

1. Operations

Short Name: **OperationID** *SeqNum:* 10
Field Name: OperationID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Unique operation identifier generated by the software.
Format: Text *Width:* 9
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes:

Short Name: **UniqueID** *SeqNum:* 20
Field Name: UniqueID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* No
Description: Unique identifying number (hospital three-letter code plus hospital number)
Format: Number (Integer) *Width:*
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223: 1. Format changed from blank to "Number (Integer)"
FieldNotes:

Short Name: **ParticID** *SeqNum:* 30
Field Name: ParticID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Participant identification number assigned by the STS.
Format: Text *Width:* 5
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes:

Short Name: **VendorID** *SeqNum:* 35
Field Name: VendorID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Software Vendor Identification
Format: Text *Width:* 8

ParentField: *ParentValue:*

Valid data:

Harvest Coding:

ChangeFrom223:

FieldNotes: 1. Value is assigned to a vendor by the STS.
2. Value is automatically inserted by the software.

Short Name: DataVrsn *SeqNum:* 36

Field Name: DataVrsn *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Version number of the STS Data Specifications being implemented at the time the record is created.

Format: Text *Width:* 8

ParentField: *ParentValue:*

Valid data:

Harvest Coding: 2.30

ChangeFrom223: 1. HarvestCoding changed from '2.23' to '2.30'

FieldNotes: 1. Value is automatically entered by the software.

Short Name: SoftVrsn *SeqNum:* 37

Field Name: SoftVrsn *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Vendor's software version name and number

Format: Text *Width:* 20

ParentField: *ParentValue:*

Valid data:

Harvest Coding:

ChangeFrom223:

FieldNotes: 1. Value is defined by the vendor.
2. Value is automatically entered by the software.

Short Name: HospName *SeqNum:* 38

Field Name: HospName *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Name of the hospital where the operation was performed

Format: Text *Width:* 100

ParentField: *ParentValue:*

Valid data:

Harvest Coding:

ChangeFrom223:

FieldNotes: 1. Width can be increased as needed to fit the entire full name of the hospital.

Short Name: PatID	<i>SeqNum:</i> 40
<i>Field Name:</i> PatID	<i>Core:</i> Yes
<i>OptionalMandatory:</i> Mandatory	<i>Harvest:</i> Yes
<i>Description:</i> This is an arbitrary character or numeric string that is assigned by the software package and uniquely and permanently identifies each patient.	
<i>Format:</i> Text	<i>Width:</i> 20
<i>ParentField:</i>	<i>ParentValue:</i>
<i>Valid data:</i>	
<i>Harvest Coding:</i>	
<i>ChangeFrom223:</i>	
<i>FieldNotes:</i>	

Short Name: AgeDays	<i>SeqNum:</i> 43
<i>Field Name:</i> AgeDays	<i>Core:</i> Yes
<i>OptionalMandatory:</i> Mandatory	<i>Harvest:</i> Yes
<i>Description:</i> Age of patient in days at time of procedure	
<i>Format:</i> Number (Integer)	<i>Width:</i>
<i>ParentField:</i>	<i>ParentValue:</i>
<i>Valid data:</i> 0 - 40150	
<i>Harvest Coding:</i> 0 - 40150	
<i>ChangeFrom223:</i>	
<i>FieldNotes:</i>	

Short Name: AdmitDt	<i>SeqNum:</i> 50
<i>Field Name:</i> AdmitDt	<i>Core:</i> Yes
<i>OptionalMandatory:</i> Mandatory	<i>Harvest:</i> Yes
<i>Description:</i> Date of admission	
<i>Format:</i> Date - mm/dd/yyyy	<i>Width:</i>
<i>ParentField:</i>	<i>ParentValue:</i>
<i>Valid data:</i> Value must be greater than or equal to date of birth and less than or equal to date of surgery, date of discharge, and date of mortality.	
<i>Harvest Coding:</i> Valid date and time with 4-digit year format.	
<i>ChangeFrom223:</i>	
<i>FieldNotes:</i>	

Short Name: AntDiag	<i>SeqNum:</i> 60
<i>Field Name:</i> AntDiag	<i>Core:</i> Yes
<i>OptionalMandatory:</i> Optional	<i>Harvest:</i> Yes
<i>Description:</i> Antenatal diagnosis?	
<i>Format:</i> Code	<i>Width:</i>

*ParentField:**ParentValue:**Valid data:* 1 - 2*Harvest Coding:* 1 = Yes
2 = No*ChangeFrom223:**FieldNotes:***Short Name:** PrvCtOpN*SeqNum:* 70*Field Name:* PrvCtOpN*Core:* Yes*OptionalMandatory:* Mandatory*Harvest:* Yes*Description:* Number of prior total cardiothoracic operations*Format:* Number (Integer)*Width:**ParentField:**ParentValue:**Valid data:* 0 - 20, Value must be greater than or equal to PrvOctOpN.*Harvest Coding:* 0 - 20*ChangeFrom223:**FieldNotes:***Short Name:** PrvOCtOpN*SeqNum:* 80*Field Name:* PrvOCtOpN*Core:* Yes*OptionalMandatory:* Mandatory*Harvest:* Yes*Description:* Number of prior open cardiothoracic operations*Format:* Number (Integer)*Width:**ParentField:**ParentValue:**Valid data:* 0 - 20, Value must be less than or equal to PrvCtOpN*Harvest Coding:* 0 - 20*ChangeFrom223:* 1. HarvestCoding changed from 0 - 10 to 0 - 20

2. Parameters changed from "0 - 10, Value must be less than or equal to PrvCtOpN" to "0 - 20, Value must be less than or equal to PrvCtOpN"

*FieldNotes:***Short Name:** IntubateDT*SeqNum:* 90*Field Name:* IntubateDT*Core:* Yes*OptionalMandatory:* Optional*Harvest:* Yes*Description:* Date and time of intubation.*Format:* Date/Time -mm/dd/yyyy hh:mm*Width:**ParentField:**ParentValue:**Valid data:* Value must be greater than or equal to date and time of birth and less than date of discharge.*Harvest Coding:* Valid date and time with 4-digit year and hours in 24 hour format.*ChangeFrom223:*

FieldNotes:

Short Name: SurgDt *SeqNum:* 100
Field Name: SurgDt *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Date of surgery
Format: Date - mm/dd/yyyy *Width:*
ParentField: *ParentValue:*
Valid data: Value must be greater than or equal to date of birth and date of admission and less than or equal to date of discharge and date of mortality.
Harvest Coding: Valid date and time with 4-digit year format.
ChangeFrom223: 1. FieldName changed from 'SurgeryDate' to 'SurgDt'

FieldNotes:

Short Name: OpType *SeqNum:* 110
Field Name: OpType *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Case category
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 1 - 5, 777
Harvest Coding: 1 = CPB
2 = No CPB Cardiovascular
3 = ECMO
4 = Thoracic
5 = Interventional Cardiology
777 = Other

*ChangeFrom223:**FieldNotes:*

Short Name: WeightKg *SeqNum:* 120
Field Name: WeightKg *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Weight at operation in kilograms.
Format: Number (Single) *Width:*
ParentField: *ParentValue:*
Valid data: 0.001 - 200.0
Harvest Coding: 0.001 - 200.0

*ChangeFrom223:**FieldNotes:*

Short Name: HeightCm *SeqNum:* 130

Field Name: HeightCm *Core:* Yes
OptionalMandatory: Optional *Harvest:* Yes
Description: Height at operation in centimeters.
Format: Number (Single) *Width:*
ParentField: *ParentValue:*
Valid data: 15.0 - 250.0
Harvest Coding: 15.0 - 250.0
ChangeFrom223: 1. HarvestCoding changed from "15 - 250" to "15.0 - 250.0"
 2. Parameters changed from "15 - 250" to "15.0 - 250.0"
FieldNotes:

***Short Name:* CnsltAttnd** *SeqNum:* 140
Field Name: CnsltAttnd *Core:* Yes
OptionalMandatory: Optional *Harvest:* Yes
Description: Name of consultant / attending.
Format: Text *Width:* 100
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes:

***Short Name:* Surgeon** *SeqNum:* 150
Field Name: Surgeon *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Name of surgeon.
Format: Text *Width:* 100
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes:

***Short Name:* AsstSurgeon** *SeqNum:* 155
Field Name: AsstSurgeon *Core:* Yes
OptionalMandatory: Optional *Harvest:* Yes
Description: Name of assistant surgeon.
Format: Text *Width:* 100
ParentField: *ParentValue:*
Valid data:

*Harvest Coding:**ChangeFrom223:* New field*FieldNotes:*

Short Name: Resident *SeqNum:* 160
Field Name: Resident *Core:* Yes
OptionalMandatory: Optional *Harvest:* Yes
Description: Name of resident.
Format: Text *Width:* 100
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes:

Short Name: CPBTm *SeqNum:* 170
Field Name: CPBTm *Core:* Yes
OptionalMandatory: Optional *Harvest:* Yes
Description: Cardiopulmonary Bypass Time in minutes (does not include circulatory arrest time).
Format: Number (Integer) *Width:*
ParentField: OpType *ParentValue:* CPB
Valid data: 0 - 1400
Harvest Coding: 0 - 1400
ChangeFrom223: 1. ParentField changed from not defined to "OpType"
2. ParentValue changed from not defined to "CPB"
3. Format changed from "Number" to "Number (Integer)"

FieldNotes:

Short Name: XClampTm *SeqNum:* 180
Field Name: XClampTm *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Aortic Cross Clamp Time in minutes.
Format: Number (Integer) *Width:*
ParentField: *ParentValue:*
Valid data: 0 - 600
Harvest Coding: 0 - 600
ChangeFrom223: 1. Format changed from "Number" to "Number (Integer)"

FieldNotes:

Short Name: DHCATm *SeqNum:* 190
Field Name: DHCATm *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Circulatory Arrest Time in minutes

Format: Number (Integer) *Width:*

ParentField: OpType *ParentValue:* CPB

Valid data: 0 - 100

Harvest Coding: 0 - 100

ChangeFrom223: 1. ParentField changed from not defined to "OpType"
2. ParentValue changed from not defined to "CPB"
3. Format changed from "Number (Long)" to "Number (Integer)"

FieldNotes:

***Short Name:* ExtubateDT** *SeqNum:* 200

Field Name: ExtubateDT *Core:* Yes

OptionalMandatory: Optional *Harvest:* Yes

Description: Date and time of extubation.

Format: Date/Time -mm/dd/yyyy hh:mm *Width:*

ParentField: *ParentValue:*

Valid data: Value must be greater than or equal to date of intubation and less than date of discharge.

Harvest Coding: Valid date and time with 4-digit year and hours in 24 hour format.

ChangeFrom223:

FieldNotes:

***Short Name:* ExtubInOR** *SeqNum:* 205

Field Name: ExtubInOR *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Was patient intubated and extubated in the OR?

Format: Code *Width:*

ParentField: *ParentValue:*

Valid data: 1 - 2

Harvest Coding: 1 = Yes
2 = No

ChangeFrom223: New field

FieldNotes:

***Short Name:* ReOpAftrOpInAdm** *SeqNum:* 210

Field Name: ReOpAftrOpInAdm *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Reoperation after this operation during this admission?

Format: Code *Width:*

ParentField: *ParentValue:*

Valid data: 1 - 2

Harvest Coding: 1 = Yes
2 = No

ChangeFrom223:

FieldNotes: 1. Software will have a consistency check to ensure there is another record after this one if response is "Yes".

Short Name: ReOpInAdm *SeqNum:* 220

Field Name: ReOpInAdm *Core:* Yes

OptionalMandatory: Optional *Harvest:* Yes

Description: Is this operation a reoperation during this admission?

Format: Code *Width:*

ParentField: *ParentValue:*

Valid data: 1 - 3

Harvest Coding: 1 = Yes - Planned reoperation
2 = No
3 = Yes - Unplanned reoperation

ChangeFrom223:

FieldNotes: 1. Software will have a consistency check to ensure there is another record before this one if response is "Yes - Planned reoperation" or "Yes - Unplanned reoperation".

Short Name: DischDt *SeqNum:* 230

Field Name: DischDt *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Date of discharge

Format: Date - mm/dd/yyyy *Width:*

ParentField: *ParentValue:*

Valid data: Values must be greater than or equal to date of birth, date of admission, and date of surgery.

Harvest Coding: Valid date and time with 4-digit year format.

ChangeFrom223:

FieldNotes:

Short Name: DisLoctn *SeqNum:* 235

Field Name: DisLoctn *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Location to where the patient was discharged.

Format: Code *Width:*

ParentField: MtDCStat *ParentValue:* Alive

Valid data: 1 - 3

Harvest Coding: 1 = Home
2 = Acute care center

3 = Chronic care center

ChangeFrom223: New field

FieldNotes:

Short Name: MtOpD *SeqNum:* 240
Field Name: MtOpD *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Operative mortality
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 1 - 2
Harvest Coding: 1 = Yes
 2 = No

ChangeFrom223:

FieldNotes:

Short Name: MtDCStat *SeqNum:* 250
Field Name: MtDCStat *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Mortality discharge status (alive or dead).
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 1 - 2
Harvest Coding: 1 = Alive
 2 = Dead

ChangeFrom223:

FieldNotes:

Short Name: Mt30Stat *SeqNum:* 260
Field Name: Mt30Stat *Core:* Yes
OptionalMandatory: Optional *Harvest:* Yes
Description: Mortality - Status at 30 days after surgery (alive or dead).
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 1 - 2
Harvest Coding: 1 = Alive
 2 = Dead

ChangeFrom223:

FieldNotes:

Short Name: MortCase *SeqNum:* 270

Field Name: MortCase *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Mortality assigned to this operation?
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 1 - 2
Harvest Coding: 1 = Yes
 2 = No
ChangeFrom223:
FieldNotes:

2. Demographics

***Short Name:* PatID** *SeqNum:* 280
Field Name: PatID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: This is an arbitrary character or numeric string that is assigned by the software package and uniquely and permanently identifies each patient.
Format: Text *Width:* 20
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes:

***Short Name:* DataVrsn** *SeqNum:* 285
Field Name: DataVrsn *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Version number of the STS Data Specifications being implemented at the time the record is created.
Format: Text *Width:* 8
ParentField: *ParentValue:*
Valid data:
Harvest Coding: 2.30
ChangeFrom223: 1. HarvestCoding changed from '2.23' to '2.30'
FieldNotes: 1. Value is automatically entered by the software.

***Short Name:* PatLName** *SeqNum:* 290
Field Name: PatLName *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* No
Description: Patient's Last Name

Format: Text *Width:* 50
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes:

***Short Name:* PatFName** *SeqNum:* 300
Field Name: PatFName *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* No
Description: Patient's First Name
Format: Text *Width:* 50
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes:

***Short Name:* PatMInit** *SeqNum:* 301
Field Name: PatMInit *Core:* Yes
OptionalMandatory: Optional *Harvest:* No
Description: Patient's Middle Initial
Format: Text *Width:* 1
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223: New field
FieldNotes:

***Short Name:* PatNationalID** *SeqNum:* 305
Field Name: PatNationalID *Core:* Yes
OptionalMandatory: Optional *Harvest:* No
Description: Patient's National Identification Number
Format: Text *Width:* 11
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223: New field
FieldNotes: 1. 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.

Short Name: MedRecN *SeqNum:* 306
Field Name: MedRecN *Core:* Yes
OptionalMandatory: Optional *Harvest:* No
Description: Patient's Medical Record Number
Format: Text *Width:* 11
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223: New field
FieldNotes:

Short Name: DOB *SeqNum:* 310
Field Name: DOB *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Optional
Description: Date of birth
Format: Date - mm/dd/yyyy *Width:*
ParentField: *ParentValue:*
Valid data: Value must be less than or equal to date of admission, date of surgery, date of discharge, and date of mortality.
Harvest Coding: Valid date and time with 4-digit year format.
ChangeFrom223:
FieldNotes:

Short Name: Gender *SeqNum:* 320
Field Name: Gender *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Gender of patient
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 1 - 3
Harvest Coding: 1 = Male
 2 = Female
 3 = Ambiguous
ChangeFrom223:
FieldNotes:

Short Name: Race *SeqNum:* 330
Field Name: Race *Core:* Yes
OptionalMandatory: Optional *Harvest:* Yes
Description: Patient's race

Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 1 - 5, 777

Harvest Coding: 1 = Caucasian
 2 = Black
 3 = Hispanic
 4 = Asian
 5 = Native American
 777 = Other

ChangeFrom223:

FieldNotes:

<i>Short Name:</i> PatRegion	<i>SeqNum:</i>	340
<i>Field Name:</i> PatRegion	<i>Core:</i>	Yes
<i>OptionalMandatory:</i> Optional	<i>Harvest:</i>	Yes

Description: State, province, or administrative domain in which the patient lives.

Format: Text *Width:* 2
ParentField: *ParentValue:*
Valid data:

Harvest Coding: Two character abbreviation

ChangeFrom223:

FieldNotes: 1. Values will be selected from a drop down list of two character abbreviations for each US state and Canadian province.

<i>Short Name:</i> PatCountry	<i>SeqNum:</i>	350
<i>Field Name:</i> PatCountry	<i>Core:</i>	Yes
<i>OptionalMandatory:</i> Optional	<i>Harvest:</i>	Yes

Description: Country in which the patient lives.

Format: Code *Width:*
ParentField: *ParentValue:*
Valid data:

Harvest Coding: ABW = ARUBA
 AFG = AFGHANISTAN
 AGO = ANGOLA
 AIA = ANGUILLA
 ALB = ALBANIA
 AND = ANDORRA
 ANT = NETHERLANDS ANTILLES
 ARE = UNITED ARAB EMIRATES
 ARG = ARGENTINA
 ARM = ARMENIA
 ASM = AMERICAN SAMOA
 ATA = ANTARCTICA
 ATF = FRENCH SOUTHERN TERRITORIES
 ATG = ANTIGUA AND BARBUDA

AUS = AUSTRALIA
AUT = AUSTRIA
AZE = AZERBAIJAN
BDI = BURUNDI
BEL = BELGIUM
BEN = BENIN
BFA = BURKINA FASO
BGD = BANGLADESH
BGR = BULGARIA
BHR = BAHRAIN
BHS = BAHAMAS
BIH = BOSNIA AND HERZEGOWINA
BLR = BELARUS
BLZ = BELIZE
BMU = BERMUDA
BOL = BOLIVIA
BRA = BRAZIL
BRB = BARBADOS
BRN = BRUNEI DARUSSALAM
BTN = BHUTAN
BVT = BOUVET ISLAND
BWA = BOTSWANA
CAF = CENTRAL AFRICAN REPUBLIC
CAN = CANADA
CCK = COCOS (KEELING) ISLANDS
CHE = SWITZERLAND
CHL = CHILE
CHN = CHINA
CIV = COTE D'IVOIRE
CMR = CAMEROON
COG = CONGO
COK = COOK ISLANDS
COL = COLOMBIA
COM = COMOROS
CPV = CAPE VERDE
CRI = COSTA RICA
CUB = CUBA
CXR = CHRISTMAS ISLAND
CYM = CAYMAN ISLANDS
CYP = CYPRUS
CZE = CZECH REPUBLIC
DEU = GERMANY
DJI = DJIBOUTI
DMA = DOMINICA
DNK = DENMARK
DOM = DOMINICAN REPUBLIC
DZA = ALGERIA
ECU = ECUADOR
EGY = EGYPT
ERI = ERITREA
ESH = WESTERN SAHARA
ESP = SPAIN
EST = ESTONIA

ETH = ETHIOPIA
FIN = FINLAND
FJI = FIJI
FLK = FALKLAND ISLANDS (MALVINAS)
FRA = FRANCE
FRO = FAROE ISLANDS
FSM = MICRONESIA, FEDERATED STATES OF
FXX = FRANCE, METROPOLITAN
GAB = GABON
GBR = UNITED KINGDOM
GEO = GEORGIA
GHA = GHANA
GIB = GIBRALTAR
GIN = GUINEA
GLP = GUADELOUPE
GMB = GAMBIA
GNB = GUINEA-BISSAU
GNQ = EQUATORIAL GUINEA
GRC = GREECE
GRD = GRENADA
GRL = GREENLAND
GTM = GUATEMALA
GUF = FRENCH GUIANA
GUM = GUAM
GUY = GUYANA
HKG = HONG KONG
HMD = HEARD AND MC DONALD ISLANDS
HND = HONDURAS
HRV = CROATIA (local name: Hrvatska)
HTI = HAITI
HUN = HUNGARY
IDN = INDONESIA
IND = INDIA
IOT = BRITISH INDIAN OCEAN TERRITORY
IRL = IRELAND
IRN = IRAN (ISLAMIC REPUBLIC OF)
IRQ = IRAQ
ISL = ICELAND
ISR = ISRAEL
ITA = ITALY
JAM = JAMAICA
JOR = JORDAN
JPN = JAPAN
KAZ = KAZAKHSTAN
KEN = KENYA
KGZ = KYRGYZSTAN
KHM = CAMBODIA
KIR = KIRIBATI
KNA = SAINT KITTS AND NEVIS
KOR = KOREA, REPUBLIC OF
KWT = KUWAIT
LAO = LAO PEOPLE'S DEMOCRATIC REPUBLIC
LBN = LEBANON

LBR = LIBERIA
LBY = LIBYAN ARAB JAMAHIRIYA
LCA = SAINT LUCIA
LIE = LIECHTENSTEIN
LKA = SRI LANKA
LSO = LESOTHO
LTU = LITHUANIA
LUX = LUXEMBOURG
LVA = LATVIA
MAC = MACAU
MAR = MOROCCO
MCO = MONACO
MDA = MOLDOVA, REPUBLIC OF
MDG = MADAGASCAR
MDV = MALDIVES
MEX = MEXICO
MHL = MARSHALL ISLANDS
MKD = MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF
MLI = MALI
MLT = MALTA
MMR = MYANMAR
MNG = MONGOLIA
MNP = NORTHERN MARIANA ISLANDS
MOZ = MOZAMBIQUE
MRT = MAURITANIA
MSR = MONTSERRAT
MTQ = MARTINIQUE
MUS = MAURITIUS
MWI = MALAWI
MYS = MALAYSIA
MYT = MAYOTTE
NAM = NAMIBIA
NCL = NEW CALEDONIA
NER = NIGER
NFK = NORFOLK ISLAND
NGA = NIGERIA
NIC = NICARAGUA
NIU = NIUE
NLD = NETHERLANDS
NOR = NORWAY
NPL = NEPAL
NRU = NAURU
NZL = NEW ZEALAND
OMN = OMAN
PAK = PAKISTAN
PAN = PANAMA
PCN = PITCAIRN
PER = PERU
PHL = PHILIPPINES
PLW = PALAU
PNG = PAPUA NEW GUINEA
POL = POLAND
PRI = PUERTO RICO

PRK = KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
PRT = PORTUGAL
PRY = PARAGUAY
PYF = FRENCH POLYNESIA
QAT = QATAR
REU = REUNION
ROM = ROMANIA
RUS = RUSSIAN FEDERATION
RWA = RWANDA
SAU = SAUDI ARABIA
SDN = SUDAN
SEN = SENEGAL
SGP = SINGAPORE
SGS = SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
SHN = ST. HELENA
SJM = SVALBARD AND JAN MAYEN ISLANDS
SLB = SOLOMON ISLANDS
SLE = SIERRA LEONE
SLV = EL SALVADOR
SMR = SAN MARINO
SOM = SOMALIA
SPM = ST. PIERRE AND MIQUELON
STP = SAO TOME AND PRINCIPE
SUR = SURINAME
SVK = SLOVAKIA (Slovak Republic)
SVN = SLOVENIA
SWE = SWEDEN
SWZ = SWAZILAND
SYC = SEYCHELLES
SYR = SYRIAN ARAB REPUBLIC
TCA = TURKS AND CAICOS ISLANDS
TCD = CHAD
TGO = TOGO
THA = THAILAND
TJK = TAJIKISTAN
TKL = TOKELAU
TKM = TURKMENISTAN
TMP = EAST TIMOR
TON = TONGA
TTO = TRINIDAD AND TOBAGO
TUN = TUNISIA
TUR = TURKEY
TUV = TUVALU
TWN = TAIWAN, PROVINCE OF CHINA
TZA = TANZANIA, UNITED REPUBLIC OF
UGA = UGANDA
UKR = UKRAINE
UMI = UNITED STATES MINOR OUTLYING ISLANDS
URY = URUGUAY
USA = UNITED STATES
UZB = UZBEKISTAN
VAT = VATICAN CITY STATE (HOLY SEE)
VCT = SAINT VINCENT AND THE GRENADINES

VEN = VENEZUELA
 VGB = VIRGIN ISLANDS (BRITISH)
 VIR = VIRGIN ISLANDS (U.S.)
 VNM = VIET NAM
 VUT = VANUATU
 WLF = WALLIS AND FUTUNA ISLANDS
 WSM = SAMOA
 YEM = YEMEN
 YUG = YUGOSLAVIA
 ZAF = SOUTH AFRICA
 ZAR = ZAIRE
 ZMB = ZAMBIA
 ZWE = ZIMBABWE

ChangeFrom223: 1. HarvestCoding changed from blank to defined codes.

FieldNotes:

Short Name: PatPostalCode *SeqNum:* 360
Field Name: PatPostalCode *Core:* Yes
OptionalMandatory: Optional *Harvest:* Optional

Description: Patient's postal code. In the USA, this is the first five digits of the ZIP code (HIPAA does not allow the "Zip+4" portion to be included. Outside the USA, this data may be known as Postal Code.

Format: Text *Width:* 10
ParentField: *ParentValue:*

Valid data:
Harvest Coding:

ChangeFrom223: 1. Harvest changed from Yes to Optional
 2. Description changed to provide more details.

FieldNotes:

Short Name: MtDate *SeqNum:* 370
Field Name: MtDate *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes

Description: Date of mortality
Format: Date - mm/dd/yyyy *Width:*
ParentField: *ParentValue:*
Valid data: Values must be greater or equal to date of birth, date of admission, and date of surgery.

Harvest Coding: Valid date with 4-digit year format.
ChangeFrom223: 1. Format changed from "Date/Time -mm/dd/yyyy hh:mm" to "Date - mm/dd/yyyy"
 2. HarvestCoding changed to remove reference to Time portion of values.

FieldNotes: 1. This field will be required if MortCase is answered "Yes".

3. Risk_Factors

Short Name: RFUniqueID *SeqNum:* 380
Field Name: RFUniqueID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Unique identifier for record in Risk_Factors table.
Format: Number (Integer) *Width:*
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223: 1. Format changed from "Long" to "Number (Integer)"
FieldNotes:

Short Name: OperationID *SeqNum:* 390
Field Name: OperationID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Unique operation identifier
Format: Text *Width:* 9
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes: 1. This field is the foreign key linking this risk factor with the associated operations data.

Short Name: RiskFactor *SeqNum:* 400
Field Name: RiskFactor *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: General Preoperative Risk Factor
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 10 - 160, 777
Harvest Coding: 10 = None
20 = Preoperative mechanical circulatory support (IABP, VAD, ECMO, or CPS)
30 = Preoperative complete AV block
40 = Preoperative arrhythmia
50 = Preoperative shock
60 = Preoperative acidosis
70 = Preoperative pulmonary hypertension crises (PA pressure > systemic pressure)
80 = Preoperative mechanical ventilatory support
90 = Preoperative tracheostomy
100 = Preoperative renal failure (creatinine >2)
110 = Preoperative renal failure requiring dialysis
120 = Preoperative bleeding disorder
130 = Preoperative endocarditis
140 = Preoperative septicemia

- 150 = Preoperative neurological deficit
- 160 = Preoperative seizures
- 777 = Other preoperative risk factor

ChangeFrom223: 1. Change FieldName from NCAGPRF to RiskFactor

FieldNotes: 1. Vendor software will force "None" to be an exclusive choice.
 2. Vendor software will ensure that a risk factor is not entered twice for the same patient/operation.
 3. Note field name used to be NCAGPRF but was changed to RiskFactor in version 2.30 since field no longer contains Non-Cardiac Abnormality values. No changes were made at this time to the definition or harvest codes.

4. Diagnosis

Short Name: **DiagUniqueID** *SeqNum:* 410
Field Name: DiagUniqueID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Unique identifier for record in Diagnosis table.
Format: Number (Integer) *Width:*
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223: 1. Format changed from "Long" to "Number (Integer)"
FieldNotes:

Short Name: **OperationID** *SeqNum:* 420
Field Name: OperationID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Unique operation identifier.
Format: Text *Width:* 9
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223:
FieldNotes: 1. This field is the foreign key linking this diagnosis with the associated operations data.

Short Name: **Diagnosis** *SeqNum:* 430
Field Name: Diagnosis *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Operative diagnosis
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 10 - 1580, 7000, 7777
Harvest Coding: 10 = PFO

- 20 = ASD, secundum
- 30 = ASD, sinus venosus
- 40 = ASD, coronary sinus
- 50 = ASD, common atrium (single atrium)
- 60 = ASD, NOS
- 70 = VSD, single
- 80 = VSD, multiple
- 90 = VSD, NOS
- 100 = AVC (AVSD), complete CAVSD
- 110 = AVC (AVSD), intermediate (transitional)
- 120 = AVC (AVSD), partial (incomplete) (PAVSD) (ASD, primum)
- 130 = AVC (AVSD), NOS
- 140 = AP window (aortopulmonary window)
- 150 = Pulmonary artery origin from ascending aorta (hemitruncus)
- 160 = Truncus arteriosus
- 170 = Truncal valve insufficiency
- 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)
- 240 = Total anomalous pulmonary venous connection (TAPVC), NOS
- 250 = Cor triatriatum
- 260 = Pulmonary venous stenosis
- 270 = Systemic venous anomaly
- 280 = Systemic venous obstruction
- 290 = TOF
- 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 (pseudotruncus)
- 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
- 450 = Pulmonary artery stenosis, branch, peripheral (beyond the hilar bifurcation)
- 460 = Pulmonary artery stenosis, NOS
- 470 = Pulmonary artery, discontinuous
- 480 = Pulmonary stenosis, NOS
- 490 = Pulmonary stenosis, subvalvar
- 500 = DCRV
- 510 = Pulmonary valve, other
- 520 = Conduit failure
- 530 = Pulmonary insufficiency
- 540 = Pulmonary insufficiency and pulmonary stenosis

550 = Aortic stenosis, subvalvar
560 = Aortic stenosis, valvar
570 = Aortic stenosis, supra-valvar
580 = Aortic stenosis, NOS
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, supra-valvar mitral ring
660 = Mitral stenosis, valvar
670 = Mitral stenosis, subvalvar
680 = Mitral stenosis, subvalvar, parachute
690 = Mitral stenosis, NOS
700 = Mitral regurgitation and mitral stenosis
710 = Mitral regurgitation
720 = Mitral valve, other
730 = Hypoplastic left heart syndrome (HLHS)
740 = Cardiomyopathy
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
860 = Single ventricle, NOS
870 = Congenitally corrected TGA
880 = TGA, IVS
890 = TGA, IVS-LVOTO
900 = TGA, VSD
910 = TGA, VSD-LVOTO
920 = TGA, NOS
930 = DORV, VSD type
940 = DORV, TOF type
950 = DORV, TGA type
960 = DORV, remote VSD (uncommitted VSD)
970 = DORV, NOS
980 = DOLV
990 = Coarctation of aorta
1000 = Aortic arch hypoplasia
1010 = Coronary artery anomaly, anomalous aortic origin
1020 = Coronary artery anomaly, anomalous pulmonary origin (includes ALCAPA)
1030 = Coronary artery anomaly, fistula
1040 = Coronary artery anomaly, aneurysm
1050 = Coronary artery anomaly, other
1060 = Coronary artery anomaly, NOS
1070 = Interrupted aortic arch

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
1150 = Pectus
1160 = Tracheal stenosis
1170 = Tracheal disease, other
1180 = Arrhythmia
1190 = Arrhythmia, heart block, acquired
1200 = Arrhythmia, heart block, congenital
1210 = Arrhythmia, heart block, NOS
1220 = Arrhythmia, pacemaker, indication for replacement
1230 = Atrial isomerism, left
1240 = Atrial isomerism, right
1250 = Aneurysm, ventricular, right
1260 = Aneurysm, ventricular, left
1270 = Aneurysm, pulmonary artery
1280 = Aneurysm, other
1290 = Hypoplastic RV
1300 = Hypoplastic LV
1310 = Mediastinitis
1320 = Endocarditis
1330 = Prosthetic valve failure
1340 = Myocardial infarction
1350 = Cardiac tumor
1360 = Pulmonary AV fistula
1370 = Pulmonary embolism
1380 = Pulmonary vascular obstructive disease, NOS
1390 = Pulmonary vascular obstructive disease (Eisenmenger's)
1400 = Primary pulmonary hypertension
1410 = Persistent fetal circulation
1420 = Meconium aspiration
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
1510 = Mediastinal disease, benign
1520 = Mediastinal disease, malignant
1530 = Mediastinal disease, NOS
1540 = Diaphragm paralysis
1550 = Diaphragm disease, other
1560 = Cardiac, other
1570 = Thoracic and/or mediastinal, other
1580 = Peripheral vascular, other
7000 = Normal heart
7777 = Miscellaneous, other

ChangeFrom223:

FieldNotes: 1. Vendor software will force "Normal heart" to be an exclusive choice.
2. Vendor software will ensure that a diagnosis is not entered twice for the same patient/operation.

Short Name: PrimDiag *SeqNum:* 435

Field Name: PrimDiag *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Primary diagnosis for this operation.

Format: Code *Width:*

ParentField: *ParentValue:*

Valid data: 1 - 2

Harvest Coding: 1 = Yes
2 = No

ChangeFrom223: New field

FieldNotes: 1. Vendor software will enforce only one primary diagnosis for each operation.

5. Procedures

Short Name: ProcUniqueID *SeqNum:* 440

Field Name: ProcUniqueID *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Unique identifier for record in Operations table.

Format: Number (Integer) *Width:*

ParentField: *ParentValue:*

Valid data:

Harvest Coding:

ChangeFrom223: 1. Format changed from "Long" to "Number (Integer)"

FieldNotes:

Short Name: OperationID *SeqNum:* 450

Field Name: OperationID *Core:* Yes

OptionalMandatory: Mandatory *Harvest:* Yes

Description: Unique operation identifier.

Format: Text *Width:* 9

ParentField: *ParentValue:*

Valid data:

Harvest Coding:

ChangeFrom223:

FieldNotes: 1. This field is the foreign key linking this operation with the associated operations data.

Short Name: Procedure *SeqNum:* 460

<i>Field Name:</i>	Procedure	<i>Core:</i>	Yes
<i>OptionalMandatory:</i>	Mandatory	<i>Harvest:</i>	Yes
<i>Description:</i>	Operation (primary procedure and additional procedures from Procedures Short List)		
<i>Format:</i>	Code	<i>Width:</i>	
<i>ParentField:</i>		<i>ParentValue:</i>	
<i>Valid data:</i>	10 - 2050, 7777		
<i>Harvest Coding:</i>	10 = PFO, primary closure 20 = ASD repair, primary closure 30 = ASD repair, patch 40 = ASD repair, device 50 = ASD, common atrium (single atrium), septation 60 = ASD creation/enlargement 70 = ASD partial closure 80 = Atrial septal fenestration 90 = ASD repair, NOS 100 = VSD repair, primary closure 110 = VSD repair, patch 120 = VSD repair, device 130 = VSD, multiple, repair 140 = VSD creation/enlargement 150 = Ventricular septal fenestration 160 = VSD repair, NOS 170 = AVC (AVSD) repair, complete (CAVSD) 180 = AVC (AVSD) repair, intermediate (transitional) 190 = AVC (AVSD) repair, partial (incomplete) (PAVSD) 200 = AVC (AVSD) repair, NOS 210 = AP window repair 220 = Pulmonary artery origin from ascending aorta (hemitruncus) repair 230 = Truncus arteriosus repair 240 = Valvuloplasty, truncal valve 250 = Valve replacement, truncal 260 = PAPVC repair 270 = PAPVC, scimitar, repair 280 = TAPVC repair 290 = Cor triatriatum repair 300 = Pulmonary venous stenosis repair 310 = Atrial baffle procedure (non-Mustard, non-Senning) 320 = Atrial baffle procedure, NOS 330 = Anomalous systemic venous connection repair 340 = Systemic venous stenosis repair 350 = TOF repair, no ventriculotomy 360 = TOF repair, ventriculotomy, nontransanular patch 370 = TOF repair, ventriculotomy, transanular patch 380 = TOF repair, RV-PA conduit 390 = TOF, AVC (AVSD), repair 400 = TOF, absent pulmonary valve, repair 410 = TOF repair, NOS 420 = Pulmonary atresia-VSD (including TOF, PA), repair 430 = Pulmonary atresia-VSD-MAPCA (pseudotruncus), repair 440 = Unifocalization MAPCA(s) 450 = Occlusion MAPCA(s)		

- 460 = Valvuloplasty, tricuspid
- 470 = Valve replacement, tricuspid (TVR)
- 480 = Valve closure, tricuspid (exclusion, univentricular approach)
- 490 = Valve excision, tricuspid (without replacement)
- 500 = Valve surgery, other, tricuspid
- 510 = RVOT procedure
- 520 = 1 1/2 ventricular repair
- 530 = PA, reconstruction (plasty), main (trunk)
- 540 = PA, reconstruction (plasty), branch, central
- 550 = PA, reconstruction (plasty), branch, peripheral (at or beyond the hilar bifurcation)
- 560 = PA, reconstruction (plasty), NOS
- 570 = DCRV repair
- 580 = Conduit reoperation
- 590 = Valvuloplasty, pulmonic
- 600 = Valve replacement, pulmonic (PVR)
- 610 = Conduit, placement, RV to PA
- 620 = Conduit, placement, LV to PA
- 630 = Valve excision, pulmonary (without replacement)
- 640 = Valve closure, semilunar
- 650 = Valve surgery, other, pulmonic
- 660 = Valvuloplasty, aortic
- 670 = Valve replacement, aortic (AVR)
- 680 = Valve replacement, aortic (AVR), mechanical
- 690 = Valve replacement, aortic (AVR), bioprosthetic
- 700 = Valve replacement, aortic (AVR), homograft
- 710 = Aortic root replacement
- 720 = Aortic root replacement, mechanical
- 730 = Aortic root replacement, homograft
- 740 = Ross procedure
- 750 = Konno procedure
- 760 = Ross-Konno procedure
- 770 = Other annular enlargement procedure
- 780 = Aortic stenosis, subvalvar, repair
- 790 = Aortic stenosis, supra-valvar, repair
- 800 = Valve surgery, other, aortic
- 810 = Sinus of Valsalva, aneurysm repair
- 820 = LV to aorta tunnel repair
- 830 = Valvuloplasty, mitral
- 840 = Mitral stenosis, supra-valvar mitral ring, repair
- 850 = Valve replacement, mitral (MVR)
- 860 = Valve surgery, other, mitral
- 870 = Norwood procedure
- 880 = HLHS biventricular repair
- 890 = Transplant, heart
- 900 = Transplant, heart and lung
- 910 = Partial left ventriculectomy (LV volume reduction surgery) (Batista)
- 920 = Pericardial drainage procedure
- 930 = Pericardiectomy
- 940 = Pericardial procedure, other
- 950 = Fontan, atrio-pulmonary connection
- 960 = Fontan, atrio-ventricular connection
- 970 = Fontan, TCPC, lateral tunnel, fenestrated
- 980 = Fontan, TCPC, lateral tunnel, nonfenestrated

990 = Fontan, TCPC, lateral tunnel, NOS
1000 = Fontan, TCPC, external conduit, fenestrated
1010 = Fontan, TCPC, external conduit, nonfenestrated
1020 = Fontan, TCPC, external conduit, NOS
1030 = Fontan, other
1040 = Fontan, NOS
1050 = Congenitally corrected TGA repair, atrial switch and ASO (double switch)
1060 = Congenitally corrected TGA repair, atrial switch and Rastelli
1070 = Congenitally corrected TGA repair, VSD closure
1080 = Congenitally corrected TGA repair, VSD closure and LV to PA conduit
1090 = Congenitally corrected TGA repair, other
1100 = Congenitally corrected TGA repair, NOS
1110 = Arterial switch operation (ASO)
1120 = Arterial switch operation (ASO) and VSD repair
1130 = Senning
1140 = Mustard
1150 = Rastelli
1160 = REV
1170 = TGA, other procedures (Nikaidoh, Kawashima, LV-PA conduit, other)
1180 = DORV, intraventricular tunnel repair
1190 = DORV repair, NOS
1200 = DOLV repair
1210 = Coarctation repair, end to end
1220 = Coarctation repair, end to end, extended
1230 = Coarctation repair, subclavian flap
1240 = Coarctation repair, patch aortoplasty
1250 = Coarctation repair, interposition graft
1260 = Coarctation repair, other
1270 = Coarctation repair, NOS
1280 = Aortic arch repair
1290 = Coronary artery fistula ligation
1291 = Anomalous origin of coronary artery repair
1300 = Coronary artery bypass
1310 = Coronary artery procedure, other
1320 = Interrupted aortic arch repair
1330 = PDA closure, surgical
1340 = PDA closure, device
1350 = PDA closure, NOS
1360 = Vascular ring repair
1370 = Pulmonary artery sling repair
1380 = Aortic aneurysm repair
1390 = Aortic dissection repair
1400 = Lung biopsy
1410 = Transplant, lung(s)
1420 = Lung procedure, other
1430 = Pectus repair
1440 = Tracheal procedure
1450 = Pacemaker implantation, permanent
1460 = Pacemaker procedure
1470 = ICD (AICD) implantation
1480 = ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure
1490 = Arrhythmia surgery-atrial, surgical ablation
1500 = Arrhythmia surgery-ventricular, surgical ablation

1510 = Arrhythmia surgery, NOS
1520 = ASD creation, balloon septostomy (BAS) (Rashkind)
1530 = ASD creation, blade septostomy
1540 = Balloon dilation
1550 = Stent placement
1560 = Device closure
1570 = RF ablation
1580 = Coil embolization
1590 = Shunt, systemic to pulmonary, modified Blalock-Taussig shunt (MBTS)
1600 = Shunt, systemic to pulmonary, central (from aorta or to main pulmonary artery)
1610 = Shunt, systemic to pulmonary, other
1620 = Shunt, systemic to pulmonary, NOS
1630 = Shunt, ligation and takedown
1640 = PA banding (PAB)
1650 = PA debanding
1660 = Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)
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
1710 = Palliation, other
1720 = Aneurysm, ventricular, right, repair
1730 = Aneurysm, ventricular, left, repair
1740 = Aneurysm, pulmonary artery, repair
1750 = Atrial baffle procedure, NOS
1760 = Cardiac tumor resection
1770 = Conduit placement, NOS
1780 = Pulmonary AV fistula repair/occlusion
1790 = Ligation, pulmonary artery
1800 = Pulmonary embolectomy
1810 = Pleural drainage procedure
1820 = Pleural procedure, other
1830 = Ligation, thoracic duct
1840 = Decortication
1850 = Esophageal procedure
1860 = Mediastinal procedure
1870 = Bronchoscopy
1880 = Diaphragm plication
1890 = Diaphragm procedure, other
1900 = Intraaortic balloon pump (IABP) insertion
1910 = ECMO procedure
1920 = Right/left heart assist device procedure
1930 = VATS (video-assisted thoracoscopic surgery)
1940 = Minimally invasive procedure
1950 = Bypass for noncardiac lesion
1960 = Delayed sternal closure
1970 = Mediastinal exploration
1980 = Sternotomy wound drainage
1990 = Thoracotomy, other
2000 = Cardiotomy, other
2010 = Cardiac procedure, other

2020 = Thoracic and/or mediastinal procedure, other
 2030 = Peripheral vascular procedure, other
 2040 = Miscellaneous procedure, other
 2050 = Organ procurement
 7777 = Other procedure

ChangeFrom223:

FieldNotes: 1. Vendor software will prompt user if a procedure is entered twice for the same patient/operation, and will not accept the second value unless it is verified by the user.

Short Name: PrimProc *SeqNum:* 465
Field Name: PrimProc *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Primary procedure for this operation.
Format: Code *Width:*
ParentField: *ParentValue:*
Valid data: 1 - 2
Harvest Coding: 1 = Yes
 2 = No

ChangeFrom223: New field

FieldNotes: 1. Vendor software will enforce only one primary procedure for each operation.

6. Complications

Short Name: CompUniqueID *SeqNum:* 470
Field Name: CompUniqueID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Unique identifier for record in Complications table.
Format: Number (Integer) *Width:*
ParentField: *ParentValue:*
Valid data:
Harvest Coding:
ChangeFrom223: 1. Format changed from "Long" to "Number (Integer)"
FieldNotes:

Short Name: OperationID *SeqNum:* 480
Field Name: OperationID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes
Description: Unique operation identifier.
Format: Text *Width:* 9
ParentField: *ParentValue:*
Valid data:
Harvest Coding:

ChangeFrom223:

FieldNotes: 1. This field is the foreign key linking this complication with the associated procedure data.

Short Name: Complication	<i>SeqNum:</i> 490
<i>Field Name:</i> Complication	<i>Core:</i> Yes
<i>OptionalMandatory:</i> Mandatory	<i>Harvest:</i> Yes
<i>Description:</i> Complication	
<i>Format:</i> Code	<i>Width:</i>
<i>ParentField:</i>	<i>ParentValue:</i>
<i>Valid data:</i> 10 - 330, 777	
<i>Harvest Coding:</i>	
10 = None	
20 = Reoperation during this admission (unplanned reoperation)	
30 = Postoperative cardiac arrest	
40 = Postoperative mechanical circulatory support (IABP, VAD, ECMO, or CPS)	
50 = Postoperative complete AV block requiring temporary pacemaker	
60 = Postoperative complete AV block requiring permanent pacemaker	
70 = Postoperative arrhythmia	
80 = Postoperative low cardiac output	
90 = Postoperative acidosis	
100 = Sternum left open	
110 = Pericardial effusion requiring drainage	
120 = Systemic vein obstruction	
130 = Pulmonary vein obstruction	
140 = Postoperative pulmonary hypertension crises (PA pressure > systemic pressure)	
150 = Postoperative respiratory insufficiency requiring mechanical ventilatory support > 7 days	
160 = Postoperative respiratory insufficiency requiring reintubation	
170 = Postoperative tracheostomy	
180 = Pneumonia	
190 = Pneumothorax	
200 = Pleural effusion requiring drainage	
210 = Chylothorax	
220 = Acute renal failure requiring temporary dialysis	
230 = Acute renal failure requiring permanent dialysis	
240 = Bleeding requiring reoperation	
250 = Wound dehiscence	
260 = Wound infection	
270 = Mediastinitis	
280 = Postoperative endocarditis	
290 = Postoperative septicemia	
300 = Phrenic nerve injury/paralyzed diaphragm	
310 = Recurrent laryngeal nerve injury/paralyzed vocal cord	
320 = Postoperative neurological deficit persisting at discharge	
330 = Postoperative new onset seizures	
777 = Other postoperative complication	

ChangeFrom223:

FieldNotes: 1. Vendor software will force "None" to be an exclusive choice.
2. Vendor software will ensure that a complication is not entered twice for the same patient/operation.

7. Non-Cardiac Abnormality

Short Name: NCAUniqueID *SeqNum:* 500
Field Name: NCAUniqueID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes

Description: Unique identifier for record in NCAbnormality table.

Format: Number (Integer) *Width:*

ParentField: *ParentValue:*

Valid data:

Harvest Coding:

ChangeFrom223: 1. Format changed from "Long" to "Number (Integer)"

FieldNotes:

Short Name: PatID *SeqNum:* 510
Field Name: PatID *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes

Description: The unique identifier from the Demographics table used to identify the patient.

Format: Text *Width:* 20

ParentField: *ParentValue:*

Valid data:

Harvest Coding:

ChangeFrom223:

FieldNotes: 1. This field is the foreign key linking this non-cardiac abnormality with the associated patient in the demographics data.

Short Name: NCAbnormality *SeqNum:* 520
Field Name: NCAbnormality *Core:* Yes
OptionalMandatory: Mandatory *Harvest:* Yes

Description: Non-Cardiac Abnormality

Format: Code *Width:*

ParentField: *ParentValue:*

Valid data: 10 - 120, 777

Harvest Coding:

- 10 = None
- 20 = Asplenia
- 30 = Polysplenia
- 40 = Down syndrome
- 50 = Turner syndrome
- 60 = DiGeorge
- 70 = Williams-Beuren syndrome
- 80 = Alagille syndrome (intrahepatic biliary duct agenesis)
- 90 = 22q11 deletion
- 100 = Other chromosomal/syndromic abnormality

110 = Rubella
120 = Marfan syndrome
777 = Other noncardiac abnormality

ChangeFrom223:

FieldNotes: 1. Vendor software will force "None" to be an exclusive choice.
2. Vendor software will ensure that an abnormality is not entered twice for the same patient.

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