure ROOT Definition = A seizure is defined as the clinical and/or electroencephalographic recognition of epileptiform activity.

410	Spinal cord injury, Neurological deficit persisting at discharge	Spinal cord injury (ROOT Definition) + With a persisting neurologic deficit present at hospital discharge. {"Spinal cord injury" ROOT Definition = Newly acquired or newly recognized deficit of spinal cord function indicated by physical exam findings, imaging studies, or both.}
420	Stroke	Stroke ROOT Definition = A stroke is any confirmed neurological deficit of abrupt onset caused by a disturbance in blood flow to the brain, when the neurologic deficit does not resolve within 24 hours.
440	Subdural bleed	
450	Intraventricular Hemorrhage (IVH) >2	
310	Vocal cord dysfunction (possible recurrent laryngeal nerve injury)	Presence of poor or no vocal cord movement assessed by endoscopy. Patient may or may not have stridor, hoarse voice or poor cry, in conjunction with endoscopic findings.
250	Wound dehiscence (sterile)	Wound dehiscence (sterile) ROOT Definition = Wound dehiscence (sterile) is defined as separation of the layers of a surgical wound. This separation can either be superficial or deep and can include the sternum in the case of a median sternotomy incision. When the sterile separation includes the skin and sternum, in the case of a median sternotomy incision, use this code ("Wound dehiscence (sterile)"). The code "Sternal instability (sterile)" should be used to record the complication when the superficial and deep layers of the incision remain intact but non-union of the sternal edges is present. Causes of wound dehiscence can include tissue ischemia, nutritional deficiencies, use of corticosteroids, vitamin C deficiency, and others. Wound dehiscence due to wound infection should be recorded as a wound infection.
255	Wound dehiscence (sterile), Median sternotomy	Wound dehiscence (sterile) (ROOT Definition) + Location = Median sternotomy
261	Wound infection	Wound infection ROOT Definition = Erythema, possible induration and possible fluctuance of a surgical wound (surgical site) with possible drainage and possible tissue separation. Though wound cultures may be positive, this is not an absolute requirement for establishing this clinical diagnosis.
262	Wound infection-Deep wound infection	Wound infection-Deep wound infection ROOT Definition = A deep wound infection involves the deep soft tissues (e.g., fascial and muscle layers) of the incision AND the patient has at least ONE of the following numbered features: 1) Purulent drainage from the deep portion of the incision (but not from the organ / space component of the surgical site and no evidence of sternal osteomyelitis), 2) The deep incision spontaneously dehisces or is deliberately opened by a

		surgeon when the patient has ONE of the following lettered signs or symptoms (unless the incision is culture negative): A) fever, B) localized pain, or C) tenderness, 3) An abscess or other evidence of infection involving the deep incision is found on direct examination, during reoperation, or by histopathologic or radiologic examination, or 4) A diagnosis of a deep wound infection by a surgeon or by an attending physician.
270	Wound infection-Mediastinitis	The diagnosis of mediastinitis must meet one of the following criteria: Criterion 1: Patient has organisms cultured from mediastinal tissue or fluid that is obtained during a surgical operation or by needle aspiration. Criterion 2: Patient has evidence of mediastinitis by histopathologic examination or visual evidence of mediastinitis seen during a surgical operation. Criterion 3: Patient has at least ONE of the following numbered signs or symptoms with no other recognized cause: 1) fever, 2) chest pain, or 3) sternal instability AND at least one of the following numbered features: 1) purulent mediastinal drainage, 2) organisms cultured from mediastinal blood, drainage or tissue, or 3) widening of the cardio-mediastinal silhouette. Criterion 4: Patient ≤ 1 year of age has at least one of the following numbered signs or symptoms with no other recognized cause: 1) fever, 2) hypothermia, 3) apnea, 4) bradycardia, or 5) sternal instability AND at least one of the following numbered features: 1) purulent mediastinal discharge, 2) organisms cultured from mediastinal blood, drainage or tissue, or 3) widening of the cardio-mediastinal silhouette. Infections of the sternum (sternal osteomyelitis) should be classified as mediastinitis. Sternal instability that is not associated with a wound infection or mediastinitis is documented as "Sternal instability".
263	Wound infection-Superficial wound infection	Wound infection-Superficial wound infection ROOT Definition = A superficial wound infection must meet the following numbered criteria: 1) The infection involves only the skin and the subcutaneous tissue of the incision and 2) The patient has at least ONE of the following lettered features: A) purulent drainage from the superficial portion of the incision, B) organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial portion of the incision, C) at least ONE of the following numbered signs or symptoms: [1] pain or tenderness, [2] localized swelling, redness, or heat, and [3] the superficial portion of the incision is deliberately opened by a surgeon, unless the incision is culture negative, or D) a diagnosis of superficial wound infection by the surgeon or by the attending physician.
430	Anesthesia-related complication	Anesthesia-related complication independent of surgical procedure (e.g., cardiac arrest during induction or failed

		intubation).
460	Complication of cardiovascular catheterization procedure	
900	Other complication	Any complication not otherwise specified in this list. An operative or procedural complication is any complication, regardless of cause, occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention. Operative and procedural complications include both intraoperative/intraprocedural complications and postoperative/postprocedural complications in this time interval. Please select this choice if a known complication occurred after the Operative time period.
901	Other operative/procedural complication	Any complication not otherwise specified in this list that occurs prior to discharge, or after discharge but within 30 days of surgery or intervention. (An operative or procedural complication is any complication, regardless of cause, occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same hospitalization subsequent to the operation or intervention. Operative and procedural complications include both intraoperative/intraprocedural complications and postoperative/postprocedural complications in this time interval.) Please select this choice if the complications occurred during the Operative time period.

Long Name: Reoperation After This Operation Within This Admission *SeqNo:* 4210

Short Name: **ReOpAftrOpInAdm** *Core:* No

Section Name: Discharge/Readmission *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient underwent another related operation subsequent to the initial operative procedure during this hospitalization? This would include delayed sternal closure, pacemaker placement, valve replacement, repair of residual defect, bronchoscopy (if related to this procedure), diaphragm plication, or re-op for bleeding.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Date of Hospital Discharge *SeqNo:* 4220

Short Name: **HospDischDt** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date that the patient is discharged from the hospital where the surgery took place.

In rare instances, the “Date of Hospital Discharge” differs from the “Date of Database Discharge”. In situations where the patient is discharged to another acute care facility or to a chronic care facility, the “Date of Hospital Discharge” is the date the patient is transferred from the hospital where the surgery took place to another facility. This field is intended to capture the total length of stay in your hospital regardless of the medical service managing the patient.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date - mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Mortality Status At Hospital Discharge *SeqNo:* 4230

Short Name: **MtHospDisStat** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient was Alive or Dead at date and time of "Date of Hospital Discharge" for this operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Alive
2	Dead

Long Name: Discharge Location *SeqNo:* 4240

Short Name: **DisLoctn** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate the location to where the patient was discharged at the Date of Hospital Discharge.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mortality Status At Hospital Discharge *Format:* Text (categorical values specified by STS)

ParentShortName: MtHospDisStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Home
2	Other Acute Care Center
3	Other Chronic Care Center

Long Name: VAD-Discharge Status *SeqNo:* 4245

Short Name: **VADDiscS** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient had a VAD in place at discharge from the hospital.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
5	No VAD used during this admission
1	Discharged with a VAD
4	VAD removed prior to discharge
3	Expired in Hospital

Long Name: Date of Database Discharge *SeqNo:* 4250

Short Name: **DBDischDt** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate the "Date of Database Discharge". The "Date of Database Discharge" is defined as a date that is determined by three rules (presented below as Rule A, Rule B, and Rule C), which specify how to complete the field "Date of Database Discharge".

[Rule A]: If a patient was admitted from their home, they must be either dead or discharged to home prior to completing the field "Date of Database Discharge". Their "Date of Database Discharge" is the date they are discharged to home or their date of mortality. If a patient was admitted from their home, the field "Date of Database Discharge" can not be completed if the patient is transferred to another acute care facility or chronic care facility until they are either dead or discharged to home. However, if this patient survives in a chronic care facility for 6 postoperative months (i.e., 183 postoperative days in the chronic care facility), the patient can then be assigned a "Date of Database Discharge" that is the date when the patient is in the chronic care facility for 183 days. (Some institutions may not have a mechanism that allows transfer to a chronic care facility and instead utilizes their own institution as the chronic care facility. If an institution does not utilize a chronic care facility and instead keeps these chronic patients in-house, this institution can apply to this Rule [Rule A] whenever one of their patients survives for 6 postoperative months (i.e., 183 postoperative days) on "chronic care status" within their institution.)

[Rule B]: If a patient was admitted from (i.e., transferred from) a chronic care facility where they chronically reside, they must be either dead or discharged either to home or to a chronic care facility prior to completing the field "Date of Database Discharge". Their "Date of Database Discharge" is the date they are discharged either to home or to a chronic care facility, or their date of mortality.

[Rule C]: If a patient was admitted from (i.e., transferred from) another acute care facility, Rule A as previously stated applies if they lived at home prior to their admission to the transferring acute care facility. If a patient was transferred from another acute care facility, Rule B as previously stated applies if they lived in a chronic care facility prior to their admission to the transferring acute care facility.

These three rules are consistent with previously published rules defining Operative Mortality [1] and Operative Morbidity [2] in the following published manuscripts [1, 2]. [1]. Jacobs JP, Mavroudis C, Jacobs ML, Maruszewski B, Tchervenkov CI, Lacour-Gayet FG, Clarke DR, Yeh T, Walters HL 3rd, Kurosawa H, Stellin G, Ebels T, Elliott MJ. What is Operative Mortality? Defining Death in a Surgical Registry Database: A Report from the STS Congenital Database Task Force and the Joint EACTS-STS Congenital Database Committee. The Annals of Thoracic Surgery, 81(5):1937-41, May 2006. [2]. Jacobs JP, Jacobs ML, Mavroudis C, Maruszewski B, Tchervenkov CI, Lacour-Gayet FG, Clarke DR, Yeh T, Walters HL 3rd, Kurosawa H, Stellin G, Ebels T, Elliott MJ, Vener DF, Barach P, Benavidez OJ, Bacha EA.. What is Operative Morbidity? Defining Complications in a Surgical Registry Database: A Report from the STS Congenital Database Task Force and the Joint EACTS-STS Congenital Database Committee. The Annals of Thoracic Surgery; 84:1416-1421, October 2007.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date - mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Mortality Status At Database Discharge *SeqNo:* 4260

Short Name: **MtDBDisStat** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient was Alive or Dead at the date and time of "Date of Database Discharge" for this operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Alive
2	Dead
3	Unknown

Long Name: Readmission Within 30 Days *SeqNo:* 4270

Short Name: **Readmit30** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient was readmitted within thirty days of discharge.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mortality Status At Hospital Discharge *Format:* Text (categorical values specified by STS)

ParentShortName: MtHospDisStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Readmission Date *SeqNo:* 4280

Short Name: **ReadmitDt** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date on which the patient was readmitted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Readmission Within 30 Days *Format:* Date - mm/dd/yyyy

ParentShortName: Readmit30 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Primary Readmission Reason *SeqNo:* 4290

Short Name: ReadmitRsn *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate the primary reason for readmission.

Whenever possible, use the most appropriate specific organ system and/or lesion based choice from the list to document the reason for admission.

Please only use one of the three choices beginning with the word “Other”’ when no other choice is appropriate.

If the readmission is for the patient to undergo a procedure related to the index operation (the first operation of the given hospitalization that has an Operation Type of "CPB" or "No CPB Cardiovascular"), please document the cause of this readmission to be assigned to the specific organ system and/or lesion based choice if possible.

If no specific organ system and/or lesion based choice is appropriate and the readmission is for the patient to undergo a procedure related to the index operation, please choose “Other Cardiovascular Complication” if the planned procedure is cardiac, and “Other - Readmission related to this index operation" if the planned procedure is noncardiac.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Readmission Within 30 Days *Format:* Text (categorical values specified by STS)

ParentShortName: Readmit30 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
26	Thrombotic Complication	Complication involving development of a blood clot possibly leading to vascular obstruction
27	Embolic Complication	Complication involving migration of blood clot or other matter possibly leading to vascular obstruction
28	Hemorrhagic Complication	Complication involving life threatening bleeding
29	Stenotic Complication	Complication involving narrowing of lumen resulting in flow disruption
2	Arrhythmia	
3	Congestive Heart Failure	Physician documentation or report of insufficient cardiac output leading to fluid retention, rales, jugular venous distention, hepatic congestion or pulmonary edema. Low ejection fraction without clinical evidence of heart failure does not qualify as heart failure.
30	Cardiac Transplant Rejection	Rejection refers to the organ recipient's immune system recognizing a transplanted organ as foreign and

		mounting a response to it via cellular and/or humoral (antibody-mediated) mechanisms. Routine endomyocardial biopsy remains the criterion standard for monitoring for such rejection.
31	Myocardial Ischemia	Insufficient oxygen delivery to meet the demand of myocardial tissue may result in pain, wall motion abnormality and EKG changes. Untreated ischemia may progress to infarction.
14	Renal Failure	
6	Pericardial Effusion and/or Tamponade	Abnormal accumulation of fluid in the pericardial space requiring drainage
32	Pleural Effusion	
33	Neurologic Complication	Newly recognized and/or newly acquired deficit of neurologic function leading to inpatient referral, therapy, or intervention not otherwise practiced for a similar unaffected patient,
7	Respiratory Complication/Airway Complication	Complication related to the respiratory system, includes airway issues
34	Septic/Infectious Complication	Complication related to infection, includes infection of wound(s), bloodstream infection or other infectious conditions
35	Cardiovascular Device Complications	Complication related to a device
36	Residual/Recurrent Cardiovascular Defects	Complication related to residual or recurrent cardiac abnormality
37	Failure to Thrive	Current weight or rate of weight gain is significantly lower than that of other children of similar age and gender
25	VAD Complications	Complication related to ventricular assist device
39	Gastrointestinal Complication	Gastrointestinal complication (Includes readmission for percutaneous endoscopic tube [PEG tube] and readmission for Nissen fundoplication, as well as readmission for nausea, vomiting, or diarrhea)
38	Other Cardiovascular Complication	Unlisted complication related to the cardiovascular system
998	Other - Readmission related to this index operation	Example: Shunt thrombosis in a patient who has had a Norwood procedure.
999	Other - Readmission not related to this index operation	Example: Orthopedic procedure in a patient who has had a Norwood procedure.

Long Name: Mortality - 30-Day Status *SeqNo:* 4300

Short Name: **Mt30Stat** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient was alive or dead on the 30th day post surgical procedure whether in hospital or not.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Alive
2	Dead
3	Unknown

Long Name: Mortality - 30-Day Status - Method Of Verification *SeqNo:* 4310

Short Name: **Mt30StatMeth** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate the primary method used to verify the patient's 30-day mortality status.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Evidence of life or death in the medical record
2	Contact with patient or family
3	Contact with medical provider
4	Office visit to provider greater than or equal to 30

days after procedure.

5 Social Security Death Master File

9 Other

Long Name: Mortality Case *SeqNo:* 4320

Short Name: **MortCase** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether patient's death (death within hospitalization or within 30 days of surgery if patient is discharged) is assigned to this operation.

In the event that more than one operation (with operation type "CPB" or "No CPB Cardiovascular") takes place within a hospitalization that results in patient death either within the hospitalization or within 30 days of surgery after discharge from that hospitalization, indicate the operation to which mortality is to be assigned. (Examples include patients who undergo preliminary palliation with repair following, patients who undergo repair with pacemaker placement following, patients who undergo repair that fails with subsequent heart transplantation, etc.)

Please note that at data harvest, mortality that occurs for an admission with multiple operations is assigned to the first cardiac operation (that is the first operation with operation type "CPB" or "No CPB Cardiovascular") of that admission; this initial cardiac operation of the hospitalization is considered the Index Operation of the hospitalization. This field is included in the database in order to ascertain whether differences exist between the methodology of assigning mortality to the index operation (which is the methodology utilized at Duke Clinical Research Institute [DCRI] in the Harvest of Data and preparation of STS Outcome Reports) and the methodology of surgeon-assigned case mortality (which is the methodology of this particular database field and may be the methodology utilized by some surgeons within participating institutions at their own institutions).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Mortality - Operative Death *SeqNo:* 4330

Short Name: **MtOpD** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Operative Mortality includes: (1) all deaths, regardless of cause, occurring during the hospitalization in which the operation was performed, even if after 30 days (including patients transferred to other acute care facilities); and (2) all deaths, regardless of cause, occurring after discharge from the hospital, but before the end of the thirtieth postoperative day.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Eligibility For CHSS Study *SeqNo:* 4331

Short Name: **CHSSElig** *Core:* Yes

Section Name: Discharge/Readmission *Harvest:* Yes

DBTableName Operations

Definition: Indicate patient's eligibility for the Congenital Heart Surgeon Society (CHSS) study.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Patient is eligible and enrolled
2	Patient is eligible, but declined enrollment
3	Patient is eligible, but not invited to participate
4	Patient is eligible, but

	institution is not a CHSS participant.
5	Patient is eligible, but not enrolled for other reason
6	Patient is not eligible for CHSS study

Long Name: Patient's care discussed at preoperative multidisciplinary planning conference *SeqNo:* 4340

Short Name: **CareDiscussed** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether this patient's care was discussed at a preoperative multidisciplinary planning conference to plan pediatric and congenital heart surgery cases.

A preoperative multidisciplinary planning conference involves attendance by multiple members of the healthcare team, with recommended participation including but not limited to: cardiology, cardiac surgery, anesthesia, and critical care.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Reason why patient's care was not discussed *SeqNo:* 4350

Short Name: **CareDiscussedRsn** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the reason why the patient's case was not discussed at a preoperative multidisciplinary planning conference.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient's care discussed at preoperative multidisciplinary planning conference

Format: Text (categorical values specified by STS)

ParentShortName: CareDiscussed *DataLength:*

ParentValue: = "No" *Data Source:* User

ParentHarvestCodes: 2

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Urgent / emergent / salvage case	This case was an urgent / emergent /salvage case and the patient went to surgery prior to the next scheduled conference.
2	Neonate admitted between conferences	This patient is a neonate who was admitted after the previous conference and went to surgery prior to the next scheduled conference.
3	Program does not routinely discuss all cases	This case was not discussed at conference because program does not routinely discuss all cases at a pre-operative multidisciplinary planning conference.
4	Program does not have regular conferences	Program does not have a regularly scheduled pre-operative multidisciplinary planning conference to plan pediatric and congenital heart surgery cases.
5	Other	Reason not listed

Long Name: Transesophageal Echocardiography (TEE) available for case *SeqNo:* 4370

Short Name: **TEEAvail** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether intraoperative transesophageal echocardiography (TEE) was available for this case (or epicardial echocardiography if TEE contraindicated or not informative).

Availability is defined as the presence and availability of equipment and staff to perform the study. Reporting of compliance will be as the fraction of all Cardiac Operations with availability (as opposed to use) of TEE and/or epicardial echocardiography.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intraoperative transesophageal echocardiography (TEE) performance *SeqNo:* 4380

Short Name: **TEEEpicEchoPerf** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether TEE / epicardial echocardiography was performed for this case.

If available, TEE may not be performed due to surgeon preference, size of patient, not indicated, etc.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transesophageal Echocardiography (TEE) available for case *Format:* Text (categorical values specified by STS)

ParentShortName: TEEAvail *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: Preoperative antibiotic prophylaxis given *SeqNo:* 4400

Short Name: **PreopAntiProph** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a preoperative antibiotic prophylaxis was given to this patient.

Measure is satisfied for each Cardiac Operation, when there is documentation that the patient has received prophylactic antibiotic(s) within the hour immediately preceding surgical incision (two hours if receiving vancomycin). To satisfy this measure, the field named “Skin Incision Start Time” must be completed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative antibiotic prophylaxis - Cephalosporin *SeqNo:* 4410

Short Name: **PreopAntiProphCeph** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the preoperative antibiotic prophylaxis included Cephalosporin.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative antibiotic prophylaxis given *Format:* Text (categorical values specified by STS)

ParentShortName: PreopAntiProph *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: Preoperative antibiotic prophylaxis - Penicillin or related medication *SeqNo:* 4420

Short Name: **PreopAntiProphPen** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the preoperative antibiotic prophylaxis included penicillin or related medications (i.e., Oxacillin, Nafcillin, Ampicillin, etc.)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative antibiotic prophylaxis given *Format:* Text (categorical values specified by STS)

ParentShortName: PreopAntiProph *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative antibiotic prophylaxis - Aminoglycoside *SeqNo:* 4430

Short Name: **PreopAntiProphAmino** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the preoperative antibiotic prophylaxis included Aminoglycoside.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative antibiotic prophylaxis given *Format:* Text (categorical values specified by STS)

ParentShortName: PreopAntiProph *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative antibiotic prophylaxis - Vancomycin *SeqNo:* 4440

Short Name: **PreopAntiProphVan** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the preoperative antibiotic prophylaxis included Vancomycin.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative antibiotic prophylaxis given *Format:* Text (categorical values specified by STS)

ParentShortName: PreopAntiProph *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative antibiotic prophylaxis - Other *SeqNo:* 4450

Short Name: **PreopAntiProphOth** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the preoperative antibiotic prophylaxis included any other class of antibiotic.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative antibiotic prophylaxis given *Format:* Text (categorical values specified by STS)

ParentShortName: PreopAntiProph *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative antibiotic prophylaxis - Time started *SeqNo:* 4470

Short Name: **PreopAntiProphTime** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the time when the antibiotic infusion started.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative antibiotic prophylaxis given *Format:* Time - hh:mm (24-hour clock)

ParentShortName: PreopAntiProph *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Conventional preprocedure time-out. *SeqNo:* 4480

Short Name: **ConvTimeOut** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a conventional preprocedural “time-out”, which includes identification of patient, operative site, procedure, and history of any allergies, was performed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Surgeon shares essential elements of operative plan *SeqNo:* 4490

Short Name: **PreProcBrief** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a preprocedural briefing was performed wherein the surgeon shares with all members of the operating room team the essential elements of the operative plan; including diagnosis, planned procedure, outline of essentials of anesthesia and bypass strategies, antibiotic prophylaxis, availability of blood products, anticipated or planned implants or device applications, and anticipated challenges.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Postprocedure debriefing *SeqNo:* 4500

Short Name: **PostProcDebrief** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a postprocedural debriefing was performed wherein the surgeon succinctly reviews with all members of the operating room team the essential elements of the operative plan, identifying both the successful components and the opportunities for improvement. This debriefing should take place prior to the patient leaving the operating room or its equivalent, and may be followed by a more in-depth dialogue involving team members at a later time. (The actual debriefing in the operating room is intentionally and importantly brief, in recognition of the fact that periods of transition may be times of instability or vulnerability for the patient.)

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Hand-off protocol at the time of transfer to the Intensive Care Unit *SeqNo:* 4510

Short Name: HandoffProtocol *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a briefing and execution of a hand-off protocol (checklist) was performed at the time of transfer (arrival) to the Intensive Care Unit at the end of the operation, involving ALL of the following: the anesthesiologist, surgeon, physician staff of the Intensive Care Unit (including critical care and cardiology) and nursing.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Operation Type *Format:* Text (categorical values specified by STS)

ParentShortName: OpType *DataLength:*

ParentValue: = "CPB" or "No CPB Cardiovascular" *Data Source:* User

ParentHarvestCodes: 1|2

Harvest Codes:

Code:	Value:
1	Yes - All required team members present
2	Yes - Not all required team members present
3	No

Long Name: Hand-off protocol - Anesthesiologist *SeqNo:* 4520

Short Name: **HandoffAnesth** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the anesthesiologist or designee attended the hand-off protocol at the time of transfer to the Intensive Care Uniti at the end of the operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Hand-off protocol at the time of transfer to the Intensive Care Unit

Format: Text (categorical values specified by STS)

ParentShortName: HandoffProtocol

DataLength:

ParentValue: = "Yes - Not all required team members present"

Data Source: User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Attended hand-off protocol
2	Did not attend hand-off protocol

Long Name: Hand-off protocol - Surgeon *SeqNo:* 4530

Short Name: **HandoffSurg** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the surgeon or designee attended the hand-off protocol at the time of transfer to the Intensive Care Uniti at the end of the operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Hand-off protocol at the time of transfer to the Intensive Care Unit

Format: Text (categorical values specified by STS)

ParentShortName: HandoffProtocol

DataLength:

ParentValue: = "Yes - Not all required team members present"

Data Source: User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Attended hand-off protocol
2	Did not attend hand-off

protocol

Long Name: Hand-off protocol - Physician staff of the Intensive Care Unit *SeqNo:* 4540

Short Name: **HandoffPhysStaff** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the physician staff of the Intensive Care Unit or designee attended the hand-off protocol at the time of transfer to the Intensive Care Uniti at the end of the operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Hand-off protocol at the time of transfer to the Intensive Care Unit

Format: Text (categorical values specified by STS)

ParentShortName: HandoffProtocol

DataLength:

ParentValue: = "Yes - Not all required team members present"

Data Source: User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:
1	Attended hand-off protocol
2	Did not attend hand-off protocol

Long Name: Hand-off protocol - Nursing *SeqNo:* 4550

Short Name: **HandoffNursing** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a nurse or designee attended the hand-off protocol at the time of transfer to the Intensive Care Uniti at the end of the operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Hand-off protocol at the time of transfer to the Intensive Care Unit

Format: Text (categorical values specified by STS)

ParentShortName: HandoffProtocol

DataLength:

ParentValue: = "Yes - Not all required team members present"

Data Source: User

ParentHarvestCodes: 2

Harvest Codes:

Code:	Value:

1	Attended hand-off protocol
2	Did not attend hand-off protocol

Long Name: Patient died or had major postoperative complication(s) *SeqNo:* 4560

Short Name: PostOpComp *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient died before hospital discharge and/or had any of these major postoperative complication(s):

a. New postoperative renal failure requiring dialysis
b. New postoperative neurological deficit persisting at discharge
c. Arrhythmia necessitating permanent pacemaker insertion
d. Paralyzed diaphragm
e. Need for postoperative mechanical circulatory support
f. Unplanned reoperation and/or interventional cardiovascular catheterization procedure

The detailed definitions for the six postoperative complications are the definitions used in the current version of the STS Congenital Heart Surgery Database. These detailed definitions for these six postoperative complications may be found in the following manuscript:

Jacobs JP et al. Quality measures for congenital and pediatric cardiac surgery. World Journal for Pediatric and Congenital Heart Surgery 2012;3:32-47

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Patient management and outcomes reviewed *SeqNo:* 4570

Short Name: **PostOpReview** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient's management and outcomes were reviewed as a part of a regularly scheduled Quality Assurance and Quality Improvement Cardiac Care Conference (i.e., Morbidity and Mortality conference).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient died or had major postoperative complication(s) *Format:* Text (categorical values specified by STS)

ParentShortName: PostOpComp *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	Reviewed at conference	This patient's management and outcome were reviewed as a part of a regularly scheduled Quality Assurance and Quality Improvement Cardiac Care Conference (i.e., Morbidity and Mortality conference).
2	Scheduled to be reviewed at next conference	This patient is on the schedule to be discussed at an upcoming Quality Assurance and Quality Improvement Cardiac Care Conference (i.e., Morbidity and Mortality conference). (Please log back in to the Quality Module and change this answer to "Reviewed at conference" after the patient has been discussed in Quality Assurance and Quality Improvement Cardiac Care Conference).
3	Not reviewed and not scheduled to be reviewed	This patient's management and outcome were NOT reviewed as a part of a regularly scheduled Quality Assurance and Quality Improvement Cardiac Care Conference (i.e., Morbidity and Mortality conference) and is not currently on the schedule to be discussed at an upcoming Quality Assurance and Quality Improvement Cardiac Care Conference.
4	Program does not have regularly scheduled conferences	Program does not have a regularly scheduled Quality Assurance and Quality Improvement Cardiac Care Conference (i.e., Morbidity and Mortality conference).

Long Name: Patient management and outcomes reviewed - date *SeqNo:* 4580

Short Name: **PostOpReviewDate** *Core:* Yes

Section Name: Patient Process Measures *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date this patient's management and outcome was reviewed as a part of a regularly scheduled Quality Assurance and Quality Improvement Cardiac Care Conference (i.e., Morbidity and Mortality conference).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient management and outcomes reviewed *Format:* Date - mm/dd/yyyy

ParentShortName: PostOpReview *DataLength:*

ParentValue: = "Reviewed at conference" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Primary Anesthesiologist Attending Name *SeqNo:* 4590

Short Name: **PrimAnesName** *Core:* Yes

Section Name: Anesthesia Administrative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the name of the primary anesthesiologist (attending physician present at induction of anesthesia).

The name, NPI and signature of all anesthesiologists contributing data to the database must be on file with the STS for data files to be accepted.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by user)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Primary Anesthesiologist National Provider Identifier *SeqNo:* 4600

Short Name: **PrimAnesNPI** *Core:* Yes

Section Name: Anesthesia Administrative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the individual-level National Provider Identifier (NPI) of the anesthesiologist performing the procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Lookup

ParentHarvestCodes:

Long Name: Secondary Anesthesiologist Attending *SeqNo:* 4610

Short Name: **SecAnes** *Core:* Yes

Section Name: Anesthesia Administrative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a relieving anesthesiologist and/or second anesthesiology attending was present during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Secondary Anesthesiologist AttendingName *SeqNo:* 4620

Short Name: **SecAnesName** *Core:* No

Section Name: Anesthesia Administrative *Harvest:* No

DBTableName Operations

Definition: Indicate the name of the relieving anesthesiologist and/or second anesthesiology attending present during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Secondary Anesthesiologist Attending *Format:* Text (categorical values specified by user)

ParentShortName: SecAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Fellow or Resident Present *SeqNo:* 4630

Short Name: **FelRes** *Core:* Yes

Section Name: Anesthesia Administrative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a Fellow or Resident was present during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Mid-Level Provider (CRNA, AA) Present *SeqNo:* 4640

Short Name: **CRNA** *Core:* Yes

Section Name: Anesthesia Administrative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a Certified Registered Nurse Anesthetist (CRNA) or Anesthesia Assistant (AA) participated in the patient care during all or part of this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Certified Registered Nurse Anesthetist Name *SeqNo:* 4650

Short Name: **CRNAName** *Core:* No

Section Name: Anesthesia Administrative *Harvest:* No

DBTableName Operations

Definition: Indicate the name of the CRNA present during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Mid-Level Provider (CRNA, AA) Present *Format:* Text (categorical values specified by user)

ParentShortName: CRNA *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Non-CV Physician *SeqNo:* 4660

Short Name: **NonCVPhys** *Core:* No

Section Name: Anesthesia Administrative *Harvest:* No

DBTableName Operations

Definition: The physician providing care for the procedure who is NOT the Cardiac Surgeon (i.e., cardiologist, radiologist, general surgeon, ENT surgeon).

This field is ONLY for use for cardiac patients undergoing non-cardiac surgical procedures with cardiac anesthesia such as diagnostic or therapeutic catheterization, diagnostic or therapeutic radiology, tracheostomy, g-tube placement, etc.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by user)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Preoperative Medications Table Unique Record Identifier *SeqNo:* 4670

Short Name: **PMUniqueID** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName PreopMeds

Definition: Unique identifier for the record in the Preoperative Medications table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Preoperative Medication Link to Operations Table *SeqNo:* 4680

Short Name: **OperationID** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName PreopMeds

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. This field is the foreign key that links the Preoperative Medications record with the associated record in the Operations table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Preoperative Medication *SeqNo:* 4690

Short Name: **PreopMed** *Core:* No

Section Name: Anesthesia Preoperative *Harvest:* No

DBTableName PreopMeds

Definition: Indicate the preoperative medication(s) given to the patient prior to the period of anesthetic care.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
10	None
20	Amiodarone
30	Aspirin
40	Bosentan
50	Captopril (Capoten)
60	Clopidogrel
70	Coumadin
80	Digoxin
90	Diltiazem
100	Dobutamine

110	Dopamine
120	Enalapril
130	Epinephrine (Adrenalin)
140	Esmolol (Brevibloc)
150	Fentanyl
160	Furosemide (Lasix)
170	Heparin
180	Low Molecular Weight Heparin
190	Labetolol
200	Lisinopril
210	Midazolam (Versed)
220	Milrinone
230	Morphine
240	Nitroglycerin
250	Nitroprusside
260	Norepinephrine (Levophed)
270	Propranolol
280	Prostaglandin
290	Sildenafil
300	Sotalol
310	Vasopressin
320	ACE Inhibitors not otherwise listed
330	Beta Blockers not otherwise listed
340	Anti-arrhythmics not otherwise listed
350	Inotropes not otherwise listed (e.g., study drugs (levosimendan))
360	Vasodilators not otherwise listed
370	Vasoconstrictors not otherwise listed

Long Name: Preoperative Medication Category *SeqNo:* 4700

Short Name: **PreopMedCat** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName PreopMeds

Definition: Indicate the categories of preoperative medication(s) given to the patient prior to the period of anesthetic care.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
5	None
10	Amiodarone
20	Angiotensin Converting Enzyme (ACE) Inhibitors
30	Anti-reflux Medications (H2 antagonists, PPI, propulsives)
40	Anti-seizure Medications
50	Aspirin
60	Benzodiazepines
70	Beta blockers
80	Birth Control (Oral, Intramuscular)
90	Calcium Channel Blockers
100	Calcium Chloride Infusion
110	Coumadin
120	Digoxin
130	Direct Thrombin Inhibitors (e.g., argatroban)
140	Diuretics
150	Dobutamine
160	Dopamine
170	Endothelin Antagonist (e.g., Bosentan)
180	Epinephrine
190	Heparin

200	Inhaled Bronchodilators
210	Insulin
220	Low Molecular Weight Heparin
230	Milrinone
240	Narcotics
250	Nitric Oxide
260	Nitroglycerin
270	Nitroprusside
280	Norepinephrine
290	PDE-5 Inhibitors (e.g., Sildenafil)
300	Platelet Inhibitors other than Aspirin (e.g., Plavix)
310	Prostacyclin (e.g., Flolan, Remodulin)
320	Prostaglandin
330	Psychiatric Medications (including ADHD and antidepressants)
340	Statins
350	Steroids (oral/intravenous)
360	Thyroid Hormone
370	Transplant Rejection Inhibition Meds (other than steroids)
380	Vasopressin
700	Anti-arrhythmics Not Otherwise Listed
710	Inotropes Not Otherwise Listed
720	Vasoconstrictors Not Otherwise Listed
730	Vasodilators Not Otherwise Listed
900	Other

Long Name: Preoperative Sedation *SeqNo:* 4710

Short Name: **PreopSed** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received preoperative sedation

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Route *SeqNo:* 4720

Short Name: **PreopSedRte** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the route used for preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	IM
2	IV
3	Nasal
4	PO (Oral)
5	Rectal

Long Name: Preoperative Sedation Drug - Atropine *SeqNo:* 4730

Short Name: **PreopSedDrugAtro** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Atropine as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Demerol *SeqNo:* 4740

Short Name: **PreopSedDrugDem** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Demerol as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Dexmedetomidine *SeqNo:* 4741

Short Name: **PreopSedDrugDex** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Dexmedetomidine as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Diazepam *SeqNo:* 4750

Short Name: **PreopSedDrugDiaz** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Diazepam as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Glycopyrrolate *SeqNo:* 4760

Short Name: **PreopSedDrugGlyco** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Glycopyrrolate as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Ketamine *SeqNo:* 4770

Short Name: **PreopSedDrugKet** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Ketamine as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Lorazepam *SeqNo:* 4780

Short Name: **PreopSedDrugLoraz** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Lorazepam as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Midazolam *SeqNo:* 4790

Short Name: **PreopSedDrugMidaz** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Midazolam as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Morphine *SeqNo:* 4800

Short Name: **PreopSedDrugMorph** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Morphine as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Sedation Drug - Pentobarbital *SeqNo:* 4810

Short Name: **PreopSedDrugPent** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received Pentobarbital as a preoperative sedation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Preoperative Sedation *Format:* Text (categorical values specified by STS)

ParentShortName: PreopSed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Preoperative Oxygen Saturation *SeqNo:* 4820

Short Name: **PreopO2Sat** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the preoperative resting pulse oximeter saturation (%) recorded either in the clinic or immediately prior to the procedure.

LowValue: 1.0 *UsualRangeLow:* 60.0

HighValue: 100.0 *UsualRangeHigh:* 100.0

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Preoperative Oxygen Supplementation *SeqNo:* 4830

Short Name: **PreopOxygen** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received preoperative oxygen supplementation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Transport to Procedure Location Date and Time *SeqNo:* 4840

Short Name: **PLocTransDT** *Core:* Yes

Section Name: Anesthesia Preoperative *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm 24-hour clock) of day when the patient was transferred to the procedure location or when anesthesia started.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date/Time - mm/dd/yyyy hh:mm

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Arterial Line *SeqNo:* 4850

Short Name: **ArtLine** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an arterial line was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Line Type - Radial *SeqNo:* 4860

Short Name: **ArtLineTypeRad** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a radial arterial line type was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Arterial Line *Format:* Text (categorical values specified by STS)

ParentShortName: ArtLine *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Line Type - Brachial *SeqNo:* 4870

Short Name: **ArtLineTypeBrach** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a brachial arterial line type was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Arterial Line *Format:* Text (categorical values specified by STS)

ParentShortName: ArtLine *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Line Type - Axillary *SeqNo:* 4880

Short Name: **ArtLineTypeAx** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an axillary arterial line type was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Arterial Line *Format:* Text (categorical values specified by STS)

ParentShortName: ArtLine *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Line Type - Femoral *SeqNo:* 4890

Short Name: **ArtLineTypeFem** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a femoral arterial line type was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Arterial Line *Format:* Text (categorical values specified by STS)

ParentShortName: ArtLine *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Line Type - Ulnar *SeqNo:* 4900

Short Name: **ArtLineTypeUlnar** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an ulnar arterial line type was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Arterial Line *Format:* Text (categorical values specified by STS)

ParentShortName: ArtLine *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Line Type - Dorsalis Pedis *SeqNo:* 4910

Short Name: **ArtLineTypeDors** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a dorsalis pedis arterial line type was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Arterial Line *Format:* Text (categorical values specified by STS)

ParentShortName: ArtLine *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Line Type - Posterior Tibial *SeqNo:* 4920

Short Name: **ArtLineTypePost** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a posterior tibial arterial line type was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Arterial Line *Format:* Text (categorical values specified by STS)

ParentShortName: ArtLine *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Line Type - Umbilical *SeqNo:* 4930

Short Name: **ArtLineTypeCent** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an umbilical arterial line type was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Arterial Line *Format:* Text (categorical values specified by STS)

ParentShortName: ArtLine *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cutdown *SeqNo:* 4940

Short Name: **Cutdown** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a cutdown was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cutdown Type - Radial *SeqNo:* 4950

Short Name: **CutdownRad** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a radial cutdown was used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cutdown *Format:* Text (categorical values specified by STS)

ParentShortName: Cutdown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cutdown Type - Femoral *SeqNo:* 4960

Short Name: **CutdownFem** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a femoral cutdown was used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cutdown *Format:* Text (categorical values specified by STS)

ParentShortName: Cutdown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cutdown Type - Ulnar *SeqNo:* 4970

Short Name: **CutdownUln** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an ulnar cutdown was used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cutdown *Format:* Text (categorical values specified by STS)

ParentShortName: Cutdown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cutdown Type - Other *SeqNo:* 4980

Short Name: **CutdownOth** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether any other type of cutdown was used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Cutdown *Format:* Text (categorical values specified by STS)

ParentShortName: Cutdown *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Percutaneous Central Pressure *SeqNo:* 4990

Short Name: **PercCentPress** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether percutaneous central pressure was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Percutaneous Central Pressure Location - Right Internal Jugular *SeqNo:* 5000

Short Name: **PCPLocRJug** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the percutaneous central pressure was located in the right internal jugular.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Percutaneous Central Pressure *Format:* Text (categorical values specified by STS)

ParentShortName: PercCentPress *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Percutaneous Central Pressure Location - Left Internal Jugular *SeqNo:* 5010

Short Name: **PCPLocLJug** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the percutaneous central pressure was used in the left internal jugular.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Percutaneous Central Pressure *Format:* Text (categorical values specified by STS)

ParentShortName: PercCentPress *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Percutaneous Central Pressure Location - Right Subclavian *SeqNo:* 5020

Short Name: **PCPLocRSub** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the percutaneous central pressure was used in the right subclavian.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Percutaneous Central Pressure *Format:* Text (categorical values specified by STS)

ParentShortName: PercCentPress *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Percutaneous Central Pressure Location - Left Subclavian *SeqNo:* 5030

Short Name: **PCPLocLSub** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the percutaneous central pressure was used in the left subclavian.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Percutaneous Central Pressure *Format:* Text (categorical values specified by STS)

ParentShortName: PercCentPress *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Percutaneous Central Pressure Location - Right Femoral Vein *SeqNo:* 5040

Short Name: **PCPLocRFem** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the percutaneous central pressure was used in the right femoral vein.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Percutaneous Central Pressure *Format:* Text (categorical values specified by STS)

ParentShortName: PercCentPress *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Percutaneous Central Pressure Location - Left Femoral Vein *SeqNo:* 5050

Short Name: **PCPLocLFem** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the percutaneous central pressure was used in the left femoral vein.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Percutaneous Central Pressure *Format:* Text (categorical values specified by STS)

ParentShortName: PercCentPress *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Percutaneous Central Pressure Location - Other *SeqNo:* 5060

Short Name: **PCPLocOth** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the percutaneous central pressure was used in any other location.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Percutaneous Central Pressure *Format:* Text (categorical values specified by STS)

ParentShortName: PercCentPress *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: CVP Placed By Anesthesia *SeqNo:* 5070

Short Name: **CVPPlaced** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a CVP was placed by anesthesia during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Swan-Ganz Catheter *SeqNo:* 5080

Short Name: SGCath *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a Swan-Ganz catheter was inserted or utilized by anesthesia during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Oximetric Central Line *SeqNo:* 5090

Short Name: ScVO2 *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an oximetric central line was inserted or utilized by anesthesia during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Ultrasound Guidance Used For Line Placement *SeqNo:* 5100

Short Name: **UltraGuide** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether real-time ultrasound imaging was used for line placement (i.e., Sonosite or equivalent).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	None
2	Yes - arterial line only
3	Yes - central venous line only
4	Yes - arterial and central venous lines

Long Name: Neurologic Monitoring *SeqNo:* 5110

Short Name: **NeuroMonitor** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received neurologic monitoring during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Neurologic Monitoring Type *SeqNo:* 5120

Short Name: **NeuroMonitorType** *Core:* No

Section Name: Anesthesia Monitoring *Harvest:* No

DBTableName Operations

Definition: Indicate the type of neurologic monitoring the patient received during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Neurologic Monitoring *Format:* Text (categorical values specified by STS)

ParentShortName: NeuroMonitor *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Near Infrared Spectroscopy (NIRS)
2	Transcranial Doppler (TCD)
3	Bispectral Index (BIS)
9	Other

Long Name: Neurologic Monitoring - Bispectral Index *SeqNo:* 5130

Short Name: **NeuroMonBIS** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the neurologic monitoring performed during this procedure included Bispectral Index (BIS).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Neurologic Monitoring *Format:* Text (categorical values specified by STS)

ParentShortName: NeuroMonitor *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Neurologic Monitoring - Transcranial Doppler *SeqNo:* 5140

Short Name: **NeuroMonTCD** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the neurologic monitoring performed during this procedure included Transcranial Doppler (TCD).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Neurologic Monitoring *Format:* Text (categorical values specified by STS)

ParentShortName: NeuroMonitor *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Neurologic Monitoring - NIRS (Cerebral) *SeqNo:* 5141

Short Name: **NeuroMonNIRS** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the neurologic (cerebral) monitoring performed during this procedure included Near Infrared Spectroscopy (NIRS).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Neurologic Monitoring *Format:* Text (categorical values specified by STS)

ParentShortName: NeuroMonitor *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Neurologic Monitoring - Other *SeqNo:* 5150

Short Name: **NeuroMonOth** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the neurologic monitoring performed during this procedure included some other method.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Neurologic Monitoring *Format:* Text (categorical values specified by STS)

ParentShortName: NeuroMonitor *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Lowest Recorded Intraoperative Temperature *SeqNo:* 5160

Short Name: **LowIntraopTemp** *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate the patient's lowest temperature (in degrees Centigrade) recorded during the intraoperative period.

LowValue: 0.1 *UsualRangeLow:* 16.0

HighValue: 40.9 *UsualRangeHigh:* 38.0

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Lowest Intraoperative Temperature Monitoring Site *SeqNo:* 5170

Short Name: IntraopTempSite *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate the site where the patient's lowest temperature was being recorded intraoperatively.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Nasal
2	Esophageal
3	Bladder
4	Rectal
5	Axillary
6	Skin
7	Tympanic
9	Other

Long Name: Transesophageal Echocardiography *SeqNo:* 5180

Short Name: TEE *Core:* Yes

Section Name: Anesthesia Monitoring *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a transesophageal echocardiography probe was placed or attempted during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:

Code:	Value:
1	Yes
2	No

Long Name: Induction Date and Time *SeqNo:* 5190

Short Name: **InductionDT** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm 24-hour clock) of day when the patient was first induced.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date/Time - mm/dd/yyyy hh:mm

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Induction Type - Inhalation *SeqNo:* 5200

Short Name: **IndTypeInh** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an inhalation drug was used as an induction agent.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Primary Induction Agent - Inhalation *SeqNo:* 5210

Short Name: **PrimIndAgentInhal** *Core:* No

Section Name: Anesthesia Anesthetic Technique *Harvest:* No

DBTableName Operations

Definition: Indicate the type of inhalation drug that was used for this operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Inhalation *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeInh *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Sevoflurane
2	Halothane

Long Name: Induction Agent - Inhalation - Sevoflurane *SeqNo:* 5220

Short Name: **IndAgentInhalSevo** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether sevoflurane was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Inhalation *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeInh *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Inhalation - Isoflurane *SeqNo:* 5230

Short Name: **IndAgentInhalIso** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether isoflurane was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Inhalation *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeInh *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Type - Intravenous *SeqNo:* 5240

Short Name: **IndTypeIV** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an intravenous drug was used as an induction agent.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Primary Induction Agent - Intravenous *SeqNo:* 5250

Short Name: **PrimIndAgentIV** *Core:* No

Section Name: Anesthesia Anesthetic Technique *Harvest:* No

DBTableName Operations

Definition: Indicate the primary type of intravenous drug that was used for this operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Propofol
2	Etomidate
3	Ketamine
4	Sodium Thiopental
5	Fentanyl
6	Sufentanil
7	Midazolam

Long Name: Induction Agent - Intravenous - Sodium Thiopental *SeqNo:* 5260

Short Name: **IndAgentIVSodT** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether sodium thiopental was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intravenous - Ketamine *SeqNo:* 5270

Short Name: **IndAgentIVKet** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether ketamine was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intravenous - Etomidate *SeqNo:* 5280

Short Name: **IndAgentIVEtom** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether etomidate was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intravenous - Propofol *SeqNo:* 5290

Short Name: **IndAgentIVProp** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether propofol was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intravenous - Fentanyl *SeqNo:* 5300

Short Name: **IndAgentIVFent** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether fentanyl was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intravenous - Midazolam *SeqNo:* 5310

Short Name: **IndAgentIVMid** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether intravenous midazolam was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intravenous - Dexmedetomidine *SeqNo:* 5320

Short Name: **IndAgentIVDex** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether dexmedetomidine was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intravenous - Sufentanil *SeqNo:* 5330

Short Name: **IndAgentIVSuf** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether sufentanil was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intravenous - Remifentanil *SeqNo:* 5340

Short Name: **IndAgentIVRem** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether remifentanil was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intravenous *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Type - Intramuscular *SeqNo:* 5350

Short Name: **IndTypeIM** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an intramuscular drug was used as an induction agent.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Primary Induction Agent - Intramuscular *SeqNo:* 5360

Short Name: **PrimIndAgentIM** *Core:* No

Section Name: Anesthesia Anesthetic Technique *Harvest:* No

DBTableName Operations

Definition: Indicate the primary type of intramuscular drug that was used for this operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intramuscular *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIM *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Ketamine
2	Midazolam

Long Name: Induction Agent - Intramuscular - Ketamine *SeqNo:* 5370

Short Name: **IndAgentIMKet** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether ketamine was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intramuscular *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIM *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Induction Agent - Intramuscular - Midazolam *SeqNo:* 5380

Short Name: **IndAgentIMMid** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether intramuscular midazolam was used for induction of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Induction Type - Intramuscular *Format:* Text (categorical values specified by STS)

ParentShortName: IndTypeIM *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Primary Maintenance Agent *SeqNo:* 5390

Short Name: **PrimMaintAgent** *Core:* No

Section Name: Anesthesia Anesthetic Technique *Harvest:* No

DBTableName Operations

Definition: Indicate the primary maintenance agent used for this patient. If additional agents used, indicate under Intraoperative Pharmacology.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Alfentanil
2	Desflurane
3	Dexmedetomidine
4	Fentanyl
5	Halothane
6	Isoflurane
7	Ketamine
8	Midazolam
9	Morphine
10	Propofol
11	Remifentanil
12	Sevoflurane
13	Sufentanil

Long Name: Regional Anesthetic *SeqNo:* 5400

Short Name: **RegionalAnes** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a regional anesthetic was used during this operation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Site *SeqNo:* 5410

Short Name: **RegAnesSite** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate the technique used for the regional anesthetic.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Thoracic Epidural Catheter
2	Lumbar Epidural Catheter
3	Caudal Epidural Catheter
4	Lumbar Epidural - Single shot
5	Caudal Epidural - Single shot
6	Lumbar Intrathecal - Single Shot

9 Other

Long Name: Regional Anesthetic Drug - Bupivicaine *SeqNo:* 5420

Short Name: **RegAnesDrugBup** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Bupivicaine was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Bupivicaine/Fentanyl *SeqNo:* 5430

Short Name: **RegAnesDrugBupFen** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Bupivicaine/Fentanyl was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Clonidine *SeqNo:* 5440

Short Name: **RegAnesDrugClon** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Clonidine was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Fentanyl *SeqNo:* 5450

Short Name: **RegAnesDrugFen** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Fentanyl was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Hydromorphone *SeqNo:* 5460

Short Name: **RegAnesDrugHydro** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Hydromorphone was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Lidocaine *SeqNo:* 5470

Short Name: **RegAnesDrugLido** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Lidocaine was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Morphine *SeqNo:* 5480

Short Name: **RegAnesDrugMorph** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Morphine was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Ropivicaine *SeqNo:* 5490

Short Name: **RegAnesDrugRop** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Ropivicaine was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Ropivicaine/Fentanyl *SeqNo:* 5500

Short Name: **RegAnesDrugRopFen** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Ropivicaine/Fentanyl was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Tetracaine *SeqNo:* 5510

Short Name: **RegAnesDrugTetra** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the regional anesthetic drug Tetracaine was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Anesthetic Drug - Other *SeqNo:* 5520

Short Name: **RegAnesDrugOth** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether any other regional anesthetic drug was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Regional Anesthetic *Format:* Text (categorical values specified by STS)

ParentShortName: RegionalAnes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Intercostal Nerve Infiltration By Surgeon or Anesthesia *SeqNo:* 5530

Short Name: **IntNerveInf** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether intercostal nerve infiltration was performed by the surgeon or anesthesiologist

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Regional Field Block by Surgeon or Anesthesia *SeqNo:* 5540

Short Name: **RegFieldBlock** *Core:* Yes

Section Name: Anesthesia Anesthetic Technique *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether a regional field block was performed by the surgeon or anesthesiologist

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Airway In-situ (ETT or Tracheostomy) *SeqNo:* 5550

Short Name: **AirwayInsitu** *Core:* Yes

Section Name: Anesthesia Airway *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an Endotracheal Tube (ETT) or tracheostomy was in place prior to arrival in the procedure area.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Airway Type *SeqNo:* 5560

Short Name: **AirwayType** *Core:* Yes

Section Name: Anesthesia Airway *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of airway support that was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	No airway support
7	Simple face mask
2	Bag-mask
3	Nasal cannulae
4	Laryngeal Mask Airway (LMA)
5	Endotracheal intubation
6	Tracheostomy

Long Name: Airway Size - Laryngeal Mask Airway *SeqNo:* 5570

Short Name: **AirwaySizeLMA** *Core:* Yes

Section Name: Anesthesia Airway *Harvest:* Yes

DBTableName Operations

Definition: Indicate the size of the laryngeal mask airway used during this operation

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Airway Type *Format:* Text (categorical values specified by STS)

ParentShortName: AirwayType *DataLength:*

ParentValue: = "Laryngeal Mask Airway (LMA)" *Data Source:* User

ParentHarvestCodes: 4

Harvest Codes:

Code:	Value:
10	1.0

15	1.5
20	2.0
25	2.5
30	3.0
40	4.0
50	5.0

Long Name: Airway Size - Endotracheal Intubation *SeqNo:* 5580

Short Name: **AirwaySizeIntub** *Core:* Yes

Section Name: Anesthesia Airway *Harvest:* Yes

DBTableName Operations

Definition: Indicate the size of the endotracheal intubation airway used during this procedure. Measurement should be the inner diameter (ID) size measured in milimeters (mm).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Airway Type *Format:* Text (categorical values specified by STS)

ParentShortName: AirwayType *DataLength:*

ParentValue: = "Endotracheal Intubation" *Data Source:* User

ParentHarvestCodes: 5

Harvest Codes:

Code:	Value:
25	2.5
30	3.0
35	3.5
40	4.0
45	4.5
50	5.0
55	5.5
60	6.0
65	6.5
70	7.0
75	7.5
80	8.0
95	Other
96	Airway size not listed (DLETT, Tracheotomy)

Long Name: Cuffed *SeqNo:* 5590

Short Name: **Cuffed** *Core:* Yes

Section Name: Anesthesia Airway *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the endotracheal tube was cuffed.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Airway Type *Format:* Text (categorical values specified by STS)

ParentShortName: AirwayType *DataLength:*

ParentValue: = "Endotracheal Intubation" *Data Source:* User

ParentHarvestCodes: 5

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Airway Site *SeqNo:* 5600

Short Name: **AirwaySite** *Core:* Yes

Section Name: Anesthesia Airway *Harvest:* Yes

DBTableName Operations

Definition: Indicate the endotracheal intubation site.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Airway Type *Format:* Text (categorical values specified by STS)

ParentShortName: AirwayType *DataLength:*

ParentValue: = "Endotracheal intubation" or "Tracheostomy" *Data Source:* User

ParentHarvestCodes: 5|6

Harvest Codes:

Code:	Value:
1	Oral
2	Nasal
3	Tracheostomy

Long Name: Endobronchial Isolation (DLETT, Bronchial Blocker) *SeqNo:* 5610

Short Name: **EndobroncIso** *Core:* Yes

Section Name: Anesthesia Airway *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether endobronchial isolation was employed using a double lumen ETT or bronchial blocker.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: ICU-Type Ventilator Used Intraop *SeqNo:* 5620

Short Name: **ICUTypeVent** *Core:* Yes

Section Name: Anesthesia Airway *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether an ICU-type ventilator was used during the procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Transfusion *SeqNo:* 5630

Short Name: **Transfusion** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient received a transfusion during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Packed Red Blood Cells (PRBC) *SeqNo:* 5640

Short Name: **PRBC** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient received packed red blood cells (PRBC) during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Packed Red Blood Cells (PRBC) - Number *SeqNo:* 5650

Short Name: **PRBCNum** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for red blood cells (PRBC) for this operation. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Packed Red Blood Cells (PRBC) *Format:* Integer

ParentShortName: PRBC *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Packed Red Blood Cells (PRBC) - Units *SeqNo:* 5660

Short Name: **PRBCUnits** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of units of red blood cells (PRBC) transfused during this operation. This includes blood products used for priming or during cardiopulmonary bypass. Any part of a unit counts as a whole unit. Enter zero if no red blood cells were transfused.

LowValue: 0 *UsualRangeLow:*

HighValue: 99 *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Integer

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Platelets *SeqNo:* 5670

Short Name: **Platelets** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient received platelets during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Platelets - Number *SeqNo:* 5680

Short Name: **PlateletsNum** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for platelets for this procedure. Donor exposures refer to the number of different blood donors the patient is exposed to. For example, a pooled platelet pack of 5 units from separate donors would count as 5 donor exposures even if only one half of the pooled platelet volume is given. A single-donor platelet pheresis however would only count as one donor exposure, regardless of the volume transfused.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Platelets *Format:* Integer

ParentShortName: Platelets *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Platelets Pheresis Units *SeqNo:* 5690

Short Name: **PlateletsPheresis** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of units of platelet pheresis for this procedure. Any part of a unit counts as a whole unit. Enter zero if no platelet pheresis units were transfused.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Integer

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Random Donor Platelet Units *SeqNo:* 5700

Short Name: **PlateletsDonor** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of random donor platelet units the patient received during this procedure. Any part of a unit counts as a whole unit. Enter zero if no random donor platelets were transfused.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Integer

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Fresh Frozen Plasma (FFP) *SeqNo:* 5710

Short Name: **FFP** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient received Fresh Frozen Plasma (FFP) during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Fresh Frozen Plasma (FFP) - Number *SeqNo:* 5720

Short Name: **FFPNum** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for Fresh Frozen Plasma (FFP) for this procedure. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Fresh Frozen Plasma (FFP) *Format:* Integer

ParentShortName: FFP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Fresh Frozen Plasma (FFP) - Units *SeqNo:* 5730

Short Name: **FFPUnits** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of units of fresh frozen plasma (FFP) transfused during this operation. This includes blood products used for priming or during cardiopulmonary bypass. Any part of a unit counts as a whole unit. Enter zero if no FFP were transfused.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Integer

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Cryoprecipitate *SeqNo:* 5740

Short Name: **Cryo** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient received Cryoprecipitate during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cryoprecipitate - Number *SeqNo:* 5750

Short Name: CryoNum *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for Cryoprecipitate for this procedure. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Cryoprecipitate *Format:* Integer

ParentShortName: Cryo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Cryoprecipitate - Units *SeqNo:* 5760

Short Name: CryoUnits *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of units of cryoprecipitate transfused during this operation. This includes blood products used for priming or during cardiopulmonary bypass. Any part of a unit counts as a whole unit. Enter zero if no cryoprecipitate was transfused.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Integer

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Whole Blood *SeqNo:* 5770

Short Name: **WholeBld** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient received whole blood during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Whole Blood - Number *SeqNo:* 5780

Short Name: **WholeBldNum** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate the number of donor exposures the patient had for whole blood for this procedure. Donor exposure refers to each unit or fraction of a unit given to the patient. For example, giving 20 cc volume from one unit counts as a single donor exposure. Further transfusion from that same unit is included in that single donor exposure. Utilization of any part of a second unit counts as another donor exposure. Pre-operative autologous blood donation counts as a single donor exposure.

LowValue: 1 *UsualRangeLow:*

HighValue: 40 *UsualRangeHigh:*

Parent Long Name: Whole Blood *Format:* Integer

ParentShortName: WholeBld *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Whole Blood - Units *SeqNo:* 5790

Short Name: **WholeBldUnits** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate the number of units of whole blood transfused during this operation. This includes blood products used for priming or during cardiopulmonary bypass. Any part of a unit counts as a whole unit. Enter zero if no whole blood was transfused.

LowValue: 0 *UsualRangeLow:*

HighValue: 50 *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Integer

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Autologous Transfusion *SeqNo:* 5800

Short Name: **AutologousTrans** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient was transfused with any autologous blood products that had been collected prior to surgery (e.g. self-donated).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cell Saver/Salvage *SeqNo:* 5810

Short Name: **CellSavSal** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether cell saver/salvage blood was transfused during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Directed Donor Units *SeqNo:* 5820

Short Name: **DirDonorUnits** *Core:* Yes

Section Name: Anesthesia Transfusion *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient recevied any directed donor transfusions during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Factor VIIa *SeqNo:* 5830

Short Name: **FactorVIIa** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient received Factor VIIa (NovoSeven) during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Transfusion *Format:* Text (categorical values specified by STS)

ParentShortName: Transfusion *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Factor VIIa Dose *SeqNo:* 5840

Short Name: **FactorDose** *Core:* No

Section Name: Anesthesia Transfusion *Harvest:* No

DBTableName Operations

Definition: Indicate the total dosage of Factor VIIa given to the patient. Total dosage should be reported in micrograms per kg. For example, if 360 mcg is given to a 4 kg patient, the total dosage is reported as 90 mcg/kg.

LowValue: 1 *UsualRangeLow:*

HighValue: 300 *UsualRangeHigh:*

Parent Long Name: Factor VIIa *Format:* Integer

ParentShortName: FactorVIIa *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Factor VIIa (Novoseven) mcg/kg - Dose 1 *SeqNo:* 5850

Short Name: **ProcoagFactorVIIa1** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the first dose in micrograms per kilogram of Factor VIIa given during this procedure. Enter zero if none given.

LowValue: 0 *UsualRangeLow:*

HighValue: 200 *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Factor VIIa (Novoseven) mcg/kg - Dose 2 *SeqNo:* 5860

Short Name: **ProcoagFactorVIIa2** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the second dose in micrograms per kilogram of Factor VIIa given during this procedure. Enter zero if no second dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 200 *UsualRangeHigh:*

Parent Long Name: Factor VIIa (Novoseven) mcg/kg - Dose 1 *Format:* Integer

ParentShortName: ProcoagFactorVIIa1 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Factor VIIa (Novoseven) mcg/kg - Dose 3 *SeqNo:* 5870

Short Name: **ProcoagFactorVIIa3** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the third dose in micrograms per kilogram of Factor VIIa given during this procedure. Enter zero if no third dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 200 *UsualRangeHigh:*

Parent Long Name: Factor VIIa (Novoseven) mcg/kg - Dose 2 *Format:* Integer

ParentShortName: ProcoagFactorVIIa2 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Prothrombin Concentrate units/kg - Dose 1 *SeqNo:* 5880

Short Name: **ProcoagProthrom1** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the first dose in units per kilogram of prothrombin concentrate given during this procedure. Enter zero if no dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Prothrombin Concentrate units/kg - Dose 2 *SeqNo:* 5890

Short Name: **ProcoagProthrom2** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the second dose in units per kilogram of prothrombin concentrate given during this procedure. Enter zero if no second dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Prothrombin Concentrate units/kg - Dose 1 *Format:* Integer

ParentShortName: ProcoagProthrom1 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Prothrombin Concentrate units/kg - Dose 3 *SeqNo:* 5900

Short Name: **ProcoagProthrom3** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the third dose in units per kilogram of prothrombin concentrate given during this procedure. Enter zero if no third dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Prothrombin Concentrate units/kg - Dose 2 *Format:* Integer

ParentShortName: ProcoagProthrom2 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Fibrinogen Concentrate mg/kg - Dose 1 *SeqNo:* 5910

Short Name: **ProcoagFibrin1** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the first dose in mg per kilogram of fibrinogen concentrate given during this procedure. Enter zero if no dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Fibrinogen Concentrate mg/kg - Dose 2 *SeqNo:* 5920

Short Name: **ProcoagFibrin2** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the second dose in mg per kilogram of fibrinogen concentrate given during this procedure. Enter zero if no second dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Fibrinogen Concentrate mg/kg - Dose 1 *Format:* Integer

ParentShortName: ProcoagFibrin1 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Fibrinogen Concentrate mg/kg - Dose 3 *SeqNo:* 5930

Short Name: **ProcoagFibrin3** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the third dose in mg per kilogram of fibrinogen concentrate given during this procedure. Enter zero if no third dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 100 *UsualRangeHigh:*

Parent Long Name: Fibrinogen Concentrate mg/kg - Dose 2 *Format:* Integer

ParentShortName: ProcoagFibrin2 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Antithrombin 3 Concentrate units - Dose 1 *SeqNo:* 5940

Short Name: **ProcoagAntithrom1** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the first dose in units of antithrombin 3 concentrate given during this procedure. Enter zero if no dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 5000 *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Antithrombin 3 Concentrate units - Dose 2 *SeqNo:* 5950

Short Name: **ProcoagAntithrom2** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the second dose in units of antithrombin 3 concentrate given during this procedure. Enter zero if no second dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 5000 *UsualRangeHigh:*

Parent Long Name: Antithrombin 3 Concentrate units - Dose 1 *Format:* Integer

ParentShortName: ProcoagAntithrom1 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Antithrombin 3 Concentrate units - Dose 3 *SeqNo:* 5960

Short Name: **ProcoagAntithrom3** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the third dose in units of antithrombin 3 concentrate given during this procedure. Enter zero if no third dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 5000 *UsualRangeHigh:*

Parent Long Name: Antithrombin 3 Concentrate units - Dose 2 *Format:* Integer

ParentShortName: ProcoagAntithrom2 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Desmopressin (DDAVP) mcg/kg - Dose 1 *SeqNo:* 5970

Short Name: **ProcoagDesmo1** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the first dose in micrograms per kilogram of desmopressin (DDAVP) given during this procedure. Enter zero if no dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 6 *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Desmopressin (DDAVP) mcg/kg - Dose 2 *SeqNo:* 5980

Short Name: **ProcoagDesmo2** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the second dose in micrograms per kilogram of desmopressin (DDAVP) given during this procedure. Enter zero if no second dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 6 *UsualRangeHigh:*

Parent Long Name: Desmopressin (DDAVP) mcg/kg - Dose 1 *Format:* Integer

ParentShortName: ProcoagDesmo1 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Desmopressin (DDAVP) mcg/kg - Dose 3 *SeqNo:* 5990

Short Name: **ProcoagDesmo3** *Core:* Yes

Section Name: Anesthesia Procoagulents *Harvest:* Yes

DBTableName Operations

Definition: Indicate the third dose in micrograms per kilogram of desmopressin (DDAVP) given during this procedure. Enter zero if no third dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 6 *UsualRangeHigh:*

Parent Long Name: Desmopressin (DDAVP) mcg/kg - Dose 2 *Format:* Integer

ParentShortName: ProcoagDesmo2 *DataLength:*

ParentValue: >0 *Data Source:* User

ParentHarvestCodes: >0

Long Name: Epsilon Aminocaproic Acid (Amicar) Used *SeqNo:* 6000

Short Name: **AntifibEpUse** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether EACA was used.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Epsilon Aminocaproic Acid (Amicar) Load mg/kg *SeqNo:* 6010

Short Name: **AntifibEpLoad** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the loading dose in mg/kg of epsilon aminocaproic acid (Amicar) given during this procedure. Enter zero if no loading dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 300 *UsualRangeHigh:*

Parent Long Name: Epsilon Aminocaproic Acid (Amicar) Used *Format:* Integer

ParentShortName: AntifibEpUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Epsilon Aminocaproic Acid (Amicar) Pump Prime mg/kg *SeqNo:* 6020

Short Name: **AntifibEpPrime** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the pump priming dose in mg/kg of epsilon aminocaproic acid (Amicar) given during this procedure. Enter zero if no pump priming dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 300 *UsualRangeHigh:*

Parent Long Name: Epsilon Aminocaproic Acid (Amicar) Used *Format:* Integer

ParentShortName: AntifibEpUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Epsilon Aminocaproic Acid (Amicar) Infusion Rate mg/kg/hr *SeqNo:* 6030

Short Name: **AntifibEpInfRate** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the infusion rate in mg/kg/hour of epsilon aminocaproic acid (Amicar) given during this procedure. Enter zero if no infusion initiated.

LowValue: 0 *UsualRangeLow:*

HighValue: 200 *UsualRangeHigh:*

Parent Long Name: Epsilon Aminocaproic Acid (Amicar) Used *Format:* Integer

ParentShortName: AntifibEpUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Tranexamic Acid Used *SeqNo:* 6040

Short Name: **AntifibTranexUse** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether tranexamic acid was used during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Tranexamic Acid Load mg/kg *SeqNo:* 6050

Short Name: **AntifibTranexLoad** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the loading dose in mg/kg of tranexamic acid given during this procedure. Enter zero if no loading dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 30 *UsualRangeHigh:*

Parent Long Name: Tranexamic Acid Used *Format:* Integer

ParentShortName: AntifibTranexUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Tranexamic Acid Pump Prime mg/kg *SeqNo:* 6060

Short Name: **AntifibTranexPrime** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the pump priming dose in mg/kg of tranexamic acid given during this procedure. Enter zero if no pump priming dose given.

LowValue: 0 *UsualRangeLow:*

HighValue: 30 *UsualRangeHigh:*

Parent Long Name: Tranexamic Acid Used *Format:* Integer

ParentShortName: AntifibTranexUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Tranexamic Acid Infusion Rate mg/kg/hr *SeqNo:* 6070

Short Name: **AntifibTranexInfRate** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the infusion rate in mg/kg/hour of tranexamic acid given during this procedure. Enter zero if no infusion initiated.

LowValue: 0 *UsualRangeLow:*

HighValue: 30 *UsualRangeHigh:*

Parent Long Name: Tranexamic Acid Used *Format:* Integer

ParentShortName: AntifibTranexUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Trasylol (Aprotinin) Used *SeqNo:* 6080

Short Name: **AntifibTrasylUse** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether trasylol (aprotinin) was given to the patient during this procedure.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Trasylol (Aprotinin) Load cc/kg *SeqNo:* 6090

Short Name: **AntifibTrasylLoad** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the loading dose of trasylol (aprotinin) in cc/kg used during this procedure. Enter zero if no loading dose was used.

LowValue: 0 *UsualRangeLow:*

HighValue: 10 *UsualRangeHigh:*

Parent Long Name: Trasylol (Aprotinin) Used *Format:* Integer

ParentShortName: AntifibTrasylUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Trasylol (Aprotinin) Pump Prime cc/kg *SeqNo:* 6100

Short Name: **AntifibTrasylPrime** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the pump priming dose of trasylol (aprotinin) in cc/kg used during this procedure. Enter zero if no pump priming dose was used.

LowValue: 0 *UsualRangeLow:*

HighValue: 10 *UsualRangeHigh:*

Parent Long Name: Trasylol (Aprotinin) Used *Format:* Integer

ParentShortName: AntifibTrasylUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Trasylol (Aprotinin) Infusion Rate cc/kg/hr *SeqNo:* 6110

Short Name: **AntifibTrasylInfRate** *Core:* Yes

Section Name: Anesthesia Antifibrinolytics *Harvest:* Yes

DBTableName Operations

Definition: Indicate the infusion rate of trasylol (aprotinin) in cc/kg/hour used during this procedure. Enter zero if no infusion initiated.

LowValue: 0 *UsualRangeLow:*

HighValue: 10 *UsualRangeHigh:*

Parent Long Name: Trasylol (Aprotinin) Used *Format:* Integer

ParentShortName: AntifibTrasylUse *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Intraoperative Pharmacology Table Unique Record Identifier *SeqNo:* 6120

Short Name: **IPUniqueID** *Core:* Yes

Section Name: Anesthesia Intraoperative Pharmacology *Harvest:* Yes

DBTableName IntraopPharm

Definition: Unique idenitifer for the record in the Intraoperative Pharmacology table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Intraoperative Pharmacology Link to Operations Table *SeqNo:* 6130

Short Name: **OperationID** *Core:* Yes

Section Name: Anesthesia Intraoperative Pharmacology *Harvest:* Yes

DBTableName IntraopPharm

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. This field is the foreign key that links the Intraoperative Pharmacology record with the associated record in the Operations table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: IntraOperative Pharmacology (Including CPB) *SeqNo:* 6140

Short Name: **IntraopPharm** *Core:* Yes

Section Name: Anesthesia Intraoperative Pharmacology *Harvest:* Yes

DBTableName IntraopPharm

Definition: Indicate the medications that were given during the intraoperative time period.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
10	None
450	5-HT3 Agents (e.g., Ondansetron)
20	Adenosine bolus
50	Amiodarone
420	Bronchodilators - Inhaled
440	Benzodiazepine
70	Calcium Chloride infusion
75	Calcium Gluconate infusion
480	Desflurane

80	Dexmetetomidine (Precedex)
90	Dobutamine infusion
100	Dopamine infusion
110	Epinephrine (Adrenalin) infusion
120	Esmolol
510	Fenoldopam Infusion
140	Furosemide
150	Insulin
460	Isoflurane
170	Isoproterenol infusion
490	Ketamine
180	Norepinephrine (Levophed) infusion
190	Magnesium Sulfate
210	Milrinone
430	Narcotic
230	Nesiritide Infusion
240	Nicardipine Infusion
250	Nitric Oxide inhalation
260	Nitroglycerin (Tridil) infusion
270	Nitroprusside (Nipride)
280	Phenoxybenzamine bolus
290	Phentolamine (Regitine)
300	Phenylephrine infusion
500	Procainamide
310	Propofol (Diprivan) infusion
320	Prostaglandin infusion
470	Sevoflurane
400	Sodium Bicarbonate bolus
160	Steroids IV / CPB (Hydrocortisone/Methylprednisolone/Dexamethasone)
340	Thyroid Hormone
410	Tromethamine (THAM) bolus
360	Vasopressin infusion
370	Other Inotrope
380	Other Vasodilator
390	Other Vasoconstrictor

Long Name: ICU Pharmacology Table Unique Record Identifier *SeqNo:* 6150

Short Name: **ICUPUniqueID** *Core:* Yes

Section Name: Anesthesia Pharmacology On Arrival To ICU/PACU *Harvest:* Yes

DBTableName ICUPharm

Definition: Unique idenitifer for the record in the ICU Pharmacology table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: ICU Pharmacology Link to Operations Table *SeqNo:* 6160

Short Name: **OperationID** *Core:* Yes

Section Name: Anesthesia Pharmacology On Arrival To ICU/PACU *Harvest:* Yes

DBTableName ICUPharm

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. This field is the foreign key that links the ICU Pharmacology record with the associated record in the Operations table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: ICU/PACU Arrival Pharmacology *SeqNo:* 6170

Short Name: **ICUPharm** *Core:* Yes

Section Name: Anesthesia Pharmacology On Arrival To ICU/PACU *Harvest:* Yes

DBTableName ICUPharm

Definition: Indicate the medications that were given to the patient on arrival to ICU (Intensive Care Unit) / PACU (Post Anesthesia Care Unit).

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
10	None
20	Aminocaproic Acid (Amicar) infusion
30	Amiodarone infusion
40	Aprotinin (Trasylol) infusion
370	Benzodiazepine infusion
50	Calcium Chloride infusion
60	Calcium Gluconate infusion
70	Dexmetetomidine (Precedex) infusion
80	Dobutamine infusion
90	Dopamine infusion
100	Epinephrine (Adrenalin) infusion
340	Esmolol infusion
390	Fenoldopam Infusion
120	Insulin infusion
130	Isoproterenol infusion
350	Local anesthetic infusion via catheter (On-Q, pleural catheters)
150	Milrinone infusion
170	Muscle Relaxant infusion
360	Narcotic infusion
180	Nesiritide Infusion

190	Nicardipine infusion
200	Nitric Oxide inhalation
210	Nitroglycerin (Tridil) infusion
220	Nitroprusside (Nipride) infusion
230	Norepinephrine (Levophed) infusion
240	Phentolamine (Regitine)Infusion
250	Phenylephrine infusion
380	Procainamide bolus/infusion
260	Propofol (Diprivan) infusion
270	Prostaglandin infusion
280	Thyroid Hormone infusion
290	Tranexamic Acid infusion
300	Vasopressin infusion
310	Other Inotrope
320	Other Vasodilator
330	Other Vasoconstrictor

Long Name: ICU/PACU Arrival Date and Time *SeqNo:* 6180

Short Name: **ICUArrDT** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm 24-hour clock) the patient arrived to the ICU / PACU.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Date/Time - mm/dd/yyyy hh:mm

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Initial FiO2 *SeqNo:* 6190

Short Name: **InitialFiO2** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the initial FiO2 (closest to the patient's arrival).

LowValue: 0.17 *UsualRangeLow:*

HighValue: 1.0 *UsualRangeHigh:*

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Mechanical Circulatory Support (ECMO/VAD) *SeqNo:* 6200

Short Name: **MechCircSup** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient was on extracorporeal membrane oxygenation (ECMO) or on Ventricular Assist Device (VAD) on arrival.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Arterial Blood Gas *SeqNo:* 6210

Short Name: **ABG** *Core:* No

Section Name: Anesthesia ICU/PACU Care *Harvest:* No

DBTableName Operations

Definition: Indicate whether an arterial blood gas (ABG) was obtained on arrival.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: ICU/PACU Arrival Labs *SeqNo:* 6211

Short Name: **ICUPACULabs** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether lab tests were drawn upon arrival to PACU or ICU.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: pH *SeqNo:* 6220
Short Name: **pH** *Core:* Yes
Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes
DBTableName Operations
Definition: Indicate the pH level from the first ABG obtained.
LowValue: 6.00 *UsualRangeLow:* 7.20
HighValue: 8.00 *UsualRangeHigh:* 7.50
Parent Long Name: ICU/PACU Arrival Labs *Format:* Real
ParentShortName: ICUPACULabs *DataLength:*
ParentValue: = "Yes" *Data Source:* User
ParentHarvestCodes: 1

Long Name: pCO2 *SeqNo:* 6230
Short Name: **pCO2** *Core:* Yes
Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes
DBTableName Operations
Definition: Indicate the pCO2 level from the first ABG obtained.
LowValue: 20 *UsualRangeLow:* 30
HighValue: 150 *UsualRangeHigh:* 50
Parent Long Name: ICU/PACU Arrival Labs *Format:* Integer
ParentShortName: ICUPACULabs *DataLength:*
ParentValue: = "Yes" *Data Source:* User
ParentHarvestCodes: 1

Long Name: pO2 *SeqNo:* 6240
Short Name: **pO2** *Core:* Yes
Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes
DBTableName Operations
Definition: Indicate the pO2 level from the first ABG obtained.
LowValue: 15 *UsualRangeLow:* 30
HighValue: 650 *UsualRangeHigh:* 600
Parent Long Name: ICU/PACU Arrival Labs *Format:* Integer
ParentShortName: ICUPACULabs *DataLength:*
ParentValue: = "Yes" *Data Source:* User
ParentHarvestCodes: 1

Long Name: Base Excess *SeqNo:* 6250

Short Name: **BaseExcess** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the Base Excess level from the first ABG obtained.

LowValue: -30 *UsualRangeLow:* -5

HighValue: 30 *UsualRangeHigh:* 5

Parent Long Name: ICU/PACU Arrival Labs *Format:* Integer

ParentShortName: ICUPACULabs *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Lactate *SeqNo:* 6260

Short Name: **Lactate** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the Lactate level from the first ABG obtained.

LowValue: 0.1 *UsualRangeLow:* 0.1

HighValue: 30.0 *UsualRangeHigh:* 10.0

Parent Long Name: ICU/PACU Arrival Labs *Format:* Real

ParentShortName: ICUPACULabs *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Hematocrit *SeqNo:* 6270

Short Name: **Hematocrit** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the hematocrit level from the first ABG obtained.

LowValue: 5.0 *UsualRangeLow:* 15.0

HighValue: 70.0 *UsualRangeHigh:* 45.0

Parent Long Name: ICU/PACU Arrival Labs *Format:* Real

ParentShortName: ICUPACULabs *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Initial Pulse Oximeter *SeqNo:* 6280

Short Name: **InitPulseOx** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the first pulse oximeter measurement after arrival to ICU / PACU.

LowValue: 50.0 *UsualRangeLow:* 70.0

HighValue: 100.0 *UsualRangeHigh:* 100.0

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Temperature ICU/PACU Arrival *SeqNo:* 6290

Short Name: **TempICUArr** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the patient's temperature in degrees centigrade on arrival to the ICU/PACU.

LowValue: 30.0 *UsualRangeLow:* 34.0

HighValue: 41.0 *UsualRangeHigh:* 37.5

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: Temperature Measurement Site *SeqNo:* 6300

Short Name: **TempSite** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the location where the patient's temperature was measured.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Temperature ICU/PACU Arrival *Format:* Text (categorical values specified by STS)

ParentShortName: TempICUArr *DataLength:*

ParentValue: Is Not Missing *Data Source:* User

ParentHarvestCodes: Not null

Harvest Codes:

Code:	Value:
1	Forehead scan
2	Tympanic membrane
3	Skin
4	Rectal
5	Bladder
6	Oral
7	Axillary
9	Other

Long Name: Temporary Pacemaker on Arrival In ICU/PACU *SeqNo:* 6310

Short Name: **TempPace** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the need for a temporary pacemaker on arrival to the ICU/PACU.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:

1 Yes

2 No

Long Name: Temporary Pacemaker Site *SeqNo:* 6320

Short Name: **TempPaceSite** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the site of the temporary pacemaker.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Temporary Pacemaker on Arrival In ICU/PACU *Format:* Text (categorical values specified by STS)

ParentShortName: TempPace *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Epicardial
2	Transvenous

Long Name: Type of Temporary Pacing *SeqNo:* 6330

Short Name: **TempPaceType** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate the type of temporary pacing.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Temporary Pacemaker on Arrival In ICU/PACU *Format:* Text (categorical values specified by STS)

ParentShortName: TempPace *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Atrial
2	Atrio-ventricular
3	Ventricular
9	Other

Long Name: Disposition Under Anesthesia *SeqNo:* 6340

Short Name: **DispUnderAnes** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate patient disposition after completion of anesthetic management.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Discharge home as planned after PACU/Recovery
2	Admit to hospital floor as planned
3	Admit to ICU as planned
4	Unplanned admission to hospital or ICU
8	Other location not listed above
9	Patient expired while under anesthetic management

Long Name: Peri-Anesthetic Demise (Within 24 Hours of Last Anesthesia End Time) *SeqNo:* 6350

Short Name: **PeriAnesDemise** *Core:* Yes

Section Name: Anesthesia ICU/PACU Care *Harvest:* Yes

DBTableName Operations

Definition: Indicate whether the patient died within 24 hours of end of anesthesia.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Anesthesia Adverse Events Unique Record Identifier *SeqNo:* 6360

Short Name: **AAEUniqueID** *Core:* Yes

Section Name: Anesthesia Adverse Events *Harvest:* Yes

DBTableName AAdvEvents

Definition: Unique identifier for the record in the Anesthesia Adverse Events table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Anesthesia Adverse Events Link to Operation Table *SeqNo:* 6370

Short Name: **OperationID** *Core:* Yes

Section Name: Anesthesia Adverse Events *Harvest:* Yes

DBTableName AAdvEvents

Definition: An arbitrary, unique value generated by the software that permanently identifies each operation record in the participant's database. This field is the foreign key that links the Anesthesia Adverse Events record with the associated record in the Operations table.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

ParentHarvestCodes:

Long Name: Anesthesia Adverse Event *SeqNo:* 6380

Short Name: **AnesAdvEvent** *Core:* Yes

Section Name: Anesthesia Adverse Events *Harvest:* Yes

DBTableName AAdvEvents

Definition: Indicate the anesthesia-related adverse events that occurred.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
10	None	No anesthesia-related adverse events occurred
20	Oral / Nasal Injury - Bleeding	Indicate whether the patient experienced an oral / nasal injury such as lip or gum laceration or tooth injury.
30	Respiratory Arrest	Indicate whether the patient experienced preoperative, intraoperative, or postoperative respiratory arrest requiring unanticipated airway support such as placement of an LMA or endotracheal tube where not part of the original anesthetic plan.
40	Difficult Intubation/Reintubation	Indicate whether the patient experienced an unanticipated difficult intubation and/or reintubation.
50	Stridor / Sub-glottic Stenosis	Indicate whether the patient experienced post-extubation stridor or sub-glottic stenosis requiring

		therapy such as racemic epinephrine or intravenous dexamethasone or HeliOx
60	Extubation	Indicate whether the patient experienced an extubation in the OR (or any procedure location) or during patient transfer to or from procedure location that was not part of anesthetic plan
70	Endotracheal Tube Migration	Indicate whether the patient experienced endotracheal tube migration requiring repositioning after initial intubation and securing. Endotracheal tube was either too deep or too high.
80	Airway Injury	Indicate whether the patient experienced an airway injury related to ventilation such as barotrauma or pneumothorax.
90	Arrythmia - Central Venous Line Placement	Indicate whether the patient experienced arrythmia during central venous line placement requiring therapy other than withdrawing the wire.
100	Myocardial Injury - Central Venous Line Placement	Indicate whether the patient experienced a myocardial perforation or injury with central venous line placement.
110	Vascular Compromise - Central Venous Line Placement	Indicate whether the patient experienced a vascular compromise (e.g., ischemic leg, venous obstruction) secondary to central venous line placement.
120	Pneumothorax - Central Venous Line Placement	Indicate whether the patient experienced a pneumothorax during central venous line placement.
130	Vascular Access	Indicate whether the patient experienced difficult vascular access requiring more than one hour of attempted access.
140	Hematoma requiring relocation of catheter placement	Indicate whether the patient experienced a hematoma requiring cancellation of the procedure or an additional surgical exploration.
150	Arterial Puncture	Indicate whether the patient experienced an arterial puncture with hematoma formation, hemodynamic consequence or neurologic injury
160	Intravenous/Intra-arterial Air Embolism	Intravenous or Intra-arterial air embolism causing hemodynamic, local or systemic injury
170	Bleeding - Regional Anesthetic Site	Indicate whether the patient experienced bleeding at the regional anesthetic site or with aspiration.
180	Intrathecal Puncture - Regional	Indicate whether an intrathecal puncture occurred during placement of a regional anesthetic that was not part of the anesthetic plan.
190	Local Anesthetic Toxicity - Regional	Indicate whether the patient experienced local anesthetic toxicity during administration of regional anesthesia.
200	Neurologic Injury - Regional	Indicate if a neurologic injury occurred potentially associated with a regional anesthetic.
210	Anaphylaxis/Anaphylactoid Reaction	Indicate whether the patient experienced an anaphylaxis/anaphylactoid reaction.
220	Non-allergic Drug Reaction	Indicate whether the patient experienced a non-allergic

		drug reaction (e.g., "Red Man" syndrome with vancomycin).
230	Medication Administration	Indicate if a medication was administered that was not part of the anesthetic plan at the time of administration.
240	Medication Dosage	Indicate if a medication that was part of the anesthetic plan was given at a dosage or time different than planned.
250	Intraoperative Recall	Indicate whether the patient experienced any intraoperative recall.
260	Malignant Hyperthermia	Indicate whether the patient experienced either a suspected or confirmed episode of Malignant Hyperthermia requiring therapy with dantrolene.
270	Protamine Reaction	Indicate whether the patient experienced a significant protamine reaction requiring additional intervention (e.g., hypotension, brochospasm, elevated pulmonary artery pressure) other than slowing the rate of administration.
280	Cardiac Arrest related to anesthesia care	Indicate whether the patient experienced a cardiac arrest related to anesthesia care.
490	Cardiac arrest unrelated to anesthesia care	Indicate whether the patient experienced a cardiac arrest not related to anesthesia care.
290	TEE-related esophageal bleeding/rupture	Indicate whether the patient experienced esophageal bleeding or rupture during transesophageal echocardiogram (TEE) placement or manipulation.
300	Esophageal Chemical Burn	Indicate whether the patient experienced esophageal chemical burn related to transesophageal echocardiogram (TEE) probe.
310	TEE-related airway compromise	Indicate whether the patient experienced an airway compromise during transesophageal echocardiogram (TEE) placement / manipulation requiring removal of TEE.
320	TEE-Related Extubation	Indicate if the endotracheal tube was removed from the trachea during TEE manipulation.
330	Complications during patient transfer	Indicate whether the patient experienced any trauma related to transfers from stretcher to bed or bed to stretcher or similar transfers.
340	Peripheral Nerve Injury due to positioning	Indicate whether the patient experienced a neurologic injury as a result of patient positioning during anesthetic care.
350	Arterial Line Placement - Extremity ischemia	Impaired perfusion or ischemia distal to arterial line insertion site or attempted insertion site
370	Anesthesia Equipment Malfunction/Failure	Mechanical equipment malfunction or failure impacting delivery of anesthetic care
380	Intravenous Infliltration	Extravasation of fluid, blood or medication into tissue surrounding intravenous access site
390	Integument Injury (skin breakdown or dehiscence,	Integument Injury such as skin breakdown, dehiscence, pressure ulcer or alopecia caused by positioning,

	pressure ulcer or alopecia)	equipment or adhesive tape.
400	Bronchospasm	Bronchospasm, a sudden constriction of the muscles in the walls of the bronchioles in association with anesthesia may appear as an entity in its own right or be a component of another problem such as anaphylaxis. It may present with expiratory wheeze, prolonged exhalation or, in severe cases, complete silence on auscultation.
410	Hemoptysis	Blood or of blood-stained sputum expectorated or suctioned from from the bronchi, larynx, trachea, or lungs
420	Post-operative Nausea/Vomiting requiring admission	Sustained periods nausea or vomiting requiring readmission and intervention
430	Vomiting or Aspiration on Induction/Emergence	Vomiting, with or without aspiration, during induction of anesthesia or emergence from anesthesia
440	Emergence Delirium Requiring Medication	A dissociated state of consciousness following general anesthesia in which the child is uncharacteristically inconsolable, irritable, uncompromising or uncooperative, requiring medication administration
450	Laryngospasm requiring medication	An uncontrolled/involuntary spasm of the laryngeal cords requiring medication administration.
470	Unplanned need to remain intubated post-procedure due to anesthesia factors	
480	Ocular Injury (corneal abrasion or injury)	Injury to the eye(s) during anesthetic management
500	Pulmonary Hypertensive Crisis unrelated to surgical manipulation	Indicate whether the patient experienced a suspected or proven Pulmonary Hypertensive crisis requiring intervention that was not related to surgical manipulation
510	Hypercyanotic Episode (“Tet Spell”) unrelated to surgical manipulation	Indicate whether the patient experienced a hypercyanotic episode (desaturation more than 20% from baseline) not related to surgical manipulation.
900	Other	Unlisted adverse event related to anesthesia

Long Name: Current Or Recent Cigarette Smoker *SeqNo:* 6390

Short Name: **CigSmoker** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate if the patient has smoked cigarettes anytime during the year prior to surgery.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-Family History CAD *SeqNo:* 6400

Short Name: **FHCAD** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate if the patient has/had any direct blood relatives (parents, siblings, children) who have had ANY of the following DIAGNOSED at age less than 55 years for male relatives, or less than 65 years for female relatives:

1. Coronary Artery Disease (angina, previous CABG or PCI)
2. MI
3. Sudden cardiac death without obvious cause.

If the patient is adopted, or the family history is unavailable, code "No".

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-Last Hematocrit *SeqNo:* 6410

Short Name: **Hct** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate the pre-operative Hematocrit level at the date and time closest to surgery.

LowValue: 10 *UsualRangeLow:* 39

HighValue: 70 *UsualRangeHigh:* 53

Parent Long Name: Patient Age In Days *Format:* Integer

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Long Name: RF-Last WBC Count *SeqNo:* 6420

Short Name: **WBC** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate the pre-operative White Blood Cell (WBC) count closest to the date and time prior to surgery

LowValue: 0.1 *UsualRangeLow:* 4.0

HighValue: 50.0 *UsualRangeHigh:* 15.0

Parent Long Name: Patient Age In Days *Format:* Real

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Long Name: RF-Diabetes *SeqNo:* 6430

Short Name: **Diabetes** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a history of diabetes, regardless of duration of disease or need for anti-diabetic agents. Includes on admission or preoperative diagnosis. Does not include gestational diabetes.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-Diabetes-Control *SeqNo:* 6440

Short Name: **DiabCtrl** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate the method of diabetic control. Code the control method patient presented with on admission. Patients placed on a pre-operative diabetic pathway of Insulin drip but at admission were controlled with NONE, diet or oral method are not coded as insulin dependent.

LowValue: 1 *UsualRangeLow:*

HighValue: 5 *UsualRangeHigh:*

Parent Long Name: RF-Diabetes *Format:* Text (categorical values specified by STS)

ParentShortName: Diabetes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	None	No treatment for diabetes.
2	Diet	Diet treatment only.
3	Oral	Oral agent treatment (includes oral agent with/without diet treatment).

4	Insulin	Insulin treatment (includes any combination with insulin).
5	Other	Other adjunctive therapy

Long Name: RF-Last A1c Level *SeqNo:* 6450

Short Name: **A1cLvl** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate the pre-operative HbA1c level closest to the date and time prior surgery.

LowValue: 1.0 *UsualRangeLow:* 4.0

HighValue: 20.0 *UsualRangeHigh:* 8.0

Parent Long Name: RF-Diabetes *Format:* Real

ParentShortName: Diabetes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Long Name: Dyslipidemia *SeqNo:* 6460

Short Name: **Dyslip** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate if the patient has a prior history of dyslipidemia diagnosed and/or treated by a physician. As per National Cholesterol Education Program criteria can include documentation of:
1 Total cholesterol greater than 200 mg/dl, or
2. LDL greater than or equal to 130 mg/dl, or
3. HDL less than 40 mg/dl

Note: If treatment was initiated because the LDL was >100 mg/dl (2.59 mmole/l) in patients with known coronary artery disease, this would quantify as a "Yes". Any pharmacological treatment qualifies as a "Yes".

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-Last Creat Lvl *SeqNo:* 6470

Short Name: **CreatLst** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate the creatinine level closest to the date and time prior surgery.

A creatinine level should be collected on all patients, even if they have no prior history. A creatinine value is a high predictor of a patient's outcome and is used in the predicted risk models.

LowValue: 0.1 *UsualRangeLow:* 0.1

HighValue: 30.0 *UsualRangeHigh:* 9.0

Parent Long Name: Patient Age In Days *Format:* Real

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Long Name: RF-Renal Fail-Dialysis *SeqNo:* 6480

Short Name: **Dialysis** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient is currently undergoing dialysis.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-Hypertension *SeqNo:* 6490

Short Name: **Hypertn** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a diagnosis of hypertension, documented by one of the following:
a. Documented history of hypertension diagnosed and treated with medication, diet and/or exercise
b. Prior documentation of blood pressure >140 mmHg systolic or 90 mmHg diastolic for patients without diabetes or chronic kidney disease, or prior documentation of blood pressure >130 mmHg systolic or 80 mmHg diastolic on at least 2 occasions for patients with diabetes or chronic kidney disease
c. Currently on pharmacologic therapy to control hypertension

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-Infect Endocard *SeqNo:* 6500

Short Name: **InfEndo** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a history of infectious endocarditis documented by one of the following:
1. positive blood cultures
2. vegetation on echocardiography and/or other diagnostic modality
3. documented history of infectious endocarditis

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:

1	Yes
2	No

Long Name: RF-Infect Endocard Type *SeqNo:* 6510

Short Name: **InfEndTy** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate the type of endocarditis the patient has. If the patient is currently being treated for endocarditis, the disease is considered active. If no antibiotic medication (other than prophylactic medication) is being given at the time of surgery, then the infection is considered treated.

LowValue: 1 *UsualRangeLow:*

HighValue: 2 *UsualRangeHigh:*

Parent Long Name: RF-Infect Endocard *Format:* Text (categorical values specified by STS)

ParentShortName: InfEndo *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Treated
2	Active

Long Name: RF-Chronic Lung Dis *SeqNo:* 6520

Short Name: **ChrLungD** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has chronic lung disease, and the severity leve.

LowValue: 1 *UsualRangeLow:*

HighValue: 4 *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes and Value Definitions:

Code:	Value:	Definition:
1	No	
2	Mild	FEV1 60% to 75% of predicted, and/or on chronic inhaled or oral bronchodilator therapy.

3	Moderate	FEV1 50% to 59% of predicted, and/or on chronic steroid therapy aimed at lung disease.
4	Severe	FEV1 <50% predicted, and/or Room Air pO2 < 60 or Room Air pCO2 > 50.

Long Name: RF-Immunosuppressive Rx *SeqNo:* 6530

Short Name: **ImmSupp** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has used any form of immunosuppressive therapy within 30 days preceding the operative procedure. This includes, but is not limited to inhaled or systemic steroid therapy and chemotherapy. This does not include topical applications, one time systemic therapy, or preoperative protocol.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF - Peripheral Arterial Disease *SeqNo:* 6540

Short Name: **PVD** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a history of peripheral arterial disease (includes upper and lower extremity, renal, mesenteric, and abdominal aortic systems). This can include:
1. Claudication , either with exertion or at rest,
2. Amputation for arterial vascular insufficiency,
3. Vascular reconstruction, bypass surgery, or percutaneous intervention to the extremities (excluding dialysis fistulas and vein stripping),
4. Documented aortic aneurysm with or without repair,
5. Positive noninvasive test (e.g., ankle brachial index =< 0.9, ultrasound, magnetic resonance or computed tomography imaging of > 50% diameter stenosis in any peripheral artery, i.e., renal, subclavian, femoral, iliac).

Peripheral arterial disease excludes disease in the carotid or cerebrovascular arteries.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-Cerebrovascular Dis *SeqNo:* 6550

Short Name: **CVD** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has Cerebro-Vascular Disease, documented by any one of the following: CVA (symptoms > 24 hrs after onset, presumed to be from vascular etiology); TIA (recovery within 24 hrs); Non-invasive carotid test with > 79% diameter occlusion.; or Prior carotid surgery. Does not include neurological disease processes such as metabolic and/or anoxic ischemic encephalopathy.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: Patient Age In Days *Format:* Text (categorical values specified by STS)

ParentShortName: AgeDays *DataLength:*

ParentValue: >6574 *Data Source:* User

ParentHarvestCodes: >6574

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-Coma *SeqNo:* 6560

Short Name: **CVDComa** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a history of Unresponsive Coma greater than 24 hours: Patient experienced complete mental unresponsiveness and no evidence of psychological or physiologically appropriate responses to stimulation.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)

ParentShortName: CVD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-CVA *SeqNo:* 6570

Short Name: **CVA** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a history of stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in cerebral blood supply) that did not resolve within 24 hours.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)

ParentShortName: CVD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-CVA-When *SeqNo:* 6580

Short Name: **CVAWhen** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate when the CVA events occurred. Those events occurring within two weeks of the surgical procedure are considered recent, while all others are considered remote.

LowValue: 1 *UsualRangeLow:*

HighValue: 2 *UsualRangeHigh:*

Parent Long Name: RF-CVA *Format:* Text (categorical values specified by STS)

ParentShortName: CVA *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Recent (<=2 wk.)
2	Remote (>2 wk.)

Long Name: RF-CVD TIA *SeqNo:* 6590

Short Name: **CVDTIA** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a history of a Transient Ischemic Attack (TIA): Patient has a history of loss of neurological function that was abrupt in onset but with complete return of function within 24 hours.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)

ParentShortName: CVD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-CVD NonInvas >75% *SeqNo:* 6600

Short Name: **CVDNInvas** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a history of a Non-invasive/invasive carotid test with greater than 75% occlusion.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)

ParentShortName: CVD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: RF-CVD Prior Carotid Surgery *SeqNo:* 6610

Short Name: **CVDPCarSurg** *Core:* No

Section Name: Adult Preoperative Factors *Harvest:* No

DBTableName Operations

Definition: Indicate whether the patient has a history of previous carotid artery surgery and/or stenting.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)

ParentShortName: CVD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

ParentHarvestCodes: 1

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: STS Custom Numeric Field 1 *SeqNo:* 6620

Short Name: **STSCustNum1** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Numeric Field 2 *SeqNo:* 6630

Short Name: **STSCustNum2** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Numeric Field 3 *SeqNo:* 6640

Short Name: **STSCustNum3** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Numeric Field 4 *SeqNo:* 6650

Short Name: **STSCustNum4** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Numeric Field 5 *SeqNo:* 6660

Short Name: **STSCustNum5** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Text Field 1 *SeqNo:* 6670

Short Name: **STSCustTxt1** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Text Field 2 *SeqNo:* 6680

Short Name: **STSCustTxt2** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Text Field 3 *SeqNo:* 6690

Short Name: **STSCustTxt3** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Text Field 4 *SeqNo:* 6700

Short Name: **STSCustTxt4** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes:

Long Name: STS Custom Text Field 5 *SeqNo:* 6710

Short Name: **STSCustTxt5** *Core:* Yes

Section Name: STS Custom Fields *Harvest:* Yes

DBTableName Operations

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:*

HighValue: *UsualRangeHigh:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

ParentHarvestCodes: