Section: Demographics **Parent: Root**

Element: 2000 Last Name

Coding Instruction: Indicate the patient's last name. Hyphenated names should be recorded with a hyphen.

Target Value: The value on arrival at this facility

Technical Specification

Code:	1000142463
Code System Name:	ACC NCDR
Short Name:	LastName
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	LN
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2010 First Name

Coding Instruction: Indicate the patient's first name.

Target Value: The value on arrival at this facility

Technical Specification

Code:	1000142463
Code System Name:	ACC NCDR
Short Name:	FirstName
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	FN
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2020 Middle Name

Coding Instruction: Indicate the patient's middle name.

Note(s):
It is acceptable to specify the middle initial.

If there is no middle name given, leave field blank.

If there are multiple middle names, enter all of the middle names sequentially.

If the name exceeds 50 characters, enter the first 50 letters only.

Target Value: The value on arrival at this facility

Technical Specification

Code:	1000142463
Code System Name:	ACC NCDR
Short Name:	MidName
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	MN
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Demographics **Parent: Root**

Element: 2050 Birth Date

Coding Instruction: Indicate the patient's date of birth.

Target Value: The value on arrival at this facility

Technical Specification

Code:	1000142447
Code System Name:	ACC NCDR
Short Name:	DOB
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	DT
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2030 SSN

Coding Instruction: Indicate the patient's United States Social Security Number (SSN).

Note(s):
If the patient does not have a US Social Security Number (SSN), leave blank and check 'SSN NA'.

Target Value: The value on arrival at this facility

Vendor Instruction: SSN (2030) must be 9 numeric characters long

Technical Specification

Code:	2.16.840.1.113883.4.1
Code System Name:	United States Social Security Number (SSN)
Short Name:	SSN
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	9
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	2031 SSN N/A
Operator:	Equal
Value:	No (or Not Answered)

Element: 2031 SSN N/A

Coding Instruction: Indicate if the patient does not have a United States Social Security Number (SSN).

Target Value: The value on arrival at this facility

Technical Specification

Code:	2.16.840.1.113883.4.1
Code System Name:	United States Social Security Number (SSN)
Short Name:	SSNNA
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Demographics **Parent: Root**

Element: 2040 Patient ID

Coding Instruction: Indicate the number created and automatically inserted by the software that uniquely identifies this patient.

Note(s):
Once assigned to a patient at the participating facility, this number will never be changed or reassigned to a different patient. If the patient returns to the same participating facility or for follow up, they will receive this same unique patient identifier.

Target Value: The value on arrival at this facility

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.842
Code System Name:	ACC NCDR
Short Name:	NCDRPatientID
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	Yes
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	9
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 999,999,999
Data Source:	Automatic

Element: 2045 Other ID

Coding Instruction: Indicate an optional patient identifier, such as medical record number, that can be associated with the patient.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.843
Code System Name:	ACC NCDR
Short Name:	OtherID
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2060 Sex

Coding Instruction: Indicate the patient's sex at birth.

Note: If sex is ambiguous at birth, update this field once genetic testing is complete and results can be added.

Target Value: The value on arrival at this facility

Technical Specification

Code:	1000142448
Code System Name:	ACC NCDR
Short Name:	Sex
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Person Sex - 1.3.6.1.4.1.19376.1.4.1.6.5.19

Selection	Definition	Source	Code	Code System Name
Male			M	HL7 Administrative Gender
Female			F	HL7 Administrative Gender

Section: Demographics **Parent: Root**

Element: 2065 Patient Zip Code

Coding Instruction: Indicate the patient's United States Postal Service zip code of their primary residence.

Note(s):
If the patient does not have a U.S. residence, or is homeless, leave blank and check 'Zip Code NA'.

Target Value: The value on arrival at this facility

Vendor Instruction: Patient Zip Code (2065) must be 5 numeric characters long

Technical Specification

Code:	1000142449
Code System Name:	ACC NCDR
Short Name:	ZipCode
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	5
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 2066 Zip Code N/A
Operator: Equal
Value: No (or Not Answered)

Element: 2066 Zip Code N/A

Coding Instruction: Indicate if the patient does not have a United States Postal Service zip code.

Note(s):
This includes patients who do not have a U.S. residence or are homeless.

Target Value: The value on arrival at this facility

Technical Specification

Code:	1000142449
Code System Name:	ACC NCDR
Short Name:	ZipCodeNA
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2070 Race - White

Coding Instruction: Indicate if the patient is White as determined by the patient/family.

Note(s):
If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility

Supporting Definition: **White**

Individuals with origins in any of the original peoples of Europe, including, for example, English, German, Irish, Italian, Polish, and Scottish.

Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity

Technical Specification

Code:	2106-3
Code System Name:	HL7 Race
Short Name:	RaceWhite
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Demographics **Parent: Root**

Element: 2071 Race - Black/African American

Coding Instruction: Indicate if the patient is Black or African American as determined by the patient/family.

Target Value: The value on arrival at this facility

Supporting Definition: **Black or African American**

Individuals with origins in any of the Black racial groups of Africa, including, for example, African American, Jamaican, Haitian, Nigerian, Ethiopian, and Somali.

Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity

Technical Specification

Code:	2054-5
Code System Name:	HL7 Race
Short Name:	RaceBlack
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2073 Race - American Indian/Alaskan Native

Coding Instruction: Indicate if the patient is American Indian or Alaskan Native as determined by the patient/family.

Note(s):
If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility

Supporting Definition: **American Indian or Alaska Native**

Individuals with origins in any of the original peoples of North, Central, and South America, including, for example, Navajo Nation, Blackfeet Tribe of the Blackfeet Indian Reservation of Montana, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, Aztec, and Maya.

Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity

Technical Specification

Code:	1002-5
Code System Name:	HL7 Race
Short Name:	RaceAmIndian
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2072 Race - Asian

Coding Instruction: Indicate if the patient is Asian as determined by the patient/family.

Note(s):
If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility

Supporting Definition: **Asian**

Individuals with origins in any of the original peoples of Central or East Asia, Southeast Asia, or South Asia, including, for example, Chinese, Asian Indian, Filipino, Vietnamese, Korean, and Japanese.

Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity

Technical Specification

Code:	2028-9
Code System Name:	HL7 Race
Short Name:	RaceAsian
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Demographics **Parent: Root**

Element: 2074 — Race - Native Hawaiian/Pacific Islander

Coding Instruction: Indicate if the patient is Native Hawaiian or Pacific Islander as determined by the patient/family.

Note(s):
If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility

Supporting Definition: **Native Hawaiian or Pacific Islander**

Individuals with origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands, including, for example, Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, and Marshallese.

Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity

Technical Specification

Code:	2076-8
Code System Name:	HL7 Race
Short Name:	RaceNatHaw
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2075 — Race - Middle Eastern/North African

Coding Instruction: Indicate if the patient is Middle Eastern or North African as determined by the patient/family.

Target Value: The value on arrival at this facility

Supporting Definition: **Middle Eastern**

Individuals with origins in any of the original peoples of the Middle East or North Africa, including, for example, Lebanese, Iranian, Egyptian, Syrian, Iraqi, and Israeli.

Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity

Technical Specification

Code:	2118-8
Code System Name:	HL7 Race
Short Name:	RaceMiddleEastern
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 2076 — Hispanic or Latino Ethnicity

Coding Instruction: Indicate if the patient is of Hispanic or Latino ethnicity as determined by the patient/family.

Note(s):
If the patient has multiple hispanic or latin ethnicity, specify them using the other ethnicity selections in addition to this one.

Target Value: The value on arrival at this facility

Supporting Definition: **Hispanic or Latino**

Includes individuals of Mexican, Puerto Rican, Salvadoran, Cuban, Dominican, Guatemalan, and other Central or South American or Spanish culture or origin.

Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity

Technical Specification

Code:	2135-2
Code System Name:	HL7 Ethnicity
Short Name:	HispOrig
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Episode of Care **Parent: Root**

Element: 2999 — Episode Unique Key

Coding Instruction: Indicate the unique key associated with each patient episode record as assigned by the EMR/EHR or your software application.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.855
Code System Name:	ACC NCDR
Short Name:	EpisodeKey
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	Yes
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Element: 3001 — Arrival Date and Time

Coding Instruction: Indicate the date and time the patient arrived at your facility.

Note(s):
Indicate the time (hours:minutes) using the military 24-hour clock, beginning at midnight (00:00 hours).

Target Value: N/A

Vendor Instruction: Arrival Date and Time (3001) must be <= Discharge Date and Time (10101)

Technical Specification

Code:	1000142450
Code System Name:	ACC NCDR
Short Name:	ArrivalDateTime
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	TS
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 3005 — Health Insurance

Coding Instruction: Indicate if the patient has health insurance.

Target Value: The value on arrival at this facility

Vendor Instruction: Health Insurance (3005) must not be NULL

Technical Specification

Code:	63513-6
Code System Name:	LOINC
Short Name:	HealthIns
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Episode of Care **Parent: Root**

Element: 3010 Health Insurance Payment Source

Coding Instruction: Indicate the patient's health insurance payment type.

Note(s):
If the patient has multiple insurance payors, select all payors.

Target Value: The value on arrival at this facility

Technical Specification

Code:	100001072
Code System Name:	ACC NCDR
Short Name:	HIPS
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	3005	Health Insurance
Operator:	Equal	
Value:	Yes	

Payor Category - 1.3.6.1.4.1.19376.1.4.1.6.5.5

Selection	Definition	Source	Code	Code System Name
Private health insurance	Private health insurance is coverage by a health plan provided through an employer or union or purchased by an individual from a private health insurance company. A health maintenance organization (HMO) is considered private health insurance.		5	PHDSC
State-specific plan (non-Medicaid)	State Specific Plans - Some states have their own health insurance programs for low-income uninsured individuals. These health plans may be known by different names in different states.		36	PHDSC
Medicare (Part A or B)	Medicare is the Federal program which helps pay health care costs for people 65 and older and for certain people under 65 with long-term disabilities.		1	PHDSC
Medicare Advantage (Part C)	Medicare Part C (Medicare Advantage) – Part C is an alternative way to get Medicare coverage through private insurance companies instead of the federal government. Part C provides the same benefits as Medicare Part A and Part B, and may include additional benefits such as dental, vision, prescription drug and wellness programs coverage.	Medicare Advantage Plans (Part C) | MedicareAdvantage.com	112000002025	ACC NCDR
Medicaid	Medicaid is a program administered at the state level, which provides medical assistance to the needy. Families with dependent children, the aged, blind, and disabled who are in financial need are eligible for Medicaid. It may be known by different names.		2	PHDSC
Military health care	Military Health care - Military health care includes TRICARE/CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) and CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs (VA).		31	PHDSC
Indian Health Service	Indian Health Service (IHS) is a health care program through which the Department of Health and Human Services provides medical assistance to eligible American Indians at IHS facilities. In addition, the IHS helps pay the cost of selected health care services provided at non-IHS facilities.		33	PHDSC
Non-US insurance	Non-US insurance refers to individuals with a payor that does not originate in the United States.		100000812	ACC NCDR

Section: Episode of Care **Parent: Root**

Element: 12846 Medicare Beneficiary Identifier

Coding Instruction: Indicate the patient's Medicare Beneficiary Identifier (MBI).

Note(s):
Enter the Medicare Beneficiary Identifier (MBI) for those patients insured by Medicare. Patients without Medicare will not have a MBI.

Target Value: The value on arrival at this facility

Supporting Definition: **Medicare Beneficiary Identifier**

The Medicare Access and CHIP Reauthorization Act (MACRA) of 2015, requires us to remove Social Security Numbers (SSNs) from all Medicare cards by April 2019. A new Medicare Beneficiary Identifier (MBI) will replace the SSN-based Health Insurance Claim Number (HICN) on the new Medicare cards for Medicare transactions like billing, eligibility status, and claim status.

Source: https://www.cms.gov/Medicare/New-Medicare-Card/index.html

Technical Specification

Code:	2.16.840.1.113883.4.927
Code System Name:	Centers for Medicare & Medicaid Services
Short Name:	MBI
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	11
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	3010 Health Insurance Payment Source
Operator:	Equal
Value:	Medicare (Part A or B)
Element:	3010 Health Insurance Payment Source
Operator:	Equal
Value:	Medicare Advantage (Part C)

Element: 3020 Patient Enrolled in Research Study

Coding Instruction: Indicate if the patient is enrolled in an ongoing ACC - NCDR research study related to this registry.

Target Value: Any occurrence between arrival at this facility and discharge

Supporting Definition: **Patient Enrolled in Research Study**

A clinical or research study is one in which participants are assigned to receive one or more interventions (or no intervention) so that researchers can evaluate the effects of the interventions on biomedical or health-related outcomes. The assignments are determined by the study protocol. Participants may receive diagnostic, therapeutic, or other types of interventions.

Source: Clinicaltrials.gov Glossary of Common Site Terms retrieved from http://clinicaltrials.gov/ct2/about-studies/glossary#interventional-study

Technical Specification

Code:	100001095
Code System Name:	ACC NCDR
Short Name:	EnrolledStudy
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Research Study **Parent: Episode of Care**

Element: 3025 Research Study Name

Coding Instruction: Indicate the research study name as provided by the research study protocol.

Note(s):
If the patient is in more than one research study, list each separately.

Target Value: N/A

Vendor Instruction: A Research Study Name (3025) may only be entered/selected once

Research Study Name (3025) must be a valid study name for IMPACT v3.0

Technical Specification

Code:	100001096
Code System Name:	ACC NCDR
Short Name:	StudyName
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	3020	Patient Enrolled in Research Study
Operator:	Equal	
Value:	Yes	

Element: 3030 Research Study Patient ID

Coding Instruction: Indicate the research study patient identification number as assigned by the research protocol.

Note(s):
If the patient is in more than one research study, list each separately.
Intended for future use.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.852
Code System Name:	ACC NCDR
Short Name:	StudyPtID
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	3025	Research Study Name
Operator:		
Value:	Any Value	

Section: Pathway **Parent: Episode of Care**

Element: 15836 IMPACT Registry Pathway

Coding Instruction: Indicate the primary procedure(s) that were attempted or performed during the case, regardless of success. If multiple primary procedure types were performed during this episode of care, select all that apply.

Notes

1. Interventional or diagnostic catheterization: Code if any catheterization was performed

2. Electrophysiology study with and without ablation: Code electrophysiology study if an EP study was performed with or without ablation during this episode of care.

3. Cardiovascular implantable electronic device (CIED): Code CIED if a procedure was performed to implant ICD/CRT generators, leads, pacemaker generators, and/or implantable loop recorders. Do not code CIED if a procedure involves temporary pacing or non-implantable cardiac monitoring devices.

Target Value: The value on current procedure

Technical Specification

Code:	112000003715
Code System Name:	ACC NCDR
Short Name:	ImpRegPath
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

IMPACT Registry Pathway Value Set - 1.3.6.1.4.1.19376.1.4.1.6.5.984

Selection	Definition	Source	Code	Code System Name
Diagnostic or interventional catheterization			112000003750	ACC NCDR
Electrophysiology study with or without ablation			252425004	SNOMED CT
Cardiovascular implantable electronic device (CIED)	Cardiovascular Implantable Electronic Devices (CIED) refer to procedures done to implant ICD generators/CRT, leads, pacemaker generators, and implantable loop recorders.		112000003721	ACC NCDR

Section: Primary Diagnosis **Parent: Episode of Care**

Element: 15835 Primary Diagnosis

Coding Instruction: Indicate the primary congenital heart defect. Select the diagnosis from the diagnosis master list.

Note: "Status post diagnosis(es)" cannot be used as the primary diagnosis.

The intent of the “Primary diagnosis code” is to capture the singular most pertinent heart defect regardless of whether the condition was treated or still present. In cases where the patient has multiple conditions present, please select the one felt to be the most significant or having the broadest overall effect on the patient’s health.

If the patient was not born with a congenital heart defect, or has no history of a congenital heart defect, then please identify the electrical variance from the diagnosis master list if available.

If the patient was not born with a congenital heart defect, has no history of a congenital heart defect, and has no electrical variance, then ‘Normal Heart’ would be selected.

Target Value: The value on arrival at this facility

Technical Specification

Code:	362965005
Code System Name:	SNOMED CT
Short Name:	PrimDx
Missing Data:	Report
Harvested:	Yes (EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15836 IMPACT Registry Pathway
Operator:	Equal
Value:	Diagnostic or interventional catheterization
Element:	15836 IMPACT Registry Pathway
Operator:	Equal
Value:	Electrophysiology study with or without ablation

Diagnosis Master - 1.3.6.1.4.1.19376.1.4.1.6.5.893

Selection	Definition	Source	Code	Code System Name
Septal defects - PFO			112000002777	ACC NCDR
Septal defects - ASD - secundum			112000002778	ACC NCDR
Septal defects - ASD - sinus venosus			112000002779	ACC NCDR
Septal defects - ASD - coronary sinus			112000002780	ACC NCDR
Septal defects - ASD - common atrium - single atrium			112000002781	ACC NCDR
Septal defects - VSD - Type 1 subarterial - supracristal - conal septal defect - infundibular			112000002782	ACC NCDR
Septal defects - VSD - Type 2 - perimembranous - paramembranous - conoventricular			112000002783	ACC NCDR
Septal defects - VSD - type 3 - inlet - AV canal type			112000002784	ACC NCDR
Septal defects - VSD - type 4 - muscular			112000002785	ACC NCDR
Septal defects - VSD - type - gerbode type - LV-RA communication			112000002786	ACC NCDR
Septal defects - VSD - multiple			112000002787	ACC NCDR
Septal defects - AVC - AVSD - complete CAVSD			112000002788	ACC NCDR
Septal defects - AVC - AVSD - intermediate -transitional			112000002789	ACC NCDR
Septal defects - AVC - AVSD - partial - incomplete - PAVSD - ASD primum			112000002790	ACC NCDR
Septal defects - AP window - aortopulmonary window			112000002791	ACC NCDR
Septal defects - pulmonary artery origin from ascending aorta - hemitruncus			112000002792	ACC NCDR
Septal defects - truncus arteriosus			112000002793	ACC NCDR
Septal defects - truncal valve			112000002794	ACC NCDR

Section: Primary Diagnosis	Parent: Episode of Care		
insufficiency			
Septal defects - truncus arteriosus and interrupted aortic arch		112000002795	ACC NCDR
Pulmonary venous anomalies - partial anomalous pulmonary venous connection		112000002796	ACC NCDR
Pulmonary venous anomalies - partial anomalous pulmonary venous connection - scimitar		112000002797	ACC NCDR
Pulmonary venous anomalies - total anomalous pulmonary venous connection - Type 1 supracardiac		112000002798	ACC NCDR
Pulmonary venous anomalies - total anomalous pulmonary venous connection - Type 2 cardiac		112000002799	ACC NCDR
Pulmonary venous anomalies - total anomalous pulmonary venous connection - Type 3 infracardiac		112000002800	ACC NCDR
Pulmonary venous anomalies - total anomalous pulmonary venous connection - Type 4 mixed		112000002801	ACC NCDR
Cor triatriatum - cor triatriatum		112000002802	ACC NCDR
Pulmonary venous stenosis - Pulmonary venous stenosis		112000002803	ACC NCDR
Systemic venous anomalies - Systemic venous anomaly		112000002804	ACC NCDR
Systemic venous anomalies - systemic venous obstruction		112000002805	ACC NCDR
Right heart lesions - TOF		112000002806	ACC NCDR
Right heart lesions - TOF - pulmonary stenosis		112000002807	ACC NCDR
Right heart lesions - TOF - AVC - AVSD		112000002808	ACC NCDR
Right heart lesions - TOF - absent pulmonary valve		112000002809	ACC NCDR
Right heart lesions - pulmonary atresia		112000002810	ACC NCDR
Right heart lesions - pulmonary atresia - IVS		112000002811	ACC NCDR
Right heart lesions - pulmonary atresia - VSD including TOF-PA		112000002812	ACC NCDR
Right heart lesions - pulmonary atresia - VSD-MAPCA - pseudotruncus		112000002813	ACC NCDR
Right heart lesions - MAPCA - major aortopulmonary collaterals - without PA-VSD		112000002814	ACC NCDR
Right heart lesions - Ebsteins anomaly		112000002815	ACC NCDR
Right heart lesions - tricuspid regurgitation - non-Ebsteins related		112000002816	ACC NCDR
Right heart lesions - tricuspid stenosis		112000002817	ACC NCDR
Right heart lesions - tricuspid regurgitation and tricuspid stenosis		112000002818	ACC NCDR
Right heart lesions - tricuspid valve disease - other		112000002819	ACC NCDR
Right heart lesions - pulmonary stenosis - valvar		112000002820	ACC NCDR
Right heart lesions - pulmonary artery stenosis - hypoplasia - main-trunk		112000002821	ACC NCDR
Right heart lesions - pulmonary artery stenosis - branch -		112000002822	ACC NCDR

Section: Primary Diagnosis	Parent: Episode of Care		
central - within the hilar bifurcation			
Right heart lesions - pulmonary artery stenosis - branch - peripheral - at or beyond the hilar bifurcation		112000002823	ACC NCDR
Right heart lesions - pulmonary artery - discontinuous		112000002824	ACC NCDR
Right heart lesions - pulmonary stenosis - subvalvar		112000002825	ACC NCDR
Right heart lesions - DCRV		112000002826	ACC NCDR
Right heart lesions - pulmonary valve disease - other		112000002827	ACC NCDR
Right heart lesions - pulmonary insufficiency		112000002828	ACC NCDR
Right heart lesions - pulmonary insufficiency and pulmonary stenosis		112000002829	ACC NCDR
Shunt failure - shunt failure		112000002830	ACC NCDR
Right heart lesions - conduit failure		112000002831	ACC NCDR
Left heart lesions - aortic stenosis - subvalvar		112000002832	ACC NCDR
Left heart lesions - aortic stenosis - valvar		112000002833	ACC NCDR
Left heart lesions - aortic stenosis - supravalvar		112000002834	ACC NCDR
Left heart lesions - aortic valve atresia		112000002835	ACC NCDR
Left heart lesions - aortic insufficiency		112000002836	ACC NCDR
Left heart lesions - aortic insufficiency and aortic stenosis		112000002837	ACC NCDR
Left heart lesions - aortic valve - other		112000002838	ACC NCDR
Left heart lesions - sinus of valsalva aneurysm		112000002839	ACC NCDR
Left heart lesions - LV to aorta tunnel		112000002840	ACC NCDR
Left heart lesions - mitral stenosis - supravalvar mitral ring		112000002841	ACC NCDR
Left heart lesions - mitral stenosis - valvar		112000002842	ACC NCDR
Left heart lesions - mitral stenosis - subvalvar		112000002843	ACC NCDR
Left heart lesions - mitral stenosis - subvalvar-parachute		112000002844	ACC NCDR
Left heart lesions - mitral stenosis		112000002845	ACC NCDR
Left heart lesions - mitral regurgitation and mitral stenosis		112000002846	ACC NCDR
Left heart lesions - mitral regurgitation		112000002847	ACC NCDR
Left heart lesions - mitral valve -other		112000002848	ACC NCDR
Left heart lesions - hypoplastic left heart syndrome		112000002849	ACC NCDR
Left heart lesions - shones syndrome		112000002850	ACC NCDR
Left heart lesions - cardiomyopathy - including dilated - restrictive - and hypertrophic		112000002851	ACC NCDR
Left heart lesions - cardiomyopathy - end-stage congenital heart disease		112000002852	ACC NCDR
Left heart lesions - pericardial effusion		112000002853	ACC NCDR

Section: Primary Diagnosis	Parent: Episode of Care	
Left heart lesions - pericarditis	112000002854	ACC NCDR
Left heart lesions - pericardial disease - other	112000002855	ACC NCDR
Single ventricle - single ventricle - DILV	112000002856	ACC NCDR
Single ventricle - single ventricle - DIRV	112000002857	ACC NCDR
Single ventricle - single ventricle - mitral atresia	112000002858	ACC NCDR
Single ventricle - single ventricle - tricuspid atresia	112000002859	ACC NCDR
Single ventricle - single ventricle - unbalanced AV canal	112000002860	ACC NCDR
Single ventricle - single ventricle - heterotaxia syndrome	112000002861	ACC NCDR
Single ventricle - single ventricle - other	112000002862	ACC NCDR
Single ventricle - single ventricle and total anomalous pulmonary venous connection	112000002863	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA	112000002864	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA - IVS	112000002865	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA - IVS-LVOTO	112000002866	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA - VSD	112000002867	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA - VSD-LVOTO	112000002868	ACC NCDR
Transposition of the great arteries - TGA - IVS	112000002869	ACC NCDR
Transposition of the great arteries - TGA - IVS-LVOTO	112000002870	ACC NCDR
Transposition of the great arteries - TGA - VSD	112000002871	ACC NCDR
Transposition of the great arteries - TGA - VSD-LVOTO	112000002872	ACC NCDR
DORV - DORV - VSD type	112000002873	ACC NCDR
DORV - DORV - TOF type	112000002874	ACC NCDR
DORV - DORV - TGA type	112000002875	ACC NCDR
DORV - DORV - remote VSD - uncommitted VSD	112000002876	ACC NCDR
DORV - DORV and AVSD - AV canal	112000002877	ACC NCDR
DORV - DORV - IVS	112000002878	ACC NCDR
DOLV - DOLV	112000002879	ACC NCDR
Thoracic arteries and veins - coarctation of aorta	112000002880	ACC NCDR
Thoracic arteries and veins - aortic arch hypoplasia	112000002881	ACC NCDR
Thoracic arteries and veins - VSD plus aortic arch hypoplasia	112000002882	ACC NCDR
Thoracic arteries and veins - VSD plus coarctation of aorta	112000002883	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - anomalous aortic origin of coronary artery from aorta	112000002884	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - Anomalous pulmonary origin - includes ALCAPA	112000002885	ACC NCDR

Section: Primary Diagnosis	Parent: Episode of Care		
Thoracic arteries and veins - coronary artery anomaly - fistula		112000002886	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - aneurysm		112000002887	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - other		112000002888	ACC NCDR
Thoracic arteries and veins - interrupted aortic arch		112000002889	ACC NCDR
Thoracic arteries and veins - interrupted aortic arch and VSD		112000002890	ACC NCDR
Thoracic arteries and veins - interrupted aortic arch and AP window - aortopulmonary window		112000002891	ACC NCDR
Thoracic arteries and veins - patent ductus arteriosus		112000002892	ACC NCDR
Thoracic arteries and veins - vascular ring		112000002893	ACC NCDR
Thoracic arteries and veins - pulmonary artery sling		112000002894	ACC NCDR
Thoracic arteries and veins - aortic aneurysm - including pseudoaneurysm		112000002895	ACC NCDR
Thoracic arteries and veins - aortic dissection		112000002896	ACC NCDR
Thoracic and mediastinal disease - lung disease - benign		112000002897	ACC NCDR
Thoracic and mediastinal disease - lung disease - malignant		112000002898	ACC NCDR
Thoracic and mediastinal disease - pect		112000002899	ACC NCDR
Thoracic and mediastinal disease - tracheal stenosis		112000002900	ACC NCDR
Thoracic and mediastinal disease - airway disease		112000002901	ACC NCDR
Thoracic and mediastinal disease - pleural disease - benign		112000002902	ACC NCDR
Thoracic and mediastinal disease - pleural disease - malignant		112000002903	ACC NCDR
Thoracic and mediastinal disease - pneumothorax		112000002904	ACC NCDR
Thoracic and mediastinal disease - pleural effusion		112000002905	ACC NCDR
Thoracic and mediastinal disease - chylothorax		112000002906	ACC NCDR
Thoracic and mediastinal disease - empyema		112000002907	ACC NCDR
Thoracic and mediastinal disease - esophageal disease - benign		112000002908	ACC NCDR
Thoracic and mediastinal disease - esophageal disease - malignant		112000002909	ACC NCDR
Thoracic and mediastinal disease - mediastinal disease		112000002910	ACC NCDR
Thoracic and mediastinal disease - mediastinal disease - benign		112000002911	ACC NCDR
Thoracic and mediastinal disease - mediastinal disease - malignant		112000002912	ACC NCDR
Thoracic and mediastinal disease - diaphragm paralysis		112000002913	ACC NCDR
Thoracic and mediastinal		112000002914	ACC NCDR

Section: Primary Diagnosis	Parent: Episode of Care	
disease - diaphragm disease - other		
Electrophysiologic - arrhythmia	112000002915	ACC NCDR
Electrophysiologic - arrhythmia - atrial	112000002916	ACC NCDR
Electrophysiologic - arrhythmia - junctional	112000002917	ACC NCDR
Electrophysiologic - arrhythmia - ventricular	112000002918	ACC NCDR
Electrophysiologic - arrhythmia - heart block	112000002919	ACC NCDR
Electrophysiologic - arrhythmia - heart block - acquired	112000002920	ACC NCDR
Electrophysiologic - arrhythmia - heart block - congenital	112000002921	ACC NCDR
Electrophysiologic - arrhythmia - pacemaker - indication for replacement	112000002922	ACC NCDR
Miscellaneous - atrial isomerism - left	112000002923	ACC NCDR
Miscellaneous - atrial isomerism - right	112000002924	ACC NCDR
Miscellaneous - dextrocardia	112000002925	ACC NCDR
Miscellaneous - levocardia	112000002926	ACC NCDR
Miscellaneous - mesocardia	112000002927	ACC NCDR
Miscellaneous - situs inversusy	112000002928	ACC NCDR
Miscellaneous - aneurysm - ventricular - right - including pseudoaneurysm	112000002929	ACC NCDR
Miscellaneous - aneurysm - ventricular - left - including pseudoaneurysm	112000002930	ACC NCDR
Miscellaneous - aneurysm - pulmonary artery	112000002931	ACC NCDR
Miscellaneous - aneurysm - other	112000002932	ACC NCDR
Miscellaneous - hypoplastic RV	112000002933	ACC NCDR
Miscellaneous - hypoplastic LV	112000002934	ACC NCDR
Miscellaneous - postoperative bleeding	112000002935	ACC NCDR
Miscellaneous - mediastinitis	112000002936	ACC NCDR
Miscellaneous - endocarditis	112000002937	ACC NCDR
Miscellaneous - rheumatic heart disease	112000002938	ACC NCDR
Miscellaneous - prosthetic valve failure	112000002939	ACC NCDR
Miscellaneous - myocardial infarction	112000002940	ACC NCDR
Miscellaneous - cardiac tumor	112000002941	ACC NCDR
Miscellaneous - pulmonary AV fistula	112000002942	ACC NCDR
Miscellaneous - pulmonary embolism	112000002943	ACC NCDR
Miscellaneous - pulmonary vascular obstructive disease	112000002944	ACC NCDR
Miscellaneous - pulmonary vascular obstructive disease - eisenmengers	112000002945	ACC NCDR
Miscellaneous - primary pulmonary hypertension	112000002946	ACC NCDR
Miscellaneous - persistent fetal circulation	112000002947	ACC NCDR
Miscellaneous - meconium aspiration	112000002948	ACC NCDR
Miscellaneous - cardiac - other	112000002949	ACC NCDR
Miscellaneous - thoracic and-or mediastinal - other	112000002950	ACC NCDR
Miscellaneous - peripheral	112000002951	ACC NCDR

Section: Primary Diagnosis	Parent: Episode of Care	
vascular - other		
Miscellaneous - status post transplant - heart	112000002952	ACC NCDR
Miscellaneous - status post transplant - lung	112000002953	ACC NCDR
Miscellaneous - status post transplant - heart and lung	112000002954	ACC NCDR
Miscellaneous - normal heart	112000002955	ACC NCDR
Miscellaneous - other	112000002956	ACC NCDR

Section: History and Risk Factors **Parent: Root**

Element: 15113 Genetic Condition

Coding Instruction: Indicate if the patient does or does not have a genetic condition.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	312850006
Code System Name:	SNOMED CT
Short Name:	GenCongCondOcc
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: History and Risk Factors **Parent: Root**

Element: 15048 Genetic Condition Name

Coding Instruction: Select the genetic condition(s) from which the patient's history is determined.

Target Value: N/A

Technical Specification

Code:	312850006
Code System Name:	SNOMED CT
Short Name:	GenCongConditionHx
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15113	Genetic Condition
Operator:	Equal	
Value:	Yes	

Genetic and Congenital Condition History - 1.3.6.1.4.1.19376.1.4.1.6.5.811

Selection	Definition	Source	Code	Code System Name
22q11.2 deletion (DiGeorge syndrome)	A deletion of a portion of the twenty-second chromosome that can cause such health problems as heart defects, immune deficiency, and cleft palate as well as developmental delays, learning disabilities and social/emotional issues.		737546002	SNOMED CT
Alagille syndrome	Genetic condition evidenced by a mutation or deletion of the JAG1 (20p12) gene.		31742004	SNOMED CT
CHARGE syndrome	A syndrome involving a specific set of birth defects, including coloboma, heart defects, choanal atresia, growth retardation, genital abnormalities, and ear anomalies, typically linked to mutations in the CHD7 gene.		47535005	SNOMED CT
Congenital rubella syndrome	A condition caused by maternal rubella infection during pregnancy, often resulting in cardiac defects, hearing impairment, and other anomalies.		36653000	SNOMED CT
Down syndrome	Congenital disease evidenced by a full or partial extra copy of chromosome 21.		41040004	SNOMED CT
Emanuel syndrome	A chromosomal disorder characterized by developmental delays, heart defects, and craniofacial abnormalities, caused by an extra derivative chromosome 22.		702417004	SNOMED CT
Heterotaxy	The abnormal placement of organs due to failure to establish the normal left-right patterning during embryonic development.		14821001	SNOMED CT
Jacobsen syndrome	A chromosomal disorder resulting from a deletion on chromosome 11, often associated with developmental delays, heart defects, and bleeding disorders.		715438008	SNOMED CT
Kabuki syndrome	A genetic disorder characterized by distinct facial features, developmental delays, and a range of congenital anomalies. The condition is typically caused by mutations in the KMT2D or KDM6A genes, which are involved in chromatin regulation and gene expression.		313426007	SNOMED CT
Loeys-Dietz syndrome	A connective tissue disorder marked by arterial aneurysms, dissections, and skeletal anomalies, often caused by mutations in TGFBR1 or TGFBR2 genes.		446263001	SNOMED CT
Marfan syndrome	An inherited disorder of the connective tissue that causes abnormalities of the patient's eyes, cardiovascular system, and musculoskeletal system.		19346006	SNOMED CT
Noonan syndrome	A relatively common congenital genetic condition which affects both males and females. It used to be referred to as the male version of Turner syndrome. However, the genetic causes of Noonan syndrome and Turner syndrome are distinct. The principal features include congenital heart malformation, short stature, learning problems, indentation of the chest, impaired blood clotting, and a characteristic configuration of facial		205824006	SNOMED CT

Section: History and Risk Factors	Parent: Root		
	features.		
Trisomy-13	Trisomy 13 (also called Patau syndrome) is a genetic disorder in which a person has three copies of genetic material from chromosome 13, instead of the usual two copies. Rarely, the extra material may be attached to another chromosome (translocation).	737540008	SNOMED CT
Trisomy-18	Edwards syndrome, or Trisomy 18, is a chromosomal abnormality where the patient has an extra (or third) copy of chromosome 18. 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.	737541007	SNOMED CT
Turner syndrome	A congenital disease as evidenced by a defect in/or absence of the second female X chromosome.	38804009	SNOMED CT
VACTERL syndrome	An acronym describing a group of birth defects that affect the vertebrae, anus, cardiovascular system, trachea, esophagus, renal system, and limbs.	431395004	SNOMED CT
Williams-Beuren syndrome	Idiopathic hypercalcemia of infants as evidenced by the deletion of chromosome 7 material.	63247009	SNOMED CT
Other	N/A	100000351	ACC NCDR

Section: Condition History **Parent: History and Risk Factors**

Element: 12903 Condition History Name

Coding Instruction: Select from the following list of medical conditions based on prior clinical diagnosis/documentation. Additional definitions appear below for those selections that may need further clarification.

Target Value: N/A

Technical Specification

Code:	312850006
Code System Name:	SNOMED CT
Short Name:	ConditionHx
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Condition Histories - 1.3.6.1.4.1.19376.1.4.1.6.5.927

Selection	Definition	Source	Code	Code System Name
Cardiomyopathy	Select if there is documentation of cardiomyopathy, a disease of the heart muscle, including but not limited to hypertrophic cardiomyopathy, dilated cardiomyopathy, restrictive cardiomyopathy, arrhythmogenic right ventricular dysplasia, or Takotsubo cardiomyopathy.		85898001	SNOMED CT
Chronic Lung Disease	Select if there is documentation of chronic lung disease, such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, emphysema, chronic inhalation reactive diseases (e.g., asbestosis, pneumoconiosis), or radiation-induced lung damage. This includes patients requiring chronic inhaled or oral pharmacologic therapy, such as steroids or beta-agonists. Asthma, seasonal allergies, and transient conditions like atelectasis are not considered chronic lung disease.		413839001	SNOMED CT
Blood Coagulation Disorder	Select if there is documentation of a history of a hypercoagulable state, characterized by an increased tendency to form blood clots. This may be indicated by below-normal prothrombin time (PT) or partial thromboplastin time (PTT). Conditions caused solely by medications, such as vitamin K, do not meet the criteria		64779008	SNOMED CT
Congenital heart disease	Select if there is documentation of congenital heart disease, including but not limited to Tetralogy of Fallot, Ventricular Septal Defect (VSD), Ebstein anomaly, Transposition of Great Vessels, Patent Foramen Ovale (PFO), Atrial Septal Defect (ASD), Holt-Oram syndrome, Heart-Hand syndrome, or Common Ventricle.		13213009	SNOMED CT
Endocarditis	Select if there is documentation of endocarditis.		56819008	SNOMED CT
Heart Failure	Heart failure is a complex clinical syndrome that results from any structural or functional impairment of ventricular filling or ejection of blood. The cardinal manifestations of HF are dyspnea and fatigue, which may limit exercise tolerance, and fluid retention, which may lead to pulmonary and/or splanchnic congestion and/or peripheral edema. Some patients have exercise intolerance but little evidence of fluid retention, whereas others complain primarily of edema, dyspnea, or fatigue. Because some patients present without signs or symptoms of volume overload, the term "heart failure" is preferred over "congestive heart failure." There is no single diagnostic test for HF because it is largely a clinical diagnosis based on a careful history and physical examination.	2013 ACCF/AHA Guideline for the Management of Heart Failure; J Am Coll Cardiol. 2013;62(16):e147-e239. doi:10.1016/j.jacc.2013.05.019	84114007	SNOMED CT
Heart transplant			32413006	SNOMED CT
Stroke	Select if there is documentation/diagnosis of stroke associated with abrupt onset of neurological deficit lasting more than 24 hours.		100000977	ACC NCDR

Section: Condition History **Parent: History and Risk Factors**

Element: 15510 Condition History Occurrence

Coding Instruction: Indicate if the patient has or has not had a clinical diagnosis of the indicated medical condition.

Target Value: Any occurrence between birth and arrival at this facility

Vendor Instruction: Condition History Occurrence (15510) cannot be Null when a Condition History Name (12903) is selected

Technical Specification

Code:	312850006
Code System Name:	SNOMED CT
Short Name:	ConditionHxOccurenceArrival
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	12903	Condition History Name
Operator:		
Value:	Any Value	

Section: Condition History Details **Parent: History and Risk Factors**

Element: 15051 Cardiomyopathy Type

Coding Instruction: Indicate the type(s) of cardiomyopathy the patient has been diagnosed with.

Target Value: Any occurrence between birth and current procedure

Technical Specification

Code:	100000953
Code System Name:	ACC NCDR
Short Name:	PriorCMHx
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 12903 Condition History Name
Operator: Equal
Value: Cardiomyopathy

--- AND ---

Element: 15510 Condition History Occurrence
Operator: Equal
Value: Yes

Cardiomyopathy Type - 1.3.6.1.4.1.19376.1.4.1.6.5.193

Selection	Definition	Source	Code	Code System Name
Arrhythmogenic right ventricular cardiomyopathy	A genetic disorder involving fibrofatty replacement of right ventricular myocardium, predisposing to arrhythmias and potential heart failure.		281170005	SNOMED CT
Dilated cardiomyopathy	Select if there is documentation of ventricular dilation with impaired systolic function, commonly defined by a left ventricular ejection fraction (LVEF) less than 40%. Dilated cardiomyopathy can occur with or without symptoms of heart failure and may be primary (idiopathic) or secondary to identifiable causes such as genetic factors, infections, or systemic conditions.		195021004	SNOMED CT
Hypertrophic cardiomyopathy	Select if there is documentation of hypertrophic cardiomyopathy, characterized by a hypertrophied, nondilated left ventricle (LV) in the absence of other systemic or cardiac diseases capable of causing similar wall thickening (e.g., hypertension, aortic valve stenosis). Diagnosis is typically made using echocardiography or cardiac magnetic resonance imaging (CMR) by identifying otherwise unexplained LV wall thickening, often accompanied by a small LV cavity.		233873004	SNOMED CT
Ischemic cardiomyopathy	Considered to be present in patients with HF who have had a myocardial infarction (MI) or have evidence of viable hibernating myocardium or, on angiography, severe coronary disease. The term ischemic cardiomyopathy has been used to describe significantly impaired left ventricular function (left ventricular ejection fraction <=35 to 40 percent) that results from coronary artery disease. Despite the common clinical use of the term ischemic cardiomyopathy, ventricular dysfunction caused by coronary disease is not a cardiomyopathy as defined by the 2006 American Heart Association and 2008 European Society of Cardiology statements.		426856002	SNOMED CT
Noncompaction of the ventricular myocardium	A congenital condition characterized by the presence of trabeculated (spongy) muscle in the ventricles, often resulting in impaired cardiac function and increased risk of arrhythmias.		112000002196	ACC NCDR
Pacemaker induced	Cardiomyopathy that is due to a pacemaker. Commonly this is a reduction in left ventricular function in the setting of right ventricular pacing.		112000001511	ACC NCDR
Restrictive cardiomyopathy	Select if there is documentation of restrictive cardiomyopathy, a rare form of heart muscle disease		415295002	SNOMED CT

Section: Condition History Details **Parent: History and Risk Factors**

	characterized by impaired ventricular filling due to restrictive physiology. This condition features non-hypertrophied, non-dilated ventricles with normal or decreased volume, biatrial enlargement, and normal (or near-normal) systolic function. Restrictive cardiomyopathy is associated with diastolic dysfunction and can present similarly to constrictive pericarditis.		
Tachycardia-induced cardiomyopathy	The patient developed cardiomyopathy caused by prolonged or frequent tachycardia episodes	426300009	SNOMED CT
Other cardiomyopathy type	The term "unclassified cardiomyopathy" was included in the 2008 ESC classification system to describe disorders that do not readily fit into any of the above phenotypic categories [3]. Examples cited include LV noncompaction and stress-induced (takotsubo) cardiomyopathy.	100001065	ACC NCDR

Element: 15393 Congenital Heart Disease Type

Coding Instruction: Indicate the type of congenital heart disease the patient has been diagnosed with.

Target Value: Any occurrence between birth and current procedure

Vendor Instruction: Parent/Child Validation Notes: For the Primary Diagnosis (15835) parent condition, see Diagnosis Master dynamic list. Enable the element when the element reference number is listed under the enableElements column applicable to the Primary Diagnosis (15835) under the dynamic list.

Technical Specification

Code: 13213009
Code System Name: SNOMED CT
Short Name: EPHxCHD
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Electrophysiology study with or without ablation

AND

Element: 15835 Primary Diagnosis
Operator: Not Equal
Value: Miscellaneous - status post transplant - heart (or Not Answered)

AND

Element: 12903 Condition History Name
Operator: Equal
Value: Congenital heart disease

--- AND ---

Element: 15510 Condition History Occurrence
Operator: Equal
Value: Yes

Congenital Heart Disease History Type - 1.3.6.1.4.1.19376.1.4.1.6.5.876

Selection	Definition	Source	Code	Code System Name
Repaired functionally two-ventricle congenital heart disease	The patient has undergone surgical or interventional repair resulting in a functional two-ventricle circulation. Examples include ventricular septal defect (VSD) or atrioventricular canal defect repairs.		112000002330	ACC NCDR
Transposition of the great arteries following atrial-level (Mustard or Senning) palliation	Select if there is documentation of l-looped ventricles, a congenital heart condition characterized by atrioventricular (AV) and ventriculoarterial discordance. This condition is also referred to as congenitally corrected transposition of the great arteries (ccTGA), double discordance, or ventricular inversion. Key features include the morphologic right ventricle supporting systemic circulation and the morphologic left ventricle supporting pulmonary circulation.		26146002	SNOMED CT

Section: Condition History Details		Parent: History and Risk Factors	
	Documentation may note associated defects such as ventricular septal defects (VSDs), pulmonary stenosis, or arrhythmias, or highlight risks like systemic right ventricular dysfunction leading to heart failure.		
Unoperated acyanotic congenital heart disease	Acyanotic congenital heart conditions that have not undergone surgical or interventional repair. Examples include small atrial septal defects (ASD) or mild pulmonary stenosis.	78485007	SNOMED CT
Unoperated cyanotic congenital heart disease	Cyanotic congenital heart conditions that have not been surgically addressed, leading to persistent mixing of oxygenated and deoxygenated blood. Examples include unrepaired tetralogy of Fallot or transposition of the great arteries.	12770006	SNOMED CT
Single ventricle pre-Glenn	Patients with single-ventricle anatomy who have not yet undergone the Glenn procedure, a staged surgery typically performed as part of single-ventricle palliation.	112000004029	ACC NCDR
Single ventricle pre-Fontan	Patients with single-ventricle anatomy who have completed the Glenn procedure but have not yet undergone the Fontan procedure.	112000004030	ACC NCDR
Single ventricle s/p Fontan	Patients with single-ventricle anatomy who have completed the Fontan procedure, resulting in systemic venous return directly routed to the pulmonary arteries without a pumping chamber.	112000004031	ACC NCDR
Other		100000351	ACC NCDR
Ebstein Anomaly	Ebstein's anomaly is a rare congenital heart defect characterized by abnormal development of the tricuspid valve.	204357006	SNOMED CT

Section: Condition History Details **Parent: History and Risk Factors**

Element: 16031 Single ventricle s/p Fontan Type

Coding Instruction: Select the specific type of Fontan procedure performed in patients with a single ventricle heart physiology.

Target Value: The last value prior to the start of the first procedure

Technical Specification

Code:	112000003862
Code System Name:	ACC NCDR
Short Name:	SingVentFontan
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15393 Congenital Heart Disease Type
Operator: Equal
Value: Single ventricle s/p Fontan

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Electrophysiology study with or without ablation

AND

Element: 15835 Primary Diagnosis
Operator: Not Equal
Value: Miscellaneous - status post transplant - heart (or Not Answered)

AND

Element: 12903 Condition History Name
Operator: Equal
Value: Congenital heart disease

--- AND ---

Element: 15510 Condition History Occurrence
Operator: Equal
Value: Yes

Single ventricle s/p Fontan Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1044

Selection	Definition	Source	Code	Code System Name
RA to PA Fontan	A Fontan procedure where blood flow is routed from the right atrium (RA) directly to the pulmonary arteries (PA) without a pumping ventricle.		112000003876	ACC NCDR
Lateral tunnel Fontan	A Fontan modification that uses a surgically constructed tunnel within the heart to direct blood flow from the inferior vena cava (IVC) to the pulmonary arteries.		112000003877	ACC NCDR
Extracardiac conduit Fontan	A Fontan variation where an external conduit is used to connect the IVC directly to the pulmonary arteries, avoiding blood flow through the hear		112000003878	ACC NCDR
Other	N/A		100000351	ACC NCDR

Section: Procedure History **Parent: History and Risk Factors**

Element: 12905 Procedure History Name

Coding Instruction: The procedures listed in this field are controlled by the Procedure History Master file. This file is maintained by the NCDR and will be made available for downloading and importing/updating into your application.

Target Value: N/A

Technical Specification

Code:	416940007
Code System Name:	SNOMED CT
Short Name:	ProcedHxName
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Procedure History Names - 1.3.6.1.4.1.19376.1.4.1.6.5.928

Selection	Definition	Source	Code	Code System Name
Cardiac catheterization			112000003717	ACC NCDR
Cardiac Surgery			64915003	SNOMED CT
EP therapy attempted	An invasive procedure that tests the electrical conduction system of the heart to assess the electrical activity and conduction pathways of the heart.	Source: Thomas KE, Zimetbaum PJ. Electrophysiology study: indications and interpretations. In: Yan G-X, Kowey PR, eds. Management of Cardiac Arrhythmias. 2nd ed. New York, NY: Humana Press (Springer SciencebBusiness Media, LLC); 2011:123-40	252425004	SNOMED CT
Prior cardiovascular implantable electronic device			100000954	ACC NCDR

Element: 15511 Procedure History Occurrence

Coding Instruction: Indicate if the patient has or has not undergone the indicated medical procedure.

Target Value: Any occurrence between birth and arrival at this facility

Vendor Instruction: Procedure History Occurrence (15511) cannot be Null when a Procedure History Name (12905) is selected

Technical Specification

Code:	416940007
Code System Name:	SNOMED CT
Short Name:	ProcHxOccurrenceArrival
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	12905 Procedure History Name
Operator:	
Value:	Any Value

Section: Cardiac Catheterization History **Parent: Procedure History Details**

Element: 15856 Most Recent Catheterization Procedures Not Documented

Coding Instruction: Indicate if the patient has had a previous cardiac catheterization performed but the specific procedure is not documented or that procedure is beyond 30 days.

Target Value: N/A

Technical Specification

Code:	41976001
Code System Name:	SNOMED CT
Short Name:	MostRecCathProcsnotdoc
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 12905 Procedure History Name
Operator: Equal
Value: Cardiac catheterization

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Cardiac Catheterization History **Parent: Cardiac Catheterization History**

Element: 15038 Most Recent Catheterization Procedures

Coding Instruction: Indicate the primary procedure that occurred during the patient's most recent cardiac catheterization.

Target Value: The last value within 30 days prior to the start of current procedure

Technical Specification

Code: 41976001
Code System Name: SNOMED CT
Short Name: MostRecCathProcs
Missing Data: Report
Harvested: Yes (CIED, EP, INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15856 Most Recent Catheterization Procedures Not Documented
Operator: Equal
Value: No

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Cardiac catheterization

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Procedure Master - 1.3.6.1.4.1.19376.1.4.1.6.5.892

Selection	Definition	Source	Code	Code System Name
Adjunctive therapy - Adenosine			112000002457	ACC NCDR
Adjunctive therapy - Beta blockade			112000002458	ACC NCDR
Adjunctive therapy - Rapid pacing			112000002459	ACC NCDR
Adjunctive therapy - Rapid pacing - Endocardial			112000002460	ACC NCDR
Adjunctive therapy - Rapid pacing - Epicardial			112000002461	ACC NCDR
Balloon dilation - Conduit - Sano modification - RV to PA valveless conduit			112000002462	ACC NCDR
Balloon dilation - Conduit - Sano modification-with valve - RV to PA valved conduit			112000002463	ACC NCDR
Balloon dilation - Conduit - LA to LV			112000002464	ACC NCDR
Balloon dilation - Conduit - LV to aorta			112000002465	ACC NCDR
Balloon dilation - Conduit - LV to PA			112000002466	ACC NCDR
Balloon dilation - Conduit - Other			112000002467	ACC NCDR
Balloon dilation - Conduit - RA to PA			112000002468	ACC NCDR
Balloon dilation - Conduit - RA to PA-pulmonary trunk			112000002469	ACC NCDR
Balloon dilation - Conduit - RA to RV			112000002470	ACC NCDR
Balloon dilation - Conduit - RV to aorta			112000002471	ACC NCDR
Balloon dilation - Conduit - RV to PA			112000002472	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
Balloon dilation - Conduit - Shunt - systemic-to-pulmonary		112000002473	ACC NCDR
Balloon dilation - Intracardiac-septum - Atrial baffle S-P atrial switch		112000002474	ACC NCDR
Balloon dilation - Intracardiac-septum - Atrial septum - Static balloon dilation without pullback		112000002475	ACC NCDR
Balloon dilation - Intracardiac-septum - Fontan Baffle		112000002476	ACC NCDR
Balloon dilation - Intracardiac-septum - Fontan fenestration		112000002477	ACC NCDR
Balloon dilation - Intracardiac-septum - Ventricular septum		112000002478	ACC NCDR
Balloon dilation - Pulmonary artery - Central - Proximal left and-or proximal right pulmonary artery including the pulmonary artery bifurcation		112000002479	ACC NCDR
Balloon dilation - Pulmonary artery - Main - Trunk		112000002480	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral		112000002481	ACC NCDR
Balloon dilation - Pulmonary artery - Proximal		112000002482	ACC NCDR
Balloon dilation - Pulmonary vein - Left - Left pulmonary vein		112000002483	ACC NCDR
Balloon dilation - Pulmonary vein - Left lower - Left lower pulmonary vein		112000002484	ACC NCDR
Balloon dilation - Pulmonary vein - Left upper - Left upper pulmonary vein		112000002485	ACC NCDR
Balloon dilation - Pulmonary vein - Lingula - Lingular pulmonary vein		112000002486	ACC NCDR
Balloon dilation - Pulmonary vein - Pulmonary venous confluence		112000002487	ACC NCDR
Balloon dilation - Pulmonary vein - Pulmonary venous confluence with left atrium		112000002488	ACC NCDR
Balloon dilation - Pulmonary vein - Right - Right pulmonary vein		112000002489	ACC NCDR
Balloon dilation - Pulmonary vein - Right lower - Right lower pulmonary vein		112000002490	ACC NCDR
Balloon dilation - Pulmonary vein - Right middle - Right middle pulmonary vein		112000002491	ACC NCDR
Balloon dilation - Pulmonary vein - Right upper - Right upper pulmonary vein		112000002492	ACC NCDR
Balloon dilation - Systemic artery - Aorta		112000002493	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta		112000002494	ACC NCDR
Balloon dilation - Systemic vein - Caval vein		112000002495	ACC NCDR
Balloon dilation - Systemic vein - Non-Caval vein		112000002496	ACC NCDR
Balloon dilation - Systemic vein		112000002497	ACC NCDR
Balloon dilation - Systemic vein - Caval vein - Superior vena cava		112000002498	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar		112000002499	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar -		112000002500	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History	
Left lingula PA		
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Left lower PA	112000002501	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Left upper PA	112000002502	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Right lower PA	112000002503	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Right middle PA	112000002504	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Right upper PA	112000002505	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Sublobar equal Segmental	112000002506	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Sublobar equal Segmental - Left	112000002507	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Sublobar equal Segmental - Right	112000002508	ACC NCDR
Balloon dilation - Pulmonary artery - Proximal - Left	112000002509	ACC NCDR
Balloon dilation - Pulmonary artery - Proximal - Right	112000002510	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Abdominal aorta - Coarctation	112000002511	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Abdominal aorta - Native - Primary coarctation	112000002512	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Abdominal aorta - Recurrent coarctation	112000002513	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Ascending aorta	112000002514	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Coarctation - Native - Primary coarctation	112000002515	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Coarctation - Recurrent coarctation	112000002516	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Descending thoracic aorta	112000002517	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Transverse arch	112000002518	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Coronary artery	112000002519	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Femoral artery	112000002520	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Iliac artery	112000002521	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Innominate artery	112000002522	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Renal artery	112000002523	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other	112000002524	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
than aorta - Subclavian artery			
Balloon dilation - Systemic vein - Non-Caval vein - Femoral vein		112000002525	ACC NCDR
Balloon dilation - Systemic vein - Non-Caval vein - Iliac vein		112000002526	ACC NCDR
Balloon dilation - Systemic vein - Non-Caval vein - Innominate - Brachiocephalic		112000002527	ACC NCDR
Balloon dilation - Systemic vein - Non-Caval vein - Subclavian vein		112000002528	ACC NCDR
Balloon valvotomy - Aortic valve		112000002529	ACC NCDR
Balloon valvotomy - Mitral valve		112000002530	ACC NCDR
Balloon valvotomy - Pulmonic valve		112000002531	ACC NCDR
Balloon valvotomy - Tricuspid valve		112000002532	ACC NCDR
Biopsy - RV not S-P heart transplant		112000002533	ACC NCDR
Biopsy - RV post heart transplant		112000002534	ACC NCDR
Biopsy - Site not RV		112000002535	ACC NCDR
Cardiovascular catheterization procedure - Therapeutic - Perforation - establishing interchamber and-or intervessel communication - Systemic artery - Systemic artery other than aorta - Iliac artery		112000002536	ACC NCDR
Coil implantation - Atrial septal defect - ASD		112000002537	ACC NCDR
Coil implantation - Conduit - Sano modification - RV to PA valveless conduit		112000002538	ACC NCDR
Coil implantation - Conduit - Sano modification-with valve - RV to PA valved conduit		112000002539	ACC NCDR
Coil implantation - Conduit - LA to LV		112000002540	ACC NCDR
Coil implantation - Conduit - LV to aorta		112000002541	ACC NCDR
Coil implantation - Conduit - LV to PA		112000002542	ACC NCDR
Coil implantation - Conduit - Other		112000002543	ACC NCDR
Coil implantation - Conduit - RA to PA		112000002544	ACC NCDR
Coil implantation - Conduit - RA to PA-pulmonary trunk		112000002545	ACC NCDR
Coil implantation - Conduit - RA to RV		112000002546	ACC NCDR
Coil implantation - Conduit - RV to aorta		112000002547	ACC NCDR
Coil implantation - Conduit - RV to PA		112000002548	ACC NCDR
Coil implantation - Conduit - Shunt - systemic-to-pulmonary		112000002549	ACC NCDR
Coil implantation - Coronary artery fistula		112000002550	ACC NCDR
Coil implantation - Fontan fenestration		112000002551	ACC NCDR
Coil implantation - Intracardiac baffle leak		112000002552	ACC NCDR
Coil implantation - Patent ductus arteriosus - PDA		112000002553	ACC NCDR
Coil implantation - Perivalvar leak		112000002554	ACC NCDR
Coil implantation - Pulmonary		112000002555	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
arteriovenous malformation			
Coil implantation - Systemic arteriovenous malformation		112000002556	ACC NCDR
Coil implantation - Systemic artery to pulmonary artery collateral		112000002557	ACC NCDR
Coil implantation - Systemic artery - Aorta		112000002558	ACC NCDR
Coil implantation - Systemic artery - Systemic artery other than aorta		112000002559	ACC NCDR
Coil implantation - Systemic vein to pulmonary vein collateral		112000002560	ACC NCDR
Coil implantation - Systemic vein - Caval vein		112000002561	ACC NCDR
Coil implantation - Systemic vein - Non-caval vein		112000002562	ACC NCDR
Coil implantation - Coil implantation		112000002563	ACC NCDR
Coil implantation - Systemic artery		112000002564	ACC NCDR
Coil implantation - Systemic vein		112000002565	ACC NCDR
Data - Hemodynamic data obtained		112000002566	ACC NCDR
Data - Angiographic data obtained		112000002567	ACC NCDR
Device implantation - Aortopulmonary window - AP window		112000002568	ACC NCDR
Device implantation - Atrial septal defect - ASD		112000002569	ACC NCDR
Device implantation - Conduit - Sano modification - RV to PA valveless conduit		112000002570	ACC NCDR
Device implantation - Conduit - Sano modification-with valve - RV to PA valved conduit		112000002571	ACC NCDR
Device implantation - Conduit - LA to LV		112000002572	ACC NCDR
Device implantation - Conduit - LV to aorta		112000002573	ACC NCDR
Device implantation - Conduit - LV to PA		112000002574	ACC NCDR
Device implantation - Conduit - Other		112000002575	ACC NCDR
Device implantation - Conduit - RA to PA		112000002576	ACC NCDR
Device implantation - Conduit - RA to PA-pulmonary trunk		112000002577	ACC NCDR
Device implantation - Conduit - RA to RV		112000002578	ACC NCDR
Device implantation - Conduit - RV to aorta		112000002579	ACC NCDR
Device implantation - Conduit - RV to PA		112000002580	ACC NCDR
Device implantation - Conduit - Shunt - systemic-to-pulmonary		112000002581	ACC NCDR
Device implantation - Coronary artery fistula		112000002582	ACC NCDR
Device implantation - Fontan fenestration		112000002583	ACC NCDR
Device implantation - Intracardiac baffle leak		112000002584	ACC NCDR
Device implantation - Patent ductus arteriosus - PDA		112000002585	ACC NCDR
Device implantation - Patent Foramen Ovale - PFO		112000002586	ACC NCDR
Device implantation - Perivalvar leak		112000002587	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
Device implantation - Pulmonary arteriovenous malformation		112000002588	ACC NCDR
Device implantation - Pulmonary artery		112000002589	ACC NCDR
Device implantation - Systemic arteriovenous malformation		112000002590	ACC NCDR
Device implantation - Systemic artery to pulmonary artery collateral		112000002591	ACC NCDR
Device implantation - Systemic artery - Aorta		112000002592	ACC NCDR
Device implantation - Systemic artery - Systemic artery other than aorta		112000002593	ACC NCDR
Device implantation - Systemic vein to pulmonary vein collateral		112000002594	ACC NCDR
Device implantation - Systemic vein - Caval vein		112000002595	ACC NCDR
Device implantation - Systemic vein - Caval vein - Superior vena cava - Right		112000002596	ACC NCDR
Device implantation - Systemic vein - Non-Caval vein		112000002597	ACC NCDR
Device implantation - Ventricular septal defect - VSD		112000002598	ACC NCDR
Device implantation - Conduit		112000002599	ACC NCDR
Device implantation - Systemic artery		112000002600	ACC NCDR
Device implantation - Systemic vein		112000002601	ACC NCDR
Device implantation - Systemic vein - Caval vein - Inferior vena cava		112000002602	ACC NCDR
Device implantation - Systemic vein - Caval vein - Superior vena cava		112000002603	ACC NCDR
Diagnostic - Transluminal test occlusion		112000002604	ACC NCDR
Electrophysiology alteration - Atrial stimulation		112000002605	ACC NCDR
Electrophysiology alteration - Ventricular stimulation		112000002606	ACC NCDR
Hemodynamic alteration - Oxygen-nitric test		112000002607	ACC NCDR
Hemodynamic alteration - Inotropy test		112000002608	ACC NCDR
Hemodynamic alteration - Fluid bolus challenge		112000002609	ACC NCDR
Hybrid Approach - Transcardiac balloon dilation		112000002610	ACC NCDR
Hybrid Approach - Transcardiac transcatheter device placement		112000002611	ACC NCDR
Hybrid Approach Stage 1 - Application of RPA and LPA bands		112000002612	ACC NCDR
Hybrid Approach Stage 1 - Stent placement in arterial duct - PDA		112000002613	ACC NCDR
Hybrid Approach Stage 1 - Stent placement in arterial duct - PDA plus application of RPA and LPA bands		112000002614	ACC NCDR
Hybrid approach Stage 2 - Aortopulmonary amalgamation plus Superior Cavopulmonary anastomosis- es plus PA Debanding plus Aortic arch repair - Norwood Stage 1 plus Superior Cavopulmonary		112000002615	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
anastomosis- es plus PA Debanding			
Hybrid approach Stage 2 - Aortopulmonary amalgamation plus Superior Cavopulmonary anastomosis- es plus PA Debanding + Without aortic arch repair		112000002616	ACC NCDR
Intravascular foreign body removal - Intravascular foreign body removal		112000002617	ACC NCDR
Other invasive procedures-interventional techniques - Pericardiocentesis - elective		112000002618	ACC NCDR
Other invasive procedures-interventional techniques - Pericardiocentesis - emergent		112000002619	ACC NCDR
Other invasive procedures-interventional techniques - Pleuracentesis - elective		112000002620	ACC NCDR
Other invasive procedures-interventional techniques - Pleuracentesis - emergent		112000002621	ACC NCDR
Other invasive procedures-interventional techniques - Snare foreign body		112000002622	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Atretic aortic valve		112000002623	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Atretic pulmonary valve		112000002624	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Atrial septum		112000002625	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - Sano modification - RV to PA valveless conduit		112000002626	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - Sano modification-with valve - RV to PA valved conduit		112000002627	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - LA to LV		112000002628	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - LV to aorta		112000002629	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - LV to PA		112000002630	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - Other		112000002631	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - RA to PA		112000002632	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - RA to PA-pulmonary trunk		112000002633	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
Perforation - establishing interchamber and-or intervessel communication - Conduit - RA to RV		112000002634	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - RV to aorta		112000002635	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - RV to PA		112000002636	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - Shunt - systemic-to-pulmonary		112000002637	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Fontan Baffle		112000002638	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic artery - Aorta		112000002639	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic artery - Systemic artery other than aorta		112000002640	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Caval vein		112000002641	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Non-Caval vein		112000002642	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Ventricular septum		112000002643	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Perforation - establishing interchamber and-or intervessel communication		112000002644	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic artery		112000002645	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic artery - Systemic artery other than aorta - Femoral artery		112000002646	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein		112000002647	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Non-Caval vein - Femoral vein		112000002648	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Non-Caval vein - Iliac vein		112000002649	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication -		112000002650	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
Systemic vein - Caval vein - Inferior vena cava - Systemic vein - Caval vein - Inferior vena cava			
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Caval vein - Superior vena cava - Systemic vein - Caval vein - Superior vena cava		112000002651	ACC NCDR
Septostomy - Balloon atrial septostomy by pullback - Rashkind - BAS		112000002652	ACC NCDR
Septostomy - Blade atrial septostomy		112000002653	ACC NCDR
Septostomy - Septostomy		112000002654	ACC NCDR
Stent insertion - Conduit - Sano modification - RV to PA valveless conduit		112000002655	ACC NCDR
Stent insertion - Conduit - Sano modification-with valve - RV to PA valved conduit		112000002656	ACC NCDR
Stent insertion - Conduit - LA to LV		112000002657	ACC NCDR
Stent insertion - Conduit - LV to aorta		112000002658	ACC NCDR
Stent insertion - Conduit - LV to PA		112000002659	ACC NCDR
Stent insertion - Conduit - Other		112000002660	ACC NCDR
Stent insertion - Conduit - RA to PA		112000002661	ACC NCDR
Stent insertion - Conduit - RA to PA-pulmonary trunk		112000002662	ACC NCDR
Stent insertion - Conduit - RA to RV		112000002663	ACC NCDR
Stent insertion - Conduit - RV to aorta		112000002664	ACC NCDR
Stent insertion - Conduit - RV to PA		112000002665	ACC NCDR
Stent insertion - Conduit - Shunt - systemic-to-pulmonary		112000002666	ACC NCDR
Stent insertion - Intracardiac-septum - Atrial baffle S-P atrial switch		112000002667	ACC NCDR
Stent insertion - Intracardiac-septum - Atrial septum		112000002668	ACC NCDR
Stent insertion - Intracardiac-septum - Fontan Baffle		112000002669	ACC NCDR
Stent insertion - Intracardiac-septum - Fontan fenestration		112000002670	ACC NCDR
Stent insertion - Intracardiac-septum - Ventricular septum		112000002671	ACC NCDR
Stent insertion - PDA		112000002672	ACC NCDR
Stent insertion - Pulmonary artery - Central - Proximal left and-or proximal right pulmonary artery including the pulmonary artery bifurcation		112000002673	ACC NCDR
Stent insertion - Pulmonary artery - Main - Trunk		112000002674	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral		112000002675	ACC NCDR
Stent insertion - Pulmonary artery - Proximal		112000002676	ACC NCDR
Stent insertion - Pulmonary vein - Left - Left pulmonary vein		112000002677	ACC NCDR
Stent insertion - Pulmonary vein - Left lower - Left lower pulmonary vein		112000002678	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
Stent insertion - Pulmonary vein - Left upper - Left upper pulmonary vein		112000002679	ACC NCDR
Stent insertion - Pulmonary vein - Lingula - Lingular pulmonary vein		112000002680	ACC NCDR
Stent insertion - Pulmonary vein - Pulmonary venous confluence		112000002681	ACC NCDR
Stent insertion - Pulmonary vein - Pulmonary venous confluence with left atrium		112000002682	ACC NCDR
Stent insertion - Pulmonary vein - Right - Right pulmonary vein		112000002683	ACC NCDR
Stent insertion - Pulmonary vein - Right lower - Right lower pulmonary vein		112000002684	ACC NCDR
Stent insertion - Pulmonary vein - Right middle - Right middle pulmonary vein		112000002685	ACC NCDR
Stent insertion - Pulmonary vein - Right upper - Right upper pulmonary vein		112000002686	ACC NCDR
Stent insertion - Systemic artery - Aorta		112000002687	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta		112000002688	ACC NCDR
Stent insertion - Systemic vein - Caval vein		112000002689	ACC NCDR
Stent insertion - Systemic vein - Non-Caval vein		112000002690	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Lobar		112000002691	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Lobar - Left		112000002692	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Lobar - Right		112000002693	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Sublobar equal Segmental		112000002694	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Sublobar equal Segmental - Left		112000002695	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Sublobar equal Segmental - Right		112000002696	ACC NCDR
Stent insertion - Pulmonary artery - Proximal - Left		112000002697	ACC NCDR
Stent insertion - Pulmonary artery - Proximal - Right		112000002698	ACC NCDR
Stent insertion - Systemic vein - Caval vein - Superior vena cava		112000002699	ACC NCDR
Stent insertion - Systemic artery - Aorta - Abdominal aorta		112000002700	ACC NCDR
Stent insertion - Systemic artery - Aorta - Abdominal aorta - Coarctation		112000002701	ACC NCDR
Stent insertion - Systemic artery - Aorta - Abdominal aorta - Native - Primary coarctation		112000002702	ACC NCDR
Stent insertion - Systemic artery - Aorta - Abdominal aorta - Recurrent coarctation		112000002703	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta		112000002704	ACC NCDR
Stent insertion - Systemic		112000002705	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
artery - Aorta - Thoracic aorta - Ascending aorta			
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Coarctation - Native - Primary coarctation		112000002706	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Coarctation - Recurrent coarctation		112000002707	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Descending thoracic aorta		112000002708	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Transverse arch		112000002709	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracoabdominal aorta		112000002710	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Coronary artery		112000002711	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Femoral artery		112000002712	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Iliac artery		112000002713	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Renal artery		112000002714	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Subclavian artery		112000002715	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Systemic pulmonary vessel connection		112000002716	ACC NCDR
Stent insertion - Transcatheter implantation of valve		112000002717	ACC NCDR
Stent re-dilation - Conduit - Sano modification - RV to PA valveless conduit		112000002718	ACC NCDR
Stent re-dilation - Conduit - Sano modification-with valve - RV to PA valved conduit		112000002719	ACC NCDR
Stent re-dilation - Conduit - LA to LV		112000002720	ACC NCDR
Stent re-dilation - Conduit - LV to aorta		112000002721	ACC NCDR
Stent re-dilation - Conduit - LV to PA		112000002722	ACC NCDR
Stent re-dilation - Conduit - Other		112000002723	ACC NCDR
Stent re-dilation - Conduit - RA to PA		112000002724	ACC NCDR
Stent re-dilation - Conduit - RA to PA-pulmonary trunk		112000002725	ACC NCDR
Stent re-dilation - Conduit - RA to RV		112000002726	ACC NCDR
Stent re-dilation - Conduit - RV to aorta		112000002727	ACC NCDR
Stent re-dilation - Conduit - RV to PA		112000002728	ACC NCDR
Stent re-dilation - Conduit - Shunt - systemic-to-pulmonary		112000002729	ACC NCDR
Stent re-dilation - Intracardiac-septum - Atrial baffle S-P atrial switch		112000002730	ACC NCDR
Stent re-dilation - Intracardiac-septum - Atrial septum		112000002731	ACC NCDR
Stent re-dilation - Intracardiac-septum - Fontan Baffle		112000002732	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
Stent re-dilation - Intracardiac-septum - Fontan fenestration		112000002733	ACC NCDR
Stent re-dilation - Intracardiac-septum - Ventricular septum		112000002734	ACC NCDR
Stent re-dilation - PDA		112000002735	ACC NCDR
Stent re-dilation - Pulmonary artery - Central - Proximal left and-or proximal right pulmonary artery including the pulmonary artery bifurcation		112000002736	ACC NCDR
Stent re-dilation - Pulmonary artery - Main - Trunk		112000002737	ACC NCDR
Stent re-dilation - Pulmonary artery - Peripheral		112000002738	ACC NCDR
Stent re-dilation - Pulmonary artery - Proximal		112000002739	ACC NCDR
Stent re-dilation - Pulmonary vein - Left - Left pulmonary vein		112000002740	ACC NCDR
Stent re-dilation - Pulmonary vein - Left lower - Left lower pulmonary vein		112000002741	ACC NCDR
Stent re-dilation - Pulmonary vein - Left upper - Left upper pulmonary vein		112000002742	ACC NCDR
Stent re-dilation - Pulmonary vein - Lingula - Lingular pulmonary vein		112000002743	ACC NCDR
Stent re-dilation - Pulmonary vein - Pulmonary venous confluence		112000002744	ACC NCDR
Stent re-dilation - Pulmonary vein - Pulmonary venous confluence with left atrium		112000002745	ACC NCDR
Stent re-dilation - Pulmonary vein - Right - Right pulmonary vein		112000002746	ACC NCDR
Stent re-dilation - Pulmonary vein - Right lower - Right lower pulmonary vein		112000002747	ACC NCDR
Stent re-dilation - Pulmonary vein - Right middle - Right middle pulmonary vein		112000002748	ACC NCDR
Stent re-dilation - Pulmonary vein - Right upper - Right upper pulmonary vein		112000002749	ACC NCDR
Stent re-dilation - Systemic artery - Aorta		112000002750	ACC NCDR
Stent re-dilation - Systemic artery - Systemic artery other than aorta		112000002751	ACC NCDR
Stent re-dilation - Systemic vein - Caval vein		112000002752	ACC NCDR
Stent re-dilation - Systemic vein - Non-Caval vein		112000002753	ACC NCDR
Transcatheter Fontan completion - Completion of total cavopulmonary connection - TCPC using transcatheter covered stent		112000002754	ACC NCDR
Transcatheter implantation of valve - Not systemic or pulmonary outflow		112000002755	ACC NCDR
Transcatheter implantation of valve - Pulmonary outflow position		112000002756	ACC NCDR
Transcatheter implantation of valve - Systemic outflow position		112000002757	ACC NCDR
Transcatheter implantation of valve - pulmonary ventricular inflow position		112000002758	ACC NCDR

Section: Cardiac Catheterization History	Parent: Cardiac Catheterization History		
Transcatheter implantation of valve - Systemic ventricular inflow position		112000002759	ACC NCDR
Transluminal test occlusion - Conduit - Sano modification - RV to PA valveless conduit		112000002760	ACC NCDR
Transluminal test occlusion - Conduit - Sano modification- with valve - RV to PA valved conduit		112000002761	ACC NCDR
Transluminal test occlusion - Conduit - LA to LV		112000002762	ACC NCDR
Transluminal test occlusion - Conduit - LV to aorta		112000002763	ACC NCDR
Transluminal test occlusion - Conduit - LV to PA		112000002764	ACC NCDR
Transluminal test occlusion - Conduit - Other		112000002765	ACC NCDR
Transluminal test occlusion - Conduit - RA to PA		112000002766	ACC NCDR
Transluminal test occlusion - Conduit - RA to RV		112000002767	ACC NCDR
Transluminal test occlusion - Conduit - RV to aorta		112000002768	ACC NCDR
Transluminal test occlusion - Conduit - RV to PA		112000002769	ACC NCDR
Transluminal test occlusion - Conduit - Shunt - systemic-to-pulmonary		112000002770	ACC NCDR
Transluminal test occlusion - Fontan fenestration		112000002771	ACC NCDR
Transluminal test occlusion - Interatrial communication		112000002772	ACC NCDR
Transluminal test occlusion - Systemic artery - Aorta		112000002773	ACC NCDR
Transluminal test occlusion - Systemic artery - Systemic artery other than aorta		112000002774	ACC NCDR
Transluminal test occlusion - Systemic vein - Caval vein		112000002775	ACC NCDR
Transluminal test occlusion - Systemic vein - Non-Caval vein		112000002776	ACC NCDR

Section: Cardiac Surgery History **Parent: Procedure History Details**

Element: 15857 Most Recent Cardiac Surgery Not Documented

Coding Instruction: Indicate if the patient has had a previous cardiac surgery but the specific surgery is not documented or that procedure is beyond 30 days.

Target Value: N/A

Technical Specification

Code:	64915003
Code System Name:	SNOMED CT
Short Name:	MostRecCardSurgProcsnotdoc
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 12905 Procedure History Name
Operator: Equal
Value: Cardiac Surgery

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Cardiac Surgery History **Parent: Cardiac Surgery History**

Element: 15045 Most Recent Cardiac Surgery Procedures

Coding Instruction: Indicate all applicable procedures which were performed during the patient's most recent cardiac surgery. Select all applicable procedures performed from the surgery master list.

Target Value: The last value within 30 days prior to the start of current procedure

Technical Specification

Code: 64915003
Code System Name: SNOMED CT
Short Name: MostRecCardSurgProcs
Missing Data: Report
Harvested: Yes (CIED, EP, INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15857 Most Recent Cardiac Surgery Not Documented
Operator: Equal
Value: No

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Cardiac Surgery

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Cardiac Surgery Master - 1.3.6.1.4.1.19376.1.4.1.6.5.894

Selection	Definition	Source	Code	Code System Name
ASD - ASD Partial closure			112000002963	ACC NCDR
ASD - Atrial Fenestration closure			112000002965	ACC NCDR
VSD - VSD Repair - Patch			112000002967	ACC NCDR
VSD - VSD Creation-enlargement			112000002970	ACC NCDR
AV Canal - AVC - AVSD - repair - Complete - CAVSD			112000002972	ACC NCDR
AV Canal - AVC - AVSD - repair - Intermediate - Transitional			112000002973	ACC NCDR
AV Canal - AVC - AVSD - repair - Partial - Incomplete - PAVSD			112000002974	ACC NCDR
Truncus arteriosus - Truncus arteriosus repair			112000002977	ACC NCDR
Truncus arteriosus - Valve replacement - Truncal valve			112000002979	ACC NCDR
Partial Anomalous Pulmonary Venous Connection - PAPVC repair			112000002980	ACC NCDR
Partial Anomalous Pulmonary Venous Connection - PAPVC repair - Scimitar			112000002981	ACC NCDR
Total Anomalous Pulmonary Venous Connection - TAPVC Repair			112000002982	ACC NCDR
Cor triatriatum - Cor triatriatum repair			112000002983	ACC NCDR
Pulmonary venous stenosis - Pulmonary venous stenosis Repair			112000002984	ACC NCDR
Tetralogy of Fallot - TOF Repair - No ventriculotomy			112000002988	ACC NCDR

Section: Cardiac Surgery History	Parent: Cardiac Surgery History		
Tetralogy of Fallot - TOF Repair - Ventriculotomy - Nontransanular patch		112000002989	ACC NCDR
Tetralogy of Fallot - TOF Repair - Ventriculotomy - Transanular patch		112000002990	ACC NCDR
Tetralogy of Fallot - TOF Repair - RV-PA conduit		112000002991	ACC NCDR
Tetralogy of Fallot - TOF - AVC - AVSD - repair		112000002992	ACC NCDR
Tetralogy of Fallot - TOF - Absent pulmonary valve		112000002993	ACC NCDR
Pulmonary atresia - VSD including TOF-PA - repair		112000002994	ACC NCDR
Pulmonary atresia - VSD - MAPCA - pseudotruncus - repair		112000002995	ACC NCDR
Pulmonary atresia - Unifocalization MAPCA		112000002996	ACC NCDR
Tricuspid Valve Disease and Ebstein's Anomaly - Valvuloplasty - Tricuspid		112000002998	ACC NCDR
Tricuspid Valve Disease and Ebsteins Anomaly - Ebsteins repair		112000002999	ACC NCDR
Tricuspid Valve Disease and Ebsteins Anomaly - Valve replacement - Tricuspid - TVR		112000003000	ACC NCDR
Tricuspid Valve Disease and Ebsteins Anomaly - Valve closure - Tricuspid - exclusion - univentricular approach		112000003001	ACC NCDR
RVOT Obstruction- IVS Pulmonary Stenosis - 1 1-2 ventricular repair		112000003005	ACC NCDR
RVOT Obstruction- IVS Pulmonary Stenosis - Reconstruction - plasty - Main - trunk		112000003006	ACC NCDR
RVOT Obstruction- IVS Pulmonary Stenosis - Reconstruction - plasty - Branch-Central within the hilar bifurcation		112000003007	ACC NCDR
RVOT Obstruction- IVS Pulmonary Stenosis - DCRV repair		112000003009	ACC NCDR
Conduit Stenosis - Insufficiency - Conduit reoperation		112000003010	ACC NCDR
Pulmonary Valve Disease - Valvuloplasty - Pulmonic		112000003011	ACC NCDR
Pulmonary Valve Disease - Valve replacement - Pulmonic - PVR		112000003012	ACC NCDR
Conduit operations - Conduit placement - RV to PA		112000003013	ACC NCDR
Conduit operations - Conduit placement - LV to PA		112000003014	ACC NCDR
Pulmonary Valve Disease - Valve surgery - Other - Pulmonic		112000003017	ACC NCDR
Aortic Valve Disease - Valvuloplasty - Aortic		112000003018	ACC NCDR
Aortic Valve Disease - Valve replacement - Aortic - AVR - Mechanical		112000003020	ACC NCDR
Aortic Valve Disease - Valve replacement - Aortic - AVR - Bioprosthetic		112000003021	ACC NCDR
Aortic Valve Disease - Ross procedure		112000003027	ACC NCDR
Aortic Valve Disease - Ross-		112000003029	ACC NCDR

Section: Cardiac Surgery History	Parent: Cardiac Surgery History		
Konno procedure			
Aortic Valve Disease - Aortic stenosis - Subvalvar - Repair		112000003031	ACC NCDR
Aortic Valve Disease - Aortic stenosis - Supravalvar Repair		112000003032	ACC NCDR
Aortic Valve Disease - Valve surgery - Other - Aortic		112000003033	ACC NCDR
Mitral Valve Disease - Valvuloplasty - Mitral		112000003036	ACC NCDR
Mitral Valve Disease - Mitral stenosis - Supravalvar mitral ring repair		112000003037	ACC NCDR
Mitral Valve Disease - Valve replacement - Mitral - MVR		112000003038	ACC NCDR
Mitral Valve Disease - Valve surgery - Other - Mitral		112000003039	ACC NCDR
Hypoplastic Left Heart - Norwood procedure		112000003040	ACC NCDR
Cardiomyopathy - Transplant - Heart		112000003042	ACC NCDR
Single Ventricle - Fontan - TCPC - Lateral tunnel Fenestrated		112000003050	ACC NCDR
Single Ventricle - Fontan - TCPC- Lateral tunnel Nonfenestrated		112000003051	ACC NCDR
Single Ventricle - Fontan - TCPC- External conduit Fenestrated		112000003052	ACC NCDR
Single Ventricle - Fontan - TCPC- External conduit Nonfenestrated		112000003053	ACC NCDR
Single Ventricle - Fontan revision or conversion - Re-do Fontan		112000003054	ACC NCDR
Single Ventricle - Fontan - Other		112000003055	ACC NCDR
Congenitally corrected TGA repair - Congenitally corrected TGA repair - Atrial switch and ASO - double switch		112000003057	ACC NCDR
Congenitally corrected TGA repair - Congenitally corrected TGA repair - Atrial switch and Rastelli		112000003058	ACC NCDR
Congenitally corrected TGA repair - Congenitally corrected TGA repair - VSD closure		112000003059	ACC NCDR
Congenitally corrected TGA repair - Congenitally corrected TGA repair - VSD closure and LV to PA conduit		112000003060	ACC NCDR
Transposition of the Great Arteries - Arterial switch operation		112000003062	ACC NCDR
Transposition of the Great Arteries - Arterial switch operation and VSD repair		112000003063	ACC NCDR
Transposition of the Great Arteries - Arterial switch procedure and Aortic arch repair		112000003064	ACC NCDR
Transposition of the Great Arteries - Arterial switch procedure and VSD repair and Aortic arch repair		112000003065	ACC NCDR
Transposition of the Great Arteries - Senning		112000003066	ACC NCDR
Transposition of the Great Arteries - Atrial baffle procedure - Mustard or Senning revision		112000003068	ACC NCDR
Transposition of the Great		112000003069	ACC NCDR

Section: Cardiac Surgery History	Parent: Cardiac Surgery History	
Arteries - Rastelli		
Transposition of the Great Arteries - Aortic root translocation over left ventricle - Including Nikaidoh procedure	112000003071	ACC NCDR
DORV - DORV - Intraventricular tunnel repair	112000003072	ACC NCDR
Coarctation of Aorta and Aortic arch hypoplasia - Coarctation repair - End to end	112000003074	ACC NCDR
Coarctation of Aorta and Aortic arch hypoplasia - Coarctation repair - End to end - Extended	112000003075	ACC NCDR
Coarctation of Aorta and Aortic arch hypoplasia - Coarctation repair - Subclavian flap	112000003076	ACC NCDR
Coarctation of Aorta and Aortic arch hypoplasia - Coarctation repair - Patch aortoplasty	112000003077	ACC NCDR
Coarctation of Aorta and Aortic arch hypoplasia - Coarctation repair - Interposition graft	112000003078	ACC NCDR
Coarctation of Aorta and Aortic arch hypoplasia - Aortic arch repair	112000003081	ACC NCDR
Coronary Artery Anomalies - Anomalous origin of coronary artery from pulmonary artery repair	112000003084	ACC NCDR
Coronary Artery Anomalies - Coronary artery bypass	112000003085	ACC NCDR
Coronary Artery Anomalies - Anomalous aortic origin of coronary artery from aorta - repair	112000003086	ACC NCDR
Coronary Artery Anomalies - Coronary artery procedure - Other	112000003087	ACC NCDR
Interrupted Arch - Interrupted aortic arch repair	112000003088	ACC NCDR
Patent Ductus Arteriosus - PDA closure - Surgical	112000003089	ACC NCDR
Vascular Rings and Slings - Vascular ring repair	112000003091	ACC NCDR
Vascular Rings and Slings - Pulmonary artery sling repair	112000003093	ACC NCDR
Electrophysiological - Pacemaker implantation - Permanent	112000003101	ACC NCDR
Electrophysiological - Pacemaker procedure	112000003102	ACC NCDR
Electrophysiological - ICD - AICD - implantation	112000003103	ACC NCDR
Electrophysiological - ICD - AICD - procedure	112000003104	ACC NCDR
Electrophysiological - Arrhythmia surgery - Atrial - Surgical Ablation	112000003105	ACC NCDR
Electrophysiological - Arrhythmia surgery - Ventricular- Surgical Ablation	112000003106	ACC NCDR
RF ablation - RF ablation	112000003112	ACC NCDR
Palliative Procedures - Shunt - Systemic to pulmonary - Modified Blalock-Taussig Shunt	112000003114	ACC NCDR
Palliative Procedures - Shunt - Systemic to pulmonary - Central from aorta or to main pulmonary artery	112000003115	ACC NCDR

Section: Cardiac Surgery History	Parent: Cardiac Surgery History		
Palliative Procedures - Shunt - Systemic to pulmonary - Other		112000003116	ACC NCDR
Palliative Procedures - Shunt - Ligation and takedown		112000003117	ACC NCDR
Palliative Procedures - PA banding		112000003118	ACC NCDR
Palliative Procedures - PA debanding		112000003119	ACC NCDR
Palliative Procedures - Damus-Kaye-Stansel procedure - Creation of AP anastomosis without arch reconstruction		112000003120	ACC NCDR
Palliative Procedures - Bidirectional cavopulmonary anastomosis - BDCPA - bidirectional Glenn		112000003121	ACC NCDR
Palliative Procedures - Glenn unidirectional cavopulmonary anastomosis - unidirectional Glenn		112000003122	ACC NCDR
Palliative Procedures - Bilateral bidirectional cavopulmonary anastomosis - bilateral bidirectional Glenn		112000003123	ACC NCDR
Palliative Procedures - Hemifontan		112000003124	ACC NCDR
Miscellaneous Procedures - Aneurysm - Ventricular - Right Repair		112000003126	ACC NCDR
Miscellaneous Procedures - Aneurysm - Pulmonary artery - Repair		112000003128	ACC NCDR
Miscellaneous Procedures - Ligation - Pulmonary artery		112000003133	ACC NCDR
Miscellaneous Procedures - Pulmonary embolectomy - Chronic pulmonary embolus		112000003135	ACC NCDR
Miscellaneous Procedures - Ligation - Thoracic duct		112000003138	ACC NCDR
Palliative Procedures - Shunt - Reoperation		112000003161	ACC NCDR
ASD - ASD repair - Patch plus PAPVC repair		112000003163	ACC NCDR
Partial Anomalous Pulmonary Venous Connection - PAPVC repair - Baffle redirection to left atrium with systemic vein translocation - Warden - SVC sewn to right atrial appendage		112000003164	ACC NCDR
Palliative Procedures - Superior Cavopulmonary anastomosis and PA reconstruction		112000003165	ACC NCDR
Hypoplastic Left Heart - Hybrid approach - Stage 2 - Aortopulmonary amalgamation and Superior Cavopulmonary anastomosis and PA Debanding and Aortic arch repair - Norwood Stage 1 and Superior Cavopulmonary anastomosis and PA Debanding		112000003166	ACC NCDR
Hypoplastic Left Heart - Hybrid Approach Stage 1 - Application of RPA and LPA bands		112000003168	ACC NCDR
Hypoplastic Left Heart - Hybrid Approach Stage 1 - Stent placement in arterial duct - PDA		112000003169	ACC NCDR
Truncus arteriosus - Truncus plus Interrupted aortic arch repair		112000003173	ACC NCDR

Section: Cardiac Surgery History	Parent: Cardiac Surgery History		
AV Canal - Valvuloplasty converted to valve replacement in the same operation- Common atrioventricular valve		112000003176	ACC NCDR
AV Canal - Valvuloplasty - Common atrioventricular valve		112000003181	ACC NCDR
Single Ventricle - Fontan and Atrioventricular valvuloplasty		112000003185	ACC NCDR
Electrophysiological - Explantation of pacing system		112000003186	ACC NCDR
Mechanical Support - ECMO cannulation		112000003187	ACC NCDR
Mechanical Support - ECMO decannulation		112000003188	ACC NCDR
Mechanical Support - VAD implantation		112000003189	ACC NCDR
Mechanical Support - VAD explantation		112000003190	ACC NCDR
Interventional Cardiology Procedures - Cardiovascular catheterization procedure - Therapeutic- Adjunctive therapy		112000003213	ACC NCDR
Aortic Surgery		32907006	SNOMED CT
Aortic Valve Disease - Root replacement		112000003725	ACC NCDR
ASD - Secundum ASD Closure		112000003726	ACC NCDR

Section: EP Therapy History **Parent: Procedure History Details**

Element: 15419 History of Electrophysiological Therapy

Coding Instruction: Indicate all electrophysiologic therapies that have been attempted.

Target Value: Any occurrence between birth and current procedure

Technical Specification

Code: 416940007
Code System Name: SNOMED CT
Short Name: EPHxTherapy
Missing Data: Report
Harvested: Yes (CIED, EP, INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16255 Prior EP Therapy(ies) Received Unknown
Operator: Equal
Value: No

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: EP therapy attempted

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Electrophysiological Procedure - 1.3.6.1.4.1.19376.1.4.1.6.5.887

Selection	Definition	Source	Code	Code System Name
Catheter Ablation	A procedure used to remove or terminate a faulty electrical pathway in the heart to treat cardiac arrhythmias		18286008:363702006=49436004	SNOMED CT
Cardiovascular Implantable Electronic Device	Includes prior implantation of devices such as, but not limited to, pacemakers, implantable cardioverter -defibrillators (ICDs), or cardiac resynchronization therapy (CRT) devices.		112000003721	ACC NCDR
Direct Current (DC) Cardioversion	Restores rhythm through the use of synchronized electrical shock.		180325003	SNOMED CT
Pharmacologic therapy	Antiarrhythmic drugs can be administered for attempted conversion of arrhythmias to sinus rhythm or to facilitate electrical cardioversion.		440142000	SNOMED CT
Surgical ablation or arrhythmia surgery	Refers to procedures such as the Maze procedure, surgical pulmonary vein isolation, or other surgical interventions for arrhythmia management.		64915003	SNOMED CT

Section: EP Therapy History **Parent: Procedure History Details**

Element: 16255 Prior EP Therapy(ies) Received Unknown

Coding Instruction: Select if prior electrophysiology therapy(ies) received are unknown.

Target Value: N/A

Technical Specification

Code:	416940007
Code System Name:	SNOMED CT
Short Name:	PriEPTherRecUnk
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 12905 Procedure History Name
Operator: Equal
Value: EP therapy attempted

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: EP Therapy Catheter Ablation **Parent: EP Therapy History**

Element: 16223 Prior Catheter Ablation Counter

Coding Instruction: The prior catheter ablation counter distinguishes individual prior catheter ablations when multiple catheter ablations have been performed Note: The software-assigned device counter should start at one and be incremented by one for each device used.

Target Value: Any occurrence between birth and current procedure

Technical Specification

Code:	473229000
Code System Name:	SNOMED CT
Short Name:	PriCathAblCount
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element: 15419 History of Electrophysiological Therapy
Operator: Equal
Value: Catheter Ablation

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: EP therapy attempted

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: EP Therapy Catheter Ablation **Parent: EP Therapy History**

Element: 16033 Substrate Treated

Coding Instruction: Select the arrhythmia substrate that was targeted and treated during any previous catheter ablation procedures. This refers to specific areas or pathways in the heart that were ablated to manage arrhythmias in past interventions.

Target Value: Any occurrence between birth and current procedure

Technical Specification

Code:	112000004180
Code System Name:	ACC NCDR
Short Name:	SubTx
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16223 Prior Catheter Ablation Counter
Operator:
Value: Any Value

AND

Element: 15419 History of Electrophysiological Therapy
Operator: Equal
Value: Catheter Ablation

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: EP therapy attempted

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Ablation Information - 1.3.6.1.4.1.19376.1.4.1.6.5.1134

Selection	Definition	Source	Code	Code System Name
Wolff-Parkinson-White (WPW)			74390002	SNOMED CT
Concealed accessory pathway/permanent junctional reciprocating tachycardia			233922008	SNOMED CT
AV nodal reentrant tachycardia (AVNRT)			251166008	SNOMED CT
Focal atrial tachycardia			713424004	SNOMED CT
Macroreentrant atrial tachycardia			735682000	SNOMED CT
Ventricular arrhythmias (PVCs, VT, VF)			44103008	SNOMED CT
Junctional tachycardia			426648003	SNOMED CT
Other	Select only when the substrate is not represented by any existing options. Use this category exclusively when no other selection is appropriate.		100000351	ACC NCDR

Section: EP Threapy Previous Ablation **Parent: EP Therapy Catheter Ablation**

Element: 16034 Previous Ablation Location

Coding Instruction: Select the anatomical location(s) within the heart that were targeted during any prior catheter ablation procedures. This refers to the specific areas or regions of the heart where ablation was performed to treat arrhythmias in the past.

Target Value: Any occurrence between birth and current procedure

Technical Specification

Code:	112000004181
Code System Name:	ACC NCDR
Short Name:	PreAbLoc
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16223 Prior Catheter Ablation Counter
Operator:
Value: Any Value

AND

Element: 15419 History of Electrophysiological Therapy
Operator: Equal
Value: Catheter Ablation

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: EP therapy attempted

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Electrophysiology Ablation Target - 1.3.6.1.4.1.19376.1.4.1.6.5.885

Selection	Definition	Source	Code	Code System Name
Tricuspid annulus - right anterior			112000002360	ACC NCDR
Tricuspid annulus - right lateral			112000002361	ACC NCDR
Tricuspid annulus - right posterior			112000002362	ACC NCDR
Tricuspid annulus - right posterioseptal			112000002363	ACC NCDR
Tricuspid annulus - right intermediate septal			112000002364	ACC NCDR
Tricuspid Annulus - Anteroseptal			112000002365	ACC NCDR
Mitral annulus - left intermediate			112000002366	ACC NCDR
Mitral annulus - left posterior			112000002368	ACC NCDR
Mitral annulus - left posterioseptal			112000002367	ACC NCDR
Mitral annulus - left lateral			112000002369	ACC NCDR
Mitral annulus - left anterolateral			112000002370	ACC NCDR
Coronary Sinus - Distal			112000002373	ACC NCDR
Coronary Sinus - Mid			112000002372	ACC NCDR
Coronary Sinus - Proximal			112000002371	ACC NCDR
Great Cardiac Vein Structure			5928000	SNOMED CT
Right Atrium - Triangle of Koch - Anterior			112000002376	ACC NCDR
Right Atrium - Triangle of Koch - Fast Pathway			112000002377	ACC NCDR
Right Atrium - Triangle of Koch - His Bundle			112000002378	ACC NCDR

Section: EP Threapy Previous Ablation	Parent: EP Therapy Catheter Ablation	
Right Atrium - Triangle of Koch - Mid	112000002375	ACC NCDR
Right Atrium - Triangle of Koch - Posterior	112000002374	ACC NCDR
Right atrium - crista terminalis	112000002388	ACC NCDR
Right atrium - superior vena cava	112000002393	ACC NCDR
Right atrium - right side of interatrial septum	112000002392	ACC NCDR
Right atrium - right atrial appendage	112000002391	ACC NCDR
Right atrium - posterior free wall	112000002390	ACC NCDR
Right atrium - lateral free wall	112000002389	ACC NCDR
Right Ventricle - TOF-Isthmus Between VSD Patch and Tricuspid Valve	112000002404	ACC NCDR
Right Ventricle - TOF-Isthmus Between VSD Patch and Pulmonary Valve	112000002403	ACC NCDR
Right Ventricle - TOF-Isthmus Between RVOT Patch and Tricuspid Valve	112000002402	ACC NCDR
Right Ventricle - TOF-Isthmus Between RVOT Patch and Pulmonary Valve	112000002401	ACC NCDR
Right Ventricle - RVOT	112000002400	ACC NCDR
Right ventricle - posterior septum	112000002399	ACC NCDR
Right ventricle - posterior free wall	112000002398	ACC NCDR
Right ventricle - mid-septum	112000002397	ACC NCDR
Right ventricle - mid-free wall	112000002396	ACC NCDR
Right ventricle - anterior septum	112000002395	ACC NCDR
Right ventricle - anterior free wall	112000002394	ACC NCDR
Left ventricle - anterior fascicle	112000002405	ACC NCDR
Left ventricle - area of aorto-mitral continuity	112000002406	ACC NCDR
Left ventricle - left coronary cusp	112000002407	ACC NCDR
Left ventricle - posterior fascicle	112000002408	ACC NCDR
Left ventricle - right coronary cusp	112000002409	ACC NCDR
CTI	100000981	ACC NCDR
Aorta - Non-Coronary Cusp	112000002410	ACC NCDR
Left atrium - lateral free wall	112000002379	ACC NCDR
Left atrium - left atrial appendage	112000002380	ACC NCDR
Left atrium - left side of interatrial septum	112000002381	ACC NCDR
Left Atrium - LIPV	112000002382	ACC NCDR
Left Atrium - LSPV	112000002383	ACC NCDR
Left atrium - posterior free wall	112000002384	ACC NCDR
Left Atrium - RIPV	112000002385	ACC NCDR
Left Atrium - RSPV	112000002386	ACC NCDR
Left Atrium Roof Isthmus	112000002387	ACC NCDR

Section: EP Therapy Same Target **Parent: EP Therapy Catheter Ablation**

Element: 16099 Prior Ablation Same Target as Current Procedure

Coding Instruction: Indicate whether the prior ablation was the same target as a target being ablated during the current procedure.

Target Value: Any occurrence between birth and current procedure

Technical Specification

Code:	416940007
Code System Name:	SNOMED CT
Short Name:	PriAblSamTarCurrProc
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16223 Prior Catheter Ablation Counter
Operator:
Value: Any Value

AND

Element: 15419 History of Electrophysiological Therapy
Operator: Equal
Value: Catheter Ablation

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: EP therapy attempted

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: History and Risk Factors **Parent: History and Risk Factors**

Element: 15844 Gestational Age Greater Than 38 Weeks

Coding Instruction: Indicate if the gestational age at birth is greater than 38 weeks.

Target Value: N/A

Technical Specification

Code:	397669002
Code System Name:	SNOMED CT
Short Name:	GAover38wks
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Diagnostic or interventional catheterization

Element: 15041 Gestational Age

Coding Instruction: Indicate the number of full weeks of the patient's estimated gestational age at birth.

Note(s): Code only for patients who are less than 1 year old at time of arrival. If gestational age is known, enter the number of full weeks gestation completed.

Target Value: The value at birth

Supporting Definition: **Gestational Age at Birth**

Gestation is the period of time between conception and birth during which the fetus grows and develops inside the mother's womb. The time is measured from the first day of the woman's last menstrual cycle to the current date. It is measured in weeks.

Source: NCDR

Technical Specification

Code:	412726003
Code System Name:	SNOMED CT
Short Name:	GestAge
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	Weeks
Default Value:	
Usual Range:	20 - 38 Weeks
Valid Range:	15 - 38 Weeks
Data Source:	User

Parent/Child Validation

Element: 15846 Gestational Age Not Documented
Operator: Equal
Value: No

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Diagnostic or interventional catheterization

Section: History and Risk Factors **Parent: History and Risk Factors**

Element: 15846 Gestational Age Not Documented

Coding Instruction: Indicate whether gestational age was not documented.

Target Value: The value at birth

Technical Specification

Code:	412726003
Code System Name:	SNOMED CT
Short Name:	GAnotdoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15844 Gestational Age Greater Than 38 Weeks
Operator: Equal
Value: No

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Diagnostic or interventional catheterization

Element: 15040 Birth Weight

Coding Instruction: Indicate the patient's birth weight in kilograms.

Note:
Code only for patients who are less than 30 days old at time of arrival.

Target Value: The value at birth

Technical Specification

Code:	3141-9
Code System Name:	LOINC
Short Name:	BirthWeight
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	8,3
Selection Type:	Single
Unit of Measure:	kg, g
Default Value:	
Usual Range:	6.000 - 16.000 kg 6,000.000 - 16,000.000 g
Valid Range:	0.001 - 20.000 kg 1.000 - 20,000.000 g
Data Source:	User

Parent/Child Validation

Element: 15845 Birth Weight Not Documented
Operator: Equal
Value: No

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Diagnostic or interventional catheterization

Section: History and Risk Factors **Parent: History and Risk Factors**

Element: 15845 Birth Weight Not Documented

Coding Instruction: Indicate if birth weight was not documented.

Target Value: The value at birth

Technical Specification

Code:	3141-9
Code System Name:	LOINC
Short Name:	BWNotDoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15836 IMPACT Registry Pathway
Operator:	Equal
Value:	Diagnostic or interventional catheterization

Section: Prior Device **Parent: Prior Device History**

Element: 16175 Prior Device History Device Counter

Coding Instruction: The device counter distinguishes individual devices when a patient has a history of multiple device implants.
Note: The software-assigned device counter should start at one and be incremented by one for each device used.

Target Value: Any occurrence between birth and current procedure

Technical Specification

Code:	112000004131
Code System Name:	ACC NCDR
Short Name:	PriorDevHxDevCount
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16176 Prior Cardiac Implantable Electronic Device Type

Coding Instruction: Select the type of cardiac implantable electronic device (CIED) previously implanted.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004131
Code System Name:	ACC NCDR
Short Name:	PriCIEDtyp
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Prior Cardiac Implantable Electronic Device Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1122

Selection	Definition	Source	Code	Code System Name
Implantable loop recorder			112000003952	ACC NCDR
ICD generator			112000003836	ACC NCDR
Pacemaker generator			118378005	SNOMED CT
Leads only			112000003835	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16174 Prior Device History Unknown

Coding Instruction: Select this field if the patient has had or currently has a prior device but the specifics of the device implant are unknown. Specifics include indication of implant, date of implant, and whether it was a new device or replaced an existing device. This situation may arise if the patient was cared for at a different location or if historical documentation is unavailable. If this field is selected, indicate the type of device previously implanted.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004131
Code System Name:	ACC NCDR
Short Name:	PriorDevHxUnk
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16178 Prior Device Implant Date

Coding Instruction: Record the implant date of the previous implant.

Note(s): If the month or day of the procedure is unknown, please code 01/01/YYYY. If the specific year is unknown in the current record, the year may be estimated based on timeframes found in prior medical record documentation (Example: If the patient had "most recent procedure" documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004131
Code System Name:	ACC NCDR
Short Name:	PiorDevImpDat
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	DT
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16205 Prior Device ID

Coding Instruction: Indicate the prior device ID.

The device(s) that should be collected in your application are controlled by a Master File. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004178
Code System Name: ACC NCDR
Short Name: PriDevID
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16177 Prior Device Serial Number

Coding Instruction: Record the manufacturer's device serial number.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004131
Code System Name: ACC NCDR
Short Name: PriorDevSerNum
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: ST
Precision: 100
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16205 Prior Device ID
Operator:
Value: Any Value

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16179 Prior Device Status

Coding Instruction: Indicate whether the prior device was the initial device (not replacing an existing device) or a generator change.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004132
Code System Name: ACC NCDR
Short Name: PriDevStat
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16205 Prior Device ID
Operator:
Value: Any Value

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

PDHx Prior Pacemaker Device Status - 1.3.6.1.4.1.19376.1.4.1.6.5.1123

Selection	Definition	Source	Code	Code System Name
Initial device implant	The patient received the specific device type (i.e. ILR, PM/ICD generator, or lead) for the first time.		112000003662	ACC NCDR
Device change	The patient already had a device and received a generator that was an upgrade or change from one that was initially implanted.		112000004134	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16180 Prior Device In Situ

Coding Instruction: Indicate whether the previously implanted device is in situ at the start of current procedure. Select 'no' if the device has been explanted.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004132
Code System Name: ACC NCDR
Short Name: PriorDevInSitu
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16205 Prior Device ID
Operator:
Value: Any Value

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16181 Prior Explant Date

Coding Instruction: Record the explant date of the previously explanted device.

Note(s): If the month or day of the procedure is unknown, please code 01/01/YYYY. If the specific year is unknown in the current record, the year may be estimated based on timeframes found in prior medical record documentation (Example: If the patient had "most recent procedure" documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004132
Code System Name: ACC NCDR
Short Name: PriExDate
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: DT
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16180 Prior Device In Situ
Operator: Equal
Value: No

AND

Element: 16205 Prior Device ID
Operator:
Value: Any Value

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16182 Prior Explant Reason

Coding Instruction: Select the reason(s) the previously implanted device was explanted.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004135
Code System Name:	ACC NCDR
Short Name:	PriExReas
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16180 Prior Device In Situ
Operator: Equal
Value: No

AND

Element: 16205 Prior Device ID
Operator:
Value: Any Value

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

ILRP Indication For Reimplantation of Implantable Loop Recorder - 1.3.6.1.4.1.19376.1.4.1.6.5.1069

Selection	Definition	Source	Code	Code System Name
Relocation	The device was explanted because it needed to be relocated.		112000003953	ACC NCDR

Section: Prior Device		Parent: Prior Device History	
End of expected battery life	The device was explanted due to its battery reaching the end of its expected lifespan.	100001088	ACC NCDR
Erosion	The device was explanted due to erosion of the device through the skin or surrounding tissue.	100014134	ACC NCDR
Faulty connector/header	The device was explanted due to a defect or malfunction in the connector block of a device, which is the part where the leads are attached to the device. This issue can compromise the electrical connection between the device and the leads, potentially leading to improper pacing or sensing functions.	112000004177	ACC NCDR
Infection	The device was explanted due to infection.	112000002137	ACC NCDR
Malfunction	The device was explanted due to a device malfunction or failure.	112000001504	ACC NCDR
Replacement of device at the time of lead revision	The device was explanted and replaced when the leads were being revised.	112000004175	ACC NCDR
Replacement of device at the time of upgrade	The device was explanted and replaced because an upgrade was being implanted.	112000004176	ACC NCDR
Under manufacturer advisory/recalled	The device was explanted following a manufacturer issued advisory or recall	100001093	ACC NCDR
Other		100000351	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16183 Prior Implantable Loop Recorder Indication

Coding Instruction: Select the reason(s) for implantation of the previous implantable loop recorder.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004136
Code System Name: ACC NCDR
Short Name: PrilLRInd
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

ILRP Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.1068

Selection	Definition	Source	Code	Code System Name
Abnormal ECG or Holter monitor results	The device was implanted due to abnormal findings on prior ECG or Holter monitor studies.		1000142474	ACC NCDR
Palpitations	The device was implanted due to palpitations.		80313002	SNOMED CT
Pre-syncope	The device was implanted to investigate episodes of near-fainting or lightheadedness.		427461000	SNOMED CT
Replacement	The device was implanted as a replacement for a previous device.		384728007	SNOMED CT
Risk of malignant arrhythmia	The device was implanted to monitor for potentially life-threatening arrhythmias.		698247007	SNOMED CT
Syncope	The device was implanted due to syncope.		271594007	SNOMED CT
At Risk Genotype	The device was implanted because of a genetic predisposition to arrhythmias or other cardiac conditions.		112000004230	ACC NCDR
Other			100000351	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16184 Prior Implantable Loop Recorder Laterality

Coding Instruction: Indicate the location of the previously implanted implantable loop recorder.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004137
Code System Name:	ACC NCDR
Short Name:	PrilLRLat
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

ILRP Device Laterality - 1.3.6.1.4.1.19376.1.4.1.6.5.1072

Selection	Definition	Source	Code	Code System Name
Right chest			112000003956	ACC NCDR
Left chest			112000003957	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16185 Prior Implantable Loop Recorder Location

Coding Instruction: Select the specific location of the previously implanted implantable loop recorder.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004138
Code System Name:	ACC NCDR
Short Name:	PriorILRLoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Implantable loop recorder

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

ILRP Implantable Loop Recorder Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1073

Selection	Definition	Source	Code	Code System Name
Parasternal			261149009	SNOMED CT
Intercostal			1197041002	SNOMED CT
Axillary			91470000	SNOMED CT
Other			100000351	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16186 Prior Pacemaker Indication

Coding Instruction: Select the reason(s) the previous pacemaker generator was implanted.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004139
Code System Name: ACC NCDR
Short Name: PriPacInd
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

ICD Pacemaker Generator Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.1089

Selection	Definition	Source	Code	Code System Name
Sinus node dysfunction	The pacemaker was implanted to treat conditions like sinus bradycardia, sinus arrest, or chronotropic incompetence.		60423000	SNOMED CT
AV junctional rhythm	The pacemaker was implanted to manage a junctional rhythm.		11849007	SNOMED CT
2nd degree or high grade block	The pacemaker was implanted to address any second-degree AV block or high-grade AV block.		195042002	SNOMED CT
Complete heart block	The pacemaker was implanted to treat complete (third-degree) AV block.		27885002	SNOMED CT
Ventricular dysfunction	The pacemaker was implanted to improve ventricular function.		112000004022	ACC NCDR
SVT treatment	The pacemaker was implanted to manage supraventricular tachycardias, such as through overdrive pacing.		6456007	SNOMED CT
Other			100000351	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16187 Prior Pacemaker Generator Upgrade

Coding Instruction: Indicate whether the generator change involved an upgrade to a different type or newer model of generator.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004135
Code System Name: ACC NCDR
Short Name: PriPacGenUp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16179 Prior Device Status
Operator: Equal
Value: Device change

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16188 Prior Pacemaker Generator Upgrade Type

Coding Instruction: Select the type of generator upgrade for the previously implanted pacemaker.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004140
Code System Name: ACC NCDR
Short Name: PriPacGenUpTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16187 Prior Pacemaker Generator Upgrade
Operator: Equal
Value: Yes

AND

Element: 16179 Prior Device Status
Operator: Equal
Value: Device change

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Pacemaker Change Upgrade Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1090

Selection	Definition	Source	Code	Code System Name
Single to dual chamber	The pacemaker was upgraded from a single-chamber system (either atrial or ventricular) to a dual-chamber system, providing pacing for both the atrium and ventricle.		112000003989	ACC NCDR
Pacemaker to cardiac resynchronization therapy with pacemaker	The system was upgraded to include cardiac resynchronization therapy (CRT-P), adding or reconfiguring leads to synchronize ventricular contractions.		112000004024	ACC NCDR
Pacemaker to conduction system pacing	The pacemaker system was modified to pace the heart through the conduction system, such as His-bundle		112000004025	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

pacing or left bundle branch area pacing.

Element: 16189 Prior Implantable Cardioverter Defibrillator Generator Type

Coding Instruction: Select the prior implantable cardioverter defibrillator generator type.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004141
Code System Name: ACC NCDR
Short Name: PrilCDGenTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Prior Implantation Device Type - Dynamic - 1.3.6.1.4.1.19376.1.4.1.6.5.1141

Selection	Definition	Source	Code	Code System Name
ICD single chamber	A single-chamber ICD defibrillates the ventricle and paces the ventricle.		100001214	ACC NCDR
ICD dual chamber	A dual-chamber ICD defibrillates the ventricle and paces the atrium and ventricle.		100001215	ACC NCDR
Cardiac resynchronization therapy - defibrillator	A cardiac resynchronization therapy device and defibrillator (CRT-D) has dual capabilities. It is a biventricular pacemaker that sends electrical signals to both ventricles as well as a defibrillator. It may or may not have an atrial pacing wire.		100001216	ACC NCDR
Subcutaneous ICD	A subcutaneous only defibrillator.		100001217	ACC NCDR
Extravascular ICD	The extravascular (EV) ICD system has a lead (thin wire) placed outside the heart and veins, under the sternum (breastbone).		112000003612	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16190 Prior Implantable Cardioverter Defibrillator Indication

Coding Instruction: Select the indication for the prior implantable cardioverter defibrillator.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004142
Code System Name:	ACC NCDR
Short Name:	PrilCDInd
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Procedure Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.33

Selection	Definition	Source	Code	Code System Name
Primary prevention	An indication for an ICD to prevent sudden cardiac death. It refers to use of ICDs in individuals who are at risk for but have not yet had an episode of sustained ventricular tachycardia, ventricular fibrillation, or resuscitated cardiac arrest.		315233008	SNOMED CT
Secondary prevention	An indication for ICD exclusively for patients who have survived one or more cardiac arrests or sustained ventricular tachycardia. Patients with cardiac conditions associated with a high risk of sudden death who have unexplained syncope that is likely to be due to ventricular arrhythmias are considered to have a secondary indication.		315234002	SNOMED CT

Section: Prior Device **Parent: Prior Device History**

Element: 16191 Prior Implantable Cardioverter Defibrillator Generator Upgrade

Coding Instruction: Indicate whether the generator change for the prior implantable cardioverter defibrillator was a generator upgrade.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004136
Code System Name:	ACC NCDR
Short Name:	PrilCDGenUp
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16179 Prior Device Status
Operator: Equal
Value: Device change

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16192 Prior Implantable Cardioverter Defibrillator Generator Change Type

Coding Instruction: Select the type of generator change (upgrade or downgrade) for the prior implantable cardioverter defibrillator.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004147
Code System Name: ACC NCDR
Short Name: PrilCDGenChangTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16179 Prior Device Status
Operator: Equal
Value: Device change

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Prior ICD Generator Upgrade Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1125

Selection	Definition	Source	Code	Code System Name
Single chamber to dual chamber			112000004143	ACC NCDR
Implantable cardioverter defibrillator to cardiac resynchronization therapy with defibrillator			112000003990	ACC NCDR
Pacemaker to implantable cardioverter defibrillator			112000004144	ACC NCDR
Subcutaneous to transvenous implantable cardioverter defibrillator			112000004146	ACC NCDR
Transvenous to subcutaneous implantable cardioverter defibrillator			112000004145	ACC NCDR
ICD to Pacemaker			112000004208	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Transvenous to EV-ICD	112000004201	ACC NCDR
S-ICD to EV-ICD	112000004202	ACC NCDR

Element: 16193 Specify Prior ICD Change

Coding Instruction: Select the specific type of generator upgrade for the prior implantable cardioverter defibrillator.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004149
Code System Name: ACC NCDR
Short Name: SpecPrilCDChang
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16179 Prior Device Status
Operator: Equal
Value: Device change

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

ICD Upgrade Type Detail - 1.3.6.1.4.1.19376.1.4.1.6.5.1084

Selection	Definition	Source	Code	Code System Name
Ventricular pacemaker to single chamber ICD			112000003995	ACC NCDR
Ventricular pacemaker to dual chamber ICD			112000003996	ACC NCDR
Ventricular pacemaker to cardiac resynchronization therapy defibrillator			112000003997	ACC NCDR
Ventricular pacemaker to conduction system pacing defibrillator			112000003998	ACC NCDR
Atrial pacemaker to dual chamber ICD			112000003999	ACC NCDR

Section: Prior Device	Parent: Prior Device History		
Atrial pacemaker to cardiac resynchronization therapy defibrillator		112000004000	ACC NCDR
Atrial pacemaker to conduction system pacing defibrillator		112000004001	ACC NCDR
Transvenous ICD to subcutaneous ICD		112000004002	ACC NCDR
Cardiac resynchronization therapy pacemaker to cardiac resynchronization therapy defibrillator		112000004003	ACC NCDR
Cardiac resynchronization therapy pacemaker to conduction system pacing defibrillator		112000004004	ACC NCDR
Subcutaneous ICD to transvenous ICD		112000004148	ACC NCDR
Single chamber ICD to single chamber PPM		112000004200	ACC NCDR
Transvenous to EV-ICD		112000004201	ACC NCDR
S-ICD to EV-ICD		112000004202	ACC NCDR
Single/dual chamber to CRT-P		112000004203	ACC NCDR
Dual chamber to conduction system pacing		112000004204	ACC NCDR
Single/dual chamber to leadless		112000004205	ACC NCDR
Dual chamber ICD to dual chamber PPM		112000004206	ACC NCDR
Single chamber to conduction system pacing		112000004207	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16194 Prior Implantable Cardioverter Defibrillator Generator Shock History

Coding Instruction: Select the shock history for the prior implantable cardioverter defibrillator.

Target Value: Any occurrence between birth and arrival at this facility

Vendor Instruction: When Prior Implantable Cardioverter Defibrillator Generator Shock History (16194) is [No prior shock(s)], no other selections can be selected

Technical Specification

Code: 112000004154
Code System Name: ACC NCDR
Short Name: PriICDGenShoHx
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Prior ICD Generator Shock History - 1.3.6.1.4.1.19376.1.4.1.6.5.1126

Selection	Definition	Source	Code	Code System Name
Appropriate shock(s)	The patient had previously received shocks and the shocks were produced appropriately for ventricular fibrillation or ventricular tachycardia.		112000004150	ACC NCDR
Inappropriate shock(s) (from SVT)	The generator produced inappropriate shocks.		112000004151	ACC NCDR
Inappropriate shock(s) from malfunctions	The generator produced inappropriate shocks due to a malfunctioning lead or oversensing.		112000004152	ACC NCDR
No prior shock(s)	No prior shocks have been documented or reported.		112000004153	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16195 Prior Implant Location

Coding Instruction: Select the location of the previously implanted pacemaker or ICD.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004159
Code System Name: ACC NCDR
Short Name: PriImpLoc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Pacemaker Implant Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1091

Selection	Definition	Source	Code	Code System Name
Left axillary			112000004008	ACC NCDR
Left pre-pectoral			112000004006	ACC NCDR
Left sub-pectoral			112000004007	ACC NCDR
Right axillary			112000004013	ACC NCDR
Right pre-pectoral			112000004011	ACC NCDR
Right sub-pectoral			112000004012	ACC NCDR
Intrathoracic			112000004026	ACC NCDR
Subrectus			112000004009	ACC NCDR
Other			100000351	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16196 Previous Antibiotic Pouch Used

Coding Instruction: Indicate whether an antibiotic pouch was used at the time of implant to reduce the risk of infection.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004160
Code System Name: ACC NCDR
Short Name: PriAntiPouUs
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Previous Antibiotic Pouch Used - 1.3.6.1.4.1.19376.1.4.1.6.5.1127

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Not documented			100001036	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16232 Prior Lead ID

Coding Instruction: Indicate the lead ID for the previously implanted leads or subcutaneous components.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	2.16.840.1.113883.3.3478.6.1.20
Code System Name:	ACC NCDR Lead Devices
Short Name:	PriLeadID
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Leads only

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16197 Prior Lead or Subcutaneous Component Type

Coding Instruction: Select the type of lead or component that was previously implanted.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004161
Code System Name: ACC NCDR
Short Name: PriorLeSubComTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16232 Prior Lead ID
Operator:
Value: Any Value

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Leads only

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

CIED Lead Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1119

Selection	Definition	Source	Code	Code System Name
Atrial pace or sense lead	A lead placed in the atrium to deliver pacing therapy or sense atrial activity.		112000004120	ACC NCDR
Ventricular pace or sense lead	A lead placed in the ventricle to deliver pacing therapy or sense ventricular activity.		112000004121	ACC NCDR
Coronary sinus pace or sense lead	A lead positioned in the coronary sinus, typically used for left ventricular pacing in cardiac resynchronization		112000004122	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

	therapy.		
Implantable cardioverter defibrillator lead	A lead that delivers defibrillation and/or pacing therapy, placed in the right ventricle or another chamber as appropriate.	112000004123	ACC NCDR
Subcutaneous implantable cardioverter defibrillator lead	A lead used with a subcutaneous ICD system.	112000004124	ACC NCDR
Implantable cardioverter defibrillator coil only	A component of the ICD system that functions solely as a defibrillation coil without sensing or pacing capabilities.	112000004125	ACC NCDR
Implantable cardioverter defibrillator patch	A patch electrode used to deliver defibrillation therapy, commonly associated with epicardial or subcutaneous ICD systems.	112000004126	ACC NCDR
Other		100000351	ACC NCDR
Extravascular ICD (EV-ICD) lead	A lead used with the Extravascular ICD (EV-ICD) system.	112000003612	ACC NCDR

Element: 16198 Prior Lead Location

Coding Instruction: Select the location of the previously implanted lead.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004163
Code System Name: ACC NCDR
Short Name: PriLeLoc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16232 Prior Lead ID
Operator:
Value: Any Value

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Leads only

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal

Section: Prior Device **Parent: Prior Device History**

Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Prior Lead Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1128

Selection	Definition	Source	Code	Code System Name
Transvenous or endocardial			112000004162	ACC NCDR
Epicardial			261073003	SNOMED CT
Subcutaneous			764295003	SNOMED CT
Extravascular			112000004199	ACC NCDR
Other			100000351	ACC NCDR

Element: 16199 Prior Transvenous or Endocardial Lead Location

Coding Instruction: Select the location of the previously implanted transvenous/endocardial lead.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004168
Code System Name: ACC NCDR
Short Name: PriTranEndLeadLoc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16198 Prior Lead Location
Operator: Equal
Value: Transvenous or endocardial

AND

Element: 16232 Prior Lead ID
Operator:
Value: Any Value

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: ICD generator

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Leads only

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator: Equal
Value: Pacemaker generator

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic

Section: Prior Device **Parent: Prior Device History**

device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Prior Transvenous or Endocardial Lead Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1129

Selection	Definition	Source	Code	Code System Name
Systemic venous atrium			112000004164	ACC NCDR
Pulmonary venous atrium			112000004165	ACC NCDR
Subpulmonary ventricle			112000004166	ACC NCDR
Systemic ventricle			112000004167	ACC NCDR
Coronary sinus			90219004	SNOMED CT
Fontan baffle			112000003862	ACC NCDR
Other			100000351	ACC NCDR

Section: Prior Device **Parent: Prior Device History**

Element: 16200 Complications During Past Cardiac Implantable Electronic Device Surgery

Coding Instruction: Indicate whether the patient experienced complications related to the prior cardiac implantable electronic device procedure. This may include an intra- or post-procedure complication that is directly attributable to the prior device implant -acute or chronic.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004137
Code System Name:	ACC NCDR
Short Name:	CompPastCIEDSurg
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator:
Value: Any Value

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16201 Date of Complication During Prior Cardiac Implantable Electronic Device Procedure

Coding Instruction: Record the date of the last complication the patient experienced related to the prior cardiac implantable electronic device procedure. This may include an intra- or post-procedure complication that is directly attributable to the prior device implant -acute or chronic.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004135
Code System Name:	ACC NCDR
Short Name:	DateofCompPriCIEDProc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	DT
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16200 Complications During Past Cardiac Implantable Electronic Device Surgery
Operator: Equal
Value: Yes

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator:
Value: Any Value

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Section: Prior Device **Parent: Prior Device History**

Element: 16202 Complication(s) During Prior Cardiac Implantable Electronic Device Surgery

Coding Instruction: Select the complication(s) the patient experienced related to the prior cardiac implantable electronic device procedure. This may include an intra- or post-procedure complication that is directly attributable to the prior device implant -acute or chronic.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code: 112000004174
Code System Name: ACC NCDR
Short Name: CompPriCIEDSurg
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16200 Complications During Past Cardiac Implantable Electronic Device Surgery
Operator: Equal
Value: Yes

AND

Element: 16176 Prior Cardiac Implantable Electronic Device Type
Operator:
Value: Any Value

AND

Element: 16174 Prior Device History Unknown
Operator: Equal
Value: No

AND

Element: 16175 Prior Device History Device Counter
Operator:
Value: Any Value

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

AND

Element: 12905 Procedure History Name
Operator: Equal
Value: Prior cardiovascular implantable electronic device

--- AND ---

Element: 15511 Procedure History Occurrence
Operator: Equal
Value: Yes

Complications Prior CIED Surgery - 1.3.6.1.4.1.19376.1.4.1.6.5.1130

Selection	Definition	Source	Code	Code System Name
Device erosion	Select if there is documentation that the device was replaced due to erosion through the skin or surrounding tissue.		100014134	ACC NCDR
Endocarditis	Select if there is documentation of endocarditis, an infection of the inner lining of the heart (endocardium).		56819008	SNOMED CT
Exit block	Select if there is documentation of exit block, which refers to the inability of electrical activity in the pulmonary veins (PVs) to reach the left atrium (LA).		100001002	ACC NCDR
Faulty connector or head	Select if there is documentation of a defect or malfunction in the connector block, where leads attach to the device, compromising the electrical connection and potentially affecting pacing or sensing functions.		112000003988	ACC NCDR
Lead dislodgement	Select if there is documentation that the patient		234233007	SNOMED CT

Section: Prior Device		Parent: Prior Device History	
	experienced lead dislodgement, defined as the unintended movement of a cardiac device lead from its original implantation site within the heart or vascular system.		
Pericardial effusion requiring intervention	Select if there is documentation of a pericardial effusion, the accumulation of fluid around the heart, that required medical or surgical intervention.	100001073	ACC NCDR
Pneumothorax requiring intervention	Select if there is documentation of a pneumothorax, the accumulation of air in the pleural space as a complication of lead placement, requiring medical or surgical intervention.	112000002152	ACC NCDR
Sepsis	Select if there is documentation of sepsis, defined as a serious infection with systemic inflammatory response (SIRS). SIRS is present when at least two criteria are met: abnormal temperature, heart rate, respiratory rate, or white blood cell count.	91302008	SNOMED CT
Stroke	Select if there is documentation or diagnosis of a stroke, defined as a disruption in blood flow to the brain causing neurological deficits lasting more than 24 hours.	100000977	ACC NCDR
Lead conductor fracture	Select if there is documentation of a lead conductor fracture, a break in the conductor wires within the lead that impairs signal transmission.	112000004169	ACC NCDR
Lead insulation break	Select if there is documentation of a lead insulation break, involving damage to the protective insulation around a lead, exposing internal wires and affecting performance.	762681007	SNOMED CT
Lead malposition	Select if there is documentation of lead malposition, indicating the lead is incorrectly or unintentionally placed, compromising its function.	112000004170	ACC NCDR
Lead perforation	Select if there is documentation of lead perforation, where the lead has penetrated through the heart or vascular structure, potentially causing complications.	112000004171	ACC NCDR
Phrenic capture requiring lead revisions	Select if there is documentation of phrenic nerve capture, where the device stimulates the phrenic nerve causing diaphragm contractions, requiring lead adjustment or replacement.	112000004172	ACC NCDR
Wound or pocket infection	Select if there is documentation of a wound or pocket infection, where the surgical site or device pocket shows signs of infection such as redness, swelling, or discharge.	112000004173	ACC NCDR

Section: Diagnostic Studies **Parent: Root**

Element: 16084 Ventricular Function Assessed

Coding Instruction: Indicate whether ventricular function was assessed.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	112000003958
Code System Name:	ACC NCDR
Short Name:	VentFuncAss
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Element: 16085 Ejection Fraction

Coding Instruction: Record the ejection fraction (in percent). The ejection fraction can be assessed via invasive (i.e. LV gram), or non-invasive (i.e. Echo, MR, CT or Nuclear) testing. Enter left ventricle ejection fraction unless single ventricle or 1.5 ventricle circulation is present.

Note(s):
Enter a percentage in the range of 01–99. If a percentage range is reported, report the center number in the range (e.g., 50–55% is 52.5 reported to the next whole number is 53%). For EF measurements reported as "less than" or "greater than," code to the nearest whole number (e.g., <40% is coded as 39%, and >40% is coded as 41%).

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	112000003958
Code System Name:	ACC NCDR
Short Name:	DiagStudEF
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	5 - 70 %
Valid Range:	1 - 99 %
Data Source:	User

Parent/Child Validation

Element: 16086 Ejection Fraction Not Documented
Operator: Equal
Value: No

AND

Element: 16084 Ventricular Function Assessed
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Section: Diagnostic Studies **Parent: Root**

Element: 16086 Ejection Fraction Not Documented

Coding Instruction: Indicate if the ejection fraction was not documented.

Target Value: N/A

Technical Specification

Code:	112000003959
Code System Name:	ACC NCDR
Short Name:	EFNotDoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16084 Ventricular Function Assessed
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Element: 16087 Shortening Fraction

Coding Instruction: Record the shortening fraction (sometimes called fraction shortening) as an estimate of ventricular function.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	112000003959
Code System Name:	ACC NCDR
Short Name:	ShortFrac
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	5 - 70 %
Valid Range:	1 - 99 %
Data Source:	User

Parent/Child Validation

Element: 16088 Shortening Fraction Not Documented
Operator: Equal
Value: No

AND

Element: 16084 Ventricular Function Assessed
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Section: Diagnostic Studies **Parent: Root**

Element: 16088 Shortening Fraction Not Documented

Coding Instruction: Indicate if the shortening fraction was not documented.

Target Value: N/A

Technical Specification

Code:	112000003960
Code System Name:	ACC NCDR
Short Name:	ShortFracNotDoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16084 Ventricular Function Assessed
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Element: 16089 Qualitative Assessment

Coding Instruction: Select the qualitative assessment assigned to the patient's ventricular function.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	112000003958
Code System Name:	ACC NCDR
Short Name:	QualAss
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16084 Ventricular Function Assessed
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

DS Ventricular Function Qualtitative Assessment - 1.3.6.1.4.1.19376.1.4.1.6.5.1075

Selection	Definition	Source	Code	Code System Name
Normal	Ejection fraction is within the normal range.		17621005	SNOMED CT
Mild	Mild dysfunction		255604002	SNOMED CT
Moderate	Moderate dysfunction		6736007	SNOMED CT
Severe			24484000	SNOMED CT
Not documented	No classification is provided		112000001830	ACC NCDR

Section: Diagnostic Studies **Parent: Root**

Element: 16092 Late Gadolinium Enhancement (LGE) (noted on Cardiac MRI)

Coding Instruction: Indicate if late gadolinium enhancement was noted on a cardiac magnetic resonance imaging study. This refers to areas of myocardial tissue that retain gadolinium longer than normal tissue, often indicating fibrosis or scarring. This would typically be documented on the cardiac MRI imaging interpretation.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	112000003961
Code System Name:	ACC NCDR
Short Name:	GadoliniumEnhance
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16134 Cardiac MRI Not Performed
Operator: Equal
Value: No

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Element: 16134 Cardiac MRI Not Performed

Coding Instruction: Indicate if a cardiac MRI was not performed within 90 days of procedure start.

Target Value: N/A

Technical Specification

Code:	36482-8
Code System Name:	LOINC
Short Name:	CardMRINotPerf
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Section: Diagnostic Studies **Parent: Root**

Element: 16217 Late Gadolinium Enhanced Tissue Locations

Coding Instruction: Select the locations of late gadolinium enhanced tissues noted on the magnetic resonance imaging study.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	112000003961
Code System Name:	ACC NCDR
Short Name:	LGETissLoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16092 Late Gadolinium Enhancement (LGE) (noted on Cardiac MRI)
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

LGE Tissues - 1.3.6.1.4.1.19376.1.4.1.6.5.1142

Selection	Definition	Source	Code	Code System Name
Right ventricle			53085002	SNOMED CT
Left ventricle			112000004083	ACC NCDR
Both			251267008	SNOMED CT

Section: Diagnostic Studies **Parent: Root**

Element: 16093 Location of Late Gadolinium Enhancement

Coding Instruction: Select the location(s) of late gadolinium enhancement noted on the magnetic resonance imaging study.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code: 112000003959
Code System Name: ACC NCDR
Short Name: LocGadolinEnhance
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16092 Late Gadolinium Enhancement (LGE) (noted on Cardiac MRI)
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

DS Location of Late Gadolinium Enhancement - 1.3.6.1.4.1.19376.1.4.1.6.5.1077

Selection	Definition	Source	Code	Code System Name
Apex			112000003978	ACC NCDR
Apical anterior			112000003974	ACC NCDR
Apical inferior			112000003976	ACC NCDR
Apical lateral			112000003977	ACC NCDR
Apical septal			112000003975	ACC NCDR
Basal anteriolateral			112000003967	ACC NCDR
Basal anterior			112000003962	ACC NCDR
Basal anteroseptal			112000003963	ACC NCDR
Basal inferiolateral			112000003966	ACC NCDR
Basal inferior			112000003965	ACC NCDR
Basal inferoseptal			112000003964	ACC NCDR
Basal Superior			112000004227	ACC NCDR
Mid anterior			112000003968	ACC NCDR
Mid anterolateral			112000003973	ACC NCDR
Mid anteroseptal			112000003969	ACC NCDR
Mid inferior			112000003971	ACC NCDR
Mid inferolateral			112000003972	ACC NCDR
Mid inferoseptal			112000003970	ACC NCDR
Midventricular			112000004228	ACC NCDR

Section: Diagnostic Studies **Parent: Root**

Element: 16094 Percentage of Late Gadolinium Enhancement

Coding Instruction: Record the percentage of late gadolinium enhancement, if quantified, noted on the magnetic resonance imaging study.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	112000003960
Code System Name:	ACC NCDR
Short Name:	PercentGadolEnhance
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	5 - 70 %
Valid Range:	1 - 99 %
Data Source:	User

Parent/Child Validation

Element: 16095 Percentage of Late Gadolinium Enhancement Not Documented
Operator: Equal
Value: No

AND

Element: 16092 Late Gadolinium Enhancement (LGE) (noted on Cardiac MRI)
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Element: 16095 Percentage of Late Gadolinium Enhancement Not Documented

Coding Instruction: Indicate if a quantified percentage of late gadolinium enhancement was not documented on the magnetic resonance imaging study within 90 days of procedure start.

Target Value: N/A

Technical Specification

Code:	112000003979
Code System Name:	ACC NCDR
Short Name:	PercentGadolEnhanceNotDoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16092 Late Gadolinium Enhancement (LGE) (noted on Cardiac MRI)
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Section: Diagnostic Studies **Parent: Root**

Element: 5030 Electrocardiogram Performed

Coding Instruction: Indicate if the patient had an electrocardiogram (ECG).

Note: 12-lead ECG only

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	164847006
Code System Name:	SNOMED CT
Short Name:	ECG
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Element: 5035 Electrocardiogram Date

Coding Instruction: Indicate the date in which the most recent electrocardiogram (ECG) was performed.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	164847006
Code System Name:	SNOMED CT
Short Name:	ECGDate
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	DT
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 5030 Electrocardiogram Performed
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Section: Diagnostic Studies **Parent: Root**

Element: 16096 Rhythm on Electrocardiogram

Coding Instruction: Select the rhythm(s) identified and documented from the interpretation of the electrocardiogram.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code: 112000004268
Code System Name: ACC NCDR
Short Name: RhyEKG
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16245 Rhythm on ECG Not Documented
Operator: Equal
Value: No

AND

Element: 5030 Electrocardiogram Performed
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

DS Rhythm on Electrocardiogram - 1.3.6.1.4.1.19376.1.4.1.6.5.1078

Selection	Definition	Source	Code	Code System Name
Sinus rhythm			64730000	SNOMED CT
Atrial ectopic tachycardia (AET)			233892002	SNOMED CT
Supraventricular tachycardia (SVT)			6456007	SNOMED CT
Atrial fibrillation			49436004	SNOMED CT
Atrial flutter			5370000	SNOMED CT
AV junctional rhythm			11849007	SNOMED CT
Idioventricular rhythm			112000003866	ACC NCDR
Second degree AV block			195042002	SNOMED CT
Third degree AV block			27885002	SNOMED CT
Sinus arrest			5609005	SNOMED CT
Atrial paced			100000941	ACC NCDR
Ventricular paced			251266004	SNOMED CT
Ventricular tachycardia			25569003	SNOMED CT
Other rhythm not listed			100000351	ACC NCDR

Section: Diagnostic Studies **Parent: Root**

Element: 16245 Rhythm on ECG Not Documented

Coding Instruction: Select if ECG rhythm is not documented

Target Value: N/A

Technical Specification

Code:	112000004268
Code System Name:	ACC NCDR
Short Name:	RhythNotDoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 5030 Electrocardiogram Performed
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Element: 5045 Only Ventricular Paced QRS Complexes Present

Coding Instruction: Indicate if there were only ventricular paced QRS complexes present.

Note(s):
If the patient has some intrinsic ventricular complexes present, code “No”.

If no ECG is available, a pre-procedure 6 inch cardiac rhythm strip or clinician documentation may be utilized to obtain this information.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	100001120
Code System Name:	ACC NCDR
Short Name:	VPQRS
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Section: Diagnostic Studies **Parent: Root**

Element: 5050 Ventricular Paced QRS Duration

Coding Instruction: Indicate the duration of the ventricular paced QRS complex in milliseconds.

Note(s): Use the following hierarchy to code:

1. Provider documentation of QRS duration. If not available, then

2. Most recent surface 12-lead ECG. If not available, then

3. 6-inch rhythm strip and/or device interrogation.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	100001121
Code System Name:	ACC NCDR
Short Name:	VPacedQRS
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	msec
Default Value:	
Usual Range:	20 - 250 msec
Valid Range:	10 - 300 msec
Data Source:	User

Parent/Child Validation

Element: 5045 Only Ventricular Paced QRS Complexes Present
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Element: 16097 Paced QRS Morphology

Coding Instruction: Select the morphology (or morphologies) describing the paced QRS wave pattern.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	100001121
Code System Name:	ACC NCDR
Short Name:	PaMorph
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 5045 Only Ventricular Paced QRS Complexes Present
Operator: Equal
Value: Yes

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

DS Paced QRS Morphology - 1.3.6.1.4.1.19376.1.4.1.6.5.1079

Selection	Definition	Source	Code	Code System Name
Right bundle branch block			164907000	SNOMED CT
Left bundle branch block			63467002	SNOMED CT
Intraventricular conduction delay			4554005	SNOMED CT

Section: Diagnostic Studies **Parent: Root**

Element: 5055 Non-Ventricular Paced QRS duration

Coding Instruction: Indicate the duration of the non-ventricular paced or intrinsic QRS complex in milliseconds.

Note(s): Use the following hierarchy to code:

1. Provider documentation of QRS duration. If not available, then

2. Most recent surface 12-lead ECG. If not available, then

3. 6-inch rhythm strip and/or device interrogation.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	251208001
Code System Name:	SNOMED CT
Short Name:	NVPQRS
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	msec
Default Value:	
Usual Range:	20 - 250 msec
Valid Range:	10 - 300 msec
Data Source:	User

Parent/Child Validation

Element: 5045 Only Ventricular Paced QRS Complexes Present
Operator: Equal
Value: No

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

Section: Diagnostic Studies **Parent: Root**

Element: 16098 Intrinsic QRS Morphology

Coding Instruction: Select the morphology (or morphologies) describing the intrinsic QRS wave pattern.

Target Value: The last value within 90 days of procedure start

Vendor Instruction: When Intrinsic QRS Morphology (16098) is [Normal], no other selections can be selected

Technical Specification

Code: 251208001
Code System Name: SNOMED CT
Short Name: IntPacMorph
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 5045 Only Ventricular Paced QRS Complexes Present
Operator: Equal
Value: No

AND

Element: 15836 IMPACT Registry Pathway
Operator: Equal
Value: Cardiovascular implantable electronic device (CIED)

DS Intrinsic Paced QRS Morphology - 1.3.6.1.4.1.19376.1.4.1.6.5.1080

Selection	Definition	Source	Code	Code System Name
Normal			17621005	SNOMED CT
Left anterior fascicular block			37760005	SNOMED CT
Left posterior fascicular block			62026008	SNOMED CT
Left bundle branch block			63467002	SNOMED CT
Right bundle branch block			164907000	SNOMED CT
Intraventricular conduction delay			4554005	SNOMED CT
Alternating RBBB and LBBB			32758004	SNOMED CT

Section: Lab Visit **Parent: Root**

Element: 15081 Procedures Performed

Coding Instruction: Indicate the procedure(s) that were attempted or performed in the cath lab, regardless of whether the procedure actually occurred.

Note: If a cardiac biopsy occurred, code non-module intervention.

Target Value: The value on current procedure

Vendor Instruction: For Procedures Performed (15081), cannot select [Diagnostic catheterization only] with [Coarctation intervention, Proximal PA stenting, Atrial septal defect closure, Transcatheter pulmonary valve replacement, Premature infant patent ductus arteriosus closure, Aortic valvuloplasty, Other intervention (non-module)]

For Procedures Performed (15081), cannot select [EP study without ablation] with [EP study with ablation]

Technical Specification

Code:	112000000305
Code System Name:	ACC NCDR
Short Name:	PedsProcPerf
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

IMPACT Procedure Type - 1.3.6.1.4.1.19376.1.4.1.6.5.813

Selection	Definition	Source	Code	Code System Name
Coarctation intervention	Coarctation of the aorta is a congenital heart defect involving a narrowing of the aorta. To repair the aortic coarctation, a catheter is inserted and balloon inflated through the narrowed section of the aorta to stretch the area open. A stent may also be placed in the narrowed area after the balloon dilation to keep the aorta open.	NCDR	112000002204	ACC NCDR
Proximal PA stenting	Pulmonary artery stenosis is a narrowing (stenosis) that occurs in the pulmonary artery. Pulmonary artery stenting consists of moving a balloon catheter into the narrowed area of the pulmonary artery, then inserting a stent in that segment.	NCDR	112000002205	ACC NCDR
Atrial septal defect closure	Atrial septal defect (ASD) is a congenital heart defect in which the wall that separates the upper heart chambers (atria) does not close completely. During an ASD closure procedure, a catheter is threaded to the heart's septum and a device is positioned so that it plugs the hole between the atria.	NCDR	112811009	SNOMED CT
Transcatheter pulmonary valve replacement	Transcatheter pulmonary valve replacement (TPVR) is a percutaneous pulmonary valve replacement procedure to treat pulmonary regurgitation and right ventricular outflow tract obstruction.	NCDR	442525005	SNOMED CT
Premature infant patent ductus arteriosus closure	For the IMPACT Registry, a premature infant is defined as 24-37 weeks pre-term or weighing less than 2500 grams at birth. Patent ductus arteriosus (PDA) is the persistence of a normal fetal structure between the left pulmonary artery and the descending aorta. Persistence of this fetal structure beyond 10 days of life is considered abnormal. During a PDA closure procedure a physician passes a small metal coil or other blocking device through a catheter to the site of the PDA. This corrects the congenital defect by blocking blood flow through the vessel.		445089003	SNOMED CT
Aortic valvuloplasty	Aortic valve stenosis is a narrowing of the aortic valve. Aortic valvuloplasty is the repair of a stenotic aortic valve by inserting a balloon catheter inside the valve. The balloon is inflated in an effort to increase the opening size of the valve and improve blood flow.	NCDR	77166000	SNOMED CT
Other intervention (non-module)			100000351	ACC NCDR
Diagnostic catheterization only	There was no therapeutic treatment attempted or completed by the interventional cardiologist during the case.		41976001	SNOMED CT
EP study without ablation			112000003838	ACC NCDR
EP study with ablation			112000003837	ACC NCDR
ICD generator			112000003836	ACC NCDR
Implantable loop recorder			1344962007	SNOMED CT

Section: Lab Visit **Parent: Root**

Leads only	112000003835	ACC NCDR
Pacemaker pulse generator	118378005	SNOMED CT

Element: 15694 Procedure Room Entry Date and Time

Coding Instruction: Indicate the date and time the patient entered the procedure room.

Target Value: The value on current procedure

Vendor Instruction: Procedure Room Entry Date and Time (15694) must be >= Arrival Date and Time (3001)

Procedure Room Entry Date and Time (15694) must be < Procedure Room Exit Date and Time (15695)

Technical Specification

Code:	112000001197
Code System Name:	ACC NCDR
Short Name:	ProcedureEntryTime
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	TS
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 7000 Procedure Start Date and Time

Coding Instruction: Indicate the date and time the procedure started.

Note(s): Indicate the date/time (mm/dd/yyyy hours: minutes) using the military 24-hour clock, beginning at midnight (0000 hours). The time the procedure started is defined as the time of first sheath insertion.

For device implant procedures, the start time is defined as the time at which local anesthetic was first administered for vascular access, or the time of the first attempt at vascular access.

Target Value: Any occurrence on current procedure

Vendor Instruction: Procedure Start Date and Time (7000) must be >= Arrival Date and Time (3001)

Procedure Start Date and Time (7000) must be <= Procedure End Date and Time (7005)

Procedure Start Date and Time (7000) must be <= Discharge Date and Time (10101)

Technical Specification

Code:	1000142460
Code System Name:	ACC NCDR
Short Name:	ProcedureStartDateTime
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	TS
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 7005 Procedure End Date and Time

Coding Instruction: Indicate the date and time the procedure ended.

Note(s): Indicate the date/time (mm/dd/yyyy hours: minutes) using the military 24-hour clock, beginning at midnight (0000 hours).

The time the procedure ended is defined as the time of last sheath removal. If the patient leaves the lab with any sheath in place, then indicate the time the primary operator breaks scrub.

For device implant procedures, the ending date and time is defined as the time at which the operator breaks scrub at the end of the procedure.

Target Value: The value on current procedure

Vendor Instruction: Procedure Start Date and Time (7000) and Procedure End Date and Time (7005) must not overlap on multiple procedures

Procedure End Date and Time (7005) must be <= Discharge Date and Time (10101)

Technical Specification

Code:	1000142459
Code System Name:	ACC NCDR
Short Name:	ProcedureEndDateTime
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	TS
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Lab Visit **Parent: Root**

Element: 15695 Procedure Room Exit Date and Time

Coding Instruction: Indicate the date and time the patient exits the procedure room.

Target Value: The value on current procedure

Vendor Instruction: Procedure Room Entry Date and Time (15694) and Procedure Room Exit Date and Time (15695) must not overlap on multiple procedures

Technical Specification

Code:	112000001198
Code System Name:	ACC NCDR
Short Name:	ProcedureStopTime
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	TS
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Concurrent Conditions **Parent: Lab Visit**

Element: 15885 Non-cardiac Comorbidity

Coding Instruction: Indicate if the patient does or does not have a non-cardiac comorbid condition(s) at the time of procedure. Comorbid conditions that warrant coding 'yes' are:

- Chronic lung disease
- Congenital diaphragmatic hernia
- Known airway problems
- Diabetes mellitus
- Acute renal insufficiency
- Chronic renal insufficiency/end stage renal disease
- Seizure disorder
- Global developmental delay
- Bleeding disorder
- Hypercoagulable state
- Sickle cell anemia

Target Value: The value on start of current procedure

Technical Specification

Code:	112000003799
Code System Name:	ACC NCDR
Short Name:	NonCardComor
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Concurrent Conditions **Parent: Lab Visit**

Element: 15888 Cardiac Comorbidity

Coding Instruction: Indicate if the patient does or does not have a cardiac comorbid condition(s) at the time of procedure. Cardiac comorbid conditions that warrant coding 'yes' are:

- Single ventricle
- 1.5 ventricle
- L-looped ventricles
- Dilated cardiomyopathy
- Hypertrophic cardiomyopathy
- Ischemic cardiomyopathy
- Pulmonary hypertension
- Rheumatic heart
- Kawasaki disease
- Heart failure
- Aborted sudden death

Target Value: The value on start of current procedure

Technical Specification

Code:	112000003744
Code System Name:	ACC NCDR
Short Name:	CardComor
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Concurrent Conditions **Parent: Lab Visit**

Element: 15883 Arrhythmia Past 90 Days

Coding Instruction: Indicate whether the patient has a record of a cardiac arrhythmia within the past 90 days.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code:	698247007
Code System Name:	SNOMED CT
Short Name:	Arr
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Concurrent Conditions **Parent: Lab Visit**

Element: 15966 Cardiac Arrest w/in 48hrs Prior to Current Procedure

Coding Instruction: Indicate whether the patient experienced cardiac arrest within 48 hrs prior to the current procedure

Target Value: Any occurrence within 48 hours prior to procedure and the first procedure in this admission

Technical Specification

Code:	410429000
Code System Name:	SNOMED CT
Short Name:	CardArrwin48hrs
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Non-cardiac Comorbidity **Parent: Concurrent Conditions**

Element: 15886 Non-cardiac Comorbidity Name

Coding Instruction: Select the comorbidities currently associated with the patient, as documented in the medical record.

Target Value: N/A

Technical Specification

Code: 112000003799
Code System Name: ACC NCDR
Short Name: NonCardComorNam
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15885 Non-cardiac Comorbidity
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Non-cardiac Comorbidities - 1.3.6.1.4.1.19376.1.4.1.6.5.989

Selection	Definition	Source	Code	Code System Name
Chronic lung disease	Select if there is documentation of chronic lung disease, such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, emphysema, chronic inhalation reactive diseases (e.g., asbestosis, pneumoconiosis), or radiation-induced lung damage. This includes patients requiring chronic inhaled or oral pharmacologic therapy, such as steroids or beta-agonists. Asthma, seasonal allergies, and transient conditions like atelectasis are not considered chronic lung disease.		413839001	SNOMED CT
Congenital diaphragmatic hernia	Select if there is documentation of a congenital absence or defect (hole) in the diaphragm, typically occurring on the left side but possible on either side.		17190001	SNOMED CT
Known airway problems	Select if there is documentation of structural or functional airway abnormalities, such as tracheomalacia, laryngomalacia, subglottic stenosis, vocal cord paralysis, or other chronic conditions		50043002	SNOMED CT

Section: Non-cardiac Comorbidity		Parent: Concurrent Conditions		
	affecting the airway. Include cases of chronic airway obstruction or external compression impairing airflow.			
Diabetes mellitus	Code based on clinical diagnosis of diabetes.		73211009	SNOMED CT
Acute Kidney Injury	Acute kidney injury is a sudden decrease in kidney function. In adult and pediatric patients, acute kidney injury is defined as: Increase in serum creatinine by ≥0.3 mg/dL (≥26.5 micromol/L) within 48 hours, or Increase in serum creatinine to ≥1.5 times baseline, which is known or presumed to have occurred within the prior seven days, or Urine volume <0.5 mL/kg/hour for six hours	The Kidney Disease: Improving Global Outcomes (KDIGO) In previously healthy children where the baseline serum creatinine is unknown, it is generally recommended to use a presumed baseline of 120 mL/min/1.73 m2	14669001	SNOMED CT
Chronic renal insufficiency	Select if there is documentation of persistent kidney dysfunction, characterized by impaired ability to filter waste or regulate electrolytes over an extended period. This includes chronically elevated creatinine levels, decreased glomerular filtration rate (GFR), or evidence of kidney damage (e.g., proteinuria) lasting three months or longer. Patients requiring dialysis or meeting criteria for end-stage renal disease (ESRD) are not included.		709044004	SNOMED CT
End stage renal disease	Select if there is documentation of irreversible kidney failure requiring chronic dialysis (hemodialysis or peritoneal dialysis) or kidney transplantation. Include cases where end-stage renal disease is explicitly stated in the medical record or where ongoing renal replacement therapy is documented.		46177005	SNOMED CT
Seizure disorder	Select if there is documentation of episodes characterized by clinical signs or electroencephalographic (EEG) evidence of epileptiform activity. This includes cases requiring ongoing medical management or anticonvulsant therapy. Isolated seizure events or transient conditions, such as febrile seizures, are not considered seizure disorders.		128613002	SNOMED CT
Global developmental delay	Select if there is documentation of significant delays in two or more developmental domains (e.g., motor, cognitive, speech/language, or social/emotional) in children under the age of 5. Global developmental delay (GDD) may result from exogenous factors, genetic (metabolic or non-metabolic) conditions, or other underlying causes. Isolated delays in a single domain or conditions diagnosed after the age of 5 are not considered GDD.		224958001	SNOMED CT
Bleeding disorder	Select if there is documentation of a condition characterized by abnormal bleeding or impaired clotting. Examples include inherited disorders like hemophilia and von Willebrand disease, as well as acquired coagulation disorders. This does not include conditions caused solely by anticoagulant use or transient bleeding episodes.		112000002067	ACC NCDR
Hypercoagulable state	Select if there is documentation of a history of a hypercoagulable state, characterized by an increased tendency to form blood clots. This may be indicated by below-normal prothrombin time (PT) or partial thromboplastin time (PTT). Conditions caused solely by medications, such as vitamin K, do not meet the criteria.		76612001	SNOMED CT
Sickle cell anemia	Select if there is documentation of a history of sickle cell anemia, a condition involving the production of abnormal hemoglobin S, which may lead to chronic anemia and vaso-occlusive complications. Patients with only a positive test for the sickle cell trait, without active signs of the disease, do not meet the criteria.		127040003	SNOMED CT

Section: Non-cardiac Comorbidity **Parent: Concurrent Conditions**

Element: 15887 Non-cardiac Comorbidity Occurrence

Coding Instruction: Indicate if the patient has or has not had a clinical diagnosis of the indicated comorbid conditions.

Target Value: The value on start of current procedure

Vendor Instruction: Non-cardiac Comorbidity Occurrence (15887) cannot be Null when a Non-cardiac Comorbidity Name (15886) is selected

Technical Specification

Code:	112000003799
Code System Name:	ACC NCDR
Short Name:	NonCardComorOcc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15886 Non-cardiac Comorbidity Name
Operator:
Value: Any Value

AND

Element: 15885 Non-cardiac Comorbidity
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Cardiac Comorbidity **Parent: Concurrent Conditions**

Element: 15889 Cardiac Comorbidity Name

Coding Instruction: Select the comorbidities currently associated with the patient, as documented in the medical record.

Target Value: The value on current procedure

Technical Specification

Code: 112000003744
Code System Name: ACC NCDR
Short Name: CardComorNam
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15888 Cardiac Comorbidity
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Cardiac Comorbidities - 1.3.6.1.4.1.19376.1.4.1.6.5.990

Selection	Definition	Source	Code	Code System Name
Single ventricle	Select if there is documentation of a congenital heart defect where the heart has only one functional ventricle (anatomically right, left, or indeterminate) supplying systemic circulation. This term, synonymous with "functionally univentricular heart," includes conditions such as tricuspid atresia, hypoplastic left or right heart syndrome, double outlet right ventricle, and double inlet left ventricle.		45503006	SNOMED CT
One and half ventricle	Select if there is documentation of a congenital heart condition characterized by one fully functional ventricle and a partially functional second ventricle. This term typically applies to cases where a single ventricle repair is supported by a surgically augmented hypoplastic ventricle or atrium to assist with systemic or pulmonary circulation.		112000003745	ACC NCDR
L-looped ventricles	Select if there is documentation of l-looped ventricles, a congenital heart condition characterized by		26146002	SNOMED CT

Section: Cardiac Comorbidity	Parent: Concurrent Conditions		
	atrioventricular (AV) and ventriculoarterial discordance. This condition is also referred to as congenitally corrected transposition of the great arteries (ccTGA), double discordance, or ventricular inversion. Key features include the morphologic right ventricle supporting systemic circulation and the morphologic left ventricle supporting pulmonary circulation. Documentation may note associated defects such as ventricular septal defects (VSDs), pulmonary stenosis, or arrhythmias, or highlight risks like systemic right ventricular dysfunction leading to heart failure.		
Dilated cardiomyopathy	Select if there is documentation of ventricular dilation with impaired systolic function, commonly defined by a left ventricular ejection fraction (LVEF) less than 40%. Dilated cardiomyopathy can occur with or without symptoms of heart failure and may be primary (idiopathic) or secondary to identifiable causes such as genetic factors, infections, or systemic conditions.	195021004	SNOMED CT
Hypertrophic cardiomyopathy	Select if there is documentation of hypertrophic cardiomyopathy, characterized by a hypertrophied, nondilated left ventricle (LV) in the absence of other systemic or cardiac diseases capable of causing similar wall thickening (e.g., hypertension, aortic valve stenosis). Diagnosis is typically made using echocardiography or cardiac magnetic resonance imaging (CMR) by identifying otherwise unexplained LV wall thickening, often accompanied by a small LV cavity.	233873004	SNOMED CT
Restrictive cardiomyopathy	Select if there is documentation of restrictive cardiomyopathy, a rare form of heart muscle disease characterized by impaired ventricular filling due to restrictive physiology. This condition features non-hypertrophied, non-dilated ventricles with normal or decreased volume, biatrial enlargement, and normal (or near-normal) systolic function. Restrictive cardiomyopathy is associated with diastolic dysfunction and can present similarly to constrictive pericarditis.	415295002	SNOMED CT
Pulmonary hypertension	Select if there is documentation of pulmonary hypertension, defined as a mean pulmonary artery pressure (mPAP) >20 mmHg measured by right heart catheterization, as outlined by the Journal of the American Heart Association. Pulmonary vascular resistance (>2.0 Wood units) is also considered for diagnosis and prognostication.	70995007	SNOMED CT
Rheumatic heart	Select if there is documentation of heart disease, usually involving valve dysfunction (e.g., mitral or aortic valves), secondary to rheumatic fever caused by an immune response to a Group A Streptococcal infection of the pharynx. This condition results from inflammation and scarring, leading to permanent damage to the heart valves.	23685000	SNOMED CT
Kawasaki disease	Select if there is documentation of Kawasaki disease, an acute vasculitis of unknown etiology primarily affecting children under 5 years of age. KD is characterized by high fever, mucocutaneous inflammation, and cervical lymphadenopathy, with a specific focus on coronary artery involvement. Complications include coronary artery dilations and aneurysms, which may lead to long-term cardiovascular sequelae.	75053002	SNOMED CT
Ischemic cardiomyopathy	Select if there is documentation of ischemic cardiomyopathy, defined as significant left ventricular dysfunction (e.g., left ventricular ejection fraction ≤35-40%) caused by coronary artery disease. This condition is typically associated with a history of myocardial infarction (MI), evidence of viable hibernating myocardium, or severe coronary disease identified on angiography. Ischemic cardiomyopathy may lead to reduced systolic function and/or symptoms of heart failure.	426856002	SNOMED CT
Heart failure	Select if there is documentation of heart failure, a multi-dimensional clinical syndrome characterized by symptoms such as dyspnea, fatigue, exertional intolerance, or fluid retention. Heart failure results from	84114007	SNOMED CT

Section: Cardiac Comorbidity **Parent: Concurrent Conditions**

structural or functional impairment in ventricular filling or blood ejection, and may necessitate new or escalated pharmacologic therapy to manage symptoms.

Element: 15890 Cardiac Comorbidity Occurrence

Coding Instruction: Indicate if the patient has or had not had a clinical diagnosis of the indicated cardiac comorbid conditions.

Target Value: The value on start of current procedure

Vendor Instruction: Cardiac Comorbidity Occurrence (15890) cannot be Null when a Cardiac Comorbidity Name (15889) is selected

Technical Specification

Code:	112000003744
Code System Name:	ACC NCDR
Short Name:	CardComorOcc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15889 Cardiac Comorbidity Name
Operator:
Value: Any Value

AND

Element: 15888 Cardiac Comorbidity
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Arrhythmias **Parent: Concurrent Conditions**

Element: 15884 Arrhythmia Type past 90 days

Coding Instruction: Indicate the specific arrhythmia diagnosed.

Target Value: The last value within 90 days of procedure start

Technical Specification

Code: 100014018
Code System Name: ACC NCDR
Short Name: ArrTyp90days
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15883 Arrhythmia Past 90 Days
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Arrhythmia History Type - 1.3.6.1.4.1.19376.1.4.1.6.5.810

Selection	Definition	Source	Code	Code System Name
Atrial fibrillation			49436004	SNOMED CT
Atrial flutter			5370000	SNOMED CT
Supraventricular tachycardia			6456007	SNOMED CT
1st degree heart block			270492004	SNOMED CT
2nd degree heart block			195042002	SNOMED CT
Complete heart block			27885002	SNOMED CT
Sinus node dysfunction			60423000	SNOMED CT
Ventricular tachycardia			25569003	SNOMED CT
Wolff-Parkinson-White syndrome			74390002	SNOMED CT
Other			100000351	ACC NCDR

Section: Pre-Procedure **Parent: Lab Visit**

Element: 15020 Height

Coding Instruction: Indicate the patient's height in centimeters or inches.

Target Value: The value on start of current procedure

Technical Specification

Code:	8302-2
Code System Name:	LOINC
Short Name:	PedsHeight
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	5,2
Selection Type:	Single
Unit of Measure:	cm, inches
Default Value:	
Usual Range:	2.00 - 90.00 inches 5.00 - 225.00 cm
Valid Range:	2.00 - 100.00 inches 5.00 - 260.00 cm
Data Source:	User

Element: 15021 Weight

Coding Instruction: Indicate the patient's weight in kilograms or grams for patients weighing greater than or equal to 2 kilograms (2000 grams). If the patient weighs less than 2 kilograms, leave this field blank.

Target Value: The value on start of current procedure

Technical Specification

Code:	3141-9
Code System Name:	LOINC
Short Name:	PedsWeight
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	8,3
Selection Type:	Single
Unit of Measure:	kg, g
Default Value:	
Usual Range:	2.000 - 200.000 kg 2,000.000 - 200,000.000 g
Valid Range:	2.000 - 700.000 kg 2,000.000 - 700,000.000 g
Data Source:	User

Section: Pre-Procedure Medications — Parent: Pre-Procedure

Element: 15032 — Pre-Procedure Medications

Coding Instruction: Indicate the pre-procedure medication the patient was prescribed or received.

For Antiarrhythmics, select 'Yes' if the target arrhythmia was managed with an antiarrhythmic medication that was held for this procedure.

Note: The medications that should be collected in your application are controlled by a Medication Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application. Each medication in the Medication Master file is assigned a timing indicator. This indicator is used to separate procedural medications from medications prescribed at discharge. The separation of these medications is depicted on the data collection form.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Vendor Instruction: Pre-Procedure Medications (15032) should not be duplicated in a lab visit

Technical Specification

Code:	100013057
Code System Name:	ACC NCDR
Short Name:	PedsPreProcMed
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Pre-Procedure Medication - 1.3.6.1.4.1.19376.1.4.1.6.5.216

Selection	Definition	Source	Code	Code System Name
Angiotensin converting enzyme inhibitor (Any)			41549009	SNOMED CT
Angiotensin II receptor blocker (Any)			372913009	SNOMED CT
Antiarrhythmic (Any)			67507000	SNOMED CT
Anticoagulant - DOAC/NOAC			112000002174	ACC NCDR
Anticoagulant - Low molecular weight heparin			373294004	SNOMED CT
Anticoagulant - Unfractionated heparin			96382006	SNOMED CT
Anticoagulant - Warfarin			11289	RxNorm
Anticoagulant - Other			100001064	ACC NCDR
Antiplatelet (Any)			372560006	SNOMED CT
Beta blocker (Any)			33252009	SNOMED CT
Diuretic (Any)			372695000	SNOMED CT
Pulmonary vasodilator (Any)			112000003722	ACC NCDR
Prostaglandin Infusion			26351002	SNOMED CT

Element: 6991 — PreProcedure Medication Administered

Coding Instruction: Indicate if the patient was prescribed or received the medication.

Note(s):

Code 'Yes' if the patient received an oral (long-acting formula) of the medication after admission but prior to this cath lab visit.
If a medication has multiple potential uses, code the class that was the primary intended use.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Vendor Instruction: Pre-Procedure Medication Administered (6991) cannot be Null when a Pre-Procedure Medication (15032) is answered

Technical Specification

Code:	432102000
Code System Name:	SNOMED CT
Short Name:	PreProcMedAdmin
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15032 Pre-Procedure Medications
Operator:	
Value:	Any Value

Pre-Procedure Y/N/C Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.1004

Selection	Definition	Source	Code	Code System Name
No			112000000168	ACC NCDR
Yes			100001247	ACC NCDR

Section: Pre-Procedure Medication Details **Parent: Pre-Procedure**

Element: 16104 Novel Oral Anticoagulant Or Direct Oral Anticoagulant Stopped Prior To Procedure

Coding Instruction: Indicate whether Novel Oral Anticoagulants (NOAC) Or Direct Oral Anticoagulants (DOAC) were stopped prior to the procedure.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code:	112000004275
Code System Name:	ACC NCDR
Short Name:	NOADOADC
Missing Data:	Report
Harvested:	Yes (CIED, EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Direct Oral Anticoagulants

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

Section: Pre-Procedure Medication Details **Parent: Pre-Procedure**

Element: 16105 Number of Days Novel Oral Anticoagulant Or Direct Oral Anticoagulant Stopped

Coding Instruction: Record the number of days Novel Oral Anticoagulants (NOAC) Or Direct Oral Anticoagulants (DOAC) were stopped prior to the procedure.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code: 112000004275
Code System Name: ACC NCDR
Short Name: NumDaysNOADOADC
Missing Data: Report
Harvested: Yes (CIED, EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: NUM
Precision: 2
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16104 Novel Oral Anticoagulant Or Direct Oral Anticoagulant Stopped Prior To Procedure
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Direct Oral Anticoagulants

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

Section: Pre-Procedure Medication Details **Parent: Pre-Procedure**

Element: 16107 Low Molecular Weight Heparin Stopped Prior to the Procedure

Coding Instruction: Indicate whether low molecular weight heparin was stopped (or held/put on hold) prior to the procedure.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code:	112000003982
Code System Name:	ACC NCDR
Short Name:	LMWHDC
Missing Data:	Report
Harvested:	Yes (CIED, EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Low Molecular Weight Heparin

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

Section: Pre-Procedure Medication Details **Parent: Pre-Procedure**

Element: 16102 Warfarin Stopped Prior To Procedure

Coding Instruction: Indicate whether warfarin was stopped prior to the procedure.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code:	100014102
Code System Name:	ACC NCDR
Short Name:	WarDC
Missing Data:	Report
Harvested:	Yes (CIED, EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Warfarin

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

Section: Pre-Procedure Medication Details **Parent: Pre-Procedure**

Element: 16103 Number of Days Warfarin Stopped

Coding Instruction: Record the number of days warfarin was stopped prior to the procedure.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code:	100014102
Code System Name:	ACC NCDR
Short Name:	DayswoutWar
Missing Data:	Report
Harvested:	Yes (CIED, EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16102 Warfarin Stopped Prior To Procedure
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Warfarin

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

Section: Pre-Procedure Medication Details **Parent: Pre-Procedure**

Element: 16100 Antiplatelet Stopped Prior To Procedure

Coding Instruction: Indicate whether antiplatelet medications were stopped prior to the procedure.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code:	112000003981
Code System Name:	ACC NCDR
Short Name:	AntiPlatDC
Missing Data:	Report
Harvested:	Yes (CIED, EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Antiplatelet agent

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

Section: Pre-Procedure Medication Details **Parent: Pre-Procedure**

Element: 16101 Number of Days Antiplatelet Agent Stopped

Coding Instruction: Record the number of days that the antiplatelet agent (including aspirin) was stopped prior to the procedure.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code: 112000003981
Code System Name: ACC NCDR
Short Name: DayswoutAntiplat
Missing Data: Report
Harvested: Yes (CIED, EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: NUM
Precision: 2
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16100 Antiplatelet Stopped Prior To Procedure
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Antiplatelet agent

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

Section: Pre-Procedure Diagnosis Codes **Parent: Pre-Procedure Diagnosis**

Element: 15022 Pre-Procedure Diagnosis Code

Coding Instruction: Indicate all applicable cardiac diagnosis codes that were present prior to the procedure. Select all applicable codes from the diagnosis master list.

Target Value: The value on current procedure

Technical Specification

Code:	362965005
Code System Name:	SNOMED CT
Short Name:	PreProcCardDiagID
Missing Data:	Report
Harvested:	Yes (EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study with ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Diagnosis Master - 1.3.6.1.4.1.19376.1.4.1.6.5.893

Selection	Definition	Source	Code	Code System Name
Septal defects - PFO			112000002777	ACC NCDR
Septal defects - ASD - secundum			112000002778	ACC NCDR
Septal defects - ASD - sinus venosus			112000002779	ACC NCDR
Septal defects - ASD - coronary sinus			112000002780	ACC NCDR
Septal defects - ASD - common atrium - single atrium			112000002781	ACC NCDR
Septal defects - VSD - Type 1 subarterial - supracristal - conal septal defect - infundibular			112000002782	ACC NCDR
Septal defects - VSD - Type 2			112000002783	ACC NCDR

Section: Pre-Procedure Diagnosis Codes	Parent: Pre-Procedure Diagnosis		
- perimembranous - paramembranous - conoventricular			
Septal defects - VSD - type 3 - inlet - AV canal type		112000002784	ACC NCDR
Septal defects - VSD - type 4 - muscular		112000002785	ACC NCDR
Septal defects - VSD - type - gerbode type - LV-RA communication		112000002786	ACC NCDR
Septal defects - VSD - multiple		112000002787	ACC NCDR
Septal defects - AVC - AVSD - complete CAVSD		112000002788	ACC NCDR
Septal defects - AVC - AVSD - intermediate -transitional		112000002789	ACC NCDR
Septal defects - AVC - AVSD - partial - incomplete - PAVSD - ASD primum		112000002790	ACC NCDR
Septal defects - AP window - aortopulmonary window		112000002791	ACC NCDR
Septal defects - pulmonary artery origin from ascending aorta - hemitruncus		112000002792	ACC NCDR
Septal defects - truncus arteriosus		112000002793	ACC NCDR
Septal defects - truncal valve insufficiency		112000002794	ACC NCDR
Septal defects - truncus arteriosus and interrupted aortic arch		112000002795	ACC NCDR
Pulmonary venous anomalies - partial anomalous pulmonary venous connection		112000002796	ACC NCDR
Pulmonary venous anomalies - partial anomalous pulmonary venous connection - scimitar		112000002797	ACC NCDR
Pulmonary venous anomalies - total anomalous pulmonary venous connection - Type 1 supracardiac		112000002798	ACC NCDR
Pulmonary venous anomalies - total anomalous pulmonary venous connection - Type 2 cardiac		112000002799	ACC NCDR
Pulmonary venous anomalies - total anomalous pulmonary venous connection - Type 3 infracardiac		112000002800	ACC NCDR
Pulmonary venous anomalies - total anomalous pulmonary venous connection - Type 4 mixed		112000002801	ACC NCDR
Cor triatriatum - cor triatriatum		112000002802	ACC NCDR
Pulmonary venous stenosis - Pulmonary venous stenosis		112000002803	ACC NCDR
Systemic venous anomalies - Systemic venous anomaly		112000002804	ACC NCDR
Systemic venous anomalies - systemic venous obstruction		112000002805	ACC NCDR
Right heart lesions - TOF		112000002806	ACC NCDR
Right heart lesions - TOF - pulmonary stenosis		112000002807	ACC NCDR
Right heart lesions - TOF - AVC - AVSD		112000002808	ACC NCDR
Right heart lesions - TOF - absent pulmonary valve		112000002809	ACC NCDR
Right heart lesions - pulmonary atresia		112000002810	ACC NCDR
Right heart lesions - pulmonary atresia - IVS		112000002811	ACC NCDR
Right heart lesions - pulmonary atresia - VSD including TOF-		112000002812	ACC NCDR

Section: Pre-Procedure Diagnosis Codes	Parent: Pre-Procedure Diagnosis		
PA			
Right heart lesions - pulmonary atresia - VSD-MAPCA - pseudotruncus		112000002813	ACC NCDR
Right heart lesions - MAPCA - major aortopulmonary collaterals - without PA-VSD		112000002814	ACC NCDR
Right heart lesions - Ebsteins anomaly		112000002815	ACC NCDR
Right heart lesions - tricuspid regurgitation - non-Ebsteins related		112000002816	ACC NCDR
Right heart lesions - tricuspid stenosis		112000002817	ACC NCDR
Right heart lesions - tricuspid regurgitation and tricuspid stenosis		112000002818	ACC NCDR
Right heart lesions - tricuspid valve disease - other		112000002819	ACC NCDR
Right heart lesions - pulmonary stenosis - valvar		112000002820	ACC NCDR
Right heart lesions - pulmonary artery stenosis - hypoplasia - main-trunk		112000002821	ACC NCDR
Right heart lesions - pulmonary artery stenosis - branch - central - within the hilar bifurcation		112000002822	ACC NCDR
Right heart lesions - pulmonary artery stenosis - branch - peripheral - at or beyond the hilar bifurcation		112000002823	ACC NCDR
Right heart lesions - pulmonary artery - discontinuous		112000002824	ACC NCDR
Right heart lesions - pulmonary stenosis - subvalvar		112000002825	ACC NCDR
Right heart lesions - DCRV		112000002826	ACC NCDR
Right heart lesions - pulmonary valve disease - other		112000002827	ACC NCDR
Right heart lesions - pulmonary insufficiency		112000002828	ACC NCDR
Right heart lesions - pulmonary insufficiency and pulmonary stenosis		112000002829	ACC NCDR
Shunt failure - shunt failure		112000002830	ACC NCDR
Right heart lesions - conduit failure		112000002831	ACC NCDR
Left heart lesions - aortic stenosis - subvalvar		112000002832	ACC NCDR
Left heart lesions - aortic stenosis - valvar		112000002833	ACC NCDR
Left heart lesions - aortic stenosis - supravalvar		112000002834	ACC NCDR
Left heart lesions - aortic valve atresia		112000002835	ACC NCDR
Left heart lesions - aortic insufficiency		112000002836	ACC NCDR
Left heart lesions - aortic insufficiency and aortic stenosis		112000002837	ACC NCDR
Left heart lesions - aortic valve - other		112000002838	ACC NCDR
Left heart lesions - sinus of valsalva aneurysm		112000002839	ACC NCDR
Left heart lesions - LV to aorta tunnel		112000002840	ACC NCDR
Left heart lesions - mitral stenosis - supravalvar mitral ring		112000002841	ACC NCDR
Left heart lesions - mitral stenosis - valvar		112000002842	ACC NCDR
Left heart lesions - mitral		112000002843	ACC NCDR

Section: Pre-Procedure Diagnosis Codes	Parent: Pre-Procedure Diagnosis		
stenosis - subvalvar			
Left heart lesions - mitral stenosis - subvalvar-parachute		112000002844	ACC NCDR
Left heart lesions - mitral stenosis		112000002845	ACC NCDR
Left heart lesions - mitral regurgitation and mitral stenosis		112000002846	ACC NCDR
Left heart lesions - mitral regurgitation		112000002847	ACC NCDR
Left heart lesions - mitral valve -other		112000002848	ACC NCDR
Left heart lesions - hypoplastic left heart syndrome		112000002849	ACC NCDR
Left heart lesions - shones syndrome		112000002850	ACC NCDR
Left heart lesions - cardiomyopathy - including dilated - restrictive - and hypertrophic		112000002851	ACC NCDR
Left heart lesions - cardiomyopathy - end-stage congenital heart disease		112000002852	ACC NCDR
Left heart lesions - pericardial effusion		112000002853	ACC NCDR
Left heart lesions - pericarditis		112000002854	ACC NCDR
Left heart lesions - pericardial disease - other		112000002855	ACC NCDR
Single ventricle - single ventricle - DILV		112000002856	ACC NCDR
Single ventricle - single ventricle - DIRV		112000002857	ACC NCDR
Single ventricle - single ventricle - mitral atresia		112000002858	ACC NCDR
Single ventricle - single ventricle - tricuspid atresia		112000002859	ACC NCDR
Single ventricle - single ventricle - unbalanced AV canal		112000002860	ACC NCDR
Single ventricle - single ventricle - heterotaxia syndrome		112000002861	ACC NCDR
Single ventricle - single ventricle - other		112000002862	ACC NCDR
Single ventricle - single ventricle and total anomalous pulmonary venous connection		112000002863	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA		112000002864	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA - IVS		112000002865	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA - IVS-LVOTO		112000002866	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA - VSD		112000002867	ACC NCDR
Transposition of the great arteries - congenitally corrected TGA - VSD-LVOTO		112000002868	ACC NCDR
Transposition of the great arteries - TGA - IVS		112000002869	ACC NCDR
Transposition of the great arteries - TGA - IVS-LVOTO		112000002870	ACC NCDR
Transposition of the great arteries - TGA - VSD		112000002871	ACC NCDR
Transposition of the great arteries - TGA - VSD-LVOTO		112000002872	ACC NCDR
DORV - DORV - VSD type		112000002873	ACC NCDR

Section: Pre-Procedure Diagnosis Codes	Parent: Pre-Procedure Diagnosis		
DORV - DORV - TOF type		112000002874	ACC NCDR
DORV - DORV - TGA type		112000002875	ACC NCDR
DORV - DORV - remote VSD - uncommitted VSD		112000002876	ACC NCDR
DORV - DORV and AVSD - AV canal		112000002877	ACC NCDR
DORV - DORV - IVS		112000002878	ACC NCDR
DOLV - DOLV		112000002879	ACC NCDR
Thoracic arteries and veins - coarctation of aorta		112000002880	ACC NCDR
Thoracic arteries and veins - aortic arch hypoplasia		112000002881	ACC NCDR
Thoracic arteries and veins - VSD plus aortic arch hypoplasia		112000002882	ACC NCDR
Thoracic arteries and veins - VSD plus coarctation of aorta		112000002883	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - anomalous aortic origin of coronary artery from aorta		112000002884	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - Anomalous pulmonary origin - includes ALCAPA		112000002885	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - fistula		112000002886	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - aneurysm		112000002887	ACC NCDR
Thoracic arteries and veins - coronary artery anomaly - other		112000002888	ACC NCDR
Thoracic arteries and veins - interrupted aortic arch		112000002889	ACC NCDR
Thoracic arteries and veins - interrupted aortic arch and VSD		112000002890	ACC NCDR
Thoracic arteries and veins - interrupted aortic arch and AP window - aortopulmonary window		112000002891	ACC NCDR
Thoracic arteries and veins - patent ductus arteriosus		112000002892	ACC NCDR
Thoracic arteries and veins - vascular ring		112000002893	ACC NCDR
Thoracic arteries and veins - pulmonary artery sling		112000002894	ACC NCDR
Thoracic arteries and veins - aortic aneurysm - including pseudoaneurysm		112000002895	ACC NCDR
Thoracic arteries and veins - aortic dissection		112000002896	ACC NCDR
Thoracic and mediastinal disease - lung disease - benign		112000002897	ACC NCDR
Thoracic and mediastinal disease - lung disease - malignant		112000002898	ACC NCDR
Thoracic and mediastinal disease - pect		112000002899	ACC NCDR
Thoracic and mediastinal disease - tracheal stenosis		112000002900	ACC NCDR
Thoracic and mediastinal disease - airway disease		112000002901	ACC NCDR
Thoracic and mediastinal disease - pleural disease - benign		112000002902	ACC NCDR
Thoracic and mediastinal disease - pleural disease - malignant		112000002903	ACC NCDR

Section: Pre-Procedure Diagnosis Codes	Parent: Pre-Procedure Diagnosis		
Thoracic and mediastinal disease - pneumothorax		112000002904	ACC NCDR
Thoracic and mediastinal disease - pleural effusion		112000002905	ACC NCDR
Thoracic and mediastinal disease - chylothorax		112000002906	ACC NCDR
Thoracic and mediastinal disease - empyema		112000002907	ACC NCDR
Thoracic and mediastinal disease - esophageal disease - benign		112000002908	ACC NCDR
Thoracic and mediastinal disease - esophageal disease - malignant		112000002909	ACC NCDR
Thoracic and mediastinal disease - mediastinal disease		112000002910	ACC NCDR
Thoracic and mediastinal disease - mediastinal disease - benign		112000002911	ACC NCDR
Thoracic and mediastinal disease - mediastinal disease - malignant		112000002912	ACC NCDR
Thoracic and mediastinal disease - diaphragm paralysis		112000002913	ACC NCDR
Thoracic and mediastinal disease - diaphragm disease - other		112000002914	ACC NCDR
Electrophysiologic - arrhythmia		112000002915	ACC NCDR
Electrophysiologic - arrhythmia - atrial		112000002916	ACC NCDR
Electrophysiologic - arrhythmia - junctional		112000002917	ACC NCDR
Electrophysiologic - arrhythmia - ventricular		112000002918	ACC NCDR
Electrophysiologic - arrhythmia - heart block		112000002919	ACC NCDR
Electrophysiologic - arrhythmia - heart block - acquired		112000002920	ACC NCDR
Electrophysiologic - arrhythmia - heart block - congenital		112000002921	ACC NCDR
Electrophysiologic - arrhythmia - pacemaker - indication for replacement		112000002922	ACC NCDR
Miscellaneous - atrial isomerism - left		112000002923	ACC NCDR
Miscellaneous - atrial isomerism - right		112000002924	ACC NCDR
Miscellaneous - dextrocardia		112000002925	ACC NCDR
Miscellaneous - levocardia		112000002926	ACC NCDR
Miscellaneous - mesocardia		112000002927	ACC NCDR
Miscellaneous - situs inversusy		112000002928	ACC NCDR
Miscellaneous - aneurysm - ventricular - right - including pseudoaneurysm		112000002929	ACC NCDR
Miscellaneous - aneurysm - ventricular - left - including pseudoaneurysm		112000002930	ACC NCDR
Miscellaneous - aneurysm - pulmonary artery		112000002931	ACC NCDR
Miscellaneous - aneurysm - other		112000002932	ACC NCDR
Miscellaneous - hypoplastic RV		112000002933	ACC NCDR
Miscellaneous - hypoplastic LV		112000002934	ACC NCDR
Miscellaneous - postoperative bleeding		112000002935	ACC NCDR
Miscellaneous - mediastinitis		112000002936	ACC NCDR
Miscellaneous - endocarditis		112000002937	ACC NCDR
Miscellaneous - rheumatic heart disease		112000002938	ACC NCDR

Section: Pre-Procedure Diagnosis Codes	Parent: Pre-Procedure Diagnosis		
Miscellaneous - prosthetic valve failure		112000002939	ACC NCDR
Miscellaneous - myocardial infarction		112000002940	ACC NCDR
Miscellaneous - cardiac tumor		112000002941	ACC NCDR
Miscellaneous - pulmonary AV fistula		112000002942	ACC NCDR
Miscellaneous - pulmonary embolism		112000002943	ACC NCDR
Miscellaneous - pulmonary vascular obstructive disease		112000002944	ACC NCDR
Miscellaneous - pulmonary vascular obstructive disease - eisenmengers		112000002945	ACC NCDR
Miscellaneous - primary pulmonary hypertension		112000002946	ACC NCDR
Miscellaneous - persistent fetal circulation		112000002947	ACC NCDR
Miscellaneous - meconium aspiration		112000002948	ACC NCDR
Miscellaneous - cardiac - other		112000002949	ACC NCDR
Miscellaneous - thoracic and-or mediastinal - other		112000002950	ACC NCDR
Miscellaneous - peripheral vascular - other		112000002951	ACC NCDR
Miscellaneous - status post transplant - heart		112000002952	ACC NCDR
Miscellaneous - status post transplant - lung		112000002953	ACC NCDR
Miscellaneous - status post transplant - heart and lung		112000002954	ACC NCDR
Miscellaneous - normal heart		112000002955	ACC NCDR
Miscellaneous - other		112000002956	ACC NCDR

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16138 Fundamental Diagnosis

Coding Instruction: Select the primary fundamental diagnosis that is the rationale for the cardiac implantable electronic device (CIED) procedure.

Target Value: The last value between birth and the first procedure in this admission

Technical Specification

Code:	112000004081
Code System Name:	ACC NCDR
Short Name:	FundDiag
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	ICD generator
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Implantable loop recorder
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Leads only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Pacemaker pulse generator

Hx Diagnosis Category - 1.3.6.1.4.1.19376.1.4.1.6.5.1104

Selection	Definition	Source	Code	Code System Name
Acquired heart disease	Heart disease that is acquired after birth and is not related to a genetic or congenital condition.		112000004082	ACC NCDR
Cardiomyopathy	The patient has cardiomyopathy, including dilated, hypertrophic, or restrictive types.		85898001	SNOMED CT
Congenital heart disease	Structural or functional abnormalities of the heart present at birth.		112000004033	ACC NCDR
Heart block	The patient has atrioventricular (AV) block or other conduction delays requiring intervention.		233916004	SNOMED CT
Inherited arrhythmia, channelopathy	An inherited condition (in the absence of a structural heart defect) that predisposes a patient to life threatening arrhythmias and may lead to sudden cardiac death. Examples include Long or Short QT Syndrome, Brugada Syndrome, Catecholaminergic Polymorphic Ventricular Tachycardia, and idiopathic ventricular fibrillation.		698271000	SNOMED CT
s/p orthotopic heart transplant	The patient has undergone a full heart transplant and now requires a device implant.		32413006	SNOMED CT
Sinus node dysfunction (Non-CHD)	The patient has sinus node dysfunction, excluding cases associated with congenital heart disease.		60423000	SNOMED CT
Unexplained cardiac arrest	Unexplained cardiac arrest refers to cardiac arrest that does not have identifiable cause after an initial clinical evaluation.		112000004209	ACC NCDR
Other			100000351	ACC NCDR

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16135 Acquired Heart Disease Type

Coding Instruction: Indicate the type of acquired heart disease leading to the cardiac implantable electronic device procedure.

Target Value: The last value between birth and the first procedure in this admission

Technical Specification

Code:	112000004074
Code System Name:	ACC NCDR
Short Name:	AcHeartDzTyp
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Acquired heart disease

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Hx Acquired Heart Disease Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1101

Selection	Definition	Source	Code	Code System Name
Endocarditis	An infection of the inner lining of the heart (endocardium) or heart valves.		56819008	SNOMED CT
Kawasaki disease	An acute self-limited vasculitis of childhood that is characterized by fever, bilateral nonexudative conjunctivitis, erythema of the lips and oral mucosa, changes in the extremities, rash, and cervical lymphadenopathy.	Source: A Report of the ACC/AHA TF on CDS JACC Vol 70. No 8, August 22, 2017: 1029-95	75053002	SNOMED CT
Myocarditis	Myocarditis is an inflammatory disease of the myocardium resulting from viral infections and/or post-viral immune-mediated responses.	Kindermann I, Barth C, Mahfoud F, et al. Update on Myocarditis. J Am Coll Cardiol 2012;59:779-792.	50920009	SNOMED CT
Rheumatic heart disease	An inflammatory disorder that follows infection with group A streptococcus. It affects the heart, joints, and subcutaneous tissues. It is manifested with pericarditis, heart murmur, congestive heart failure, polyarthritis, subcutaneous nodules, and erythema marginatum.	Source: A Report of the ACC/AHA TF on CDS JACC Vol 70. No 8, August 22, 2017: 1029-95	23685000	SNOMED CT
Other			100000351	ACC NCDR

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16213 PreprocedureDx Cardiomyopathy Type

Coding Instruction: Indicate the type of cardiomyopathy the patient has been diagnosed with.

Target Value: The last value prior to the start of the first procedure

Technical Specification

Code: 100000953
Code System Name: ACC NCDR
Short Name: PreprocCardiomyopTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Cardiomyopathy

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Cardiomyopathy Type - 1.3.6.1.4.1.19376.1.4.1.6.5.193

Selection	Definition	Source	Code	Code System Name
Arrhythmogenic right ventricular cardiomyopathy	A genetic disorder involving fibrofatty replacement of right ventricular myocardium, predisposing to arrhythmias and potential heart failure.		281170005	SNOMED CT
Dilated cardiomyopathy	Select if there is documentation of ventricular dilation with impaired systolic function, commonly defined by a left ventricular ejection fraction (LVEF) less than 40%. Dilated cardiomyopathy can occur with or without symptoms of heart failure and may be primary (idiopathic) or secondary to identifiable causes such as genetic factors, infections, or systemic conditions.		195021004	SNOMED CT
Hypertrophic cardiomyopathy	Select if there is documentation of hypertrophic cardiomyopathy, characterized by a hypertrophied, nondilated left ventricle (LV) in the absence of other systemic or cardiac diseases capable of causing similar wall thickening (e.g., hypertension, aortic valve stenosis). Diagnosis is typically made using echocardiography or cardiac magnetic resonance imaging (CMR) by identifying otherwise unexplained LV wall thickening, often accompanied by a small LV cavity.		233873004	SNOMED CT
Ischemic cardiomyopathy	Considered to be present in patients with HF who have had a myocardial infarction (MI) or have evidence of viable hibernating myocardium or, on angiography, severe coronary disease. The term ischemic cardiomyopathy has been used to describe significantly impaired left ventricular function (left ventricular ejection fraction <=35 to 40 percent) that results from coronary artery disease. Despite the common clinical use of the term ischemic cardiomyopathy, ventricular dysfunction caused by coronary disease is not a cardiomyopathy as defined by the 2006 American Heart Association and 2008		426856002	SNOMED CT

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

	European Society of Cardiology statements.		
Noncompaction of the ventricular myocardium	A congenital condition characterized by the presence of trabeculated (spongy) muscle in the ventricles, often resulting in impaired cardiac function and increased risk of arrhythmias.	112000002196	ACC NCDR
Pacemaker induced	Cardiomyopathy that is due to a pacemaker. Commonly this is a reduction in left ventricular function in the setting of right ventricular pacing.	112000001511	ACC NCDR
Restrictive cardiomyopathy	Select if there is documentation of restrictive cardiomyopathy, a rare form of heart muscle disease characterized by impaired ventricular filling due to restrictive physiology. This condition features non-hypertrophied, non-dilated ventricles with normal or decreased volume, biatrial enlargement, and normal (or near-normal) systolic function. Restrictive cardiomyopathy is associated with diastolic dysfunction and can present similarly to constrictive pericarditis.	415295002	SNOMED CT
Tachycardia-induced cardiomyopathy	The patient developed cardiomyopathy caused by prolonged or frequent tachycardia episodes	426300009	SNOMED CT
Other cardiomyopathy type	The term "unclassified cardiomyopathy" was included in the 2008 ESC classification system to describe disorders that do not readily fit into any of the above phenotypic categories [3]. Examples cited include LV noncompaction and stress-induced (takotsubo) cardiomyopathy.	100001065	ACC NCDR

Element: 16136 Congenital Heart Disease Rationale for Device

Coding Instruction: Indicate, for the patient with congenital heart disease, the reason leading to the cardiac implantable electronic device implantation device.

Target Value: The last value between birth and the first procedure in this admission

Technical Specification

Code: 112000004075
Code System Name: ACC NCDR
Short Name: CongHearDzRat
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Congenital heart disease

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Hx Congenital Heart Disease Reason for Device - 1.3.6.1.4.1.19376.1.4.1.6.5.1102

Selection	Definition	Source	Code	Code System Name
Sinus node dysfunction	The device is being implanted due to sinus node dysfunction.		60423000	SNOMED CT
Heart block	The device is being implanted to address heart block.		233916004	SNOMED CT

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16137 Primary Congenital Defect Diagnosis

Coding Instruction: Select the primary congenital heart disease diagnosis, leading to the cardiac implantable electronic device implantation implant.

Target Value: The last value between birth and the first procedure in this admission

Technical Specification

Code: 112000004080
Code System Name: ACC NCDR
Short Name: PrimCongDefDiag
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Congenital heart disease

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Hx Primary Congenital Defect Diagnosis - 1.3.6.1.4.1.19376.1.4.1.6.5.1103

Selection	Definition	Source	Code	Code System Name
Anomalous coronary arteries			112000004076	ACC NCDR
Aortopathy			112000004077	ACC NCDR
Coarctation of Aorta			7305005	SNOMED CT
Patent Ductus Arteriosus			83330001	SNOMED CT
Anomalous pulmonary venous return, Partial (PAPVR)			68237008	SNOMED CT
Anomalous pulmonary venous return, Total (TAPVR)			111323005	SNOMED CT
Pulmonary atresia with intact ventricular septum			253590009	SNOMED CT
Pulmonary atresia with VSD			112000004078	ACC NCDR
Pulmonary valve disease (stenosis or regurgitation)			76267008	SNOMED CT
Atrial septal defect (ASD)			70142008	SNOMED CT
Atrioventricular septal defect or AV canal			360481003	SNOMED CT
Ventricular Septal Defect			30288003	SNOMED CT
Aortic valve disease (stenosis or regurgitation)			8722008	SNOMED CT
Bicuspid Aortic Valve			72352009	SNOMED CT
Mitral valve disease (stenosis or regurgitation)			11851006	SNOMED CT
Mitral valve prolapse			409712001	SNOMED CT
Tricuspid valve disease (stenosis or regurgitation)			20721001	SNOMED CT
Double inlet left ventricle (DILV)			253283000	SNOMED CT
Double outlet right ventricle (DORV)			7484005	SNOMED CT

Section: Pre-Procedure Diagnosis CIED	Parent: Pre-Procedure Diagnosis	
Ebstein's anomaly	204357006	SNOMED CT
Hypoplastic left heart syndrome (HLHS)	62067003	SNOMED CT
Shone's complex (Mitral stenosis, subaortic and valvar aortic stenosis, coarctation)	41371000119100	SNOMED CT
Subaortic stenosis	204368006	SNOMED CT
Tetralogy of Fallot	86299006	SNOMED CT
Transposition of great arteries (D-TGA)	204296002	SNOMED CT
Transposition of the Great Arteries (congenitally corrected, CC-TGA)	112000004079	ACC NCDR
Tricuspid atresia	63042009	SNOMED CT
Truncus arteriosus	61959006	SNOMED CT
Other	100000351	ACC NCDR

Element: 15028 Single Ventricle

Coding Instruction: Indicate if the patient has a single ventricle.

Note: Single ventricle is an umbrella term used to describe several very different complex congenital heart defects that share the same problem: the heart has only one functional ventricle (anatomically right or left or indeterminate) supplying the systemic circulation. These defects include tricuspid atresia, hypoplastic left or right heart syndrome, double outlet right ventricle, double inlet left ventricle, and other forms of single ventricle defects.

Target Value: Any occurrence between birth and the first procedure in this admission

Technical Specification

Code: 45503006
Code System Name: SNOMED CT
Short Name: SVDefect
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Congenital heart disease

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16139 Single Ventricle Type

Coding Instruction: Select the type of single ventricle based on its dominance (right or left). This classification is determined by which ventricle primarily supports systemic circulation.

Target Value: The first value between birth and the first procedure in this admission

Technical Specification

Code:	45503006
Code System Name:	SNOMED CT
Short Name:	SingVentTyp
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15028 Single Ventricle
Operator: Equal
Value: Yes

AND

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Congenital heart disease

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Hx Single Ventricle Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1105

Selection	Definition	Source	Code	Code System Name
Right ventricle			53085002	SNOMED CT
Left ventricle			112000004083	ACC NCDR
Indeterminant			82334004	SNOMED CT

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16140 Single Ventricle Circulation

Coding Instruction: Select the current ventricular circulation for the patient with single ventricle physiology.

Target Value: The last value between birth and the first procedure in this admission

Technical Specification

Code:	112000004084
Code System Name:	ACC NCDR
Short Name:	SingVentCirc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15028 Single Ventricle
Operator: Equal
Value: Yes

AND

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Congenital heart disease

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Hx Single Ventricle Circulation - 1.3.6.1.4.1.19376.1.4.1.6.5.1106

Selection	Definition	Source	Code	Code System Name
Single ventricle circulation	The patient has a single functional ventricle responsible for systemic or pulmonary circulation, with no significant contribution from a second ventricle.		112000004085	ACC NCDR
1.5 ventricle circulation	The patient has a partially functional second ventricle that contributes to circulation but does not provide a fully developed biventricular physiology.		112000004086	ACC NCDR

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16141 Palliative Stage of Single Ventricle

Coding Instruction: Indicate the palliative stage of the patient with single ventricle physiology. This refers to the step in the series of surgeries designed to manage circulation in patients with single ventricle defects.

Note(s):

Select the highest stage that has been completed at the time of the procedure.

Target Value: The last value between birth and the first procedure in this admission

Technical Specification

Code:	112000004087
Code System Name:	ACC NCDR
Short Name:	PalStag
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15028 Single Ventricle
Operator: Equal
Value: Yes

AND

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Congenital heart disease

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Hx Palliative Stage of Single Ventricle - 1.3.6.1.4.1.19376.1.4.1.6.5.1107

Selection	Definition	Source	Code	Code System Name
Stage I	Palliative stage 1 is a Norwood Procedure.		112000003040	ACC NCDR
Stage II	Palliative stage 2 is a Bidirectional Glenn Procedure.		112000004089	ACC NCDR
Stage III	Palliative stage 3 is a Fontan Procedure.		112000004088	ACC NCDR

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16142 Heterotaxy Syndrome

Coding Instruction: Indicate whether Heterotaxy Syndrome was present.

Target Value: The last value between birth and the first procedure in this admission

Supporting Definition: **Heterotaxy Syndrome**

Heterotaxy syndrome is a birth defect that where the heart and other organs in the chest and abdomen are in the wrong position, missing or abnormal. Heterotaxy means "different arrangement".

Source:

Technical Specification

Code:	720605009
Code System Name:	SNOMED CT
Short Name:	Heterotaxy
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Congenital heart disease

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Hx Heterotaxy Syndrome - 1.3.6.1.4.1.19376.1.4.1.6.5.1108

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Indeterminant			82334004	SNOMED CT

Section: Pre-Procedure Diagnosis CIED **Parent: Pre-Procedure Diagnosis**

Element: 16143 Heart Block Etiology

Coding Instruction: Select the etiology (or etiologies) of heart block that serve as the rationale for the cardiac implantable electronic device (CIED) procedure as recorded in the medical record.

Target Value: The value on current procedure

Technical Specification

Code:	233916004
Code System Name:	SNOMED CT
Short Name:	HeaBloEti
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16138 Fundamental Diagnosis
Operator: Equal
Value: Heart block

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Hx Heart Block Etiology - 1.3.6.1.4.1.19376.1.4.1.6.5.1109

Selection	Definition	Source	Code	Code System Name
Acquired heart block - post ablation	Etiology of heart block is due to an ablation procedure.		112000004091	ACC NCDR
Acquired heart block - post infectious	Etiology of heart block is due to an infection.		112000004092	ACC NCDR
Acquired heart block - post surgical	Etiology of heart block is related to a surgical procedure.		112000004093	ACC NCDR
Congenital heart disease	Etiology of heart block is due to congenital heart disease.		112000004033	ACC NCDR
Idiopathic heart block	Etiology of heart block is idiopathic or due to other causes.		54690008	SNOMED CT

Section: Operator Information **Parent: Procedure Information**

Element: 15072 Operator Last Name

Coding Instruction: Indicate the primary operator's last name.

Note:
If the name exceeds 50 characters, enter the first 50 letters only.

Target Value: The value on current procedure

Technical Specification

Code:	100014091
Code System Name:	ACC NCDR
Short Name:	OperLName
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	LN
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 15073 Operator First Name

Coding Instruction: Indicate the primary operator's first name.

Note:
If the name exceeds 50 characters, enter the first 50 letters only.

Target Value: The value on current procedure

Technical Specification

Code:	100014091
Code System Name:	ACC NCDR
Short Name:	OperFName
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	FN
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 15074 Operator Middle Name

Coding Instruction: Indicate the primary operator's middle name.

Note:
If the name exceeds 50 characters, enter the first 50 letters only.

Target Value: The value on current procedure

Technical Specification

Code:	100014091
Code System Name:	ACC NCDR
Short Name:	OperMName
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	MN
Precision:	50
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Operator Information — Parent: Procedure Information

Element: 7115 Operator NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the operator who is performing the procedure. NPI's, assigned by the Centers for Medicare and Medicaid Services (CMS), are used to uniquely identify physicians for Medicare billing purposes.

Target Value: The value on current procedure

Vendor Instruction: Operator NPI (7115) may only be entered/selected once

Operator NPI (7115) cannot be Null

Technical Specification

Code:	2.16.840.1.113883.4.6
Code System Name:	ACC NCDR
Short Name:	OperA_NPI
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	10
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 16237 Operator Role

Coding Instruction: Indicate the role that best describes the operator's function during the procedure. The classification is based on whether the operator was primarily responsible for the intervention or electrophysiology procedure or assisted in a secondary role.

Target Value: The value on current procedure

Vendor Instruction: Operator Role (16237) cannot be Null when Operator NPI (7115) has a value

For Operator Role (16237), only one [Primary Interventionalist] and one [Primary Electrophysiologist] can be selected within the lab visit, i.e., only one primary per operator type

Technical Specification

Code:	100014091
Code System Name:	ACC NCDR
Short Name:	OpRole
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	7115 Operator NPI
Operator:	
Value:	Any Value

Operator Role - 1.3.6.1.4.1.19376.1.4.1.6.5.1149

Selection	Definition	Source	Code	Code System Name
Primary Interventionalist			112000004257	ACC NCDR
Secondary Interventionalist			112000004258	ACC NCDR
Primary Electrophysiologist			112000004259	ACC NCDR
Secondary Electrophysiologist			112000004260	ACC NCDR

Section: Fellow Information **Parent: Procedure Information**

Element: 15433 Fellow Last Name

Coding Instruction: Indicate the last name of the Fellow-in-Training operator.

Note(s):
If the name exceeds 50 characters, enter the first 50 characters only.

Target Value: The value on current procedure

Technical Specification

Code:	112000003534
Code System Name:	ACC NCDR
Short Name:	FIT_LastName
Missing Data:	No Action
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	LN
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 15434 Fellow First Name

Coding Instruction: Indicate the first name of the Fellow-in-Training operator.

Note(s):
If the name exceeds 50 characters, enter the first 50 characters only.

Target Value: The value on current procedure

Technical Specification

Code:	112000003534
Code System Name:	ACC NCDR
Short Name:	FIT_FirstName
Missing Data:	No Action
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	FN
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 15435 Fellow Middle Name

Coding Instruction: Indicate the middle name of the Fellow-in-Training operator.

Note(s):
If the name exceeds 50 characters, enter the first 50 characters only.

Target Value: The value on current procedure

Technical Specification

Code:	112000003534
Code System Name:	ACC NCDR
Short Name:	FIT_MidName
Missing Data:	No Action
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	MN
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Fellow Information **Parent: Procedure Information**

Element: 15436 Fellow NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the Fellow-in-Training operator who is performing the procedure. NPI's, assigned by the Centers for Medicare and Medicaid Services (CMS), are used to uniquely identify physicians for Medicare billing purposes.

Target Value: The value on current procedure

Vendor Instruction: Operator NPI (7115) and Fellow NPI (15436) cannot be the same for a procedure

Technical Specification

Code:	112000003534
Code System Name:	ACC NCDR
Short Name:	FIT_NPI
Missing Data:	No Action
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	10
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 15431 Fellowship Program Identification Number

Coding Instruction: Indicate the institution's Accreditation Council for Graduate Medical Education (ACGME) number for the program in which the Fellow is participating.

Target Value: The value on current procedure

Supporting Definition: **Fellowship Program Identification Number**

The institution's Accreditation Council for Graduate Medical Education (ACGME) number for the program in which the Fellow is participating.

ACGME oversees the accreditation of fellowship programs in the US. Each accredited training program is assigned a program ID.

Source: A list of programs by specialty can be found here: ACGME - Accreditation Data System (ADS): https://apps.acgme.org/ads/Public/Reports/Report/1 .

Vendor Instruction: Fellowship Program Identification Number (15431) must be a valid ACGME ID

Technical Specification

Code:	224873004
Code System Name:	SNOMED CT
Short Name:	FITProgID
Missing Data:	No Action
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	15
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15436 Fellow NPI
Operator:	
Value:	Any Value

Section: Procedure Information **Parent: Procedure Information**

Element: 16121 Participating Providers

Coding Instruction: Select the type of providers who participated in the cardiac implantable electronic device procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000004267
Code System Name:	ACC NCDR
Short Name:	PartProv
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	ICD generator
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Implantable loop recorder
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Leads only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Pacemaker pulse generator

Participating Providers - 1.3.6.1.4.1.19376.1.4.1.6.5.1093

Selection	Definition	Source	Code	Code System Name
Electrophysiologist			112000004035	ACC NCDR
Cardiac surgeon			112000004036	ACC NCDR
Nurse practitioner			112000004037	ACC NCDR
Physician assistant			112000004038	ACC NCDR
Other			100000351	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 15071 Procedure Status

Coding Instruction: Indicate the clinical status of the patient prior to entering the procedure room.

Target Value: The value on current procedure

Technical Specification

Code:	100001218
Code System Name:	ACC NCDR
Short Name:	PedsProcStatus
Missing Data:	Report
Harvested:	Yes (EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study with ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Procedure Status - 1.3.6.1.4.1.19376.1.4.1.6.5.226

Selection	Definition	Source	Code	Code System Name
Elective	The patient's cardiac function has been stable in the days or weeks prior to the operation. The procedure could be deferred without increased risk of compromised cardiac outcome.		71388002:260870009=103390000	SNOMED CT
Urgent	The procedure is being performed on an inpatient basis and prior to discharge because of significant concerns that there is risk of cardiac dysfunction or death. Patients who are outpatients or in the emergency department at the time that the procedure is requested would warrant an admission based on their clinical presentation.		71388002:260870009=103391001	SNOMED CT
Emergent	The procedure is being performed as soon as possible because of substantial concerns that could lead to death. "As soon as possible" refers		112000000481	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

	to a patient who is of sufficient acuity that you would cancel a scheduled case to perform this procedure immediately in the next available room during business hours, or you would activate the "on call" team if this occurred during off-hours.		
Salvage	The procedure is a last resort. The patient is in cardiogenic shock at the start of the procedure. Within the last ten minutes prior to the start of the procedure the patient has also received chest compressions for a total of at least sixty seconds or has been on unanticipated extracorporeal circulatory support (e.g. extracorporeal membrane oxygenation, cardiopulmonary support).	112000001279	ACC NCDR

Element: 15855 Visit Location

Coding Instruction: Indicate the patient's visit location immediately prior to the procedure. Select the option that best describes where the patient was at the time they were brought in for the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003724
Code System Name:	ACC NCDR
Short Name:	VistLoc
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Visit Type and Location - 1.3.6.1.4.1.19376.1.4.1.6.5.986

Selection	Definition	Source	Code	Code System Name
Outpatient	The patient status was outpatient/observation immediately prior to the procedure		373864002	SNOMED CT
Inpatient non-Critical Care	The patient was already admitted to the hospital but not in a critical care unit immediately prior to the procedure		416800000	SNOMED CT
Inpatient critical care	The patient was already admitted to the hospital and in a critical care unit immediately prior to the procedure		305351004	SNOMED CT

Section: Procedure Information **Parent: Procedure Information**

Element: 15080 Patient Disposition

Coding Instruction: Indicate the patient's post-procedure disposition status, as planned or known at the start of the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	285201006
Code System Name:	SNOMED CT
Short Name:	PedsHospStatus
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Planned Patient Disposition - 1.3.6.1.4.1.19376.1.4.1.6.5.812

Selection	Definition	Source	Code	Code System Name
Outpatient care	Intent to discharge within 24 hours.		440655000	SNOMED CT
Admission to inpatient ward	Admitted to a general inpatient ward for routine monitoring and recovery following the procedure.		305342007	SNOMED CT
Admission to ICU	Admitted to an intensive care unit (ICU).		305351004	SNOMED CT
Other location	Transferred to a location not covered by the other categories (e.g., rehabilitation facility, observation unit).		100000351	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 16122 PI Procedure Performed Location

Coding Instruction: Select the type of facility or physical setting used when the procedure was performed.

Target Value: The value on current procedure

Technical Specification

Code:	112000000623
Code System Name:	ACC NCDR
Short Name:	PIProcPerfLoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	ICD generator
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Implantable loop recorder
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Leads only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Pacemaker pulse generator

Procedure Location - 1.3.6.1.4.1.19376.1.4.1.6.5.327

Selection	Definition	Source	Code	Code System Name
Cardiac catheterization laboratory	The procedure was conducted in a catheterization laboratory.		112000000616	ACC NCDR
Operating room	The procedure was performed in a traditional operating room, typically within a hospital setting, designed for surgical interventions.		225738002	SNOMED CT
Hybrid operating room suite	The procedure took place in a hybrid operating room.		112000001265	ACC NCDR
Outpatient Office	The procedure was conducted in a medical office or clinic setting, outside of a hospital or specialized surgical center.		257651001	SNOMED CT
ASC/Office based lab	The procedure occurred in a standalone outpatient surgical center or an office-based lab.		405607001	SNOMED CT
Other			100000351	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 15999 Anesthesia Type

Coding Instruction: Select the type of anesthesia or sedation administered during the procedure, based on the patient's level of responsiveness, need for airway intervention, and adequacy of spontaneous ventilation.

Target Value: The value on current procedure

Technical Specification

Code:	112000003845
Code System Name:	ACC NCDR
Short Name:	AneTyp
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Anesthesia Type - 1.3.6.1.4.1.19376.1.4.1.6.5.463

Selection	Definition	Source	Code	Code System Name
General anesthesia	A drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to maintain ventilatory function is often impaired, requiring airway intervention and, in some cases, positive pressure ventilation. Cardiovascular function may also be impaired. Responsiveness: No response even with painful stimulus Airway: Intervention often required Spontaneous Ventilation: Frequently inadequate		420653000	SNOMED CT
Moderate sedation	A drug-induced depression of consciousness where patients respond purposefully to verbal commands, either alone or with light tactile stimulation. Reflex withdrawal from pain is NOT considered a purposeful response. Airway intervention may be required, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained. Responsiveness: Purposeful response to verbal, tactile, or painful stimulation Airway: Intervention may be required Spontaneous Ventilation: May be inadequate		314271007	SNOMED CT
Minimal sedation/anxiolysis/local only	A drug-induced state where patients respond normally to verbal commands. Cognitive function and physical coordination may be impaired, but airway reflexes, ventilatory function, and cardiovascular function remain unaffected. Responsiveness: Normal response to verbal stimulation Airway: Unaffected Spontaneous Ventilation: Unaffected		427255001	SNOMED CT

Section: Procedure Information **Parent: Procedure Information**

Element: 16165 Anesthesia Time

Coding Instruction: Record the elapsed time anesthesia was being administered during the procedure in minutes.

Target Value: The value on current procedure

Technical Specification

Code:	112000004294
Code System Name:	ACC NCDR
Short Name:	AneTim
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	min
Default Value:	
Usual Range:	30.0 - 120.0 min
Valid Range:	0.0 - 360.0 min
Data Source:	User

Parent/Child Validation

Element: 16166 Anesthesia Time Not Documented
Operator: Equal
Value: No

AND

Element: 15999 Anesthesia Type
Operator: Equal
Value: General anesthesia

Element: 16166 Anesthesia Time Not Documented

Coding Instruction: Indicate if the elapsed time for anesthesia administration was not documented.

Target Value: The value on current procedure

Technical Specification

Code:	112000004294
Code System Name:	ACC NCDR
Short Name:	AneTimNotDoc
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15999 Anesthesia Type
Operator: Equal
Value: General anesthesia

Section: Procedure Information **Parent: Procedure Information**

Element: 15940 Airway Management Method

Coding Instruction: Select the type(s) of airway management used during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	386509000
Code System Name:	SNOMED CT
Short Name:	AirMgmtMeth
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16241 Airway Management Method Not Documented
Operator: Equal
Value: No

AND

Element: 15999 Anesthesia Type
Operator: Equal
Value: General anesthesia

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Airway Management Method - 1.3.6.1.4.1.19376.1.4.1.6.5.1000

Selection	Definition	Source	Code	Code System Name
Mask	Use of a face mask to deliver oxygen or ventilation without invasive airway insertion.		261382003	SNOMED CT
Endotracheal intubation	Placement of a tube into the trachea via the mouth or nose to maintain an open airway and assist with ventilation.		112798008	SNOMED CT
Laryngeal mask airway	A supraglottic airway device placed over the larynx to secure the airway and support ventilation.		424979004	SNOMED CT
Tracheostomy present	A surgically created opening in the neck leading directly to the trachea, used for airway access and ventilation.		302108003	SNOMED CT
Previously intubated	The patient was already intubated before the procedure, and no additional airway management was		52765003	SNOMED CT

Section: Procedure Information **Parent: Procedure Information**

initiated.

Element: 16241 Airway Management Method Not Documented

Coding Instruction: Indicate if the airway management method used is not documented.

Target Value: N/A

Technical Specification

Code:	386509000
Code System Name:	SNOMED CT
Short Name:	AirManMetNotDoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15999 Anesthesia Type
Operator: Equal
Value: General anesthesia

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Procedure Information **Parent: Procedure Information**

Element: 15089 Access Location

Coding Instruction: Indicate the location(s) of the access site.

Target Value: The value on current procedure

Technical Specification

Code:	112000001495
Code System Name:	ACC NCDR
Short Name:	AccessLoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Access Locations - 1.3.6.1.4.1.19376.1.4.1.6.5.814

Selection	Definition	Source	Code	Code System Name
Venous access site			112000000543	ACC NCDR
Arterial access site			100014079	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 15853 Access Site

Coding Instruction: Select the access site(s) used in the procedure.

Target Value: The value on current procedure

Supporting Definition: **General**

Location on the body where access was obtained for the procedure.

Source:

Technical Specification

Code: 311788003
Code System Name: SNOMED CT
Short Name: AccSite
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty
Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure
Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention
Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only
Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)
Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure
Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting
Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Procedure Access Site Selections - 1.3.6.1.4.1.19376.1.4.1.6.5.985

Selection	Definition	Source	Code	Code System Name
Brachial vein			20115005	SNOMED CT
Femoral vein			83419000	SNOMED CT
Hepatic vein			8993003	SNOMED CT
Internal jugular vein			12123001	SNOMED CT
Jugular vein			63190004	SNOMED CT
Subclavian vein			9454009	SNOMED CT
Transthoracic			41242001	SNOMED CT
Umbilical vein			367567000	SNOMED CT
Other vein			112000001652	ACC NCDR
Axillary artery			67937003	SNOMED CT
Brachial artery			17137000	SNOMED CT
Carotid artery			69105007	SNOMED CT
Femoral artery			7657000	SNOMED CT
Radial artery			181332001	SNOMED CT
Umbilical artery			50536004	SNOMED CT
Other artery			100013029	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 7225 Intraprocedure Anticoagulation

Coding Instruction: Indicate if intraprocedure anticoagulation therapy was provided.

Target Value: The value on current procedure

Technical Specification

Code:	81839001
Code System Name:	SNOMED CT
Short Name:	IntraProcAnticoag
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study with ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation

Section: Procedure Information **Parent: Procedure Information**

Element: 16001 Anticoagulation Start Time

Coding Instruction: Indicate the time when anticoagulation was initiated in relation to the procedure. This refers to whether anticoagulant medications were administered at the start of the procedure or after the procedure had begun.

Target Value: The value on current procedure

Technical Specification

Code:	81839001
Code System Name:	SNOMED CT
Short Name:	AnticoagStart
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 7225 Intraprocedure Anticoagulation
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Anticoagulation Start Time - 1.3.6.1.4.1.19376.1.4.1.6.5.1118

Selection	Definition	Source	Code	Code System Name
Beginning of procedure	Anticoagulation was administered before or immediately upon obtaining vascular access, but before any diagnostic or therapeutic catheter manipulation (e.g., mapping, pacing, or ablation).		112000004117	ACC NCDR
After procedure started	Anticoagulation was administered after vascular access was obtained and the procedure had progressed beyond initial catheter positioning, such as during electroanatomic mapping, ablation, or upon identifying a specific clinical need.		112000004118	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 16002 Anticoagulation After Procedure Started Indication

Coding Instruction: Select the reason why anticoagulation was not initiated until after the start of the procedure.

Target Value: The value on current procedure

Technical Specification

Code: 112000004183
Code System Name: ACC NCDR
Short Name: AnticoagInd
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16244 Anticoagulation After Procedure Started Indication Not Documented
Operator: Equal
Value: No

AND

Element: 16001 Anticoagulation Start Time
Operator: Equal
Value: After procedure started

AND

Element: 7225 Intraprocedure Anticoagulation
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation
Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

IMPACT - Anticoagulation After Procedure Started Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.1029

Selection	Definition	Source	Code	Code System Name
For any ablation	Anticoagulation was initiated after the start of the procedure as part of standard practice.		112000003847	ACC NCDR
Left-sided or systemic atrium or ventricle	Anticoagulation was initiated after the start of the procedure due to procedural involvement of left-sided or systemic atrium or ventricle access, where the risk of thromboembolic complications is higher.		112000003848	ACC NCDR
For specific equipment (multipole mapping catheter, long sheath)	Anticoagulation was initiated after the start of the procedure, secondary to the use of specific equipment that requires anticoagulation to prevent thrombus formation.		112000003849	ACC NCDR
Other			100000351	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 16244 Anticoagulation After Procedure Started Indication Not Documented

Coding Instruction: Select if the reason why anticoagulation was not initiated until after the start of the procedure is not documented.

Target Value: N/A

Technical Specification

Code:	112000004183
Code System Name:	ACC NCDR
Short Name:	AnticoagNotDoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16001 Anticoagulation Start Time
Operator: Equal
Value: After procedure started

AND

Element: 7225 Intraprocedure Anticoagulation
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Section: Procedure Information **Parent: Procedure Information**

Element: 15102 Systemic Heparinization

Coding Instruction: Indicate if heparin was used during the procedure. This includes intravenous and subcutaneous heparin for the purpose of anticoagulation.

Note: Systemic heparinization is generally achieved with unfractionated heparin. Other forms of heparin are less commonly used for the purposes of ACT monitoring.

Target Value: The value on current procedure

Technical Specification

Code:	103746007
Code System Name:	SNOMED CT
Short Name:	SysHeparin
Missing Data:	Report
Harvested:	Yes (EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 7225 Intraprocedure Anticoagulation
Operator: Equal
Value: Yes

OR

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Drug Administered - 1.3.6.1.4.1.19376.1.4.1.6.5.711

Selection	Definition	Source	Code	Code System Name
No			100014173	ACC NCDR
Yes			112000001851	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 15104 Activated Clotting Time Peak

Coding Instruction: Indicate the peak (highest value) activated clotting time (ACT) (in sec) during the procedure.

Target Value: The highest value on current procedure

Technical Specification

Code:	69874005
Code System Name:	SNOMED CT
Short Name:	ACTPeak
Missing Data:	Report
Harvested:	Yes (EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	sec
Default Value:	
Usual Range:	0 - 800 sec
Valid Range:	0 - 999 sec
Data Source:	User

Parent/Child Validation

Element:	15851 Activated Clotting Time Not Monitored
Operator:	Equal
Value:	No

Element: 15851 Activated Clotting Time Not Monitored

Coding Instruction: Indicate if an activated clotting time (ACT) was not monitored.

Target Value: N/A

Technical Specification

Code:	112000003882
Code System Name:	ACC NCDR
Short Name:	ACTnotmon
Missing Data:	Report
Harvested:	Yes (EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15102 Systemic Heparinization
Operator:	Equal
Value:	Yes

Section: Procedure Information **Parent: Procedure Information**

Element: 15850 Activated Clotting Time Below Target

Coding Instruction: Indicate if the patient's activated clotting time (ACT) was recorded as below the target range. The target ACT range should be defined by the treating provider.

Target Value: The value on current procedure

Technical Specification

Code:	69874005
Code System Name:	SNOMED CT
Short Name:	ACTbeltarg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15854 Activated Clotting Time Below Target Not Documented
Operator: Equal
Value: No

AND

Element: 15102 Systemic Heparinization
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15851 Activated Clotting Time Not Monitored
Operator: Equal
Value: No

Section: Procedure Information **Parent: Procedure Information**

Element: 15854 Activated Clotting Time Below Target Not Documented

Coding Instruction: Indicate if the patients activated clotting time (ACT) below target was not documented.

Target Value: N/A

Technical Specification

Code:	112000003883
Code System Name:	ACC NCDR
Short Name:	ACTnotdoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15102 Systemic Heparinization
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15851 Activated Clotting Time Not Monitored
Operator: Equal
Value: No

Section: Procedure Information **Parent: Procedure Information**

Element: 16130 Transfusion

Coding Instruction: Indicate whether a red blood cell transfusion was performed during the procedure. Code "No" if transfusion was performed after the procedure ended.

Target Value: The value on current procedure

Technical Specification

Code:	5447007
Code System Name:	SNOMED CT
Short Name:	INTTransf
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

INTERV - Transfusion - 1.3.6.1.4.1.19376.1.4.1.6.5.1099

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes - adverse event related	The patient received a transfusion due to an adverse event, such as significant bleeding		112000004070	ACC NCDR
Yes - not adverse event related	The patient received a transfusion, but it was not related to an adverse event. This may include pre-planned transfusions as a result of hemodynamic or physiologic findings prior to the procedure.		112000004071	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 16206 Echocardiogram Performed

Coding Instruction: Indicate whether echocardiography was used during the procedure and select the type if performed.

Target Value: The value on current procedure

Technical Specification

Code:	40701008
Code System Name:	SNOMED CT
Short Name:	EchoPerf
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Echocardiogram Type - 1.3.6.1.4.1.19376.1.4.1.6.5.526

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes - Intracardiac (ICE)			112000003746	ACC NCDR
Yes - Transthoracic (TTE)			433236007	SNOMED CT
Yes - Transesophageal (TEE)			105376000	SNOMED CT

Section: Procedure Information **Parent: Procedure Information**

Element: 7422 Mechanical Ventricular Support

Coding Instruction: Indicate if the patient required mechanical ventricular support.

Target Value: Any occurrence on current procedure

Technical Specification

Code:	100014009
Code System Name:	ACC NCDR
Short Name:	MechVentSupp
Missing Data:	Report
Harvested:	Yes (EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study with ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Procedure Information **Parent: Procedure Information**

Element: 7423 Mechanical Ventricular Support Device

Coding Instruction: Indicate the mechanical ventricular support device used.

Note(s):
The device that should be collected in your application are controlled by a Mechanical Ventricular Support Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: Any occurrence on current procedure

Technical Specification

Code:	100001278
Code System Name:	ACC NCDR
Short Name:	MVSupportDevice
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 7422 Mechanical Ventricular Support
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Mechanical Ventricular Support Device - 2.16.840.1.113883.3.3478.6.1.24

Selection	Definition	Source	Code	Code System Name
Cardiopulmonary support (CPS)			1000142428	ACC NCDR
Extracorporeal membrane oxygenation (ECMO)			233573008	SNOMED CT
Impella: left ventricular support			100014011	ACC NCDR
Impella: right ventricular support			112000000188	ACC NCDR
Intra-aortic balloon pump (IABP)			442807006	SNOMED CT
Isolated right ventricular support			112000000546	ACC NCDR
Left ventricular assist device (LVAD)			232967006	SNOMED CT
Right ventricular assist device (RVAD)			360065002	SNOMED CT
Percutaneous heart pump			1000142429	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

(PHP)		
TandemHeart	100014010	ACC NCDR
Biventricular axial flow impella catheters (BiPella)	112000001980	ACC NCDR
Combined extracorporeal membrane oxygenation and percutaneous left ventricular assist device (ECPELLA)	112000002051	ACC NCDR
Other	100000351	ACC NCDR

Element: 7424 Mechanical Ventricular Support Timing

Coding Instruction: Indicate when the mechanical ventricular support device was placed.

Target Value: Any occurrence on current procedure

Technical Specification

Code: 100014009
Code System Name: ACC NCDR
Short Name: MVSupportTiming
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 7422 Mechanical Ventricular Support
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Mechanical Ventricular Support Timing - 1.3.6.1.4.1.19376.1.4.1.6.5.524

Selection	Definition	Source	Code	Code System Name
In place at start of procedure			100001280	ACC NCDR
Inserted during procedure and prior to intervention			100001281	ACC NCDR
Inserted after intervention has begun			100013042	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 16000 ECG Rhythm At Lab Presentation

Coding Instruction: Indicate the patient's ECG rhythm upon presentation to the lab for the procedure. This should be coded based on the provider interpretation of the patient's heart rhythm documented on the ECG.

Target Value: The value on start of current procedure

Technical Specification

Code: 112000001362
Code System Name: ACC NCDR
Short Name: EKGatLab
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16247 ECG Rhythm At Lab Presentation Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

IMPACT ECG Results - 1.3.6.1.4.1.19376.1.4.1.6.5.1028

Selection	Definition	Source	Code	Code System Name
Sinus rhythm			64730000	SNOMED CT
Atrial fibrillation or atrial flutter			195080001	SNOMED CT
Second degree AV block			195042002	SNOMED CT
Third degree AV block (Complete)			27885002	SNOMED CT
Ectopic atrial rhythm			112000003846	ACC NCDR
Ectopic atrial tachycardia			233892002	SNOMED CT
Idioventricular rhythm			49260003	SNOMED CT
Junctional tachycardia			251155001	SNOMED CT
Paced rhythm (atrial or ventricular paced)			426453001	SNOMED CT
Premature atrial contraction			284470004	SNOMED CT
Premature ventricular contractions			427172004	SNOMED CT
Ventricular tachycardia			25569003	SNOMED CT
Supraventricular tachycardia			6456007	SNOMED CT
Other			100000351	ACC NCDR

Section: Procedure Information **Parent: Procedure Information**

Element: 16247 ECG Rhythm At Lab Presentation Not Documented

Coding Instruction: Select if the ECG rhythm at lab presentation is not documented.

Target Value: N/A

Technical Specification

Code:	112000001362
Code System Name:	ACC NCDR
Short Name:	ECGRhytLabPresNotDoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study with ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation

Section: Hemodynamics **Parent: Procedure Information**

Element: 15125 Systemic Arterial Saturation

Coding Instruction: Indicate the arterial oxygen saturation in % measured by arterial blood gas or by an invasive monitoring system (such as an arterial line).

Target Value: The first value on current procedure

Technical Specification

Code:	442476006
Code System Name:	SNOMED CT
Short Name:	SystemicArtSat
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	70.0 - 100.0 %
Valid Range:	1.0 - 100.0 %
Data Source:	User

Parent/Child Validation

Element: 15107 Systemic Arterial Saturation Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15107 Systemic Arterial Saturation Not Assessed

Coding Instruction: Indicate whether the systemic arterial saturation was not assessed.

Target Value: N/A

Technical Specification

Code:	442476006
Code System Name:	SNOMED CT
Short Name:	SystemicArtSatNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15136 Cardiac Index

Coding Instruction: Indicate the cardiac index measured during the procedure. Cardiac index is a hemodynamic parameter that relates the cardiac output to body surface area, providing a more accurate assessment of heart function relative to patient size. It is expressed in liters per minute per square meter (L/min/m²).

Target Value: The first value on current procedure

Technical Specification

Code:	54993008
Code System Name:	SNOMED CT
Short Name:	CardInd
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	L/min/m²
Default Value:	
Usual Range:	2.5 - 4.2 L/min/m²
Valid Range:	1.0 - 10.0 L/min/m²
Data Source:	User

Parent/Child Validation

Element: 15123 Cardiac Index Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15123 Cardiac Index Not Assessed

Coding Instruction: Indicate whether the cardiac index was not assessed or not obtained during the procedure in L/min/m^2.

Target Value: N/A

Technical Specification

Code:	54993008
Code System Name:	SNOMED CT
Short Name:	CardIndNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15842 RVSP : Systemic Systolic BP Ratio

Coding Instruction: Record the right ventricle systolic pressure to systemic systolic blood pressure ratio (RSVP: Systemic SBP). This ratio is a hemodynamic parameter used to assess the relationship between right ventricular systolic pressure (RVSP) and systemic systolic blood pressure (SBP). Coding can be done using provider documentation or calculated from the individual components. This ratio is particularly relevant in evaluating the severity of pulmonary hypertension and right ventricular function

Target Value: The value on start of current procedure

Technical Specification

Code:	276772001
Code System Name:	SNOMED CT
Short Name:	RVSPSSBPratio
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	0.0 - 3.0
Valid Range:	0.0 - 22.0
Data Source:	User

Parent/Child Validation

Element: 15843 RVSP : Systemic Systolic BP Ratio Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15843 RVSP : Systemic Systolic BP Ratio Not Assessed

Coding Instruction: Indicate if the right ventricle systolic pressure to systemic systolic blood pressure ratio is not documented or not assessed.

Target Value: N/A

Technical Specification

Code:	276772001
Code System Name:	SNOMED CT
Short Name:	RVSPSSBPrationotass
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15128 Systemic Ventricular End Diastolic Pressure

Coding Instruction: Indicate the systemic ventricular end diastolic pressure in millimeters of mercury.

Note: Pulmonary artery wedge pressure ("a wave") can be documented if the LV (or systemic ventricular) end diastolic pressure is not available AND there is reason to believe that the wedge pressure is a good reflection of left atrial pressure and LVED (in the absence of pulmonary vein or mitral stenosis).

Target Value: The first value on current procedure

Technical Specification

Code:	276781007
Code System Name:	SNOMED CT
Short Name:	SystemVentEndDiaPres
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	1 - 20 mm[Hg]
Valid Range:	1 - 99 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 15115 Systemic Ventricular End Diastolic Pressure Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15115 Systemic Ventricular End Diastolic Pressure Not Assessed

Coding Instruction: Indicate whether the systemic ventricular end diastolic pressure was not assessed.

Target Value: N/A

Technical Specification

Code:	276781007
Code System Name:	SNOMED CT
Short Name:	SystemVentEndDiaPresNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15137 Pulmonary to Systemic QpQs Shunt Flow Ratio

Coding Instruction: Indicate the pulmonary to systemic (also called the Qp:Qs) shunt flow ratio.

Target Value: The first value on current procedure

Supporting Definition: **Qp/Qs ratio**

Qp represents the pulmonary resistance and Qs represents the systemic resistance. This measures the magnitude of the shunt caused by a septal defect as determined by the level of pulmonary vascular resistance relative to the systemic vascular resistance.

Source:

Technical Specification

Code:	251050008
Code System Name:	SNOMED CT
Short Name:	QpQsRatio
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	0.1 - 4.0
Valid Range:	0.1 - 50.0
Data Source:	User

Parent/Child Validation

Element: 15124 Pulmonary to Systemic QpQs Shunt Flow Ratio Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15124 Pulmonary to Systemic QpQs Shunt Flow Ratio Not Assessed

Coding Instruction: Indicate whether the pulmonary to systemic (also called the Qp:Qs) shunt flow ratio was not assessed or not obtained during the procedure.

Target Value: N/A

Supporting Definition: **Qp/Qs ratio**

Qp represents the pulmonary resistance and Qs represents the systemic resistance. This measures the magnitude of the shunt caused by a septal defect as determined by the level of pulmonary vascular resistance relative to the systemic vascular resistance.

Source:

Technical Specification

Code:	251050008
Code System Name:	SNOMED CT
Short Name:	QpQsRatioNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15126 Mixed Venous Saturation

Coding Instruction: Indicate the measured mixed venous saturation value obtained during the procedure in percent (%). Mixed venous saturation is the percentage of oxygen bound to hemoglobin in venous blood, measured from a sample typically taken from the pulmonary artery. It reflects the balance between oxygen delivery and consumption.

Target Value: The first value on current procedure

Technical Specification

Code:	250552004
Code System Name:	SNOMED CT
Short Name:	MixVenSat
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	45 - 75 %
Valid Range:	1 - 100 %
Data Source:	User

Parent/Child Validation

Element: 15108 Mixed Venous Saturation Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15108 Mixed Venous Saturation Not Assessed

Coding Instruction: Indicate whether the mixed venous saturation was not assessed.

Target Value: N/A

Technical Specification

Code:	250552004
Code System Name:	SNOMED CT
Short Name:	MixVenSatNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15135 Pulmonary Vascular Resistance Index

Coding Instruction: Indicate the pulmonary vascular resistance index in wood units*m^2.

It can be calculated using the distal mean pulmonary artery pressure and either the pulmonary artery wedge pressure, left atrial or common atrial pressure.

Target Value: The first value on current procedure

Technical Specification

Code:	112000003589
Code System Name:	ACC NCDR
Short Name:	PulmVascRestInd
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	Wood units·M²
Default Value:	
Usual Range:	0.1 - 8.0 Wood units·M²
Valid Range:	0.1 - 50.0 Wood units·M²
Data Source:	User

Parent/Child Validation

Element: 15122 Pulmonary Vascular Resistance Index Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15122 Pulmonary Vascular Resistance Index Not Assessed

Coding Instruction: Indicate whether the pulmonary vascular resistance index was not assessed or not obtained during procedure in wood units*m^2.

Target Value: N/A

Technical Specification

Code:	112000003589
Code System Name:	ACC NCDR
Short Name:	PulmVascRestIndNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15133 Pulmonary Artery Mean Pressure

Coding Instruction: Indicate the pulmonary artery mean pressure in millimeters of mercury.

Note: If the patient has a single functional ventricle, use the highest pulmonary artery mean pressure obtained in the central pulmonary artery.

Target Value: The first value on current procedure

Technical Specification

Code:	112000001423
Code System Name:	ACC NCDR
Short Name:	PulmArtMeanPres
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	10.0 - 40.5 mm[Hg]
Valid Range:	1.0 - 99.9 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 15120 Pulmonary Artery Mean Pressure Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Hemodynamics **Parent: Procedure Information**

Element: 15120 Pulmonary Artery Mean Pressure Not Assessed

Coding Instruction: Indicate whether the pulmonary artery mean pressure was not assessed.

Target Value: N/A

Technical Specification

Code:	112000001423
Code System Name:	ACC NCDR
Short Name:	PulmArtMeanPresNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Imaging, Radiation and Contrast **Parent: Procedure Information**

Element: 15838 Contrast Volume

Coding Instruction: Indicate the volume of contrast used in milliliters (ml). The volume recorded should be the total volume for the lab visit.

Target Value: The value between start of current procedure and end of current procedure

Technical Specification

Code:	80242-1
Code System Name:	LOINC
Short Name:	ContrastVolPeds
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	6,3
Selection Type:	Single
Unit of Measure:	mL
Default Value:	
Usual Range:	5.000 - 300.000 mL
Valid Range:	0.000 - 999.000 mL
Data Source:	User

Parent/Child Validation

Element: 15892 Contrast Volume Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Imaging, Radiation and Contrast **Parent: Procedure Information**

Element: 15892 Contrast Volume Not Documented

Coding Instruction: Indicate whether contrast volume is not documented.

Target Value: The value on current procedure

Technical Specification

Code:	80242-1
Code System Name:	LOINC
Short Name:	ConVolnotdoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Section: Imaging, Radiation and Contrast **Parent: Procedure Information**

Element: 15112 X-Ray Imaging Plane Used

Coding Instruction: Indicate the X-ray imaging plane used during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	363680008
Code System Name:	SNOMED CT
Short Name:	XRayPlaneUsed
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

X-ray Imaging Plane - 1.3.6.1.4.1.19376.1.4.1.6.5.818

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes - Single Plane	X-ray system that captures images from one angle at a time.		112000002218	ACC NCDR
Yes - Biplane	X-ray system that can capture images simultaneously from two different angles.		112000002219	ACC NCDR
Yes - Rotational	A technique where the X-ray arm rotates around the patient, capturing multiple images from different angles.		262112000	SNOMED CT

Section: Imaging, Radiation and Contrast **Parent: Procedure Information**

Element: 15837 Fluoroscopy Used

Coding Instruction: Indicate whether fluoroscopy was used during the procedure.

Fluoroscopy is commonly used in interventional cardiology procedures to guide catheter placement in real time. If yes is selected, child fields for total fluoroscopy time, dose area product, and cumulative air KERMA will become available for answering.

Note: Documentation may include terms such as "fluoroscopy," "fluoro time," "radiation dose," or references to imaging modalities that align with real-time X-ray use.

Target Value: The value on current procedure

Technical Specification

Code:	100014077
Code System Name:	ACC NCDR
Short Name:	FluoroUsed
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Section: Imaging, Radiation and Contrast **Parent: Procedure Information**

Element: 7214 Fluoroscopy Time

Coding Instruction: Indicate the total fluoroscopy time recorded to the nearest 0.1-minute. The time recorded should include the total time for the lab visit.

Note: Capture the total related to the diagnostic or interventional catheterization procedure.

Target Value: The total between start of current procedure and end of current procedure

Technical Specification

Code:	100014077
Code System Name:	ACC NCDR
Short Name:	FluoroTime
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	min
Default Value:	
Usual Range:	0.1 - 30.0 min
Valid Range:	0.1 - 300.0 min
Data Source:	User

Parent/Child Validation

Element: 15837 Fluoroscopy Used
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Imaging, Radiation and Contrast **Parent: Procedure Information**

Element: 15225 Cumulative Air Kerma

Coding Instruction: Indicate the total radiation dose (Cumulative Air Kerma, or Reference Air Kerma) recorded to the nearest milligray (mGy) or gray (Gy). The value recorded should include the total dose for the lab visit. Cumulative air kerma is the total air kerma accrued from the beginning of an examination or procedure and includes all contributions from fluoroscopic and radiographic irradiation.

Note: Capture the total related to the diagnostic or interventional catheterization procedure.

Target Value: The total between start of current procedure and end of current procedure

Supporting Definition: **Cumulative (Reference) Air kerma**

Cumulative air kerma (also known as reference, reference dose, cumulative dose, or cumulative dose at a reference point) is the air kerma accumulated at a specific point in space (the patient entrance reference point) relative to the gantry of the fluoroscopy system.

The quantity, kerma, originated from the acronym, KERMA, for Kinetic Energy Released per unit Mass (of air).

Source: Miller DL, et al. Radiation doses in interventional radiology procedures. (J Vasc Interv Radiol 2003;14:711-727.)

Technical Specification

Code:	228850003
Code System Name:	SNOMED CT
Short Name:	PedsFluoroDoseKerm
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	9,3
Selection Type:	Single
Unit of Measure:	mGy, Gy
Default Value:	
Usual Range:	1.000 - 10.000 Gy 1.000 - 10,000.000 mGy
Valid Range:	0.001 - 500.000 Gy 0.001 - 500,000.000 mGy
Data Source:	User

Parent/Child Validation

Element: 15837 Fluoroscopy Used
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Imaging, Radiation and Contrast **Parent: Procedure Information**

Element: 15226 Dose Area Product

Coding Instruction: Indicate the total fluoroscopy dose. The value recorded should include the total dose for the lab visit.

Note: Capture the total related to the diagnostic or interventional catheterization procedure.

Target Value: The total between start of current procedure and end of current procedure

Supporting Definition: **Dose Area Product**

Dose Area Product is the integral of air kerma (the energy extracted from an x-ray beam per unit mass of air in a small irradiated air volume; for diagnostic x-rays, the dose delivered to that volume of air) across the entire x-ray beam emitted from the x-ray tube. It is a surrogate measure of the amount of energy delivered to the patient.

Also known as KAP (Kerma Area Product).

Source: Miller DL, et al. Radiation doses in interventional radiology procedures. (J Vasc Interv Radiol 2003; 14:711-727.)

Technical Specification

Code:	100000994
Code System Name:	ACC NCDR
Short Name:	PedsFluoroDoseDAP
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	9,3
Selection Type:	Single
Unit of Measure:	Gy·cm², dGy·cm², cGy·cm², mGy·cm², µGy·M²
Default Value:	
Usual Range:	1.000 - 500.000 Gy·cm² 10.000 - 5,000.000 dGy·cm² 100.000 - 50,000.000 cGy·cm² 100.000 - 50,000.000 µGy·M² 1,000.000 - 500,000.000 mGy·cm²
Valid Range:	0.001 - 700.000 Gy·cm² 0.010 - 7,000.000 dGy·cm² 0.100 - 70,000.000 cGy·cm² 0.100 - 70,000.000 µGy·M² 1.000 - 700,000.000 mGy·cm²
Data Source:	User

Parent/Child Validation

Element: 15837 Fluoroscopy Used
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Imaging, Radiation and Contrast EP **Parent: Imaging, Radiation and Contrast**

Element: 16233 Fluoroscopy Time

Coding Instruction: Indicate the total fluoroscopy time recorded to the nearest 0.1-minute. The time recorded should include the total time for the lab visit.

Note: Capture the total related to the EP study (with or without ablation) and cardiovascular implantable electronic device procedure.

Target Value: The total between start of current procedure and end of current procedure

Technical Specification

Code:	100014077
Code System Name:	ACC NCDR
Short Name:	FluoroTime2
Missing Data:	Report
Harvested:	Yes (CIED, EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	min
Default Value:	
Usual Range:	0.1 - 30.0 min
Valid Range:	0.1 - 300.0 min
Data Source:	User

Parent/Child Validation

Element: 15837 Fluoroscopy Used
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Section: Imaging, Radiation and Contrast EP **Parent: Imaging, Radiation and Contrast**

Element: 16234 Cumulative Air Kerma

Coding Instruction: Indicate the total radiation dose (Cumulative Air Kerma, or Reference Air Kerma) recorded to the nearest milligray (mGy) or gray (Gy). The value recorded should include the total dose for the lab visit. Cumulative air kerma is the total air kerma accrued from the beginning of an examination or procedure and includes all contributions from fluoroscopic and radiographic irradiation.

Note: Capture the total related to the EP study (with or without ablation) and cardiovascular implantable electronic device procedure.

Target Value: The total between start of current procedure and end of current procedure

Supporting Definition: **Cumulative (Reference) Air kerma**

Cumulative air kerma (also known as reference, reference dose, cumulative dose, or cumulative dose at a reference point) is the air kerma accumulated at a specific point in space (the patient entrance reference point) relative to the gantry of the fluoroscopy system.

The quantity, kerma, originated from the acronym, KERMA, for Kinetic Energy Released per unit Mass (of air).

Source: Miller DL, et al. Radiation doses in interventional radiology procedures. (J Vasc Interv Radiol 2003;14:711-727.)

Technical Specification

Code:	228850003
Code System Name:	SNOMED CT
Short Name:	PedsFluoroDoseKerm2
Missing Data:	Report
Harvested:	Yes (CIED, EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	9,3
Selection Type:	Single
Unit of Measure:	mGy, Gy
Default Value:	
Usual Range:	1.000 - 10.000 Gy 1.000 - 10,000.000 mGy
Valid Range:	0.001 - 500.000 Gy 0.001 - 500,000.000 mGy
Data Source:	User

Parent/Child Validation

Element: 15837 Fluoroscopy Used
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Section: Imaging, Radiation and Contrast EP **Parent: Imaging, Radiation and Contrast**

Element: 16235 Dose Area Product

Coding Instruction: Indicate the total fluoroscopy dose. The value recorded should include the total dose for the lab visit.

Note: Capture the total related to the EP study (with or without ablation) and cardiovascular implantable electronic device procedure.

Target Value: The total between start of current procedure and end of current procedure

Supporting Definition: **Dose Area Product**

Dose Area Product is the integral of air kerma (the energy extracted from an x-ray beam per unit mass of air in a small irradiated air volume; for diagnostic x-rays, the dose delivered to that volume of air) across the entire x-ray beam emitted from the x-ray tube. It is a surrogate measure of the amount of energy delivered to the patient.

Also known as KAP (Kerma Area Product).

Source: Miller DL, et al. Radiation doses in interventional radiology procedures. (J Vasc Interv Radiol 2003; 14:711-727.)

Technical Specification

Code:	100000994
Code System Name:	ACC NCDR
Short Name:	PedsFluoroDoseDAP2
Missing Data:	Report
Harvested:	Yes (CIED, EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	9,3
Selection Type:	Single
Unit of Measure:	Gy·cm², dGy·cm², cGy·cm², mGy·cm², µGy·M²
Default Value:	
Usual Range:	1.000 - 500.000 Gy·cm² 10.000 - 5,000.000 dGy·cm² 100.000 - 50,000.000 cGy·cm² 100.000 - 50,000.000 µGy·M² 1,000.000 - 500,000.000 mGy·cm²
Valid Range:	0.001 - 700.000 Gy·cm² 0.010 - 7,000.000 dGy·cm² 0.100 - 70,000.000 cGy·cm² 0.100 - 70,000.000 µGy·M² 1.000 - 700,000.000 mGy·cm²
Data Source:	User

Parent/Child Validation

Element: 15837 Fluoroscopy Used
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Section: Imaging, Radiation and Contrast EP **Parent: Imaging, Radiation and Contrast**

Element: 16211 3D Electroanatomic Mapping Tools Used

Coding Instruction: Indicate whether 3D electroanatomic mapping tools were used during the cardiac implantable electronic device procedure.

Target Value: Any occurrence between start of procedure and end of procedure

Technical Specification

Code:	112000004297
Code System Name:	ACC NCDR
Short Name:	3dEAMToolUsed
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Implantable loop recorder
Element:	15081 Procedures Performed
Operator:	Equal
Value:	ICD generator
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Leads only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Pacemaker pulse generator

Element: 16254 Intracardiac Echocardiogram Used

Coding Instruction: Indicate whether an intracardiac echocardiogram (ICE) was used during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	40701008
Code System Name:	SNOMED CT
Short Name:	IntEchoUsed
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study with ablation
Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation

Section: Imaging, Radiation and Contrast EP **Parent: Imaging, Radiation and Contrast**

Element: 16224 Intracardiac Echocardiogram Purpose

Coding Instruction: Indicate the primary purpose for using an intracardiac echocardiogram (ICE).

Target Value: The value on current procedure

Technical Specification

Code:	40701008
Code System Name:	SNOMED CT
Short Name:	IntraEchoUsPurp
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16254 Intracardiac Echocardiogram Used
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Intracardiac echocardiogram use and purpose - 1.3.6.1.4.1.19376.1.4.1.6.5.1145

Selection	Definition	Source	Code	Code System Name
Electroanatomic mapping system	ICE was used for anatomical visualization to assist with mapping.		707833003	SNOMED CT
Real time catheter manipulation	ICE was used to guide catheter positioning and movement.		103712006	SNOMED CT
Transseptal puncture	ICE was used solely to guide transseptal puncture.		112000004242	ACC NCDR
Other			100000351	ACC NCDR

Element: 16238 Transesophageal Echocardiogram

Coding Instruction: Indicate if transesophageal echocardiogram (TEE) was performed.

Target Value: The value on current procedure

Technical Specification

Code:	105376000
Code System Name:	SNOMED CT
Short Name:	TEE
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study with ablation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Section: Electrophysiology Study **Parent: Procedure Information**

Element: 15392 Electrophysiology Procedure Primary Procedure Indication

Coding Instruction: Indicate the primary reason(s) the procedure is being performed.

Target Value: The value on current procedure

Technical Specification

Code:	432678004
Code System Name:	SNOMED CT
Short Name:	EPPrimaryInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Procedure Primary Procedure Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.1092

Selection	Definition	Source	Code	Code System Name
Symptom	The procedure was indicated due to patient-reported symptoms.		418799008	SNOMED CT
Documented tachyarrhythmia			112000004244	ACC NCDR
ECG findings with potential for risk	The procedure was indicated due to ECG findings with potential for risk. Examples include, but are not limited to arrhythmias or conduction disturbances, that may pose a significant risk to the patient.		112000001362	ACC NCDR
Assessment of anti-arrhythmic medication treatment	The procedure was indicated to evaluate the effectiveness or appropriateness of anti-arrhythmic drug therapy.		112000004032	ACC NCDR
Pre-operative evaluation	The EP study was part of a preoperative evaluation to assess arrhythmia risk or plan interventions		1000142360	ACC NCDR
Post-operative evaluation	The EP study was conducted postoperatively to assess for arrhythmias.		262061000	SNOMED CT
AV Block	The study was performed due to documented or suspected atrioventricular (AV) block.		233917008	SNOMED CT
Inherited arrhythmia history	The procedure was indicated due to inherited arrhythmias, such as, but not limited to, long QT syndrome or Brugada syndrome.		32895009	SNOMED CT
Congenital heart disease	The procedure was indicated due to congenital heart disease to assess arrhythmias related to structural abnormalities or prior repairs.		112000004033	ACC NCDR
Family history	The procedure was indicated based on a family history of sudden cardiac death, inherited arrhythmias, or other genetic cardiac conditions.		57177007	SNOMED CT
Sudden cardiac arrest - SCA	The EP study was performed following a sudden cardiac arrest,		112000004034	ACC NCDR
Atrial or ventricular ectopy	The procedure was indicated due to ectopy or premature beats originating from the atria or ventricles.		112000004236	ACC NCDR

Section: Electrophysiology Study **Parent: Procedure Information**

Element: 16021 Symptoms Experienced

Coding Instruction: Select the specific symptoms that prompted the decision to perform the electrophysiology study.

Target Value: Any occurrence between 2 months prior to arrival at this facility and start of current procedure

Technical Specification

Code:	418799008
Code System Name:	SNOMED CT
Short Name:	SympEx
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15392 Electrophysiology Procedure Primary Procedure Indication
Operator: Equal
Value: Symptom

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Symptoms - 1.3.6.1.4.1.19376.1.4.1.6.5.1037

Selection	Definition	Source	Code	Code System Name
Palpitations	An unpleasant sensation of irregular and/or forceful beating of the heart		80313002	SNOMED CT
Syncope or near syncope	Sudden loss of consciousness with loss of postural tone, not related to anesthesia with spontaneous recovery as reported by patient or observer. Patient may experience syncope when supine.	Ref: ACC/AHA/HRS 2006 Key Data Elements and Definitions for Electrophysiological Studies and Procedures	271594007	SNOMED CT
Other			100000351	ACC NCDR

Section: Electrophysiology Study **Parent: Procedure Information**

Element: 16022 ECG Finding with Potential Risk

Coding Instruction: Select the ECG finding with potential risk identified as the procedure indication. Risk refers to specific ECG findings that are associated with an increased likelihood of serious cardiac events or complications. These findings may indicate underlying conditions or predispositions that put the patient at higher risk of adverse outcomes, such as sudden cardiac arrest, arrhythmias, or heart failure.

Target Value: The value on current procedure

Technical Specification

Code: 112000001362
Code System Name: ACC NCDR
Short Name: ECTFindwRisk
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15392 Electrophysiology Procedure Primary Procedure Indication
Operator: Equal
Value: ECG findings with potential for risk

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP ECG Finding with Potential Risk - 1.3.6.1.4.1.19376.1.4.1.6.5.1038

Selection	Definition	Source	Code	Code System Name
AV block	Evidence of atrioventricular (AV) conduction delay or block, including first-degree, second-degree (Mobitz I or II), or complete heart block, identified on the ECG.		233917008	SNOMED CT
Brugada pattern	Polymorphic ventricular tachycardia in the absence of structural heart disease, associated with a baseline ECG pattern during sinus rhythm showing right bundle branch block with ST segment elevation in leads V1 through V3. It can also be characterized by documentation of ECG patterns associated with Brugada Syndrome, some of which may be unmasked when provoked with drugs. The most common genetic mutations identified for Brugada syndrome are in a sodium channel gene (SCN5A). Sodium channel blocking drugs, therefore, may exacerbate the electrocardiographic features and clinical presentation. Brugada syndrome typically presents before the age of 50 years.		418818005	SNOMED CT
Complex ventricular ectopy/arrhythmia	Frequent or multifocal premature ventricular contractions (PVCs), couplets, non-sustained ventricular tachycardia, or other complex ventricular arrhythmias noted on the ECG not originating from the right or left ventricular outflow tract		112000003868	ACC NCDR
Pre-excitation	The presence of an accessory pathway resulting in abnormal conduction, such as a delta wave on the ECG, indicative of Wolff-Parkinson-White (WPW) syndrome or similar conditions.		112000003869	ACC NCDR
Prolonged QT interval	An abnormally long QT interval corrected for heart rate (QTc), which may predispose the patient to torsades de pointes or other life-threatening arrhythmias.		112000003870	ACC NCDR
Other			100000351	ACC NCDR

Section: Electrophysiology Study **Parent: Procedure Information**

Element: 16020 Final Arrhythmia Diagnosis

Coding Instruction: Select the final arrhythmia diagnosis/diagnoses made after the electrophysiology (EP) study. This refers to the confirmed diagnosis based on the results of the EP study, including any arrhythmias identified during the procedure.

Target Value: The value on current procedure

Technical Specification

Code: 112000003867
Code System Name: ACC NCDR
Short Name: FinArrDiag
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16249 Final Arrhythmia Diagnosis Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Final Arrhythmia Diagnosis - 1.3.6.1.4.1.19376.1.4.1.6.5.1036

Selection	Definition	Source	Code	Code System Name
Atrial ectopic tachycardia			233892002	SNOMED CT
Atrial fibrillation			49436004	SNOMED CT
Atrial flutter			5370000	SNOMED CT
Atrial paced			100000941	ACC NCDR
AV junctional rhythm			11849007	SNOMED CT
Complete heart block			27885002	SNOMED CT
Idioventricular rhythm			112000003866	ACC NCDR
Normal sinus rhythm			64730000	SNOMED CT
Second degree atrioventricular block			195042002	SNOMED CT
Sinus arrest			5609005	SNOMED CT
Supraventricular tachycardia			6456007	SNOMED CT
Ventricular paced			251266004	SNOMED CT
Ventricular tachycardia			25569003	SNOMED CT

Section: Electrophysiology Study **Parent: Procedure Information**

Element: 16249 Final Arrhythmia Diagnosis Not Documented

Coding Instruction: Select if the final arrhythmia diagnosis is not documented.

Target Value: N/A

Technical Specification

Code:	112000004184
Code System Name:	ACC NCDR
Short Name:	FinArrDiagNotDoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation

Element: 15413 Reason for Electrophysiology Ablation Not Attempted

Coding Instruction: Indicate the reason an ablation was not attempted during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	416237000
Code System Name:	SNOMED CT
Short Name:	EPAblationNotAttempted
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation

Reason an Electrophysiology Ablation not Attempted - 1.3.6.1.4.1.19376.1.4.1.6.5.884

Selection	Definition	Source	Code	Code System Name
Diagnostic only	The electrophysiology study was conducted solely for diagnostic purposes, with no plan for ablation during the procedure.		112000004028	ACC NCDR
Pre-op or post-op	The electrophysiology study was performed as part of a preoperative evaluation or postoperative assessment.		112000003879	ACC NCDR
Insufficient target for mapping and ablation or no inducible arrhythmia	The arrhythmia could not be adequately induced or sustained for mapping purposes.		423437008	SNOMED CT
Low risk substrate	The arrhythmia substrate was deemed low risk and did not warrant ablation at the time of the study.		112000003880	ACC NCDR
High risk of collateral damage or complication	The ablation was not attempted due to concerns about potential collateral damage to critical structures or a high risk of procedural complications.		112000003881	ACC NCDR
Other	N/A		100000351	ACC NCDR

Section: Electrophysiology Study **Parent: Procedure Information**

Element: 16023 Number of Diagnostic Catheters Used

Coding Instruction: Record the number of diagnostic catheters used during the EP study.

Note: Enter the maximum number of diagnostic catheters used at any one point during the procedure, not to including mapping or ablation catheters.

Target Value: The value on current procedure

Technical Specification

Code:	112000003867
Code System Name:	ACC NCDR
Short Name:	NumDiagCathUsed
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation

Element: 16024 Drug for Provocation or Diagnostic Purpose

Coding Instruction: Indicate whether drug provocation was used during the procedure. This refers to the administration of medications to provoke arrhythmias.

Target Value: The value on current procedure

Technical Specification

Code:	112000003867
Code System Name:	ACC NCDR
Short Name:	DrugProvDiagPur
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study without ablation

Section: Electrophysiology Study **Parent: Procedure Information**

Element: 16025 EP Drug Used for Provocation

Coding Instruction: Select the drug(s) used for drug provocation.

Target Value: The value on current procedure

Technical Specification

Code:	112000004299
Code System Name:	ACC NCDR
Short Name:	EPDrugUsedProv
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16024 Drug for Provocation or Diagnostic Purpose
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Drug Used for Provocation - 1.3.6.1.4.1.19376.1.4.1.6.5.1039

Selection	Definition	Source	Code	Code System Name
Isoproterenol			112000003819	ACC NCDR
Adenosine			296	RxNorm
Epinephrine			387362001	SNOMED CT
Other			100000351	ACC NCDR

Element: 16026 Inducible Arrhythmia

Coding Instruction: Indicate whether an arrhythmia was successfully induced during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	IndArr
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Section: EP Inducible Arrhythmia — Parent: Electrophysiology Study

Element: 16222 Inducible Arrhythmia Counter

Coding Instruction: The inducible arrhythmia counter distinguishes individual arrythmias when multiple arrythmias were induced during the procedure. Note: The software-assigned device counter should start at one and be incremented by one for each device used.

Target Value: The value on current procedure

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	IndArrCount
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element: 16026 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

Element: 16027 Induced Arrhythmia Type

Coding Instruction: Indicate whether the arrhythmia was sustained or non-sustained.

Target Value: The value on current procedure

Technical Specification

Code:	100014018
Code System Name:	ACC NCDR
Short Name:	IndArrTyp
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16222 Inducible Arrhythmia Counter
Operator:
Value: Any Value

AND

Element: 16026 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Induced Arrhythmia Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1040

Selection	Definition	Source	Code	Code System Name
Sustained arrhythmia	The arrhythmia persisted for greater than 30 seconds or required intervention to stop.		112000003871	ACC NCDR
Non-sustained arrhythmia	The arrhythmia spontaneously terminated without requiring intervention.		112000003872	ACC NCDR

Section: EP Inducible Arrhythmia **Parent: Electrophysiology Study**

Element: 16028 Induced Arrhythmia Location

Coding Instruction: Select the location(s) of the induced arrhythmia.

Target Value: The value on current procedure

Technical Specification

Code:	112000003817
Code System Name:	ACC NCDR
Short Name:	IndArrLoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16222 Inducible Arrhythmia Counter
Operator:
Value: Any Value

AND

Element: 16026 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Induced Arrhythmia Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1041

Selection	Definition	Source	Code	Code System Name
Supraventricular			112000003874	ACC NCDR
Ventricular			112000003875	ACC NCDR

Section: EP Inducible Arrhythmia **Parent: Electrophysiology Study**

Element: 16029 Supraventricular Arrhythmia Type

Coding Instruction: Select the type(s) of supraventricular arrhythmia induced.

Target Value: The value on current procedure

Technical Specification

Code: 112000004184
Code System Name: ACC NCDR
Short Name: SupArrTyp
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16222 Inducible Arrhythmia Counter
Operator:
Value: Any Value

AND

Element: 16028 Induced Arrhythmia Location
Operator: Equal
Value: Supraventricular

AND

Element: 16026 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Supraventricular Arrhythmia Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1042

Selection	Definition	Source	Code	Code System Name
Atrial fibrillation			49436004	SNOMED CT
Atrial flutter			5370000	SNOMED CT
Focal atrial tachycardia			276796006	SNOMED CT
Antidromic reciprocating tachycardia			233899006	SNOMED CT
AV nodal reentrant tachycardia			251166008	SNOMED CT
Junctional tachycardia			426648003	SNOMED CT
Orthodromic reciprocating tachycardia (ORT)			233897008	SNOMED CT
Premature atrial contraction			284470004	SNOMED CT
Indeterminate or other			82334004	SNOMED CT

Section: EP Inducible Arrhythmia **Parent: Electrophysiology Study**

Element: 16030 Ventricular Arrhythmia Type

Coding Instruction: Select the type(s) of ventricular arrhythmia induced.

Target Value: The value on current procedure

Technical Specification

Code: 112000003910
Code System Name: ACC NCDR
Short Name: VenArrTyp
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16222 Inducible Arrhythmia Counter
Operator:
Value: Any Value

AND

Element: 16028 Induced Arrhythmia Location
Operator: Equal
Value: Ventricular

AND

Element: 16026 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: EP study without ablation

EP Ventricular Arrhythmia Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1043

Selection	Definition	Source	Code	Code System Name
Monomorphic VT			251158004	SNOMED CT
Polymorphic VT			251159007	SNOMED CT
Ventricular fibrillation			71908006	SNOMED CT
Premature ventricular contractions (PVCs)			427172004	SNOMED CT

Section: EP Ablation Information **Parent: Electrophysiology Study**

Element: 15409 Targeted Electrophysiology Ablation Substrate

Coding Instruction: Indicate the substrate(s) that were targeted during the electrophysiology (EP) ablation.

Target Value: The value on current procedure

Technical Specification

Code:	112000002352
Code System Name:	ACC NCDR
Short Name:	EPTargetSub
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	EP study with ablation

Ablation Information - 1.3.6.1.4.1.19376.1.4.1.6.5.1134

Selection	Definition	Source	Code	Code System Name
Wolff-Parkinson-White (WPW)			74390002	SNOMED CT
Concealed accessory pathway/permanent junctional reciprocating tachycardia			233922008	SNOMED CT
AV nodal reentrant tachycardia (AVNRT)			251166008	SNOMED CT
Focal atrial tachycardia			713424004	SNOMED CT
Macroreentrant atrial tachycardia			735682000	SNOMED CT
Ventricular arrhythmias (PVCs, VT, VF)			44103008	SNOMED CT
Junctional tachycardia			426648003	SNOMED CT
Other	Select only when the substrate is not represented by any existing options. Use this category exclusively when no other selection is appropriate.		100000351	ACC NCDR

Section: Coarctation of the Aorta Intervention **Parent: Procedure Information**

Element: 15255 Aortic Coarctation Primary Procedure Indication

Coding Instruction: Indicate the primary reason the coarctation procedure is being performed.

Target Value: The value on start of current procedure

Technical Specification

Code:	432678004
Code System Name:	SNOMED CT
Short Name:	CoarcProcInd
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Aortic Coarctation Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.839

Selection	Definition	Source	Code	Code System Name
Non-invasive gradient	A pressure gradient across the aortic coarctation is documented through non-invasive testing methods, such as echocardiography or Doppler ultrasound.		112000003730	ACC NCDR
Systemic hypertension	Persistent elevated blood pressure is noted at rest, which may or may not be associated with a documented gradient or imaging findings.		38341003	SNOMED CT
Exertional hypertension only	Elevated blood pressure is observed during physical activity or exercise testing, with normal blood pressure at rest.		112000003731	ACC NCDR
Stenosis by imaging	Imaging studies (e.g., MRI, CT, or angiography) reveal significant narrowing at the coarctation site, irrespective of pressure gradients or blood pressure findings.		112000003732	ACC NCDR
Systolic ventricular dysfunction	Impaired systolic function of the left ventricle is noted, often due to increased afterload from the coarctation, as documented by echocardiography or other imaging modalities.		112000003733	ACC NCDR

Section: Coarctation of the Aorta Intervention — Parent: Procedure Information

Element: 15869 — Prior Intervention At Lesion Site

Coding Instruction: Indicate if a surgery or catheterization intervention has previously been performed at the lesion site.

Target Value: The value on current procedure

Technical Specification

Code:	100013015
Code System Name:	ACC NCDR
Short Name:	PriIntLesSit
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Intervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.797

Selection	Definition	Source	Code	Code System Name
No	No prior surgery or catheterization intervention has been previously performed at the lesion site.		100013073	ACC NCDR
Yes - Catheterization	A prior catheterization intervention has been previously performed at the lesion site.		276272002	SNOMED CT
Yes - Surgical	A prior surgery has been previously performed at the lesion site.		387713003	SNOMED CT
Yes - Both	A prior surgery AND catheterization intervention has been previously performed at the lesion site.		112000003646	ACC NCDR

Section: Coarctation Pre-intervention **Parent: Coarctation of the Aorta Intervention**

Element: 15263 Pre-Intervention Coarctation Peak Systolic Gradient

Coding Instruction: Indicate the pre-intervention coarctation peak systolic gradient in millimeters of mercury.

Target Value: The highest value at start of current procedure

Technical Specification

Code:	112000002269
Code System Name:	ACC NCDR
Short Name:	CoarcPrePkSysGrad
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.1 - 100.0 mm[Hg]
Valid Range:	0.1 - 200.0 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 15264 Pre-Intervention Coarctation Peak Systolic Gradient Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15264 Pre-Intervention Coarctation Peak Systolic Gradient Not Assessed

Coding Instruction: Indicate whether the pre-intervention coarctation peak systolic gradient was not assessed.

Target Value: N/A

Technical Specification

Code:	112000002261
Code System Name:	ACC NCDR
Short Name:	CoarcPrePkSysGradNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Pre-intervention **Parent: Coarctation of the Aorta Intervention**

Element: 15261 Pre-Intervention Minimal Lumen Coarctation Diameter

Coding Instruction: Indicate the pre-intervention minimum diameter of the aortic coarctation (in millimeters).

Target Value: The value on start of current procedure

Technical Specification

Code:	112000001392
Code System Name:	ACC NCDR
Short Name:	CoarcPreDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15262 Pre-Intervention Minimal Lumen Coarctation Diameter Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15262 Pre-Intervention Minimal Lumen Coarctation Diameter Not Assessed

Coding Instruction: Indicate whether the pre-intervention minimal diameter of the coarctation was not assessed.

Target Value: N/A

Technical Specification

Code:	100014168
Code System Name:	ACC NCDR
Short Name:	CoarcPreDiameterNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Pre-intervention **Parent: Coarctation of the Aorta Intervention**

Element: 15875 Distal Transverse Aortic Arch Diameter

Coding Instruction: Indicate the pre-intervention diameter of the distal transverse aortic arch in millimeters. The distal transverse aortic arch is considered the portion of the aortic arch between the left carotid artery and the left subclavian artery. The diameter of this site is used as a form of measurement of the aorta and serves diagnostic and interventional purposes. The diameter of the distal transverse aortic arch is used to estimate ideal balloon inflation.

Note: Enter the largest value if multiple values are documented.

Target Value: The value on start of current procedure

Technical Specification

Code:	112000004291
Code System Name:	ACC NCDR
Short Name:	DisTranAADia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	10.0 - 30.0 mm
Valid Range:	0.0 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15876 Distal Transverse Aortic Arch Diameter Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15876 Distal Transverse Aortic Arch Diameter Not Documented

Coding Instruction: Indicate if the pre-intervention diameter of the distal transverse aortic arch is not documented.

Target Value: N/A

Technical Specification

Code:	57034009
Code System Name:	SNOMED CT
Short Name:	DisTranAADianotdoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Post-intervention **Parent: Coarctation of the Aorta Intervention**

Element: 15267 Post-Intervention Coarctation Peak Systolic Gradient

Coding Instruction: Indicate the post-intervention coarctation peak systolic gradient in millimeters of mercury.

Target Value: The highest value at end of current procedure

Technical Specification

Code:	251081004
Code System Name:	SNOMED CT
Short Name:	CoarcPostPkSysGrad
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.1 - 100.0 mm[Hg]
Valid Range:	0.1 - 200.0 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 15268 Post-Intervention Coarctation Peak Systolic Gradient Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15268 Post-Intervention Coarctation Peak Systolic Gradient Not Assessed

Coding Instruction: Indicate whether the post-intervention coarctation peak systolic gradient was not assessed.

Target Value: N/A

Technical Specification

Code:	112000002264
Code System Name:	ACC NCDR
Short Name:	CoarcPostPkSysGradNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Post-intervention **Parent: Coarctation of the Aorta Intervention**

Element: 15265 Post-Intervention Minimal Lumen Coarctation Diameter

Coding Instruction: Indicate the post-Intervention minimal diameter of the coarctation in millimeters.

Target Value: The lowest value on current procedure

Technical Specification

Code:	112000002262
Code System Name:	ACC NCDR
Short Name:	CoarcPostDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15266 Post-Intervention Minimal Coarctation Diameter Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15266 Post-Intervention Minimal Coarctation Diameter Not Assessed

Coding Instruction: Indicate whether the post-intervention coarctation diameter was not assessed.

Target Value: N/A

Technical Specification

Code:	112000002263
Code System Name:	ACC NCDR
Short Name:	CoarcPostDiameterNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Post-intervention **Parent: Coarctation of the Aorta Intervention**

Element: 15871 Gradient Attributable to Intervened Site

Coding Instruction: Indicate the pressure gradient across the segment of the aorta that was treated during the procedure for coarctation of the aorta. This gradient is an important indicator of the effectiveness of the intervention as it refers to the difference in blood pressure (or flow) measured across the segment of the aorta that was treated during the procedure. Enter the gradient in millimeters of mercury (mmHg).
Gradient: This is the difference in pressure across the narrowed segment of the aorta. It's typically measured using invasive methods during catheterization.
Attributable to Intervened Site: This means the gradient being discussed specifically relates to the segment of the aorta that was targeted for intervention (e.g., balloon dilation or stent placement). It assesses how effectively the procedure has addressed the coarctation.

Target Value: The value on end of current procedure

Technical Specification

Code:	112000003884
Code System Name:	ACC NCDR
Short Name:	GradAttIntSit
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	15.0 - 30.0 mm[Hg]
Valid Range:	0.0 - 50.0 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 15872 Gradient Attributable to Intervened Site Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15872 Gradient Attributable to Intervened Site Not Documented

Coding Instruction: Indicate if the pressure gradient across the segment of the aorta that was treated was not documented.

Target Value: N/A

Technical Specification

Code:	251081004
Code System Name:	SNOMED CT
Short Name:	GradAttIntSitnotdoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Balloon Dilation **Parent: Coarctation of the Aorta Intervention**

Element: 15870 Balloon Dilation Only

Coding Instruction: Indicate whether the procedure involved balloon dilation without the placement of a stent. This refers to a minimally invasive intervention aimed at expanding the narrowed segment of the aorta in patients with coarctation of the aorta.

Select "Yes" if the procedure performed was exclusively a balloon dilation without stent placement.
Select "No" if the procedure involved other interventions, such as stent placement, or if no balloon dilation was performed at all.

Note: Other terms like "indentation resolved," "narrowing corrected," "waist disappeared," or "balloon expanded fully" may be appear in the reports. Confirmation of the intent with the provider is recommended.

Target Value: The value on current procedure

Technical Specification

Code:	100013063
Code System Name:	ACC NCDR
Short Name:	BalDilOnly
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention

Section: Coarctation Balloon Dilation Only **Parent: Coarctation Balloon Dilation**

Element: 15873 Initial Balloon Diameter

Coding Instruction: Indicate the diameter of the balloon used at the start of the balloon dilation procedure for coarctation of the aorta. Enter the diameter of the balloon (in millimeters) as documented at the initial stage of the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003739
Code System Name:	ACC NCDR
Short Name:	InBalDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15874 Final Balloon Diameter

Coding Instruction: Indicate the diameter of the balloon used at the conclusion of the balloon dilation procedure. Enter the final balloon diameter (in millimeters) used at the end of the procedure, as documented in the catheterization report. Ensure that this represents the largest diameter achieved during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003885
Code System Name:	ACC NCDR
Short Name:	FinBalDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Balloon Dilation Only **Parent: Coarctation Balloon Dilation**

Element: 15878 Waist On Any Balloon - Balloon Dilation Only

Coding Instruction: Indicate whether a "waist" was observed during the balloon dilation procedure. A waist typically suggests resistance at the site of coarctation.

Note: The term “waist” may be described using synonyms or phrases such as Indentation, Narrowing, Constriction, Balloon waist formation or sign. It is recommended to confirm the intent with the provider if any of these are documented.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

A visible narrowing or indentation on the balloon found during a balloon procedure.

Source:

Technical Specification

Code:	112000003738
Code System Name:	ACC NCDR
Short Name:	WaistOABBalDilOn
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15879 Waist Resolved - Balloon Dilation Only

Coding Instruction: Indicate whether the waist (narrowing or indentation) observed on the balloon during the dilation procedure was resolved after inflation. Resolution suggests the balloon successfully expanded the narrowed segment of the aorta.

Note: Other terms like "indentation resolved," "narrowing corrected," "waist disappeared," or "balloon expanded fully" may be appear in the reports. Confirmation of the intent with the provider is recommended.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

A visible narrowing or indentation on the balloon found during a balloon procedure.

Source:

Technical Specification

Code:	112000003886
Code System Name:	ACC NCDR
Short Name:	WaistResBalDilOn
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15878 Waist On Any Balloon - Balloon Dilation Only
Operator: Equal
Value: Yes

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Stent Implantation **Parent: Coarctation Balloon Dilation**

Element: 15858 Indication For Stent Placement

Coding Instruction: Indicate the primary reason for stent placement during the procedure for coarctation of the aorta. Stents may be placed either as part of the planned therapy or in response to issues encountered during balloon dilation.

Note: Code only the indication for the first stent.

Target Value: The value on current procedure

Technical Specification

Code:	112000003734
Code System Name:	ACC NCDR
Short Name:	IndStentPlac
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Indication For Stent Placement - 1.3.6.1.4.1.19376.1.4.1.6.5.987

Selection	Definition	Source	Code	Code System Name
Primary therapy	Select this option if stent placement was planned as the primary treatment method for the coarctation, regardless of the balloon dilation outcome. This indicates the stent was part of the initial treatment strategy.		112000003735	ACC NCDR
Insufficient gradient relief after balloon dilation	Select this option if the stent was placed because balloon dilation did not sufficiently relieve the pressure gradient across the coarctation site. This suggests the dilation alone was not enough to resolve the coarctation.		112000003736	ACC NCDR
Treatment/stabilization of injury after balloon dilation	Select this option if the stent was placed to treat or stabilize any injury (e.g., dissection, tear) caused by the balloon dilation. This implies that the stent was used as a corrective measure following a complication.		112000003737	ACC NCDR

Section: Coarctation Stent Implantation **Parent: Coarctation Balloon Dilation**

Element: 15880 Balloon Diameter Immediately Preceding Stent Placement

Coding Instruction: Record the diameter of the balloon used immediately before stent placement during the procedure for coarctation of the aorta. Enter the balloon diameter in millimeters (mm) to one decimal place (e.g., 9.0 mm, 13.5 mm).

Target Value: The value on current procedure

Technical Specification

Code:	112000003739
Code System Name:	ACC NCDR
Short Name:	BalDiaImPreStPl
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15881 Balloon Diameter Immediately Preceding Stent Placement Not Assessed
Operator: Equal
Value: No

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15881 Balloon Diameter Immediately Preceding Stent Placement Not Assessed

Coding Instruction: Indicate if the diameter of the balloon used immediately prior to the stent is not documented. Select this option if no balloon was used (stent only).

Target Value: N/A

Technical Specification

Code:	112000003739
Code System Name:	ACC NCDR
Short Name:	BalDiaImPreStPlnotass
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Stent Implantation **Parent: Coarctation Balloon Dilation**

Element: 15859 Waist On Any Balloon

Coding Instruction: Indicate whether a "waist" was observed during the balloon dilation procedure. A waist typically suggests resistance at the site of coarctation.
Select "Yes" if a waist was observed on any balloon during the procedure.
Select "No" if no waist was observed on any balloon used during the procedure.
Note: The term “waist” may be described using synonyms or phrases such as Indentation, Narrowing, Constriction, Balloon waist formation or sign. It is recommended to confirm the intent with the provider if any of these are documented.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

A visible narrowing or indentation on the balloon found during a balloon procedure.

Source:

Technical Specification

Code:	112000003738
Code System Name:	ACC NCDR
Short Name:	BalWaist
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15861 Waist on Any Balloon Not Assessed
Operator: Equal
Value: No

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15861 Waist on Any Balloon Not Assessed

Coding Instruction: Indicate if waist on any balloon was not assessed.

Target Value: N/A

Technical Specification

Code:	112000003907
Code System Name:	ACC NCDR
Short Name:	Waistnotass
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Stent Implantation **Parent: Coarctation Balloon Dilation**

Element: 15860 Waist Resolved

Coding Instruction: Indicate whether the waist (narrowing or indentation) observed on the balloon during the dilation procedure was resolved after inflation. Resolution suggests the balloon successfully expanded the narrowed segment of the aorta.

Note:
Select "Yes" if the waist was observed initially but fully resolved after balloon inflation.
Select "No" if the waist persisted, either partially or fully, even after balloon inflation.
Other terms like "indentation resolved," "narrowing corrected," "waist disappeared," or "balloon expanded fully" may be appear in the reports. Confirmation of the intent with the provider is recommended.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

A visible narrowing or indentation on the balloon found during a balloon procedure.

Source:

Technical Specification

Code:	112000003906
Code System Name:	ACC NCDR
Short Name:	WaistRes
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15859 Waist On Any Balloon
Operator: Equal
Value: Yes

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Device **Parent: Coarctation Stent Implantation**

Element: 15273 Aortic Coarctation Device Counter

Coding Instruction: The coarctation device counter distinguishes individual devices when multiple are used during one procedure.

Note: The software-assigned device counter should start at one and be incremented by one for each device used. If more than two stents are used, only the first two stents are expected to be entered. Entering beyond two stents is at the discretion of the facility.

Target Value: N/A

Technical Specification

Code: 2.16.840.1.113883.3.3478.4.851
Code System Name: ACC NCDR
Short Name: CoarcDevCounter
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CTR
Precision: 3
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range: 1 - 999
Data Source: Automatic

Parent/Child Validation

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15274 Aortic Coarctation Device ID

Coding Instruction: Indicate the device utilized during the coarctation procedure.

Note: For coarctation procedures, if a balloon and stent comes packaged as one device, treat as a stent device.

The device(s) collected in this field are controlled by the Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Vendor Instruction: Aortic Coarctation Device ID (15274) cannot be Null when Aortic Coarctation Device Counter (15273) has a value

Technical Specification

Code: 63653004
Code System Name: SNOMED CT
Short Name: CoarcDevID
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15273 Aortic Coarctation Device Counter
Operator:
Value: Any Value

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Device **Parent: Coarctation Stent Implantation**

Element: 15864 Unique Device Identifier - Coarctation Stent

Coding Instruction: Indicate the unique device identifier (UDI) of the device. Enter all characters including the parenthesis. Leave blank if the UDI is unknown or unable to be collected due to state/local privacy laws.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

The UDI identifies the specific individual device; no two devices have the same UDI. Refer to the FDA website for detailed explanation of UDIs.

The UDI is made up of five different identifiers and each identifier is preceded by a number in parentheses.

Example UDI below: Device Identifier (01), Expiration Date (17), Manufacturing date (11), Lot Number (10), and Serial Number (21)

Source:

Technical Specification

Code:	112000001973
Code System Name:	ACC NCDR
Short Name:	UDIcoarc
Missing Data:	No Action
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	150
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15273 Aortic Coarctation Device Counter
Operator:
Value: Any Value

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15863 Coarctation of the Aorta Stent Length

Coding Instruction: Record the length of the stent used during the procedure for coarctation of the aorta. Enter the stent length in centimeters (cm) or millimeters (mm) to one decimal place (e.g., 5.0 mm, 7.5 mm).

Target Value: The value on current procedure

Technical Specification

Code:	410667008
Code System Name:	SNOMED CT
Short Name:	CoAStenLen
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	cm, mm
Default Value:	
Usual Range:	0.5 - 1.5 cm 5.0 - 15.0 mm
Valid Range:	0.0 - 50.0 mm 0.5 - 5.0 cm
Data Source:	User

Parent/Child Validation

Element: 15274 Aortic Coarctation Device ID
Operator:
Value: Any Value

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Device **Parent: Coarctation Stent Implantation**

Element: 15882 Stent Diameter

Coding Instruction: Record the diameter of the stent used during the procedure for coarctation of the aorta. Enter the value to one decimal place in millimeters (mm) or centimeters (cm) (e.g., 5.0 mm, 7.5 mm, or 0.5 cm, 0.75 cm).

Target Value: The value on current procedure

Technical Specification

Code:	112000003743
Code System Name:	ACC NCDR
Short Name:	StenDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	cm, mm
Default Value:	
Usual Range:	0.5 - 2.0 cm 5.0 - 20.0 mm
Valid Range:	0.0 - 3.0 cm 0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15274 Aortic Coarctation Device ID
Operator:
Value: Any Value

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Device **Parent: Coarctation Stent Implantation**

Element: 15862 Stent Type Used

Coding Instruction: Indicate the type of stent used during the procedure for coarctation of the aorta.

Target Value: The value on current procedure

Technical Specification

Code:	100000856
Code System Name:	ACC NCDR
Short Name:	StentTypUsed
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15273 Aortic Coarctation Device Counter
Operator:
Value: Any Value

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Stent Device Type - 1.3.6.1.4.1.19376.1.4.1.6.5.307

Selection	Definition	Source	Code	Code System Name
Bare metal	Select this option if a stent with no coating or medication was used. Bare metal stents are designed solely to provide structural support without additional therapeutic agents.		464052002	SNOMED CT
Covered	Select this option if a stent covered with a material was used. Covered stents are designed to prevent blood leakage through the stent struts and may be used in specific anatomical situations.		440271000124109	SNOMED CT

Section: Coarctation Device **Parent: Coarctation Stent Implantation**

Element: 15865 Implanting Balloon Diameter

Coding Instruction: Record the diameter of the balloon used during the implantation of the stent in the coarctation of the aorta procedure in millimeters (mm) to one decimal place.

Target Value: The value on current procedure

Technical Specification

Code:	112000003739
Code System Name:	ACC NCDR
Short Name:	ImpBalDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	1.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15273 Aortic Coarctation Device Counter
Operator:
Value: Any Value

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15866 Post Dilation

Coding Instruction: Indicate whether a post-dilation was performed after stent placement during the coarctation of the aorta procedure.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

Post-dilation refers to additional balloon inflation after the stent is deployed to optimize stent expansion.

Source:

Technical Specification

Code:	112000003740
Code System Name:	ACC NCDR
Short Name:	PostDil
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15273 Aortic Coarctation Device Counter
Operator:
Value: Any Value

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Device **Parent: Coarctation Stent Implantation**

Element: 15867 Post Dilation Balloon Diameter

Coding Instruction: Indicate the diameter of the balloon used during post-dilation after the stent was placed in the coarctation of the aorta procedure.

Target Value: The highest value on current procedure

Supporting Definition: **General Definition**

Post-dilation refers to additional balloon inflation after the stent is deployed to optimize stent expansion.

Source:

Technical Specification

Code:	112000003885
Code System Name:	ACC NCDR
Short Name:	PostDilBalDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	1.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15866 Post Dilation
Operator: Equal
Value: Yes

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Section: Coarctation Device **Parent: Coarctation Stent Implantation**

Element: 15877 Reason for Second Stent

Coding Instruction: Select the reason why a second stent was placed during the coarctation of the aorta procedure.

Target Value: The value on current procedure

Technical Specification

Code: 36969009
Code System Name: SNOMED CT
Short Name: ReasSecSten
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15273 Aortic Coarctation Device Counter
Operator: Equal
Value: 2

AND

Element: 15870 Balloon Dilation Only
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Reason for Second Stent - 1.3.6.1.4.1.19376.1.4.1.6.5.988

Selection	Definition	Source	Code	Code System Name
Initial stent malposition	Select if the first stent was not properly positioned and a second stent was placed to correct its location.		112000001325	ACC NCDR
Initial stent too short	Select if the first stent was too short to adequately cover the coarctation site and a second stent was required.		410667008	SNOMED CT
Initial stent recoil	Select if the first stent recoiled (partially collapsed or did not maintain its full expansion), and a second stent was needed to stabilize the area.		112000003741	ACC NCDR
Vascular injury	Select if a second stent was placed to treat or stabilize an injury to the vessel, such as a tear or dissection, caused by the first stent.		112000003742	ACC NCDR

Section: Proximal Pulmonary Artery Stenting — Parent: Procedure Information

Element: 15227 Proximal Pulmonary Artery Stenting Primary Procedure Indication

Coding Instruction: Indicate the reason(s) the pulmonary artery stenting procedure is being performed.

Target Value: The value on start of current procedure

Technical Specification

Code:	432678004
Code System Name:	SNOMED CT
Short Name:	PASProcInd
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting

Proximal Pulmonary Artery Stenting Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.835

Selection	Definition	Source	Code	Code System Name
Angiographic narrowing	Imaging studies (e.g., angiography or CT) demonstrate a narrowing in the proximal pulmonary artery.		708528005	SNOMED CT
Right ventricular hypertension	Elevated pressure within the right ventricle is documented.		461321006	SNOMED CT
Pulmonary artery pressure gradient	A pressure gradient greater than 20 mmHg is measured across the pulmonary artery, indicating significant resistance to blood flow.		250767002	SNOMED CT
Right ventricular dysfunction	Impaired function of the right ventricle is noted, as evidenced by imaging, hemodynamic measurements, or clinical assessment.		473365008	SNOMED CT
Differential blood flow	There is less than 35% of total pulmonary blood flow directed to the lung supplied by the targeted vessel		21762000	SNOMED CT
Pulmonic valve regurgitation	Regurgitation (backflow) of blood into the pulmonary artery is documented, potentially contributing to hemodynamic inefficiency or symptoms.		91434003	SNOMED CT

Element: 16132 Ostial Stenosis Present

Coding Instruction: Indicate whether ostial stenosis is present in the proximal pulmonary artery. Ostial stenosis refers to a narrowing or obstruction at the opening (ostium) where the pulmonary artery originates.

Target Value: The value on current procedure

Technical Specification

Code:	112000002205
Code System Name:	ACC NCDR
Short Name:	OstStenPres
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting

Section: Proximal PAS Pre-intervention **Parent: Proximal Pulmonary Artery Stenting**

Element: 15239 Proximal Pulmonary Artery Defect Diameter

Coding Instruction: Indicate the pre-intervention proximal diameter of the pulmonary artery defect in millimeters.

Target Value: The value between start of procedure and prior to the intervention

Technical Specification

Code:	302286009
Code System Name:	SNOMED CT
Short Name:	PASPreProxDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	1.0 - 35.0 mm
Valid Range:	1.0 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 16132 Ostial Stenosis Present
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15240 Distal Pulmonary Artery Defect Diameter

Coding Instruction: Indicate the pre-intervention distal diameter of the pulmonary artery defect in millimeters.

Note: The pulmonary artery distal diameter should be obtained at the first branch point to a lobar artery.

Target Value: The value between start of procedure and prior to the intervention

Technical Specification

Code:	252060001
Code System Name:	SNOMED CT
Short Name:	PASPreDistDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 35.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Section: Proximal PAS Pre-intervention **Parent: Proximal Pulmonary Artery Stenting**

Element: 15241 Pulmonary Artery Vessel Defect Diameter Minimum

Coding Instruction: Indicate the pre-intervention minimum diameter of the pulmonary artery defect in millimeters.

Target Value: The value between start of procedure and prior to the intervention

Technical Specification

Code:	112000002255
Code System Name:	ACC NCDR
Short Name:	PASPreMinDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	1.0 - 25.0 mm
Valid Range:	1.0 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting

Section: Proximal PAS Post-intervention **Parent: Proximal Pulmonary Artery Stenting**

Element: 15247 Post-Intervention Proximal Pulmonary Artery Diameter

Coding Instruction: Indicate the post-intervention proximal diameter of the pulmonary artery defect in millimeters.

Target Value: The value on end of current procedure

Technical Specification

Code:	112000002253
Code System Name:	ACC NCDR
Short Name:	PASPostProxDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	1.0 - 35.0 mm
Valid Range:	1.0 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 16132 Ostial Stenosis Present
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15248 Post-Intervention Distal Pulmonary Artery Diameter

Coding Instruction: Indicate the post-intervention distal diameter of the pulmonary artery defect in millimeters.

Note: The pulmonary artery distal diameter should be obtained at the first branch point to a lobar artery

Target Value: The value on end of current procedure

Technical Specification

Code:	112000002254
Code System Name:	ACC NCDR
Short Name:	PASPostDistDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 35.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Section: Proximal PAS Post-intervention **Parent: Proximal Pulmonary Artery Stenting**

Element: 15250 Post-Intervention Pulmonary Artery Vessel Diameter Minimum

Coding Instruction: Indicate the post-intervention in stent minimum diameter of the pulmonary artery defect in millimeters.

Target Value: The value on end of current procedure

Technical Specification

Code:	112000002256
Code System Name:	ACC NCDR
Short Name:	PASPostMinDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	1.0 - 25.0 mm
Valid Range:	1.0 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting

Section: Proximal PAS Device **Parent: Proximal Pulmonary Artery Stenting**

Element: 15251 Pulmonary Artery Stenting Device Counter

Coding Instruction: The pulmonary artery stenting device counter distinguishes individual devices when multiple are used during one procedure.

Note: The software-assigned device counter should start at one and be incremented by one for each device used. If more than two stents are used, only the first stents are expected to be entered. Entering beyond two stents is at the discretion of the facility.

Target Value: The value on current procedure

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.851
Code System Name:	ACC NCDR
Short Name:	PASDevCounter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	3
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 999
Data Source:	Automatic

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15253 Device ID

Coding Instruction: Indicate the device utilized during the current pulmonary artery stenting procedure.

Note:
The device(s) collected in this field are controlled by the master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Vendor Instruction: Device ID (15253) cannot be Null when Pulmonary Artery Stenting Device Counter (15251) has a value

Technical Specification

Code:	63653004
Code System Name:	SNOMED CT
Short Name:	PASDevID
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15251 Pulmonary Artery Stenting Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Section: Proximal PAS Device **Parent: Proximal Pulmonary Artery Stenting**

Element: 15913 Unique Device Identifier - PPAS Device

Coding Instruction: Indicate the unique device identifier (UDI) of the device. Enter all characters including the parenthesis. Leave blank if the UDI is unknown or unable to be collected due to state/local privacy laws.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

The UDI identifies the specific individual device; no two devices have the same UDI. Refer to the FDA website for detailed explanation of UDIs.

The UDI is made up of five different identifiers and each identifier is preceded by a number in parentheses.

Example UDI below: Device Identifier (01), Expiration Date (17), Manufacturing date (11), Lot Number (10), and Serial Number (21)

Source:

Technical Specification

Code: 112000001973
Code System Name: ACC NCDR
Short Name: UDIPPAS
Missing Data: No Action
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: ST
Precision: 150
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15251 Pulmonary Artery Stenting Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15911 Proximal Pulmonary Artery Stent Length

Coding Instruction: Indicate the stent length in millimeters or centimeters.

Target Value: The value on current procedure

Technical Specification

Code: 410667008
Code System Name: SNOMED CT
Short Name: PPASStenLen
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: PQ
Precision: 4,1
Selection Type: Single
Unit of Measure: cm, mm
Default Value:
Usual Range: 2.0 - 10.0 cm
20.0 - 100.0 mm
Valid Range: 1.0 - 15.0 cm
10.0 - 150.0 mm
Data Source: User

Parent/Child Validation

Element: 15253 Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Section: Proximal PAS Device **Parent: Proximal Pulmonary Artery Stenting**

Element: 15912 Proximal Pulmonary Artery Stenting Stent Diameter

Coding Instruction: Indicate the stent diameter in millimeters or centimeters.

Target Value: The value on current procedure

Technical Specification

Code:	81827009
Code System Name:	SNOMED CT
Short Name:	PPASStenDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	cm, mm
Default Value:	
Usual Range:	3.0 - 7.0 cm 30.0 - 70.0 mm
Valid Range:	1.0 - 10.0 cm 10.0 - 100.0 mm
Data Source:	User

Parent/Child Validation

Element: 15253 Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15229 Pulmonary Artery Stenting Defect Location

Coding Instruction: Indicate the location of the defect in the pulmonary artery.

Target Value: The value on current procedure

Technical Specification

Code:	246267002
Code System Name:	SNOMED CT
Short Name:	PASDefectLoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15251 Pulmonary Artery Stenting Device Counter
Operator: Equal
Value: 1

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Pulmonary Artery Location - 1.3.6.1.4.1.19376.1.4.1.6.5.836

Selection	Definition	Source	Code	Code System Name
Left Proximal Pulmonary Artery			50408007	SNOMED CT
Right Proximal Pulmonary Artery			78480002	SNOMED CT

Section: Proximal PAS Device **Parent: Proximal Pulmonary Artery Stenting**

Element: 15941 PPAS Successful Treatment

Coding Instruction: Indicate whether the proximal pulmonary artery stenting procedure was successful.

Success is defined as achieving a post-procedure diameter of the narrowest portion of the stented segment that is ≥ 75% of the original (pre-procedure) target vessel diameter.

Target Value: The value on current procedure

Technical Specification

Code:	112000002205
Code System Name:	ACC NCDR
Short Name:	PPASSucTre
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15251 Pulmonary Artery Stenting Device Counter
Operator: Equal
Value: 1

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15942 PPAS Stent Embolization

Coding Instruction: Indicate whether stent embolization occurred during the proximal pulmonary artery stenting procedure.

This refers to the unintended displacement or migration of the stent from its original placement site, moving entirely to a different anatomical location.

Target Value: The value on current procedure

Technical Specification

Code:	112000003901
Code System Name:	ACC NCDR
Short Name:	PPASSteEm
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15251 Pulmonary Artery Stenting Device Counter
Operator: Equal
Value: 1

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Section: Proximal PAS Device **Parent: Proximal Pulmonary Artery Stenting**

Element: 15943 PPAS Stent Malposition

Coding Instruction: Indicate whether stent malposition occurred during the proximal pulmonary artery stenting procedure.

This refers to incomplete stent apposition, characterized by at least one stent strut being separated from the arterial wall with evidence of blood flow behind the strut, but without displacement to another site or involvement of side branches.

Target Value: The value on current procedure

Technical Specification

Code:	112000003902
Code System Name:	ACC NCDR
Short Name:	PPASSteMal
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15251 Pulmonary Artery Stenting Device Counter
Operator: Equal
Value: 1

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15914 Stent Overhang (Compromising Access to Contralateral Pulmonary Artery)

Coding Instruction: Indicate if access to the contralateral pulmonary artery was obstructed due to a stent overhang.

Target Value: The value on current procedure

Technical Specification

Code:	112000003903
Code System Name:	ACC NCDR
Short Name:	StenOvCompAccPulmArt
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15251 Pulmonary Artery Stenting Device Counter
Operator: Equal
Value: 1

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Section: Proximal PAS Device **Parent: Proximal Pulmonary Artery Stenting**

Element: 15944 Jailed Side Branch (with Compromised Flow)

Coding Instruction: Indicate whether a jailed side branch with compromised flow occurred during the proximal pulmonary artery stenting procedure. This refers to a situation where a smaller artery (side branch) is blocked, or its blood flow is reduced due to the placement of a stent over its opening.

Target Value: The value on current procedure

Technical Specification

Code:	112000003904
Code System Name:	ACC NCDR
Short Name:	JaiSB
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15251 Pulmonary Artery Stenting Device Counter
Operator: Equal
Value: 1

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Section: Atrial Septal Defect Closure **Parent: Procedure Information**

Element: 15893 Atrial Septal Defect Classification

Coding Instruction: Select the atrial septal defect (ASD) descriptor used to describe this procedure.

Note(s):

If multiple classifications are present, choose one based on the following priority:
1. ASD with Congenital Heart Disease,
2. ASD with Pulmonary Hypertension,
3. ASD with Pulmonary Stenosis,
4. ASD - Multiple,
5. ASD - Simple

Target Value: The value on start of current procedure

Technical Specification

Code:	70142008
Code System Name:	SNOMED CT
Short Name:	ASDClass
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Atrial Septal Defect Classification - 1.3.6.1.4.1.19376.1.4.1.6.5.991

Selection	Definition	Source	Code	Code System Name
Atrial septal defect - simple	An isolated defect in the atrial septum with no additional congenital heart abnormalities.		70142008	SNOMED CT
Atrial septal defects - multiple	A general classification for multiple atrial septal defects or when the specific type is not detailed in the records.		112000003748	ACC NCDR
Atrial septal defect with pulmonary artery hypertension	An atrial septal defect associated with increased pressure in the pulmonary arteries, often indicative of significant left-to-right shunting or long-standing defect. Pulmonary hypertension is explicitly noted as a result of the defect.		70995007	SNOMED CT
Atrial septal defect with pulmonary stenosis	Atrial septal defect in a patient who also has pulmonary stenosis, which is a narrowing of the pulmonary valve or pulmonary artery that restricts blood flow from the right ventricle to the lungs.		112000003732	ACC NCDR
Atrial septal defect - with congenital heart disease	An atrial septal defect occurring in conjunction with other forms of congenital heart disease.		112000003749	ACC NCDR

Section: Atrial Septal Defect Closure — Parent: Procedure Information

Element: 15141 ASD Primary Procedure Indication

Coding Instruction: Indicate the primary reason the atrial septal defect (ASD) procedure is being performed.

Target Value: The value on current procedure

Supporting Definition: **Procedure Indication**

The primary reason the procedure is being performed

Source:

Technical Specification

Code:	112000000482
Code System Name:	ACC NCDR
Short Name:	ASDProcInd
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

ASD Closure Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.821

Selection	Definition	Source	Code	Code System Name
Failure to thrive	The patient exhibits poor growth and development compared to age-based norms, often due to chronic heart failure or inadequate systemic circulation caused by the ASD.		54840006	SNOMED CT
Need for respiratory support	The patient requires mechanical or supplemental respiratory support (e.g., oxygen therapy, ventilator support) due to complications related to the ASD, such as pulmonary overcirculation or pulmonary hypertension.		112000003747	ACC NCDR
Recurrent respiratory infections	The patient has a history of frequent respiratory tract infections (e.g., pneumonia or bronchitis) that may be linked to increased pulmonary blood flow caused by the ASD.		112000002227	ACC NCDR
Right to left cardiac shunt	Hemodynamic evaluation indicates that blood is shunting from the right atrium to the left atrium through the ASD.		441826000	SNOMED CT
Right ventricular volume overload	Imaging or diagnostic studies (e.g., echocardiography) reveal significant enlargement of the right ventricle caused by increased blood flow from a left-to-right shunt, indicating hemodynamic burden.		112000002226	ACC NCDR

Section: ASD Imaging View 1 **Parent: Atrial Septal Defect Closure**

Element: 15900 ASD Dimension - View 1

Coding Instruction: Record the largest dimension of the atrial septal defect (ASD) as visualized from the first imaging view used during the procedure. View 1 refers to initial imaging plane or angle used to assess the defect.

Target Value: The highest value on current procedure

Technical Specification

Code:	112000004286
Code System Name:	ACC NCDR
Short Name:	ASDDimV1
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15901 ASD Dimension - View 1 Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15901 ASD Dimension - View 1 Not Documented

Coding Instruction: Indicate whether the pre or post intervention dimension of the atrial septal defect (in mm) in view one was not documented.

Target Value: N/A

Technical Specification

Code:	112000004286
Code System Name:	ACC NCDR
Short Name:	ASDDim1ST
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Section: ASD Imaging View 2 — Parent: Atrial Septal Defect Closure

Element: 15902 ASD Dimension - View 2

Coding Instruction: Record the largest dimension of the atrial septal defect (ASD) as visualized from the second imaging view used during the procedure. View 2 refers to the measurement of the atrial septal defect diameter from a secondary imaging plane.

Target Value: The highest value on current procedure

Technical Specification

Code:	112000004286
Code System Name:	ACC NCDR
Short Name:	ASDDimV2
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15903 ASD Dimension - View 2 Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15903 ASD Dimension - View 2 Not Documented

Coding Instruction: Indicate whether the pre or post intervention dimension of the atrial septal defect (in mm) in view two was not documented.

Target Value: N/A

Technical Specification

Code:	112000004286
Code System Name:	ACC NCDR
Short Name:	ASDDim2ND
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Section: ASD Imaging **Parent: Atrial Septal Defect Closure**

Element: 15156 Total Septal Length

Coding Instruction: Indicate the total septal length in millimeters.

Note: The total septal length is the distance from the crux of the heart to the posterior wall measured in the 4 chamber view (TTE).

Target Value: The value on start of current procedure

Technical Specification

Code:	112000002229
Code System Name:	ACC NCDR
Short Name:	ASDSeptLength
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 50.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15157 Total Septal Length Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15157 Total Septal Length Not Assessed

Coding Instruction: Indicate whether the total septal length was not assessed.

Target Value: N/A

Technical Specification

Code:	112000002229
Code System Name:	ACC NCDR
Short Name:	ASDSeptLengthNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Section: ASD Imaging **Parent: Atrial Septal Defect Closure**

Element: 15894 Deficient Rim

Coding Instruction: Indicate whether a deficient rim was present during the atrial septal defect (ASD) closure procedure. A deficient rim refers to an inadequate or insufficient amount of surrounding tissue or structure needed to securely place the closure device.

Target Value: The value on current procedure

Technical Specification

Code:	70142008
Code System Name:	SNOMED CT
Short Name:	ASDDefRim
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15895 Deficient Rim Length

Coding Instruction: Indicate the length of the deficient rim if it was present during the atrial septal defect (ASD) closure procedure. This measurement reflects the extent of the rim deficiency. Enter the length of the deficient rim in millimeters (mm).

Target Value: The value on current procedure

Technical Specification

Code:	112000004287
Code System Name:	ACC NCDR
Short Name:	ASDDefRimLen
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15898 Deficient Rim Length Not Documented
Operator: Equal
Value: No

AND

Element: 15894 Deficient Rim
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Section: ASD Imaging **Parent: Atrial Septal Defect Closure**

Element: 15898 Deficient Rim Length Not Documented

Coding Instruction: Indicate if the length of the deficient rim of the atrial septal defect was not documented.

Target Value: N/A

Technical Specification

Code:	112000004287
Code System Name:	ACC NCDR
Short Name:	ASDDefRimLenND
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15894 Deficient Rim
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 16133 ASD Deficient Rim Location

Coding Instruction: Indicate the area around the atrial septal defect where there is an inadequate amount of tissue (rim) to provide structural support for closure devices or surgical repair.

Target Value: The value on current procedure

Technical Specification

Code:	70142008
Code System Name:	SNOMED CT
Short Name:	ASDDefRimLoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15894 Deficient Rim
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

ASD Deficient Rim Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1100

Selection	Definition	Source	Code	Code System Name
Retroaortic	The rim located anteriorly, between the ASD and the aorta, is insufficient or absent.		112000004073	ACC NCDR
SVC (Superior Vena Cava)	The rim located superiorly, between the ASD and the superior vena cava (SVC), is insufficient or absent.		48345005	SNOMED CT
Posterior	The rim located at the back (posterior) of the ASD, near the pulmonary veins, is insufficient or absent.		255551008	SNOMED CT
Inferior	The rim located below the ASD, adjacent to the inferior vena cava (IVC), is insufficient or absent.		261089000	SNOMED CT

Section: ASD Imaging **Parent: Atrial Septal Defect Closure**

Element: 15896 Second Deficient Rim

Coding Instruction: Indicate whether a second deficient rim was present during the atrial septal defect (ASD) closure procedure. A second deficient rim refers to an additional area of inadequate tissue or structure beyond the primary deficient rim.

Target Value: The value on current procedure

Technical Specification

Code:	112000003937
Code System Name:	ACC NCDR
Short Name:	ASD2DefRim
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15894 Deficient Rim
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15897 Second Deficient Rim Length

Coding Instruction: Indicate the length of the second deficient rim if it was present during the atrial septal defect (ASD) closure procedure. This measurement reflects the extent of the rim deficiency. Enter the length of the deficient rim in millimeters (mm).

Target Value: The value on current procedure

Technical Specification

Code:	112000004288
Code System Name:	ACC NCDR
Short Name:	ASD2DefRimLen
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15899 Second Deficient Rim Length Not Documented
Operator: Equal
Value: No

AND

Element: 15896 Second Deficient Rim
Operator: Equal
Value: Yes

AND

Element: 15894 Deficient Rim
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Section: ASD Imaging **Parent: Atrial Septal Defect Closure**

Element: 15899 Second Deficient Rim Length Not Documented

Coding Instruction: Indicate if the length of the second deficient rim in the atrial septal defect was not documented.

Target Value: N/A

Technical Specification

Code:	112000004288
Code System Name:	ACC NCDR
Short Name:	ASD2DefRimLenND
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15896 Second Deficient Rim
Operator: Equal
Value: Yes

AND

Element: 15894 Deficient Rim
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15158 Atrial Septal Aneurysm Present

Coding Instruction: Indicate if an atrial septal aneurysm is present.

Target Value: The value on current procedure

Technical Specification

Code:	95440004
Code System Name:	SNOMED CT
Short Name:	ASDAneurysm
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Section: ASD Imaging **Parent: Atrial Septal Defect Closure**

Element: 15162 Atrial Septal Defect Balloon Sizing Performed

Coding Instruction: Indicate if balloon sizing was performed on the atrial septal defect (ASD).

Target Value: The value on current procedure

Technical Specification

Code:	449033003
Code System Name:	SNOMED CT
Short Name:	ASDBallSizPerf
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15908 Atrial Septal Defect Balloon Sizing Method

Coding Instruction: Indicate the method used for balloon sizing during the atrial septal defect (ASD) closure procedure. Balloon sizing is employed to determine the appropriate size of the closure device by inflating a balloon within the ASD to measure the defect's dimensions.

Target Value: The value on start of current procedure

Technical Specification

Code:	449033003
Code System Name:	SNOMED CT
Short Name:	ASDSizeMethod
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15162 Atrial Septal Defect Balloon Sizing Performed
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Atrial Septal Defect Balloon Sizing Methods - 1.3.6.1.4.1.19376.1.4.1.6.5.992

Selection	Definition	Source	Code	Code System Name
Waist	Indicates that balloon sizing was performed using the "waist" method. This involves inflating the balloon until a constriction or “waist” is observed, which helps determine the appropriate size of the closure device.		112000003738	ACC NCDR
Stop flow	Indicates that balloon sizing was performed using the "stop flow" method. This involves inflating the balloon until the blood flow across the ASD is stopped, which helps to gauge the defect size.		112000002234	ACC NCDR

Section: ASD Device **Parent: Atrial Septal Defect Closure**

Element: 14842 Device Counter

Coding Instruction: The atrial septal defect closure procedure device counter distinguishes individual devices when multiple are used during one procedure.

Note: The software-assigned device counter should start at one and be incremented by one for each device used.

Target Value: The value on current procedure

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.851
Code System Name:	ACC NCDR
Short Name:	DevCounter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15203 Atrial Septal Defect Device ID

Coding Instruction: Indicate the occlusion device(s) utilized during the current atrial septal defect (ASD) closure procedure.

Note: Code all devices used during the procedure.

If a device was utilized on multiple defects, specify it only once (e.g., if a balloon was used to dilated two separate defects, list the balloon only once). Every treatment and support device utilized during the procedure should be specified.

The device(s) collected in this field are controlled by the master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application

Target Value: The value on current procedure

Vendor Instruction: Atrial Septal Defect Device ID (15203) cannot be Null when Device Counter (14842) has a value

Technical Specification

Code:	63653004
Code System Name:	SNOMED CT
Short Name:	ASDDevID
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 14842 Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Section: ASD Device **Parent: Atrial Septal Defect Closure**

Element: 15910 Unique Device Identifier - ASD Device

Coding Instruction: Indicate the unique device identifier (UDI) of the device. Enter all characters including the parenthesis. Leave blank if the UDI is unknown or unable to be collected due to state/local privacy laws.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

The UDI identifies the specific individual device; no two devices have the same UDI. Refer to the FDA website for detailed explanation of UDIs.

The UDI is made up of five different identifiers and each identifier is preceded by a number in parentheses.

Example UDI below: Device Identifier (01), Expiration Date (17), Manufacturing date (11), Lot Number (10), and Serial Number (21)

Source:

Technical Specification

Code: 112000001973
Code System Name: ACC NCDR
Short Name: UDIASD
Missing Data: No Action
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: ST
Precision: 150
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 14842 Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15909 Atrial Septal Defect Second Device Indication

Coding Instruction: Indicate the reason(s) that a second device was attempted or deployed.

Target Value: The value on current procedure

Technical Specification

Code: 70142008
Code System Name: SNOMED CT
Short Name: ASD2NDDevInd
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 14842 Device Counter
Operator: Equal
Value: 2

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Atrial Septal Defect Second Device Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.993

Selection	Definition	Source	Code	Code System Name
Change Size	Select if the second device was deployed because the size of the first device was inadequate, requiring a different size for proper ASD closure.		246115007	SNOMED CT
Unanticipated device problem	Select if the second device was used due to an issue with the first device, such as malfunction or improper deployment.		55607006	SNOMED CT
Other			100000351	ACC NCDR

Section: ASD Closure **Parent: Atrial Septal Defect Closure**

Element: 15202 Residual Shunt Size

Coding Instruction: Indicate the residual shunt size of the atrial septal defect.

Target Value: The value on end of current procedure

Technical Specification

Code:	72884006
Code System Name:	SNOMED CT
Short Name:	ASDResShunt
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Residual Shunt Size - 1.3.6.1.4.1.19376.1.4.1.6.5.830

Selection	Definition	Source	Code	Code System Name
No shunt	The absence of any residual flow through the defect. The closure is complete.		100013073	ACC NCDR
Trivial shunt (less than 3 mm)	A small residual shunt is present, with a measured size less than 3 mm, often considered clinically insignificant.		112000002238	ACC NCDR
Significant shunt (greater or equal to 3 mm)	A residual shunt is detected with a measured size of 3 mm or larger, indicating substantial residual flow through the defect.		112000002239	ACC NCDR

Section: Aortic Valvuloplasty **Parent: Procedure Information**

Element: 15204 Aortic Valvuloplasty Primary Procedure Indication

Coding Instruction: Indicate the primary reason the aortic valvuloplasty procedure is being performed.

Target Value: The value on start of current procedure

Technical Specification

Code:	432678004
Code System Name:	SNOMED CT
Short Name:	AVProcInd
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty

Aortic Valvuloplasty Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.831

Selection	Definition	Source	Code	Code System Name
Abnormal stress test/ECG	The procedure was prompted by findings on a stress test or electrocardiogram (ECG).		100000854	ACC NCDR
Aortic valve gradient	The procedure was performed due to elevated pressure gradients across the aortic valve		251088005	SNOMED CT
Left ventricular dysfunction	The procedure was indicated due to impaired left ventricular function, such as reduced ejection fraction, for example.		134401001	SNOMED CT
Symptoms	Symptoms can include, but are not limited to, heart failure, syncope or angina.		418799008	SNOMED CT

Section: Aortic Valvuloplasty **Parent: Procedure Information**

Element: 15209 Aortic Valve Morphology

Coding Instruction: Indicate the morphology of the aortic valve.

Target Value: The value on start of current procedure

Technical Specification

Code:	8722008
Code System Name:	SNOMED CT
Short Name:	PedAVMorphology
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Aortic Valve Disease Morphology - 1.3.6.1.4.1.19376.1.4.1.6.5.495

Selection	Definition	Source	Code	Code System Name
Unicuspid	An aortic valve with only one leaflet		253610004	SNOMED CT
Bicuspid	A congenital anomaly in which the aortic valve has two leaflets.	NCI Thesaurus	72352009	SNOMED CT
Tricuspid	The normal anatomical structure of the aortic valve, characterized by the presence of three distinct leaflets or cusps		46030003	SNOMED CT
Quadricuspid	A four-cusps aortic valve of various size possibilities		253611000	SNOMED CT
Uncertain	Aortic valve morphology is uncertain.		100012985	ACC NCDR

Element: 15212 Aortic Valve Diameter

Coding Instruction: Indicate the diameter of the aortic valve in millimeters that was used to select the balloon used for the procedure.

Target Value: The value on start of current procedure

Technical Specification

Code:	112000003596
Code System Name:	ACC NCDR
Short Name:	AVDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Section: Aortic Valvuloplasty **Parent: Procedure Information**

Element: 15211 Aortic Valvuloplasty Pre-Intervention Aortic Valve Regurgitation

Coding Instruction: Indicate the pre-intervention regurgitation of the aortic valve. If 'trivial, trace, or physiologic' is documented, select 'none'.

Target Value: The value on start of current procedure

Technical Specification

Code:	60234000
Code System Name:	SNOMED CT
Short Name:	AVPreInsuff
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Aortic Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.862

Selection	Definition	Source	Code	Code System Name
None			112000001910	ACC NCDR
1+ (mild)			112000000380	ACC NCDR
2+ (moderate)			112000000381	ACC NCDR
3+ (moderate to severe)			1000142345	ACC NCDR
4+ (severe)			112000000382	ACC NCDR

Element: 15224 Aortic Valvuloplasty Pre-Intervention Aortic Valve Peak Systolic Gradient

Coding Instruction: Indicate the pre-intervention aortic valve peak systolic gradient in millimeters of mercury.

Target Value: The value on start of current procedure

Technical Specification

Code:	251088005
Code System Name:	SNOMED CT
Short Name:	AVPrePkSystGrad
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.1 - 100.0 mm[Hg]
Valid Range:	0.1 - 200.0 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 15840 Pre-Intervention Aortic Valve Peak Systolic Gradient Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Section: Aortic Valvuloplasty **Parent: Procedure Information**

Element: 15840 Pre-Intervention Aortic Valve Peak Systolic Gradient Not Documented

Coding Instruction: Indicate if the pre-intervention aortic valve peak systolic gradient is not documented.

Target Value: N/A

Technical Specification

Code:	251088005
Code System Name:	SNOMED CT
Short Name:	AVPrePkSystGradNotDoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15222 Aortic Valvuloplasty Post-Intervention Aortic Valve Regurgitation

Coding Instruction: Indicate the aortic valve regurgitation after the balloon has been inflated during the aortic valvuloplasty.

Note:
If 'trivial, trace, or physiologic' is documented, select 'none'.
Code the highest value or most severe regurgitation when a range is reported.

Target Value: The value on end of current procedure

Technical Specification

Code:	40445007
Code System Name:	SNOMED CT
Short Name:	AVPostDilRegurg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Aortic Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.862

Selection	Definition	Source	Code	Code System Name
None			112000001910	ACC NCDR
1+ (mild)			112000000380	ACC NCDR
2+ (moderate)			112000000381	ACC NCDR
3+ (moderate to severe)			1000142345	ACC NCDR
4+ (severe)			112000000382	ACC NCDR

Section: Aortic Valvuloplasty **Parent: Procedure Information**

Element: 15223 Aortic Valvuloplasty Post-Intervention Aortic Valve Peak Systolic Gradient

Coding Instruction: Indicate the aortic valve peak systolic gradient in millimeters of mercury, after the balloon has been inflated during the aortic valvuloplasty procedure.

Target Value: The value on end of current procedure

Technical Specification

Code:	251085008
Code System Name:	SNOMED CT
Short Name:	AVPostDilSysGrad
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.1 - 100.0 mm[Hg]
Valid Range:	0.1 - 200.0 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 15841 Post Dilation Aortic Valve Peak Systolic Gradient Not Documented
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15841 Post Dilation Aortic Valve Peak Systolic Gradient Not Documented

Coding Instruction: Indicate if the post dilation aortic valve peak systolic gradient is not documented.

Target Value: N/A

Technical Specification

Code:	251085008
Code System Name:	SNOMED CT
Short Name:	AVPostDilSysGradNotDoc
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Section: Aortic Valvuloplasty **Parent: Procedure Information**

Element: 15213 Aortic Valvuloplasty Balloon Technique

Coding Instruction: Indicate the type of balloon technique used during the aortic valvuloplasty procedure.

Target Value: The value on current procedure

Technical Specification

Code:	232834008
Code System Name:	SNOMED CT
Short Name:	AVBallTechnique
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty

Balloon Technique - 1.3.6.1.4.1.19376.1.4.1.6.5.833

Selection	Definition	Source	Code	Code System Name
Single	A single balloon is inflated.		50607009	SNOMED CT
Double	Two balloons are simultaneously inflated.		1305003	SNOMED CT

Element: 15839 Balloon Diameter - Largest

Coding Instruction: Record the largest diameter of the balloon during inflation, in millimeters (mm).

Target Value: The value on current procedure

Technical Specification

Code:	112000003739
Code System Name:	ACC NCDR
Short Name:	AVBallDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	1.0 - 40.0 mm
Valid Range:	0.0 - 99.0 mm
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty

Section: Aortic Valvuloplasty **Parent: Procedure Information**

Element: 15219 Balloon Stabilization

Coding Instruction: Indicate if pharmacologic, mechanical or rapid pacing technique were used to stabilize the balloon during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	232834008
Code System Name:	SNOMED CT
Short Name:	AVBallStab
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty

Section: Patent Ductus Arteriosus (PDA) Closure **Parent: Procedure Information**

Element: 16131 Respiratory Support

Coding Instruction: Indicate whether the patient is currently on respiratory support.

Target Value: The value on start of current procedure

Technical Specification

Code:	112000003936
Code System Name:	ACC NCDR
Short Name:	RespSup
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure

Section: Patent Ductus Arteriosus (PDA) Closure **Parent: Procedure Information**

Element: 15918 Respiratory Support Type

Coding Instruction: Indicate the respiratory support type required by the patient. This includes any form of continuous positive airway pressure therapy, conventional ventilation, high flow oxygen nasal cannula, high frequency oscillatory ventilation, jet ventilation, or other respiratory support.

Target Value: The value on start of current procedure

Technical Specification

Code:	83330001
Code System Name:	SNOMED CT
Short Name:	RespSupTyp
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16131 Respiratory Support
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

PDA Respiratory Support Type - 1.3.6.1.4.1.19376.1.4.1.6.5.995

Selection	Definition	Source	Code	Code System Name
Continuous positive airway pressure therapy	A non-invasive ventilation method that delivers continuous positive pressure to the airways to maintain airway patency and support breathing.		47545007	SNOMED CT
Conventional ventilation	Standard mechanical ventilation using a ventilator to deliver breaths to the patient at a set volume and rate via an endotracheal tube or tracheostomy.		706172005	SNOMED CT
High flow oxygen nasal cannula	Delivery of warmed oxygen at a high flow rate through nasal cannula to improve oxygenation and reduce work of breathing.		426854004	SNOMED CT
High frequency oscillatory ventilation	A type of mechanical ventilation that delivers very small tidal volumes at a very high frequency, typically used for severe respiratory failure.		243155002	SNOMED CT
Jet ventilation	A specialized ventilation technique that delivers short, rapid bursts of gas to maintain adequate oxygenation and ventilation, often used in airway surgeries.		4764004	SNOMED CT
Other	N/A		100000351	ACC NCDR

Section: Patent Ductus Arteriosus (PDA) Closure **Parent: Procedure Information**

Element: 15928 Mean Airway Pressure

Coding Instruction: Indicate the mean airway pressure (MAP) assessed at the start of the patent ductus arteriosus procedure.

Target Value: The value on start of current procedure

Technical Specification

Code:	112000003763
Code System Name:	ACC NCDR
Short Name:	MAP
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	cm H2O
Default Value:	
Usual Range:	5.0 - 25.0 cm H2O
Valid Range:	1.0 - 68.0 cm H2O
Data Source:	User

Parent/Child Validation

Element: 15929 Mean Airway Pressure Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15929 Mean Airway Pressure Not Assessed

Coding Instruction: Indicate whether the mean airway pressure (MAP) was not assessed at the start of the patent ductus arteriosus procedure.

Target Value: N/A

Technical Specification

Code:	112000003763
Code System Name:	ACC NCDR
Short Name:	MAPNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Section: Patent Ductus Arteriosus (PDA) Closure **Parent: Procedure Information**

Element: 15926 Fraction of Inspired Oxygen

Coding Instruction: Record the fraction of inspirated oxygen (FiO2) assessed at the start of the patent ductus arteriosus procedure. This value is a percentage.

Target Value: The value on start of current procedure

Technical Specification

Code:	250774007
Code System Name:	SNOMED CT
Short Name:	FracO2
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	21 - 60 %
Valid Range:	21 - 100 %
Data Source:	User

Parent/Child Validation

Element: 15927 Fraction of Inspired Oxygen Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15927 Fraction of Inspired Oxygen Not Assessed

Coding Instruction: Indicate whether the fraction of inspired oxygen (FiO2) was not assessed at the start of the patent ductus arteriosus procedure.

Target Value: N/A

Technical Specification

Code:	250774007
Code System Name:	SNOMED CT
Short Name:	FracO2NA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Section: Patent Ductus Arteriosus (PDA) Closure — Parent: Procedure Information

Element: 15921 Respiratory Severity Score

Coding Instruction: Indicate the respiratory severity score assessed at the start of the patent ductus arteriosus procedure. The respiratory severity score is calculated by multiplying mean airway pressure (MAP) by the fraction of inspired oxygen (FiO2). The score helps to assess the need for respiratory support in infants requiring assisted ventilation.
RSS=MAPxFiO2

Target Value: The value on start of current procedure

Technical Specification

Code:	112000004289
Code System Name:	ACC NCDR
Short Name:	RSS
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	1.0 - 10.0
Valid Range:	0.0 - 20.0
Data Source:	User

Parent/Child Validation

Element: 15922 Respiratory Severity Score Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15922 Respiratory Severity Score Not Assessed

Coding Instruction: Indicate if the respiratory severity score was not assessed at the start of the patent ductus arteriosus procedure.

Target Value: N/A

Technical Specification

Code:	112000004289
Code System Name:	ACC NCDR
Short Name:	RSSNA
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Section: Patent Ductus Arteriosus (PDA) Closure **Parent: Procedure Information**

Element: 15105 Inotrope Administered

Coding Instruction: Indicate if an inotrope was used during the procedure.

Note: Include positive inotropes only (e.g. dopamine, dobutamine, epinephrine, norepinephrine, vasopressin and milrinone).

Do not include isuprel when used as a diagnostic agent to induce arrhythmias during an EP procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000001358
Code System Name:	ACC NCDR
Short Name:	Inotrope
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Drug Administered - 1.3.6.1.4.1.19376.1.4.1.6.5.711

Selection	Definition	Source	Code	Code System Name
No			100014173	ACC NCDR
Yes			112000001851	ACC NCDR

Section: PDA Intra-Procedure **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 12871 Procedure Location

Coding Instruction: Indicate the location where the procedure was performed.

Target Value: The value on current procedure

Technical Specification

Code:	112000000623
Code System Name:	ACC NCDR
Short Name:	ProcedureLocation
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

PDA Procedure Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1144

Selection	Definition	Source	Code	Code System Name
Cardiac Catheterization Laboratory			112000000616	ACC NCDR
Bedside/NICU			225739005	SNOMED CT
Other			100000351	ACC NCDR

Section: PDA Intra-Procedure **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15285 Patent Ductus Arteriosus Classification

Coding Instruction: Indicate the classification of the patent ductus arteriosus (PDA) defect.

Target Value: The value on start of current procedure

Technical Specification

Code:	83330001
Code System Name:	SNOMED CT
Short Name:	PDAClass
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure

Patent Ductus Arteriosus Classifications - 1.3.6.1.4.1.19376.1.4.1.6.5.846

Selection	Definition	Source	Code	Code System Name
Type A (Conical)	The PDA has a conical shape, with a narrow distal opening and a wider proximal opening near the aorta. This is the most common PDA type.		112000002270	ACC NCDR
Type B (Window)	The PDA appears as a short, wide connection between the aorta and the pulmonary artery, resembling a window-like structure.		112000002271	ACC NCDR
Type C (Tubular)	The PDA is uniformly cylindrical, with little to no narrowing along its length.		112000002272	ACC NCDR
Type D (Complex)	The PDA has an irregular shape with multiple constrictions or branching, making it more anatomically complex.		112000002273	ACC NCDR
Type E (Elongated)	The PDA is significantly elongated, with a narrow, stretched structure		112000002274	ACC NCDR
Type F	A ductus that has tortuous morphology that does not fit in any of the above classifications. Sometimes called fetal type.		112000003764	ACC NCDR

Element: 15282 Patent Ductus Arteriosus Aortic Side Aortic Ampulla Dimension

Coding Instruction: Indicate the aortic ampulla dimension of the patent ductus arteriosus diameter on the aortic side in millimeters.

Note(s): The aortic ampulla refers to the funnel-shaped widening at the aortic side of the ductus arteriosus. This dimension may be obtained through angiography or echocardiography.

Target Value: The value on start of current procedure

Technical Specification

Code:	81827009
Code System Name:	SNOMED CT
Short Name:	PDADiameterAortSide
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.0 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure

Section: PDA Intra-Procedure **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15283 Patent Ductus Arteriosus Luminal Diameter

Coding Instruction: Indicate the patent ductus arteriosus (PDA) minimal luminal diameter in millimeters.

Target Value: The value on start of current procedure

Technical Specification

Code:	112000001392
Code System Name:	ACC NCDR
Short Name:	PDAMinLumDiameter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.0 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure

Element: 15284 Patent Ductus Arteriosus Length

Coding Instruction: Indicate the length of the patent ductus arteriosus (PDA) in millimeters.

Target Value: The value on start of current procedure

Technical Specification

Code:	410667008
Code System Name:	SNOMED CT
Short Name:	PDALength
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure

Section: PDA Intra-Procedure **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15930 PDA Measurement Technique

Coding Instruction: Indicate the measurement technique used during the patent ductus arteriosus defect closure procedure. Indicate how the measurements about PDA length, luminal diameter, etc. were obtained.

Target Value: The value on current procedure

Technical Specification

Code:	112000003936
Code System Name:	ACC NCDR
Short Name:	PDAMeasure
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

PDA Measurement Technique - 1.3.6.1.4.1.19376.1.4.1.6.5.997

Selection	Definition	Source	Code	Code System Name
Angiography			77343006	SNOMED CT
Echocardiography			40701008	SNOMED CT

Element: 15924 Pre PDA Closure Tricuspid Valve Regurgitation

Coding Instruction: Indicate the degree of tricuspid regurgitation prior to closure of the patent ductus arteriosus.

Note(s): Code the highest value or most severe regurgitation when a range is reported. If 'physiologic' is documented, select 'Trace/Trivial'.

Target Value: The value on start of current procedure

Technical Specification

Code:	111287006
Code System Name:	SNOMED CT
Short Name:	PrePDACloTriValReg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System Name
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild (1+)			112000000380	ACC NCDR
Moderate (2+)			112000000381	ACC NCDR
Moderate to severe (3+)			1000142345	ACC NCDR
Severe (4+)			112000000382	ACC NCDR

Section: PDA Intra-Procedure **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15931 PDA Ductal Angiography

Coding Instruction: Indicate whether ductal angiography was used during the patent ductus arteriosus closure procedure. Ductal angiography refers to the imaging technique used to visualize the patent ductus arteriosus and assess its anatomy and hemodynamics during the PDA closure procedure. This technique typically involves the injection of contrast dye into the PDA to provide clear imaging of the ductus and its relation to nearby structures.

Target Value: The value on current procedure

Technical Specification

Code:	83330001
Code System Name:	SNOMED CT
Short Name:	PDADucAngio
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure

Section: PDA Closure Device **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15965 Patent Ductus Arteriosus (PDA) Closure Device Counter

Coding Instruction: Patent Ductus Arteriosus (PDA) Closure device counter distinguishes individual devices when multiple are used during the procedure. At least one device must be specified for each procedure.

Note(s): If more than one device is used, enter only the initial device in counter one and the final device in counter two.

Target Value: N/A

Technical Specification

Code:	83330001
Code System Name:	SNOMED CT
Short Name:	PDACount
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15932 Catheter Technique

Coding Instruction: Indicate the catheter technique used during the patent ductus arteriosus procedure.

Target Value: The value on current procedure

Technical Specification

Code:	246501002
Code System Name:	SNOMED CT
Short Name:	CathTech
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15965 Patent Ductus Arteriosus (PDA) Closure Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

PDA Catheter Technique - 1.3.6.1.4.1.19376.1.4.1.6.5.998

Selection	Definition	Source	Code	Code System Name
Balloon endhole	Select if a balloon-tipped catheter with an endhole was used to cross the PDA. This technique involves using the balloon to aid in crossing the ductus and positioning the catheter.		112000003765	ACC NCDR
Directional endhole with 0.014 wire	Select if a catheter with a directional endhole was used together with a microcatheter and a 0.014-inch guidewire to cross the PDA.		112000003766	ACC NCDR
Directional endhole with 0.035 wire	Select if a catheter with a directional endhole was used in conjunction with a 0.035-inch guidewire to cross the PDA.		112000003767	ACC NCDR
Other			100000351	ACC NCDR

Section: PDA Closure Device **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15290 Patent Ductus Arteriosus Closure Device ID

Coding Instruction: Indicate the device utilized during the patent ductus arteriosus (PDA) closure procedure.

Note: If a device was utilized on multiple defects, specify it only once.

The device that should be collected in your application are controlled by a Master File. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Vendor Instruction: Patent Ductus Arteriosus Closure Device ID (15290) cannot be Null when Patent Ductus Arteriosus (PDA) Closure Device Counter (15965) has a value

Technical Specification

Code:	63653004
Code System Name:	SNOMED CT
Short Name:	PDADevID
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15965 Patent Ductus Arteriosus (PDA) Closure Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15923 Unique Device Identifier - PDA Device

Coding Instruction: Indicate the unique device identifier (UDI) of the device. Enter all characters including the parenthesis. Leave blank if the UDI is unknown or unable to be collected due to state/local privacy laws.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

The UDI identifies the specific individual device; no two devices have the same UDI. Refer to the FDA website for detailed explanation of UDIs.

The UDI is made up of five different identifiers and each identifier is preceded by a number in parentheses.

Example UDI below: Device Identifier (01), Expiration Date (17), Manufacturing date (11), Lot Number (10), and Serial Number (21)

Source:

Technical Specification

Code:	112000001973
Code System Name:	ACC NCDR
Short Name:	UDIPDA
Missing Data:	No Action
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	150
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15965 Patent Ductus Arteriosus (PDA) Closure Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Section: PDA Closure Device **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15934 Waist Diameter PDA Closure Device

Coding Instruction: Record the waist diameter of the closure device used. This is the narrowest part of the device that sits within the ductus. Record the units in millimeters (mm).

Target Value: The value on current procedure

Technical Specification

Code:	112000004289
Code System Name:	ACC NCDR
Short Name:	WaistDiaPDACloDev
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15290 Patent Ductus Arteriosus Closure Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15935 Disc Diameter PDA Closure Device

Coding Instruction: Record the diameter of the disc(s) of the closure device used. Record the units in millimeters (mm). If the device has more than one disc and diameters differ, record the larger diameter unless otherwise specified.

Target Value: The value on current procedure

Technical Specification

Code:	81827009
Code System Name:	SNOMED CT
Short Name:	DiscDiaPDACloDev
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15290 Patent Ductus Arteriosus Closure Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Section: PDA Closure Device **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15936 Length PDA Closure Device

Coding Instruction: Record the length of the closure device used. Record the units in millimeters.

Target Value: The value on current procedure

Technical Specification

Code:	410667008
Code System Name:	SNOMED CT
Short Name:	LenPDACloDev
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	5.0 - 20.0 mm
Valid Range:	0.0 - 30.0 mm
Data Source:	User

Parent/Child Validation

Element: 15290 Patent Ductus Arteriosus Closure Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15920 PDA Implant Technique

Coding Instruction: Indicate the technique used to implant the patent ductus arteriosus device.

Target Value: The value on current procedure

Technical Specification

Code:	83330001
Code System Name:	SNOMED CT
Short Name:	PDAImplantTec
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15965 Patent Ductus Arteriosus (PDA) Closure Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

PDA Implant Technique - 1.3.6.1.4.1.19376.1.4.1.6.5.996

Selection	Definition	Source	Code	Code System Name
Antegrade (venous access)	Procedure performed using a venous access route		827097006	SNOMED CT
Retrograde (arterial access)	Procedure performed using an arterial access route.		260526008	SNOMED CT

Section: PDA Closure Device **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15291 Outcome of Device

Coding Instruction: Indicate the outcome of the patent ductus arteriosus (PDA) closure device.

Target Value: The value on end of current procedure

Technical Specification

Code:	112000001662
Code System Name:	ACC NCDR
Short Name:	PDADevOutcome
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15965 Patent Ductus Arteriosus (PDA) Closure Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Intervention Device Outcomes - Defect Closure - 1.3.6.1.4.1.19376.1.4.1.6.5.856

Selection	Definition	Source	Code	Code System Name
Device in place	The device was successfully implanted and remains in position within the PDA at the conclusion of the procedure.		260388006	SNOMED CT
Device removed by catheter	The device was implanted but subsequently retrieved and removed using a catheter-based approach during the procedure.		276272002	SNOMED CT
Intra-operative removal	The device was implanted but removed surgically during the same procedure.		387713003	SNOMED CT
Unknown	The outcome of the device could not be determined or is not documented in the medical records.		261665006	SNOMED CT

Section: PDA Outcome **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15933 PDA Post Procedure Obstruction

Coding Instruction: Indicate whether any obstruction was observed at the end of the patent ductus arteriosus (PDA) closure procedure. Post-procedure obstruction refers to any blockage or restriction in the PDA or adjacent structures, such as the aorta or pulmonary artery, that occurs after the closure has been completed.

Target Value: The value on end of current procedure

Vendor Instruction: When PDA Post Procedure Obstruction (15933) is [No obstruction present], no other selections can be selected

Technical Specification

Code: 83330001
Code System Name: SNOMED CT
Short Name: PDAProcObst
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16242 Post Procedure Obstruction Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

PDA Post Procedure Obstruction - 1.3.6.1.4.1.19376.1.4.1.6.5.999

Selection	Definition	Source	Code	Code System Name
Aorta	Obstruction affecting the aorta defined as a continuous wave (CW) spectral Doppler velocity greater than 2.5 m/s.		15825003	SNOMED CT
Pulmonary artery	Obstruction affecting the pulmonary artery defined as a continuous wave (CW) spectral Doppler velocity greater than 2.5 m/s.		81040000	SNOMED CT
No obstruction present	Absence of obstruction affecting the PDA site.		100001231	ACC NCDR

Element: 16242 Post Procedure Obstruction Not Assessed

Coding Instruction: Indicate if post procedure obstruction was not assessed or not documented.

Target Value: N/A

Technical Specification

Code: 83330001
Code System Name: SNOMED CT
Short Name: PostProcObsNotAss
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Section: PDA Outcome **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15919 Post PDA Closure Tricuspid Valve Regurgitation

Coding Instruction: Indicate whether there is evidence of tricuspid valve regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Note(s): Code the highest value or most severe regurgitation when a range is reported.

If 'physiologic' is documented, select 'Trace/Trivial'.

Target Value: The highest value at end of current procedure

Technical Specification

Code:	111287006
Code System Name:	SNOMED CT
Short Name:	PostPDACloTriValReg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System Name
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild (1+)			112000000380	ACC NCDR
Moderate (2+)			112000000381	ACC NCDR
Moderate to severe (3+)			1000142345	ACC NCDR
Severe (4+)			112000000382	ACC NCDR

Section: PDA Outcome **Parent: Patent Ductus Arteriosus (PDA) Closure**

Element: 15288 Patent Ductus Arteriosus Residual Shunt

Coding Instruction: Indicate the residual shunt of the patent ductus arteriosus (PDA) after device placement.

Target Value: The value on end of current procedure

Technical Specification

Code:	257351008
Code System Name:	SNOMED CT
Short Name:	PDAResShunt
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Residual Shunt Types - 1.3.6.1.4.1.19376.1.4.1.6.5.848

Selection	Definition	Source	Code	Code System Name
None	No residual shunt is detected.		260413007	SNOMED CT
Trace/Trivial	A trace/trivial residual shunt is detected, as defined by the clinician.		100001111	ACC NCDR
Mild	A mild residual shunt is detected, as defined by the clinician.		255604002	SNOMED CT
Moderate	A moderate residual shunt is detected, as defined by the clinician.		6736007	SNOMED CT
Severe	A severe residual shunt is detected, as defined by the clinician.		24484000	SNOMED CT

Section: Transcatheter Pulmonary Valve Replacement Parent: Procedure Information

Element: 15293 Transcatheter Pulmonary Valve Replacement Clinical Indication

Coding Instruction: Indicate the reason(s) for the procedure.

Target Value: The value on start of current procedure

Technical Specification

Code:	432678004
Code System Name:	SNOMED CT
Short Name:	TPVRClinInd
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Pulmonary Valve Replacement Clinical Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.858

Selection	Definition	Source	Code	Code System Name
Arrhythmia	The presence of arrhythmias, such as right ventricular outflow tract arrhythmias, which may be associated with valvular issues or the need for symptomatic relief through valve replacement.		698247007	SNOMED CT
Symptomatic	Presence of symptoms such as fatigue, exercise intolerance, palpitations, or dyspnea, which may be attributed to valve-related issues or ventricular dysfunction.		418799008	SNOMED CT
Ventricular function decline	A decline in ventricular function as evidenced by reduced ejection fraction, which may be related to valve dysfunction or the need for ventricular stabilization.		250938005	SNOMED CT
Right ventricle dilation	Enlargement or dilation of the right ventricle due to increased pressure or volume load.		25322007	SNOMED CT

Section: Transcatheter Pulmonary Valve Replacement Parent: Procedure Information

Element: 15294 — Transcatheter Pulmonary Valve Replacement Hemodynamic Indication

Coding Instruction: Indicate the primary hemodynamic reason for the procedure.

Target Value: The value on start of current procedure

Technical Specification

Code:	44324008
Code System Name:	SNOMED CT
Short Name:	TPVRHemoInd
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Pulmonary Valve Replacement Hemodynamic Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.859

Selection	Definition	Source	Code	Code System Name
Predominant valve/conduit obstruction	Significant narrowing or blockage through the valve or conduit, restricting blood flow from the right ventricle to the pulmonary artery.		68646005	SNOMED CT
Predominant valve/conduit regurgitation	Significant backward flow (regurgitation) through the valve or conduit, indicating valve incompetence or failure to adequately close.		91434003	SNOMED CT
Mixed obstruction and regurgitation	A combination of both obstruction and regurgitation through the valve or conduit.		112000003532	ACC NCDR

Section: Transcatheter Pulmonary Valve Replacement — Parent: Procedure Information

Element: 16154 — TPVR Prior Right Ventricular Outflow Tract Treatment

Coding Instruction: Select the prior treatment received to the right ventricular outflow tract.

Target Value: Any occurrence between birth and current procedure

Technical Specification

Code:	44627009
Code System Name:	SNOMED CT
Short Name:	TPVRPriorRVOTTx
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

TPVR Prior Right Ventricular Outflow Tract Treatment - 1.3.6.1.4.1.19376.1.4.1.6.5.1111

Selection	Definition	Source	Code	Code System Name
Prior balloon angioplasty	A procedure to widen a narrowed valve or blood vessel using a balloon catheter, specifically targeting the right ventricular outflow tract.		112000004098	ACC NCDR
Prior right ventricular outflow tract stent	The placement of a stent within the right ventricular outflow tract to maintain patency and prevent obstruction.		112000004099	ACC NCDR
Prior transannular patch	A patch used during surgery to relieve stenosis (narrowing) by extending the right ventricular outflow tract.		112000004100	ACC NCDR
Prior surgical valvotomy	A surgical procedure to widen a stenotic valve opening, specifically in the right ventricular outflow tract.		112000004101	ACC NCDR
Prior right ventricular-pulmonary artery conduit	Placement of a prosthetic conduit between the right ventricle and the pulmonary artery to bypass stenosis or defects.		112000004102	ACC NCDR
Prior surgical bioprosthesis	Implantation of a biologic valve prosthesis in the right ventricular outflow tract, often as a replacement or repair for congenital heart defects.		112000004103	ACC NCDR
Prior transcatheter pulmonary valve replacement	A procedure to replace a malfunctioning or inadequate valve within the right ventricular outflow tract, typically using a catheter-based technique.		112000004104	ACC NCDR
None			260413007	SNOMED CT

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 16158 Bioprosthesis Type

Coding Instruction: Select the type(s) of surgical prothesis previously implanted.

Target Value: Any occurrence between birth and arrival at this facility

Technical Specification

Code:	112000004110
Code System Name:	ACC NCDR
Short Name:	BioTyp
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16154 TPVR Prior Right Ventricular Outflow Tract Treatment
Operator: Equal
Value: Prior surgical bioprosthesis

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

TPVR Bioprosthesis Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1113

Selection	Definition	Source	Code	Code System Name
Pulmonary homograft			174944001	SNOMED CT
Aortic homograft			174927000	SNOMED CT
Porcine			112000004107	ACC NCDR
Bovine			112000004108	ACC NCDR
Synthetic			112000004109	ACC NCDR
Other			100000351	ACC NCDR

Section: Transcatheter Pulmonary Valve Replacement — Parent: Procedure Information

Element: 15311 — Transcatheter Pulmonary Valve Replacement Surgically Implanted Valve or Conduit Size

Coding Instruction: Record the size of the previously implanted surgical prosthesis (in mm).

Note: If there is a history of multiple previously implanted surgical prosthesis, enter the size of the most recent.

Target Value: The value on start of current procedure

Technical Specification

Code:	112000002289
Code System Name:	ACC NCDR
Short Name:	TPVROriginalConduit
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	1 - 30 mm
Valid Range:	0 - 50 mm
Data Source:	User

Parent/Child Validation

Element: 16154 TPVR Prior Right Ventricular Outflow Tract Treatment
Operator: Equal
Value: Prior surgical bioprosthesis

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 15296 — Transcatheter Pulmonary Valve Replacement Echocardiogram

Coding Instruction: Indicate if an echocardiogram was performed prior to the procedure.

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	40701008
Code System Name:	SNOMED CT
Short Name:	TPVREcho
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15301

Transcatheter Pulmonary Valve Replacement Echocardiogram Left Ventricular Ejection Fraction

Coding Instruction: Indicate the LVEF obtained by echocardiogram prior to the procedure.

Note: If a percentage range is reported, report the center of the range (e.g., 50–55% is 52.5 reported to the next whole number is 53%. For EF measurements reported as "less than" or "greater than" code to the nearest whole number (e.g., <40% is coded as 39%, and >40% is coded as 41%).

If only a descriptive value is reported (e.g. normal), enter the corresponding percentage value from the list below:

Normal = 60%

Good function = 50%

Mildly reduced = 45%

Fair function = 40%

Moderately reduced = 30%

Poor function = 25%

Severely reduced = 20%

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	10230-1
Code System Name:	LOINC
Short Name:	TPVREchoLVEF
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	5 - 70 %
Valid Range:	1 - 99 %
Data Source:	User

Parent/Child Validation

Element: 16157 Left Ventricular Ejection Fraction Not Assessed
Operator: Equal
Value: No

AND

Element: 15296 Transcatheter Pulmonary Valve Replacement Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16157

Left Ventricular Ejection Fraction Not Assessed

Coding Instruction: Indicate if the left ventricular ejection fraction was not assessed.

Target Value: N/A

Technical Specification

Code:	100001027
Code System Name:	ACC NCDR
Short Name:	LVEFNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15296 Transcatheter Pulmonary Valve Replacement Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15297 — Transcatheter Pulmonary Valve Replacement Echocardiogram Mean Gradient Across Valve/Conduit

Coding Instruction: Indicate the mean gradient (in mm Hg) across the valve/conduit prior to the TPVR procedure by echocardiogram.

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	251086009
Code System Name:	SNOMED CT
Short Name:	TPVREchoMeanGradient
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.1 - 100.0 mm[Hg]
Valid Range:	0.1 - 200.0 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 16168 TPVR Mean Gradient Across Valve/Conduit Not Assessed
Operator: Equal
Value: No

AND

Element: 15296 Transcatheter Pulmonary Valve Replacement Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16168 — TPVR Mean Gradient Across Valve/Conduit Not Assessed

Coding Instruction: Indicate if the mean gradient (in mm Hg) across the valve/conduit prior to the TPVR procedure was not assessed.

Target Value: N/A

Technical Specification

Code:	251086009
Code System Name:	SNOMED CT
Short Name:	TPVRMeanGradNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15296 Transcatheter Pulmonary Valve Replacement Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15298 — Transcatheter Pulmonary Valve Replacement Echocardiogram Maximum Gradient Across Valve/Conduit

Coding Instruction: Indicate the maximum gradient (in mm Hg) across the valve/conduit prior to the TPVR procedure by echocardiogram.

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	112000002281
Code System Name:	ACC NCDR
Short Name:	TPVREchoMaxGradient
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.1 - 100.0 mm[Hg]
Valid Range:	0.1 - 200.0 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 16145 Maximum Gradient Across Valve/Conduit Not Assessed
Operator: Equal
Value: No

AND

Element: 15296 Transcatheter Pulmonary Valve Replacement Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16145 — Maximum Gradient Across Valve/Conduit Not Assessed

Coding Instruction: Indicate if the maximum gradient (in mm Hg) across the valve/conduit prior to the TPVR procedure was not assessed.

Target Value: N/A

Technical Specification

Code:	442525005
Code System Name:	SNOMED CT
Short Name:	MaxGradNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15296 Transcatheter Pulmonary Valve Replacement Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement — Parent: Procedure Information

Element: 15299

Transcatheter Pulmonary Valve Replacement Echocardiogram Pulmonary Valve Regurgitation

Coding Instruction: Indicate the severity of pulmonary regurgitation observed by echocardiogram prior to the TPVR procedure.

Note(s): Code the highest value or most severe regurgitation when a range is reported.
If 'trivial, trace, or physiologic' is documented, select 'none'.

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	91434003
Code System Name:	SNOMED CT
Short Name:	TPVREchoPVRegurg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15296 Transcatheter Pulmonary Valve Replacement Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Pulmonary Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.860

Selection	Definition	Source	Code	Code System Name
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Moderate to severe			1000142345	ACC NCDR
Severe			112000000382	ACC NCDR

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15300 Transcatheter Pulmonary Valve Replacement Echocardiogram Tricuspid Valve Regurgitation Severity

Coding Instruction: Indicate the severity of tricuspid regurgitation observed by echocardiogram prior to the TPVR procedure. Code the highest value or most severe regurgitation when a range is reported.

Note(s): If 'trivial, trace, or physiologic' is documented, select 'none'.

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	111287006
Code System Name:	SNOMED CT
Short Name:	TPVREchoTRS
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15296 Transcatheter Pulmonary Valve Replacement Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Tricuspid Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.861

Selection	Definition	Source	Code	Code System Name
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Moderate to severe			1000142345	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 15302 Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging

Coding Instruction: Indicate if an MRI was performed prior to the procedure.

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	113091000
Code System Name:	SNOMED CT
Short Name:	TPVRMRI
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15303

Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging Right Ventricular Ejection Fraction

Coding Instruction: Indicate the right ventricular ejection fraction (RVEF) obtained by MRI.

Note: If a percentage range is reported, report the center of the range (e.g., 50–55% is 52.5 reported to the next whole number is 53%). For EF measurements reported as "less than" or "greater than" code to the nearest whole number (e.g., <40% is coded as 39%, and >40% is coded as 41%). If only a descriptive value is reported (e.g. normal), enter the corresponding percentage value from the list below:

Normal = 60%

Good function = 50%

Mildly reduced = 45%

Fair function = 40%

Moderately reduced = 30%

Poor function = 25%

Severely reduced = 20%

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	250939002
Code System Name:	SNOMED CT
Short Name:	TPVRMRIRVEF
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	5 - 90 %
Valid Range:	1 - 99 %
Data Source:	User

Parent/Child Validation

Element: 16147 Right Ventricular Ejection Fraction Not Assessed with MRI
Operator: Equal
Value: No

AND

Element: 15302 Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16147

Right Ventricular Ejection Fraction Not Assessed with MRI

Coding Instruction: Indicate if the right ventricular ejection fraction was not assessed with MRI.

Target Value: N/A

Technical Specification

Code:	250939002
Code System Name:	SNOMED CT
Short Name:	RVEFNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15302 Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15305

Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging Pulmonary Regurgitant Fraction

Coding Instruction: Indicate the pulmonary regurgitant fraction obtained by MRI prior to the procedure.

Note: If a percentage range is reported, report the center of the range (e.g., 50–55% is 52.5 reported to the next whole number is 53%. For EF measurements reported as "less than" or "greater than" code to the nearest whole number (e.g., <40% is coded as 39%, and >40% is coded as 41%).

If only a descriptive value is reported (e.g. normal), enter the corresponding percentage value from the list below:

Normal = 60%

Good function = 50%

Mildly reduced = 45%

Fair function = 40%

Moderately reduced = 30%

Poor function = 25%

Severely reduced = 20%

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	399301000
Code System Name:	SNOMED CT
Short Name:	TPVRMRIPRFraction
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	5 - 90 %
Valid Range:	1 - 99 %
Data Source:	User

Parent/Child Validation

Element: 16146 Pulmonary Regurgitant Fraction Not Assessed with MRI
Operator: Equal
Value: No

AND

Element: 15302 Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16146

Pulmonary Regurgitant Fraction Not Assessed with MRI

Coding Instruction: Indicate if the pulmonary regurgitant fraction was not assessed with MRI.

Target Value: N/A

Technical Specification

Code:	112000004097
Code System Name:	ACC NCDR
Short Name:	PulmRegurgFracNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15302 Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15306

Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging Right Ventricular End-Diastolic Volume Index

Coding Instruction: Indicate the right ventricular end diastolic volume (RVEDV) index obtained by MRI in milliliters per meters squared

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	112000002282
Code System Name:	ACC NCDR
Short Name:	TPVRMRIRVEDVIndex
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	ml/m2
Default Value:	
Usual Range:	40 - 250 ml/m2
Valid Range:	1 - 400 ml/m2
Data Source:	User

Parent/Child Validation

Element: 16151 MRI Right Ventricular End-Diastolic Volume Index Not Assessed
Operator: Equal
Value: No

AND

Element: 15302 Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16151

MRI Right Ventricular End-Diastolic Volume Index Not Assessed

Coding Instruction: Indicate if the right ventricular end diastolic volume (RVEDV) index was not assessed by MRI.

Target Value: N/A

Technical Specification

Code:	250966002
Code System Name:	SNOMED CT
Short Name:	RVEDVNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15302 Transcatheter Pulmonary Valve Replacement Magnetic Resonance Imaging
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15314 — Transcatheter Pulmonary Valve Replacement Peak Gradient Across Valve or Conduit

Coding Instruction: Indicate the peak gradient across the valve or conduit obtained using hemodynamic measurements during the procedure.

Target Value: The value between start of procedure and prior to the intervention

Technical Specification

Code:	112000002290
Code System Name:	ACC NCDR
Short Name:	TPVRCathPeakGradient
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	5,2
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.10 - 100.00 mm[Hg]
Valid Range:	0.10 - 200.00 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 16163 Pre-procedure Peak Gradient Across Valve or Conduit Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16163 — Pre-procedure Peak Gradient Across Valve or Conduit Not Assessed

Coding Instruction: Indicate if the peak gradient across the valve or conduit obtained using hemodynamic measurements during the procedure was not assessed.

Target Value: N/A

Technical Specification

Code:	112000002290
Code System Name:	ACC NCDR
Short Name:	PreProcPkGradNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15315

Transcatheter Pulmonary Valve Replacement Narrowest Angiographic Valve or Conduit Diameter

Coding Instruction: Indicate the narrowest angiographic conduit or valve diameter in millimeters.

Target Value: The value between start of procedure and prior to the intervention

Technical Specification

Code:	81827009
Code System Name:	SNOMED CT
Short Name:	TPVRNarrowDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	5,2
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.10 - 100.00 mm
Valid Range:	0.10 - 200.00 mm
Data Source:	User

Parent/Child Validation

Element: 16164 Narrowest Valve or Conduit Diameter Not Assessed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16164

Narrowest Valve or Conduit Diameter Not Assessed

Coding Instruction: Indicate if the narrowest angiographic conduit or valve diameter during the procedure was not assessed.

Target Value: N/A

Technical Specification

Code:	81827009
Code System Name:	SNOMED CT
Short Name:	NarValConNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement — Parent: Procedure Information

Element: 16144 — Pulmonary Valve Type

Coding Instruction: Select the type of bioprosthetic pulmonary valve implanted.

Target Value: The value on end of current procedure

Technical Specification

Code:	442525005
Code System Name:	SNOMED CT
Short Name:	PulmValvTyp
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

TPVR Pulmonary Valve Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1110

Selection	Definition	Source	Code	Code System Name
Balloon expandable valve	The valve was expanded and deployed using a balloon catheter.		112000004095	ACC NCDR
Self expanding valve	The valve was deployed using a self-expanding stent that gradually opens to its intended size without balloon assistance.		112000004096	ACC NCDR

Element: 15318 — Transcatheter Pulmonary Valve Replacement Coronary Artery Compression Testing

Coding Instruction: Indicate if coronary compression testing was performed.

Target Value: The value on current procedure

Technical Specification

Code:	112000002291
Code System Name:	ACC NCDR
Short Name:	TPVRCorCompressTest
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16144 Pulmonary Valve Type
Operator: Equal
Value: Balloon expandable valve

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15320

Transcatheter Pulmonary Valve Replacement Coronary Artery Compression Present

Coding Instruction: Indicate if there is evidence of coronary artery compression present, as a result of coronary artery compression testing, prior to valve insertion.

Target Value: The value on current procedure

Supporting Definition: **Coronary Artery Compression**

Angiographic or echocardiographic evidence of a new, partial or complete obstruction of a coronary ostium, either by the valve prosthesis itself, the native leaflets, calcifications, or dissection, occurring during or after the procedure.

Source:

Technical Specification

Code: 112000001837
Code System Name: ACC NCDR
Short Name: TPVRCorCompressPresent
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15318 Transcatheter Pulmonary Valve Replacement Coronary Artery Compression Testing
Operator: Equal
Value: Yes

AND

Element: 16144 Pulmonary Valve Type
Operator: Equal
Value: Balloon expandable valve

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Present - 1.3.6.1.4.1.19376.1.4.1.6.5.852

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Uncertain			100012985	ACC NCDR

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 16160 Coronary Compression Findings Impact On Case

Coding Instruction: Select the outcome of the coronary artery compression testing and its impact on the procedure. This refers to whether the results of the testing influenced the decision to proceed with valve implantation or required modifications during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000002291
Code System Name:	ACC NCDR
Short Name:	CorCompFind
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15320 Transcatheter Pulmonary Valve Replacement Coronary Artery Compression Present
Operator: Equal
Value: Yes

AND

Element: 15318 Transcatheter Pulmonary Valve Replacement Coronary Artery Compression Testing
Operator: Equal
Value: Yes

AND

Element: 16144 Pulmonary Valve Type
Operator: Equal
Value: Balloon expandable valve

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

TPVR Coronary Compression Findings Impact On Case - 1.3.6.1.4.1.19376.1.4.1.6.5.1115

Selection	Definition	Source	Code	Code System Name
Valve not implanted	Coronary artery compression testing identified a risk that prevented valve implantation during the procedure.		112000004112	ACC NCDR
Implanted with technical modifications	Valve implantation proceeded, but technical modifications (e.g., repositioning the valve, altering stent deployment technique) were made based on coronary artery compression testing findings.		112000004113	ACC NCDR

Section: Transcatheter Pulmonary Valve Replacement — Parent: Procedure Information

Element: 15292 — Transcatheter Pulmonary Valve Replacement Conduit Pre-Dilation Performed

Coding Instruction: Indicate if pre-dilation of the conduit by angioplasty was performed.

Target Value: The value on current procedure

Technical Specification

Code:	71025006
Code System Name:	SNOMED CT
Short Name:	TPVRPredilationPerf
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16144 Pulmonary Valve Type
Operator: Equal
Value: Balloon expandable valve

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 15321 — Transcatheter Pulmonary Valve Replacement Conduit Pre-Dilation First Balloon Size

Coding Instruction: Indicate the manufacturer size of the first balloon used for the pre-dilation of the conduit.

Target Value: The value on current procedure

Technical Specification

Code:	112000002292
Code System Name:	ACC NCDR
Short Name:	TPVRFirstBallSize
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15292 Transcatheter Pulmonary Valve Replacement Conduit Pre-Dilation Performed
Operator: Equal
Value: Yes

AND

Element: 16144 Pulmonary Valve Type
Operator: Equal
Value: Balloon expandable valve

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Transcatheter Pulmonary Valve Replacement **Parent: Procedure Information**

Element: 15322 Transcatheter Pulmonary Valve Replacement Conduit Pre-Dilation Maximum Balloon Size

Coding Instruction: Indicate the maximum dilation balloon inflation size used for conduit preparation.

Target Value: The value on current procedure

Technical Specification

Code:	112000002293
Code System Name:	ACC NCDR
Short Name:	TPVRMaxBallSize
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15292 Transcatheter Pulmonary Valve Replacement Conduit Pre-Dilation Performed
Operator: Equal
Value: Yes

AND

Element: 16144 Pulmonary Valve Type
Operator: Equal
Value: Balloon expandable valve

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Device **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 15339 Transcatheter Pulmonary Valve Replacement Device Counter

Coding Instruction: The TPVR device counter distinguishes individual devices when multiple are used during one procedure.

Note: The software-assigned device counter should start at one and be incremented by one for each device used.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.851
Code System Name:	ACC NCDR
Short Name:	TPVRDevCounter
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	3
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 999
Data Source:	Automatic

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 15340 Transcatheter Pulmonary Valve Replacement Device ID

Coding Instruction: Indicate all devices utilized during the current pulmonary valve replacement procedure.

Note: The device that should be collected in your application are controlled by a Master File. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Vendor Instruction: Transcatheter Pulmonary Valve Replacement Device ID (15340) cannot be Null when Transcatheter Pulmonary Valve Replacement Device Counter (15339) has a value

Technical Specification

Code:	63653004
Code System Name:	SNOMED CT
Short Name:	TPVRDevID
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15339 Transcatheter Pulmonary Valve Replacement Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Device **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 16161 TPVR Device Diameter

Coding Instruction: Record the diameter of the valve implanted during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000004290
Code System Name:	ACC NCDR
Short Name:	TPVRDevDia
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,0
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	10 - 36 mm
Valid Range:	5 - 100 mm
Data Source:	User

Parent/Child Validation

Element: 15340 Transcatheter Pulmonary Valve Replacement Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 16162 Valve Stability

Coding Instruction: Indicate the stability of the valve frame. This refers to whether the valve's frame remained secure and properly positioned within the intended site.

Target Value: The value on current procedure

Technical Specification

Code:	112000004116
Code System Name:	ACC NCDR
Short Name:	ValStab
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15340 Transcatheter Pulmonary Valve Replacement Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

TPVR Valve Stability - 1.3.6.1.4.1.19376.1.4.1.6.5.1116

Selection	Definition	Source	Code	Code System Name
Stable frame	The valve's frame was stable and securely positioned post-deployment, without evidence of migration, tilt, or other instability.		112000004114	ACC NCDR
Unstable frame	The valve's frame exhibited instability, such as movement, displacement, or failure to anchor securely within the intended site		112000004115	ACC NCDR

Section: TPVR Device **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 16156 Transcatheter Pulmonary Valve Implanted in Intended Location

Coding Instruction: Indicate whether the transcatheter pulmonary valve was implanted in the intended location.

Target Value: The value on current procedure

Technical Specification

Code: 112000004097
Code System Name: ACC NCDR
Short Name: TransPulmValIntLoc
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15340 Transcatheter Pulmonary Valve Replacement Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

TPVR Self Expanding Implanted in Intended Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1112

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes - Supra-annular implant	The valve was implanted above the native or previous valve annulus (supra-annular position).		112000004105	ACC NCDR
Yes - Annular implant	The valve was implanted within the native or previous valve annulus.		112000004106	ACC NCDR

Element: 16150 Unique Device Identifier - IMPACT TPVR

Coding Instruction: Indicate the unique device identifier (UDI) of the device. Enter all characters including the parenthesis. Leave blank if the UDI is unknown or unable to be collected due to state/local privacy laws.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

The UDI identifies the specific individual device; no two devices have the same UDI. Refer to the FDA website for detailed explanation of UDIs.

The UDI is made up of five different identifiers and each identifier is preceded by a number in parentheses.

Example UDI below: Device Identifier (01), Expiration Date (17), Manufacturing date (11), Lot Number (10), and Serial Number (21)

Source:

Technical Specification

Code: 112000001973
Code System Name: ACC NCDR
Short Name: TPVRUDI
Missing Data: No Action
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: ST
Precision: 150
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15339 Transcatheter Pulmonary Valve Replacement Device Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Valve Deployed **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 15331 — Transcatheter Pulmonary Valve Replacement Transcatheter Pulmonary Valve Deployed

Coding Instruction: Indicate if a pulmonary valve was deployed.

Target Value: The value on current procedure

Technical Specification

Code:	860585001
Code System Name:	SNOMED CT
Short Name:	TPVRTPVDeployed
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 15335 — Transcatheter Pulmonary Valve Replacement Post-implant Right Ventricular Outflow Tract Peak Gradient

Coding Instruction: Indicate the post-implant right ventricular outflow tract (RVOT) peak gradient.

Target Value: The value on end of current procedure

Technical Specification

Code:	112000002299
Code System Name:	ACC NCDR
Short Name:	TPVRPeakRVOTGrad
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.1 - 100.0 mm[Hg]
Valid Range:	0.1 - 200.0 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 16152 Right Post-Implant Right Ventricular Outflow Tract Peak Gradient Not Assessed
Operator: Equal
Value: No

AND

Element: 15331 Transcatheter Pulmonary Valve Replacement Transcatheter Pulmonary Valve Deployed
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Valve Deployed **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 16152 Right Post-Implant Right Ventricular Outflow Tract Peak Gradient Not Assessed

Coding Instruction: Indicate the post-implant right ventricular outflow tract peak gradient was not assessed.

Target Value: N/A

Technical Specification

Code:	44627009
Code System Name:	SNOMED CT
Short Name:	RVOutTracPeakGradNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15331 Transcatheter Pulmonary Valve Replacement Transcatheter Pulmonary Valve Deployed
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Valve Deployed **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 15336 Post-Implant Pulmonary Valve Central Regurgitation

Coding Instruction: Indicate the degree of post-implant pulmonary valve regurgitation.

Note(s): Code the highest value or most severe regurgitation when a range is reported. If 'trivial, trace, or physiologic' is documented, select 'none'

Target Value: The value on end of current procedure

Technical Specification

Code:	40445007
Code System Name:	SNOMED CT
Short Name:	PostImpPulmValCentReg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15331 Transcatheter Pulmonary Valve Replacement Transcatheter Pulmonary Valve Deployed
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Pulmonary Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.860

Selection	Definition	Source	Code	Code System Name
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Moderate to severe			1000142345	ACC NCDR
Severe			112000000382	ACC NCDR

Section: TPVR Valve Deployed **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 16159 Post-Implant Pulmonary Valve Perivalvular Regurgitation

Coding Instruction: Indicate the severity of post-implant pulmonary valve perivalvular regurgitation.

Note(s): Code the highest value or most severe regurgitation when a range is reported. If 'trivial, trace, or physiologic' is documented, select 'none'.

Target Value: The last value between the implant and the end of current procedure

Supporting Definition: **TPVR Perivalvular Pulmonary Regurgitation**

A leak that occurs between a prosthetic heart valve and the surrounding tissue.

Source:

Technical Specification

Code:	112000004111
Code System Name:	ACC NCDR
Short Name:	PostImpPulmValParaReg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15331 Transcatheter Pulmonary Valve Replacement Transcatheter Pulmonary Valve Deployed
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

TPVR Perivalvular Pulmonary Regurgitation - 1.3.6.1.4.1.19376.1.4.1.6.5.1114

Selection	Definition	Source	Code	Code System Name
None			260413007	SNOMED CT
Mild			255604002	SNOMED CT
Moderate			6736007	SNOMED CT
Moderate to severe			100001045	ACC NCDR
Severe			24484000	SNOMED CT

Section: TPVR Valve Deployed **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 15338 Transcatheter Pulmonary Valve Replacement Reason Valve Not Deployed

Coding Instruction: Indicate the reason the pulmonary valve was not implanted.

Note: When multiple reasons are documented for why the valve was not deployed, code based off of priority.

Coronary artery compression risk
Complication before deployment
Device/Delivery system dysfunction/complication
Valve could not be advanced to implant location
No treatable landing zone
Pre-stent implanted, electively staged
Other

Target Value: The value on current procedure

Technical Specification

Code:	112000002113
Code System Name:	ACC NCDR
Short Name:	TPVRNotDeployedReason
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15331 Transcatheter Pulmonary Valve Replacement Transcatheter Pulmonary Valve Deployed
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Reason for Valve not Deployed - 1.3.6.1.4.1.19376.1.4.1.6.5.853

Selection	Definition	Source	Code	Code System Name
Coronary artery compression risk	Valve deployment was not performed due to the risk of compressing the coronary arteries as identified during the procedure.		112000001837	ACC NCDR
Valve could not be advanced to implant location	The valve delivery system was unable to navigate to the intended implant site.		112000002302	ACC NCDR
Complication before deployment	The procedure was halted due to an intra-procedural complication that occurred before the valve could be deployed.		112000002303	ACC NCDR
Pre-stent implanted, electively staged TPVR at later date	A pre-stent was implanted during the procedure, with the plan to perform the valve replacement at a subsequent procedure.		112000002304	ACC NCDR
No treatable landing zone	Valve implantation was not possible because an adequate anatomical landing zone was not available.		112000002305	ACC NCDR
Other			100000351	ACC NCDR
Device/delivery system dysfunction/complication	Deployment was not possible due to a malfunction or complication with the valve or its delivery system.		112000004094	ACC NCDR

Section: TPVR Valve Deployed **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 15330 Transcatheter Pulmonary Valve Replacement Delivery Balloon Size

Coding Instruction: Indicate the size of the balloon used to deliver the pulmonary valve.

Code based on the manufacturer size. If more than one valve is deployed, code the size that delivered the final valve.

Target Value: The value on current procedure

Technical Specification

Code:	112000002296
Code System Name:	ACC NCDR
Short Name:	TPVRDeliBallSize
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	3,1
Selection Type:	Single
Unit of Measure:	mm
Default Value:	
Usual Range:	0.1 - 25.0 mm
Valid Range:	0.1 - 50.0 mm
Data Source:	User

Parent/Child Validation

Element: 15331 Transcatheter Pulmonary Valve Replacement Transcatheter Pulmonary Valve Deployed
Operator: Equal
Value: Yes

AND

Element: 16144 Pulmonary Valve Type
Operator: Equal
Value: Balloon expandable valve

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Imaging **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 15342 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram

Coding Instruction: Indicate if an echocardiogram was performed post pulmonary valve placement.

Target Value: The highest value between end of current procedure and discharge

Technical Specification

Code:	112000002308
Code System Name:	ACC NCDR
Short Name:	TPVRPostEcho
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 15344 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram Maximum Gradient Across Valve/Conduit

Coding Instruction: Indicate the maximum gradient across the valve or conduit.

Target Value: The highest value between end of current procedure and discharge

Technical Specification

Code:	112000002310
Code System Name:	ACC NCDR
Short Name:	TPVRPostEchoMaxGrad
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	5,2
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.10 - 100.00 mm[Hg]
Valid Range:	0.10 - 200.00 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 16149 Post-Procedure Echocardiogram Maximum Gradient Across Valve/Conduit Not Assessed
Operator: Equal
Value: No

AND

Element: 15342 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Imaging **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 16149 Post-Procedure Echocardiogram Maximum Gradient Across Valve/Conduit Not Assessed

Coding Instruction: Indicate if the maximum gradient across the valve or conduit was not assessed.

Target Value: N/A

Technical Specification

Code:	112000002281
Code System Name:	ACC NCDR
Short Name:	MaxGradAcrosNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15342 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Element: 15343 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram Mean Gradient Across Valve/Conduit

Coding Instruction: Indicate the mean gradient across the pulmonary valve or conduit.

Target Value: The highest value between end of current procedure and discharge

Technical Specification

Code:	112000002309
Code System Name:	ACC NCDR
Short Name:	TPVRPostEchoMeanGrad
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	5,2
Selection Type:	Single
Unit of Measure:	mm[Hg]
Default Value:	
Usual Range:	0.10 - 100.00 mm[Hg]
Valid Range:	0.10 - 200.00 mm[Hg]
Data Source:	User

Parent/Child Validation

Element: 16148 Post-Procedure Echocardiogram Mean Gradient Across Valve/Conduit Not Assessed
Operator: Equal
Value: No

AND

Element: 15342 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Imaging **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 16148 Post-Procedure Echocardiogram Mean Gradient Across Valve/Conduit Not Assessed

Coding Instruction: Indicate if the mean gradient across the pulmonary valve or conduit was not assessed.

Target Value: N/A

Technical Specification

Code:	112000002309
Code System Name:	ACC NCDR
Short Name:	MeGradAcrosNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15342 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Imaging **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 15345 Post-Procedure Echocardiogram Pulmonary Valve Central Regurgitation

Coding Instruction: Indicate the severity of post-procedure pulmonary valve central regurgitation.

Note(s): Code the highest value or most severe regurgitation when a range is reported. If 'trivial, trace, or physiologic' is documented, select 'none'.

Target Value: The highest value between end of current procedure and discharge

Technical Specification

Code:	40445007
Code System Name:	SNOMED CT
Short Name:	PostProcEchoPulmValCentReg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16153 Post-Procedure Echocardiogram Pulmonary Valve Regurgitation Not Assessed
Operator: Equal
Value: No

AND

Element: 15342 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Pulmonary Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.860

Selection	Definition	Source	Code	Code System Name
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Moderate to severe			1000142345	ACC NCDR
Severe			112000000382	ACC NCDR

Section: TPVR Imaging **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 16153 Post-Procedure Echocardiogram Pulmonary Valve Regurgitation Not Assessed

Coding Instruction: Indicate if the degree of post-implant pulmonary valve regurgitation was not assessed.

Target Value: N/A

Technical Specification

Code:	91434003
Code System Name:	SNOMED CT
Short Name:	PulmRegurgNotAss
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15342 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: TPVR Imaging **Parent: Transcatheter Pulmonary Valve Replacement**

Element: 16219 Perivalvular Regurgitation

Coding Instruction: Indicate the severity of perivalvular regurgitation and whether it was present after the valve deployed.

Note(s): Code the highest value or most severe regurgitation when a range is reported. If 'trivial, trace, or physiologic' is documented, select 'none'.

Target Value: The highest value between end of current procedure and discharge

Technical Specification

Code:	112000004234
Code System Name:	ACC NCDR
Short Name:	PeriValRegurg
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15342 Transcatheter Pulmonary Valve Replacement Post-Procedure Echocardiogram
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

TPVR Perivalvular Pulmonary Regurgitation - 1.3.6.1.4.1.19376.1.4.1.6.5.1114

Selection	Definition	Source	Code	Code System Name
None			260413007	SNOMED CT
Mild			255604002	SNOMED CT
Moderate			6736007	SNOMED CT
Moderate to severe			100001045	ACC NCDR
Severe			24484000	SNOMED CT

Section: Non-module Intervention **Parent: Procedure Information**

Element: 16216 Non-Module Intervention Counter

Coding Instruction: Non-module intervention counter distinguishes individual procedures when multiple are entered.

Target Value: N/A

Technical Specification

Code:	112000004194
Code System Name:	ACC NCDR
Short Name:	NonModIntCount
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)

Section: Non-module Intervention **Parent: Procedure Information**

Element: 15067 Specific Procedure ID

Coding Instruction: Indicate all applicable procedures which were performed in addition to the IMPACT primary procedures (data element 15081) during the cath lab visit.

Note(s):

The additional procedures that should be collected in your application are controlled by a Master File. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Technical Specification

Code:	100013063
Code System Name:	ACC NCDR
Short Name:	SpecificProcID
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16216 Non-Module Intervention Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Procedure Master - 1.3.6.1.4.1.19376.1.4.1.6.5.892

Selection	Definition	Source	Code	Code System Name
Adjunctive therapy - Adenosine			112000002457	ACC NCDR
Adjunctive therapy - Beta blockade			112000002458	ACC NCDR
Adjunctive therapy - Rapid pacing			112000002459	ACC NCDR
Adjunctive therapy - Rapid pacing - Endocardial			112000002460	ACC NCDR
Adjunctive therapy - Rapid pacing - Epicardial			112000002461	ACC NCDR
Balloon dilation - Conduit - Sano modification - RV to PA valveless conduit			112000002462	ACC NCDR
Balloon dilation - Conduit - Sano modification-with valve - RV to PA valved conduit			112000002463	ACC NCDR
Balloon dilation - Conduit - LA to LV			112000002464	ACC NCDR
Balloon dilation - Conduit - LV to aorta			112000002465	ACC NCDR
Balloon dilation - Conduit - LV to PA			112000002466	ACC NCDR
Balloon dilation - Conduit - Other			112000002467	ACC NCDR
Balloon dilation - Conduit - RA to PA			112000002468	ACC NCDR
Balloon dilation - Conduit - RA to PA-pulmonary trunk			112000002469	ACC NCDR
Balloon dilation - Conduit - RA to RV			112000002470	ACC NCDR
Balloon dilation - Conduit - RV to aorta			112000002471	ACC NCDR
Balloon dilation - Conduit - RV to PA			112000002472	ACC NCDR
Balloon dilation - Conduit - Shunt - systemic-to-pulmonary			112000002473	ACC NCDR
Balloon dilation - Intracardiac-septum - Atrial baffle S-P atrial switch			112000002474	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information		
Balloon dilation - Intracardiac-septum - Atrial septum - Static balloon dilation without pullback		112000002475	ACC NCDR
Balloon dilation - Intracardiac-septum - Fontan Baffle		112000002476	ACC NCDR
Balloon dilation - Intracardiac-septum - Fontan fenestration		112000002477	ACC NCDR
Balloon dilation - Intracardiac-septum - Ventricular septum		112000002478	ACC NCDR
Balloon dilation - Pulmonary artery - Central - Proximal left and-or proximal right pulmonary artery including the pulmonary artery bifurcation		112000002479	ACC NCDR
Balloon dilation - Pulmonary artery - Main - Trunk		112000002480	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral		112000002481	ACC NCDR
Balloon dilation - Pulmonary artery - Proximal		112000002482	ACC NCDR
Balloon dilation - Pulmonary vein - Left - Left pulmonary vein		112000002483	ACC NCDR
Balloon dilation - Pulmonary vein - Left lower - Left lower pulmonary vein		112000002484	ACC NCDR
Balloon dilation - Pulmonary vein - Left upper - Left upper pulmonary vein		112000002485	ACC NCDR
Balloon dilation - Pulmonary vein - Lingula - Lingular pulmonary vein		112000002486	ACC NCDR
Balloon dilation - Pulmonary vein - Pulmonary venous confluence		112000002487	ACC NCDR
Balloon dilation - Pulmonary vein - Pulmonary venous confluence with left atrium		112000002488	ACC NCDR
Balloon dilation - Pulmonary vein - Right - Right pulmonary vein		112000002489	ACC NCDR
Balloon dilation - Pulmonary vein - Right lower - Right lower pulmonary vein		112000002490	ACC NCDR
Balloon dilation - Pulmonary vein - Right middle - Right middle pulmonary vein		112000002491	ACC NCDR
Balloon dilation - Pulmonary vein - Right upper - Right upper pulmonary vein		112000002492	ACC NCDR
Balloon dilation - Systemic artery - Aorta		112000002493	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta		112000002494	ACC NCDR
Balloon dilation - Systemic vein - Caval vein		112000002495	ACC NCDR
Balloon dilation - Systemic vein - Non-Caval vein		112000002496	ACC NCDR
Balloon dilation - Systemic vein		112000002497	ACC NCDR
Balloon dilation - Systemic vein - Caval vein - Superior vena cava		112000002498	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar		112000002499	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Left lingula PA		112000002500	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Left lower PA		112000002501	ACC NCDR
Balloon dilation - Pulmonary		112000002502	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information		
artery - Peripheral - Lobar - Left upper PA			
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Right lower PA		112000002503	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Right middle PA		112000002504	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Lobar - Right upper PA		112000002505	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Sublobar equal Segmental		112000002506	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Sublobar equal Segmental - Left		112000002507	ACC NCDR
Balloon dilation - Pulmonary artery - Peripheral - Sublobar equal Segmental - Right		112000002508	ACC NCDR
Balloon dilation - Pulmonary artery - Proximal - Left		112000002509	ACC NCDR
Balloon dilation - Pulmonary artery - Proximal - Right		112000002510	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Abdominal aorta - Coarctation		112000002511	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Abdominal aorta - Native - Primary coarctation		112000002512	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Abdominal aorta - Recurrent coarctation		112000002513	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Ascending aorta		112000002514	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Coarctation - Native - Primary coarctation		112000002515	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Coarctation - Recurrent coarctation		112000002516	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Descending thoracic aorta		112000002517	ACC NCDR
Balloon dilation - Systemic artery - Aorta - Thoracic aorta - Transverse arch		112000002518	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Coronary artery		112000002519	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Femoral artery		112000002520	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Iliac artery		112000002521	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Innominate artery		112000002522	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Renal artery		112000002523	ACC NCDR
Balloon dilation - Systemic artery - Systemic artery other than aorta - Subclavian artery		112000002524	ACC NCDR
Balloon dilation - Systemic vein - Non-Caval vein - Femoral vein		112000002525	ACC NCDR
Balloon dilation - Systemic vein		112000002526	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information		
- Non-Caval vein - Iliac vein			
Balloon dilation - Systemic vein - Non-Caval vein - Innominate - Brachiocephalic		112000002527	ACC NCDR
Balloon dilation - Systemic vein - Non-Caval vein - Subclavian vein		112000002528	ACC NCDR
Balloon valvotomy - Aortic valve		112000002529	ACC NCDR
Balloon valvotomy - Mitral valve		112000002530	ACC NCDR
Balloon valvotomy - Pulmonic valve		112000002531	ACC NCDR
Balloon valvotomy - Tricuspid valve		112000002532	ACC NCDR
Biopsy - RV not S-P heart transplant		112000002533	ACC NCDR
Biopsy - RV post heart transplant		112000002534	ACC NCDR
Biopsy - Site not RV		112000002535	ACC NCDR
Cardiovascular catheterization procedure - Therapeutic - Perforation - establishing interchamber and-or intervessel communication - Systemic artery - Systemic artery other than aorta - Iliac artery		112000002536	ACC NCDR
Coil implantation - Atrial septal defect - ASD		112000002537	ACC NCDR
Coil implantation - Conduit - Sano modification - RV to PA valveless conduit		112000002538	ACC NCDR
Coil implantation - Conduit - Sano modification-with valve - RV to PA valved conduit		112000002539	ACC NCDR
Coil implantation - Conduit - LA to LV		112000002540	ACC NCDR
Coil implantation - Conduit - LV to aorta		112000002541	ACC NCDR
Coil implantation - Conduit - LV to PA		112000002542	ACC NCDR
Coil implantation - Conduit - Other		112000002543	ACC NCDR
Coil implantation - Conduit - RA to PA		112000002544	ACC NCDR
Coil implantation - Conduit - RA to PA-pulmonary trunk		112000002545	ACC NCDR
Coil implantation - Conduit - RA to RV		112000002546	ACC NCDR
Coil implantation - Conduit - RV to aorta		112000002547	ACC NCDR
Coil implantation - Conduit - RV to PA		112000002548	ACC NCDR
Coil implantation - Conduit - Shunt - systemic-to-pulmonary		112000002549	ACC NCDR
Coil implantation - Coronary artery fistula		112000002550	ACC NCDR
Coil implantation - Fontan fenestration		112000002551	ACC NCDR
Coil implantation - Intracardiac baffle leak		112000002552	ACC NCDR
Coil implantation - Patent ductus arteriosus - PDA		112000002553	ACC NCDR
Coil implantation - Perivalvar leak		112000002554	ACC NCDR
Coil implantation - Pulmonary arteriovenous malformation		112000002555	ACC NCDR
Coil implantation - Systemic arteriovenous malformation		112000002556	ACC NCDR
Coil implantation - Systemic artery to pulmonary artery		112000002557	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information		
collateral			
Coil implantation - Systemic artery - Aorta		112000002558	ACC NCDR
Coil implantation - Systemic artery - Systemic artery other than aorta		112000002559	ACC NCDR
Coil implantation - Systemic vein to pulmonary vein collateral		112000002560	ACC NCDR
Coil implantation - Systemic vein - Caval vein		112000002561	ACC NCDR
Coil implantation - Systemic vein - Non-caval vein		112000002562	ACC NCDR
Coil implantation - Coil implantation		112000002563	ACC NCDR
Coil implantation - Systemic artery		112000002564	ACC NCDR
Coil implantation - Systemic vein		112000002565	ACC NCDR
Data - Hemodynamic data obtained		112000002566	ACC NCDR
Data - Angiographic data obtained		112000002567	ACC NCDR
Device implantation - Aortopulmonary window - AP window		112000002568	ACC NCDR
Device implantation - Atrial septal defect - ASD		112000002569	ACC NCDR
Device implantation - Conduit - Sano modification - RV to PA valveless conduit		112000002570	ACC NCDR
Device implantation - Conduit - Sano modification-with valve - RV to PA valved conduit		112000002571	ACC NCDR
Device implantation - Conduit - LA to LV		112000002572	ACC NCDR
Device implantation - Conduit - LV to aorta		112000002573	ACC NCDR
Device implantation - Conduit - LV to PA		112000002574	ACC NCDR
Device implantation - Conduit - Other		112000002575	ACC NCDR
Device implantation - Conduit - RA to PA		112000002576	ACC NCDR
Device implantation - Conduit - RA to PA-pulmonary trunk		112000002577	ACC NCDR
Device implantation - Conduit - RA to RV		112000002578	ACC NCDR
Device implantation - Conduit - RV to aorta		112000002579	ACC NCDR
Device implantation - Conduit - RV to PA		112000002580	ACC NCDR
Device implantation - Conduit - Shunt - systemic-to-pulmonary		112000002581	ACC NCDR
Device implantation - Coronary artery fistula		112000002582	ACC NCDR
Device implantation - Fontan fenestration		112000002583	ACC NCDR
Device implantation - Intracardiac baffle leak		112000002584	ACC NCDR
Device implantation - Patent ductus arteriosus - PDA		112000002585	ACC NCDR
Device implantation - Patent Foramen Ovale - PFO		112000002586	ACC NCDR
Device implantation - Perivalvar leak		112000002587	ACC NCDR
Device implantation - Pulmonary arteriovenous malformation		112000002588	ACC NCDR
Device implantation - Pulmonary artery		112000002589	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information		
Device implantation - Systemic arteriovenous malformation		112000002590	ACC NCDR
Device implantation - Systemic artery to pulmonary artery collateral		112000002591	ACC NCDR
Device implantation - Systemic artery - Aorta		112000002592	ACC NCDR
Device implantation - Systemic artery - Systemic artery other than aorta		112000002593	ACC NCDR
Device implantation - Systemic vein to pulmonary vein collateral		112000002594	ACC NCDR
Device implantation - Systemic vein - Caval vein		112000002595	ACC NCDR
Device implantation - Systemic vein - Caval vein - Superior vena cava - Right		112000002596	ACC NCDR
Device implantation - Systemic vein - Non-Caval vein		112000002597	ACC NCDR
Device implantation - Ventricular septal defect - VSD		112000002598	ACC NCDR
Device implantation - Conduit		112000002599	ACC NCDR
Device implantation - Systemic artery		112000002600	ACC NCDR
Device implantation - Systemic vein		112000002601	ACC NCDR
Device implantation - Systemic vein - Caval vein - Inferior vena cava		112000002602	ACC NCDR
Device implantation - Systemic vein - Caval vein - Superior vena cava		112000002603	ACC NCDR
Diagnostic - Transluminal test occlusion		112000002604	ACC NCDR
Electrophysiology alteration - Atrial stimulation		112000002605	ACC NCDR
Electrophysiology alteration - Ventricular stimulation		112000002606	ACC NCDR
Hemodynamic alteration - Oxygen-nitric test		112000002607	ACC NCDR
Hemodynamic alteration - Inotropy test		112000002608	ACC NCDR
Hemodynamic alteration - Fluid bolus challenge		112000002609	ACC NCDR
Hybrid Approach - Transcardiac balloon dilation		112000002610	ACC NCDR
Hybrid Approach - Transcardiac transcatheter device placement		112000002611	ACC NCDR
Hybrid Approach Stage 1 - Application of RPA and LPA bands		112000002612	ACC NCDR
Hybrid Approach Stage 1 - Stent placement in arterial duct - PDA		112000002613	ACC NCDR
Hybrid Approach Stage 1 - Stent placement in arterial duct - PDA plus application of RPA and LPA bands		112000002614	ACC NCDR
Hybrid approach Stage 2 - Aortopulmonary amalgamation plus Superior Cavopulmonary anastomosis- es plus PA Debanding plus Aortic arch repair - Norwood Stage 1 plus Superior Cavopulmonary anastomosis- es plus PA Debanding		112000002615	ACC NCDR
Hybrid approach Stage 2 - Aortopulmonary amalgamation plus Superior Cavopulmonary		112000002616	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information		
anastomosis- es plus PA Debanding + Without aortic arch repair			
Intravascular foreign body removal - Intravascular foreign body removal		112000002617	ACC NCDR
Other invasive procedures-interventional techniques - Pericardiocentesis - elective		112000002618	ACC NCDR
Other invasive procedures-interventional techniques - Pericardiocentesis - emergent		112000002619	ACC NCDR
Other invasive procedures-interventional techniques - Pleuracentesis - elective		112000002620	ACC NCDR
Other invasive procedures-interventional techniques - Pleuracentesis - emergent		112000002621	ACC NCDR
Other invasive procedures-interventional techniques - Snare foreign body		112000002622	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Atretic aortic valve		112000002623	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Atretic pulmonary valve		112000002624	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Atrial septum		112000002625	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - Sano modification - RV to PA valveless conduit		112000002626	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - Sano modification-with valve - RV to PA valved conduit		112000002627	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - LA to LV		112000002628	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - LV to aorta		112000002629	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - LV to PA		112000002630	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - Other		112000002631	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - RA to PA		112000002632	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - RA to PA-pulmonary trunk		112000002633	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - RA to RV		112000002634	ACC NCDR
Perforation - establishing		112000002635	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information		
interchamber and-or intervessel communication - Conduit - RV to aorta			
Perforation - establishing interchamber and-or intervessel communication - Conduit - RV to PA		112000002636	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Conduit - Shunt - systemic-to-pulmonary		112000002637	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Fontan Baffle		112000002638	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic artery - Aorta		112000002639	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic artery - Systemic artery other than aorta		112000002640	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Caval vein		112000002641	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Non-Caval vein		112000002642	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Ventricular septum		112000002643	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Perforation - establishing interchamber and-or intervessel communication		112000002644	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic artery		112000002645	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic artery - Systemic artery other than aorta - Femoral artery		112000002646	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein		112000002647	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Non-Caval vein - Femoral vein		112000002648	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Non-Caval vein - Iliac vein		112000002649	ACC NCDR
Perforation - establishing interchamber and-or intervessel communication - Systemic vein - Caval vein - Inferior vena cava - Systemic vein - Caval vein - Inferior vena cava		112000002650	ACC NCDR
Perforation - establishing		112000002651	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information	
interchamber and-or intervessel communication - Systemic vein - Caval vein - Superior vena cava - Systemic vein - Caval vein - Superior vena cava		
Septostomy - Balloon atrial septostomy by pullback - Rashkind - BAS	112000002652	ACC NCDR
Septostomy - Blade atrial septostomy	112000002653	ACC NCDR
Septostomy - Septostomy	112000002654	ACC NCDR
Stent insertion - Conduit - Sano modification - RV to PA valveless conduit	112000002655	ACC NCDR
Stent insertion - Conduit - Sano modification-with valve - RV to PA valved conduit	112000002656	ACC NCDR
Stent insertion - Conduit - LA to LV	112000002657	ACC NCDR
Stent insertion - Conduit - LV to aorta	112000002658	ACC NCDR
Stent insertion - Conduit - LV to PA	112000002659	ACC NCDR
Stent insertion - Conduit - Other	112000002660	ACC NCDR
Stent insertion - Conduit - RA to PA	112000002661	ACC NCDR
Stent insertion - Conduit - RA to PA-pulmonary trunk	112000002662	ACC NCDR
Stent insertion - Conduit - RA to RV	112000002663	ACC NCDR
Stent insertion - Conduit - RV to aorta	112000002664	ACC NCDR
Stent insertion - Conduit - RV to PA	112000002665	ACC NCDR
Stent insertion - Conduit - Shunt - systemic-to-pulmonary	112000002666	ACC NCDR
Stent insertion - Intracardiac-septum - Atrial baffle S-P atrial switch	112000002667	ACC NCDR
Stent insertion - Intracardiac-septum - Atrial septum	112000002668	ACC NCDR
Stent insertion - Intracardiac-septum - Fontan Baffle	112000002669	ACC NCDR
Stent insertion - Intracardiac-septum - Fontan fenestration	112000002670	ACC NCDR
Stent insertion - Intracardiac-septum - Ventricular septum	112000002671	ACC NCDR
Stent insertion - PDA	112000002672	ACC NCDR
Stent insertion - Pulmonary artery - Central - Proximal left and-or proximal right pulmonary artery including the pulmonary artery bifurcation	112000002673	ACC NCDR
Stent insertion - Pulmonary artery - Main - Trunk	112000002674	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral	112000002675	ACC NCDR
Stent insertion - Pulmonary artery - Proximal	112000002676	ACC NCDR
Stent insertion - Pulmonary vein - Left - Left pulmonary vein	112000002677	ACC NCDR
Stent insertion - Pulmonary vein - Left lower - Left lower pulmonary vein	112000002678	ACC NCDR
Stent insertion - Pulmonary vein - Left upper - Left upper pulmonary vein	112000002679	ACC NCDR
Stent insertion - Pulmonary vein - Lingula - Lingular	112000002680	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information	
pulmonary vein		
Stent insertion - Pulmonary vein - Pulmonary venous confluence	112000002681	ACC NCDR
Stent insertion - Pulmonary vein - Pulmonary venous confluence with left atrium	112000002682	ACC NCDR
Stent insertion - Pulmonary vein - Right - Right pulmonary vein	112000002683	ACC NCDR
Stent insertion - Pulmonary vein - Right lower - Right lower pulmonary vein	112000002684	ACC NCDR
Stent insertion - Pulmonary vein - Right middle - Right middle pulmonary vein	112000002685	ACC NCDR
Stent insertion - Pulmonary vein - Right upper - Right upper pulmonary vein	112000002686	ACC NCDR
Stent insertion - Systemic artery - Aorta	112000002687	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta	112000002688	ACC NCDR
Stent insertion - Systemic vein - Caval vein	112000002689	ACC NCDR
Stent insertion - Systemic vein - Non-Caval vein	112000002690	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Lobar	112000002691	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Lobar - Left	112000002692	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Lobar - Right	112000002693	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Sublobar equal Segmental	112000002694	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Sublobar equal Segmental - Left	112000002695	ACC NCDR
Stent insertion - Pulmonary artery - Peripheral - Sublobar equal Segmental - Right	112000002696	ACC NCDR
Stent insertion - Pulmonary artery - Proximal - Left	112000002697	ACC NCDR
Stent insertion - Pulmonary artery - Proximal - Right	112000002698	ACC NCDR
Stent insertion - Systemic vein - Caval vein - Superior vena cava	112000002699	ACC NCDR
Stent insertion - Systemic artery - Aorta - Abdominal aorta	112000002700	ACC NCDR
Stent insertion - Systemic artery - Aorta - Abdominal aorta - Coarctation	112000002701	ACC NCDR
Stent insertion - Systemic artery - Aorta - Abdominal aorta - Native - Primary coarctation	112000002702	ACC NCDR
Stent insertion - Systemic artery - Aorta - Abdominal aorta - Recurrent coarctation	112000002703	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta	112000002704	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Ascending aorta	112000002705	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Coarctation - Native - Primary	112000002706	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information	
coarctation		
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Coarctation - Recurrent coarctation	112000002707	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Descending thoracic aorta	112000002708	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracic aorta - Transverse arch	112000002709	ACC NCDR
Stent insertion - Systemic artery - Aorta - Thoracoabdominal aorta	112000002710	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Coronary artery	112000002711	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Femoral artery	112000002712	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Iliac artery	112000002713	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Renal artery	112000002714	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Subclavian artery	112000002715	ACC NCDR
Stent insertion - Systemic artery - Systemic artery other than aorta - Systemic pulmonary vessel connection	112000002716	ACC NCDR
Stent insertion - Transcatheter implantation of valve	112000002717	ACC NCDR
Stent re-dilation - Conduit - Sano modification - RV to PA valveless conduit	112000002718	ACC NCDR
Stent re-dilation - Conduit - Sano modification-with valve - RV to PA valved conduit	112000002719	ACC NCDR
Stent re-dilation - Conduit - LA to LV	112000002720	ACC NCDR
Stent re-dilation - Conduit - LV to aorta	112000002721	ACC NCDR
Stent re-dilation - Conduit - LV to PA	112000002722	ACC NCDR
Stent re-dilation - Conduit - Other	112000002723	ACC NCDR
Stent re-dilation - Conduit - RA to PA	112000002724	ACC NCDR
Stent re-dilation - Conduit - RA to PA-pulmonary trunk	112000002725	ACC NCDR
Stent re-dilation - Conduit - RA to RV	112000002726	ACC NCDR
Stent re-dilation - Conduit - RV to aorta	112000002727	ACC NCDR
Stent re-dilation - Conduit - RV to PA	112000002728	ACC NCDR
Stent re-dilation - Conduit - Shunt - systemic-to-pulmonary	112000002729	ACC NCDR
Stent re-dilation - Intracardiac-septum - Atrial baffle S-P atrial switch	112000002730	ACC NCDR
Stent re-dilation - Intracardiac-septum - Atrial septum	112000002731	ACC NCDR
Stent re-dilation - Intracardiac-septum - Fontan Baffle	112000002732	ACC NCDR
Stent re-dilation - Intracardiac-septum - Fontan fenestration	112000002733	ACC NCDR
Stent re-dilation - Intracardiac-septum - Ventricular septum	112000002734	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information		
Stent re-dilation - PDA		112000002735	ACC NCDR
Stent re-dilation - Pulmonary artery - Central - Proximal left and-or proximal right pulmonary artery including the pulmonary artery bifurcation		112000002736	ACC NCDR
Stent re-dilation - Pulmonary artery - Main - Trunk		112000002737	ACC NCDR
Stent re-dilation - Pulmonary artery - Peripheral		112000002738	ACC NCDR
Stent re-dilation - Pulmonary artery - Proximal		112000002739	ACC NCDR
Stent re-dilation - Pulmonary vein - Left - Left pulmonary vein		112000002740	ACC NCDR
Stent re-dilation - Pulmonary vein - Left lower - Left lower pulmonary vein		112000002741	ACC NCDR
Stent re-dilation - Pulmonary vein - Left upper - Left upper pulmonary vein		112000002742	ACC NCDR
Stent re-dilation - Pulmonary vein - Lingula - Lingular pulmonary vein		112000002743	ACC NCDR
Stent re-dilation - Pulmonary vein - Pulmonary venous confluence		112000002744	ACC NCDR
Stent re-dilation - Pulmonary vein - Pulmonary venous confluence with left atrium		112000002745	ACC NCDR
Stent re-dilation - Pulmonary vein - Right - Right pulmonary vein		112000002746	ACC NCDR
Stent re-dilation - Pulmonary vein - Right lower - Right lower pulmonary vein		112000002747	ACC NCDR
Stent re-dilation - Pulmonary vein - Right middle - Right middle pulmonary vein		112000002748	ACC NCDR
Stent re-dilation - Pulmonary vein - Right upper - Right upper pulmonary vein		112000002749	ACC NCDR
Stent re-dilation - Systemic artery - Aorta		112000002750	ACC NCDR
Stent re-dilation - Systemic artery - Systemic artery other than aorta		112000002751	ACC NCDR
Stent re-dilation - Systemic vein - Caval vein		112000002752	ACC NCDR
Stent re-dilation - Systemic vein - Non-Caval vein		112000002753	ACC NCDR
Transcatheter Fontan completion - Completion of total cavopulmonary connection - TCPC using transcatheter covered stent		112000002754	ACC NCDR
Transcatheter implantation of valve - Not systemic or pulmonary outflow		112000002755	ACC NCDR
Transcatheter implantation of valve - Pulmonary outflow position		112000002756	ACC NCDR
Transcatheter implantation of valve - Systemic outflow position		112000002757	ACC NCDR
Transcatheter implantation of valve - pulmonary ventricular inflow position		112000002758	ACC NCDR
Transcatheter implantation of valve - Systemic ventricular inflow position		112000002759	ACC NCDR
Transluminal test occlusion - Conduit - Sano modification -		112000002760	ACC NCDR

Section: Non-module Intervention	Parent: Procedure Information	
RV to PA valveless conduit		
Transluminal test occlusion - Conduit - Sano modification- with valve - RV to PA valved conduit	112000002761	ACC NCDR
Transluminal test occlusion - Conduit - LA to LV	112000002762	ACC NCDR
Transluminal test occlusion - Conduit - LV to aorta	112000002763	ACC NCDR
Transluminal test occlusion - Conduit - LV to PA	112000002764	ACC NCDR
Transluminal test occlusion - Conduit - Other	112000002765	ACC NCDR
Transluminal test occlusion - Conduit - RA to PA	112000002766	ACC NCDR
Transluminal test occlusion - Conduit - RA to RV	112000002767	ACC NCDR
Transluminal test occlusion - Conduit - RV to aorta	112000002768	ACC NCDR
Transluminal test occlusion - Conduit - RV to PA	112000002769	ACC NCDR
Transluminal test occlusion - Conduit - Shunt - systemic-to-pulmonary	112000002770	ACC NCDR
Transluminal test occlusion - Fontan fenestration	112000002771	ACC NCDR
Transluminal test occlusion - Interatrial communication	112000002772	ACC NCDR
Transluminal test occlusion - Systemic artery - Aorta	112000002773	ACC NCDR
Transluminal test occlusion - Systemic artery - Systemic artery other than aorta	112000002774	ACC NCDR
Transluminal test occlusion - Systemic vein - Caval vein	112000002775	ACC NCDR
Transluminal test occlusion - Systemic vein - Non-Caval vein	112000002776	ACC NCDR

Section: Non-module Intervention Device **Parent: Non-module Intervention**

Element: 16287 Non-Module Intervention Device Counter

Coding Instruction: The non-module intervention device counter distinguishes individual devices when multiple are used during one procedure.

Target Value: N/A

Technical Specification

Code: 2.16.840.1.113883.3.3478.4.851
Code System Name: ACC NCDR
Short Name: NonModIntDevCount
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CTR
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: Automatic

Parent/Child Validation

Element: 15067 Specific Procedure ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15937 Device Used Non-Module Intervention

Coding Instruction: Indicate the device(s) utilized during the current interventional catheterization procedure.

Note(s): Code all devices used during the procedure.

The devices that should be collected in your application are controlled by a Master File. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Vendor Instruction: Device Used Non-Module Intervention (15937) cannot be Null when Non-Module Intervention Device Counter (16287) has a value

Technical Specification

Code: 112000004194
Code System Name: ACC NCDR
Short Name: DevUsNonModInt
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16287 Non-Module Intervention Device Counter
Operator:
Value: Any Value

AND

Element: 15067 Specific Procedure ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Section: Non-module Intervention Device **Parent: Non-module Intervention**

Element: 15938 Unique Device Identifier - Non-Module

Coding Instruction: Indicate the unique device identifier (UDI) of the device. Enter all characters including the parenthesis. Leave blank if the UDI is unknown or unable to be collected due to state/local privacy laws.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

The UDI identifies the specific individual device; no two devices have the same UDI. Refer to the FDA website for detailed explanation of UDIs.

The UDI is made up of five different identifiers and each identifier is preceded by a number in parentheses.

Example UDI below: Device Identifier (01), Expiration Date (17), Manufacturing date (11), Lot Number (10), and Serial Number (21)

Source:

Technical Specification

Code:	112000001973
Code System Name:	ACC NCDR
Short Name:	UDINonMod
Missing Data:	No Action
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	150
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16287 Non-Module Intervention Device Counter
Operator:
Value: Any Value

AND

Element: 15067 Specific Procedure ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Section: Wolff-Parkinson-White Syndrome **Parent: Procedure Information**

Element: 15968 WPW Pre-Procedure Indication

Coding Instruction: Select the indication(s) for the procedure to treat WPW or another pre-excitation syndrome.

Target Value: The value on current procedure

Technical Specification

Code:	112000003818
Code System Name:	ACC NCDR
Short Name:	WPWPreProcInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

WPW Pre-Procedure Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.1012

Selection	Definition	Source	Code	Code System Name
Symptoms	The procedure was performed due to patient-reported symptoms		418799008	SNOMED CT
Risk assessment/treatment	The procedure was indicated based on the results of a risk assessment, such as identifying a high-risk accessory pathway or potential for life-threatening arrhythmias.		112000003811	ACC NCDR
Dyssynchrony cardiomyopathy	The procedure was performed to address cardiomyopathy caused by ventricular dyssynchrony.		458084001	SNOMED CT
Pre-operative	The ablation was performed as part of a preoperative strategy for another surgical or interventional procedure.		112000003812	ACC NCDR
Sudden cardiac arrest/Pre-excited AFib	The procedure was performed following a sudden cardiac arrest or documented pre-excited atrial fibrillation.		410429000	SNOMED CT
Drug refractory or side effects	The patient's condition was not adequately managed with antiarrhythmic medications or the patient experienced significant side effects from these medications.		62014003	SNOMED CT
Documented arrhythmia			112000004244	ACC NCDR
Other			100000351	ACC NCDR

Section: Wolff-Parkinson-White Syndrome **Parent: Procedure Information**

Element: 15967 WPW Symptoms

Coding Instruction: Select the symptoms experienced by the patient prior to the procedure.

Target Value: Any occurrence between 2 months prior to arrival at this facility and start of current procedure

Technical Specification

Code:	418799008
Code System Name:	SNOMED CT
Short Name:	WPWSymp
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15968 WPW Pre-Procedure Indication
Operator: Equal
Value: Symptoms

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

WPW Symptoms - 1.3.6.1.4.1.19376.1.4.1.6.5.1011

Selection	Definition	Source	Code	Code System Name
Palpitations	An unpleasant sensation of irregular and/or forceful beating of the heart		80313002	SNOMED CT
Arrhythmic syncope	The patient experienced syncope attributed to arrhythmia.		271594007	SNOMED CT
Other			100000351	ACC NCDR

Element: 15970 WPW Risk Assessment Performed

Coding Instruction: Indicate whether a risk assessment was conducted prior to the ablation procedure to evaluate the potential risks and benefits of treating the pre-excitation syndrome, such as WPW. This could include assessing the risk of sudden cardiac arrest, arrhythmia recurrence, or procedural complications.

Target Value: The value on current procedure

Technical Specification

Code:	74390002
Code System Name:	SNOMED CT
Short Name:	WPWRiAssPer
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

Section: Wolff-Parkinson-White Syndrome **Parent: Procedure Information**

Element: 15971 WPW Assessments Used

Coding Instruction: Select the specific assessments used during the risk evaluation process for the ablation procedure in patients with pre-excitation syndrome.

Target Value: The value on current procedure

Technical Specification

Code:	74390002
Code System Name:	SNOMED CT
Short Name:	WPWAssUs
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15970 WPW Risk Assessment Performed
Operator: Equal
Value: Yes

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

WPW Assessments Used - 1.3.6.1.4.1.19376.1.4.1.6.5.1014

Selection	Definition	Source	Code	Code System Name
Accessory pathway block cycle length (AP block CL)	Accessory Pathway Block Cycle Length was measured during the risk assessment. This measurement helps determine the shortest cycle length at which the accessory pathway can no longer conduct impulses, providing important information about the risk of rapid arrhythmias.		112000003814	ACC NCDR
Accessory pathway effective refractory period (APERP)	Accessory Pathway Effective Refractory Period (APERP) was evaluated. This refers to the minimum interval during which the accessory pathway cannot conduct impulses, used to assess the risk of rapid ventricular rates during atrial arrhythmias.		112000003815	ACC NCDR
Atrial fibrillation with shortest pre-excited R-R interval (AF/SPERRI)	Shortest Pre-Excited R-R Interval during Atrial Fibrillation (AF/SPERRI) was measured. This assessment evaluates the risk of extremely rapid ventricular responses in the event of atrial fibrillation, which can be dangerous in patients with WPW or other pre-excitation syndromes.		112000003816	ACC NCDR

Section: WPW Procedure **Parent: Wolff-Parkinson-White Syndrome**

Element: 16227 Wolff Parkinson White Syndrome Ablation Counter

Coding Instruction: The Wolff Parkinson White syndrome ablation counter is used to distinguish individual ablation targets or pathways when multiple targets or pathways are treated during one procedure.

Note: The software-assigned target counter should start at one and be incremented by one for each target or pathway. The target counter is reset back to one for each new lab visit.

Target Value: N/A

Technical Specification

Code:	74390002
Code System Name:	SNOMED CT
Short Name:	WPWSynAblCounter
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

Element: 16225 WPW Targeted Substrate

Coding Instruction: Indicate the conduction pathway targeted during the ablation procedure for Wolff-Parkinson-White (WPW) syndrome.

Target Value: The value on current procedure

Technical Specification

Code:	112000004249
Code System Name:	ACC NCDR
Short Name:	WPWTarSub
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16227 Wolff Parkinson White Syndrome Ablation Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

WPW targeted substrate - 1.3.6.1.4.1.19376.1.4.1.6.5.1146

Selection	Definition	Source	Code	Code System Name
Bidirectional Wolff Parkinson White	Ablation targeted a pathway conducting in both antegrade (atria to ventricles) and retrograde (ventricles to atria) directions.		112000004245	ACC NCDR
Antegrade Only Wolff Parkinson White	Ablation targeted a pathway conducting only in the antegrade direction (atria to ventricles).		112000004246	ACC NCDR
Unidirectional Antegrade Decremental - Mahaim	Ablation targeted an antegrade-only, decrementally conducting accessory pathway, typically associated with Mahaim fibers.		112000004247	ACC NCDR

Section: WPW Procedure **Parent: Wolff-Parkinson-White Syndrome**

Element: 15972 WPW Inducible Arrhythmia Pre-Excitation Syndromes

Coding Instruction: Indicate if an arrhythmia was induced during the electrophysiology study or ablation procedure for patients with a pre-excitation syndrome.

Target Value: The value on current procedure

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	IndArrPreSyn
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16227 Wolff Parkinson White Syndrome Ablation Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

Inducible arrhythmia - 1.3.6.1.4.1.19376.1.4.1.6.5.1007

Selection	Definition	Source	Code	Code System Name
Orthodromic reciprocating tachycardia (ORT)			233898003	SNOMED CT
Antidromic reciprocating tachycardia			233899006	SNOMED CT
Atrial Fibrillation			49436004	SNOMED CT
Sustained AFI/AF			5370000	SNOMED CT
None			260413007	SNOMED CT
Other			100000351	ACC NCDR

Section: WPW Procedure **Parent: Wolff-Parkinson-White Syndrome**

Element: 15973 WPW Isoproterenol Used

Coding Instruction: Indicate whether isoproterenol was used during the ablation procedure to provoke or enhance arrhythmias in patients with pre-excitation syndromes.

Target Value: The value on current procedure

Technical Specification

Code:	112000003819
Code System Name:	ACC NCDR
Short Name:	WPWIsoUs
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16227 Wolff Parkinson White Syndrome Ablation Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

Section: WPW Procedure **Parent: Wolff-Parkinson-White Syndrome**

Element: 16226 Indication for Isoproterenol

Coding Instruction: Indicate reason(s) for administering isoproterenol during the procedure.

Note: Capture the total related to the EP study (with or without ablation) and cardiovascular implantable electronic device procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003819
Code System Name:	ACC NCDR
Short Name:	IndoforIsopro
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15973 WPW Isoproterenol Used
Operator: Equal
Value: Yes

AND

Element: 16227 Wolff Parkinson White Syndrome Ablation Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

Indication for isoproterenol - 1.3.6.1.4.1.19376.1.4.1.6.5.1147

Selection	Definition	Source	Code	Code System Name
Induction of arrhythmia	Isoproterenol was used to provoke or facilitate the identification of an arrhythmia.		112000004248	ACC NCDR
Risk assessment/treatment	Isoproterenol was used to evaluate the patient's susceptibility to arrhythmia or other hemodynamic responses.		112000003811	ACC NCDR
Other			100000351	ACC NCDR

Section: WPW Procedure **Parent: Wolff-Parkinson-White Syndrome**

Element: 15974 WPW Target Site Location

Coding Instruction: Select the target site location of the pre-excitation syndrome ablation.

Target Value: The value on current procedure

Technical Specification

Code: 112000003817
Code System Name: ACC NCDR
Short Name: WPWTarSitLoc
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16227 Wolff Parkinson White Syndrome Ablation Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

Target Site Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1009

Selection	Definition	Source	Code	Code System Name
Coronary sinus/middle cardiac vein			90219004	SNOMED CT
Coronary Sinus - Distal			112000002373	ACC NCDR
Coronary Sinus - Mid			112000002372	ACC NCDR
Coronary Sinus - Proximal			112000002371	ACC NCDR
Left non-septal			112000003804	ACC NCDR
Mid-anterior septal			112000003806	ACC NCDR
Mitral Annulus - Left Anterolateral			112000002370	ACC NCDR
Mitral Annulus - Left Intermediate			112000002366	ACC NCDR
Mitral Annulus - Left Lateral			112000002369	ACC NCDR
Mitral Annulus - Left Posterior			112000002368	ACC NCDR
Mitral annulus - left posterior/inferior septal			112000002367	ACC NCDR
Posterior septal			112000003805	ACC NCDR
Right non-septal			112000003803	ACC NCDR
Middle cardiac vein			73580002	SNOMED CT
Tricuspid annulus - right anterior/superior septal (paraHisian)			112000002365	ACC NCDR
Tricuspid Annulus - Right Anterior			112000002360	ACC NCDR
Tricuspid Annulus - Right Intermediate Septal			112000002364	ACC NCDR
Tricuspid Annulus - Right Lateral			112000002361	ACC NCDR
Tricuspid Annulus - Right Posterior			112000002362	ACC NCDR
Tricuspid annulus - right posterior/inferior septal			112000002363	ACC NCDR

Section: WPW Procedure **Parent: Wolff-Parkinson-White Syndrome**

Element: 15975 WPW Outcome

Coding Instruction: Indicate the result of the procedure based on whether the pre-excitation syndrome was successfully treated. Code based on clinician interpretation of procedure success.

Target Value: The value on current procedure

Technical Specification

Code:	112000003807
Code System Name:	ACC NCDR
Short Name:	WPWOut
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16227 Wolff Parkinson White Syndrome Ablation Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Wolff-Parkinson-White (WPW)

Procedure Outcome - 1.3.6.1.4.1.19376.1.4.1.6.5.1010

Selection	Definition	Source	Code	Code System Name
Successful	Bidirectional WPW: Elimination of both antegrade and retrograde conduction for at least 30 min following successful ablation lesion for bidirectional WPW; documentation of appropriate response to adenosine is advised. Antegrade only WPW: Elimination of antegrade conduction for at least 30 min following successful ablation lesion for antegrade only WPW; documentation of appropriate response to adenosine is advised. Unidirectional antegrade decremental Mahaim: Elimination of antegrade conduction for at least 30 min following successful ablation lesion for unidirectional antegrade decremental Mahaim; documentation of appropriate response to adenosine is advised.		385669000	SNOMED CT
Unsuccessful	Persistence of either antegrade or retrograde conduction with or without echos/SVT		385671000	SNOMED CT
Indeterminant	Unknown, empiric, ambiguous, etc.		82334004	SNOMED CT

Section: Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia **Parent: Procedure Information**

Element: 15958 AP Pre-procedure Indication

Coding Instruction: Select the patient symptom(s) or condition(s) prompting the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003818
Code System Name:	ACC NCDR
Short Name:	PreProInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15409 Targeted Electrophysiology Ablation Substrate
Operator:	Equal
Value:	Concealed accessory pathway/permanent junctional reciprocating tachycardia

Pre-procedure Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.1005

Selection	Definition	Source	Code	Code System Name
Symptoms	The procedure was indicated due to patient-reported symptoms.		418799008	SNOMED CT
Documented arrhythmia			112000004244	ACC NCDR
Heart failure/ventricular dysfunction	The patient presented with heart failure and/or ventricular dysfunction. Heart failure and ventricular dysfunction should be defined by the provider.		57809008	SNOMED CT
Other	N/A		100000351	ACC NCDR

Section: CAPPJRT Procedure | **Parent: Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia**

Element: 16228 — Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia Ablation Target Counter

Coding Instruction: The concealed accessory pathway and permanent junctional reciprocating tachycardia ablation target counter is used to distinguish individual targets when multiple targets are treated during one procedure.

Note: The software-assigned target counter should start at one and be incremented by one for each target. The target counter is reset back to one for each new lab visit.

Target Value: N/A

Technical Specification

Code:	233922008
Code System Name:	SNOMED CT
Short Name:	ConAPpJTRecipTachAblTarCounter
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Concealed accessory pathway/permanent junctional reciprocating tachycardia

---

Element: 15960 — AP Inducible Arrhythmia

Coding Instruction: If an arrhythmia was induced during the electrophysiology study or ablation procedure for the accessory pathway, select which was induced.

Target Value: The value on current procedure

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	IndArrAccPath
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16228 Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Concealed accessory pathway/permanent junctional reciprocating tachycardia

Inducible arrhythmia - 1.3.6.1.4.1.19376.1.4.1.6.5.1007

Selection	Definition	Source	Code	Code System Name
Orthodromic reciprocating tachycardia (ORT)			233898003	SNOMED CT
Antidromic reciprocating tachycardia			233899006	SNOMED CT
Atrial Fibrillation			49436004	SNOMED CT
Sustained AFI/AF			5370000	SNOMED CT
None			260413007	SNOMED CT
Other			100000351	ACC NCDR

Section: CAPPJRT Procedure | **Parent: Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia**

Element: 15961 AP Targeted Ablation Substrate

Coding Instruction: Select the type of accessory pathway (AP) or area targeted during the ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003809
Code System Name:	ACC NCDR
Short Name:	TarAblSub
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16228 Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Concealed accessory pathway/permanent junctional reciprocating tachycardia

AP Targeted Ablation Substrate - 1.3.6.1.4.1.19376.1.4.1.6.5.1008

Selection	Definition	Source	Code	Code System Name
Concealed Accessory Pathway			233922008	SNOMED CT
Permanent junctional reciprocating tachycardia (PJRT)			233904005	SNOMED CT

Section: CAPPJRT Procedure | **Parent: Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia**

Element: 15962 AP Ablation Target Site Location

Coding Instruction: Indicate the anatomical location of the accessory pathway ablation target site.

Target Value: The value on current procedure

Technical Specification

Code: 112000003817
Code System Name: ACC NCDR
Short Name: AccPathAbTarSiLoc
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16228 Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Concealed accessory pathway/permanent junctional reciprocating tachycardia

Target Site Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1009

Selection	Definition	Source	Code	Code System Name
Coronary sinus/middle cardiac vein			90219004	SNOMED CT
Coronary Sinus - Distal			112000002373	ACC NCDR
Coronary Sinus - Mid			112000002372	ACC NCDR
Coronary Sinus - Proximal			112000002371	ACC NCDR
Left non-septal			112000003804	ACC NCDR
Mid-anterior septal			112000003806	ACC NCDR
Mitral Annulus - Left Anterolateral			112000002370	ACC NCDR
Mitral Annulus - Left Intermediate			112000002366	ACC NCDR
Mitral Annulus - Left Lateral			112000002369	ACC NCDR
Mitral Annulus - Left Posterior			112000002368	ACC NCDR
Mitral annulus - left posterior/inferior septal			112000002367	ACC NCDR
Posterior septal			112000003805	ACC NCDR
Right non-septal			112000003803	ACC NCDR
Middle cardiac vein			73580002	SNOMED CT
Tricuspid annulus - right anterior/superior septal (paraHisian)			112000002365	ACC NCDR
Tricuspid Annulus - Right Anterior			112000002360	ACC NCDR
Tricuspid Annulus - Right Intermediate Septal			112000002364	ACC NCDR
Tricuspid Annulus - Right Lateral			112000002361	ACC NCDR
Tricuspid Annulus - Right Posterior			112000002362	ACC NCDR
Tricuspid annulus - right posterior/inferior septal			112000002363	ACC NCDR

Section: CAPPJRT Procedure | **Parent: Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia**

Element: 15963 AP Procedure Outcome

Coding Instruction: Indicate the outcome of the ablation procedure for the accessory pathway as documented by the clinician.

Target Value: The value on current procedure

Technical Specification

Code:	112000003807
Code System Name:	ACC NCDR
Short Name:	AblProcOut
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16228 Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Concealed accessory pathway/permanent junctional reciprocating tachycardia

AP Procedure Outcome - 1.3.6.1.4.1.19376.1.4.1.6.5.1136

Selection	Definition	Source	Code	Code System Name
Successful	Elimination of retrograde AP conduction for at least 30 min following successful ablation lesion; documentation of appropriate response to adenosine is advised		385669000	SNOMED CT
Unsuccessful	Persistence or retrograde conduction with or without echos/SVT		385671000	SNOMED CT
Indeterminant	Unknown, empiric, ambiguous, etc.		82334004	SNOMED CT

Section: AV Nodal Reentrant Tachycardia — Parent: Procedure Information

Element: 15981 AVNRT Primary Indications

Coding Instruction: Select the primary indication(s) identified to perform the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003818
Code System Name:	ACC NCDR
Short Name:	AVNRTPriInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

AVNRT Pre-Procedure Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.1017

Selection	Definition	Source	Code	Code System Name
Symptoms	The procedure was indicated due to patient-reported symptoms.		418799008	SNOMED CT
Documented arrhythmia			112000004244	ACC NCDR
Other			100000351	ACC NCDR

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter

Coding Instruction: The AV nodal reentrant tachycardia (AVNRT) target counter is used to distinguish individual targets when multiple targets are treated during one procedure.

Note: The software-assigned target counter should start at one and be incremented by one for each target. The target counter is reset back to one for each new lab visit.

Target Value: N/A

Technical Specification

Code:	112000003598
Code System Name:	ACC NCDR
Short Name:	EPTargetCounter
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 20
Data Source:	Automatic

Parent/Child Validation

Element:	15409 Targeted Electrophysiology Ablation Substrate
Operator:	Equal
Value:	AV nodal reentrant tachycardia (AVNRT)

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 15982 AVNRT Inducible Arrhythmia

Coding Instruction: Select the specific type(s) of atrioventricular nodal reentrant tachycardia (AVNRT) that was induced during the electrophysiology study or ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	AVNRTIndArr
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16258 No Inducible Arrhythmia
Operator: Equal
Value: No

AND

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

AVNRT Inducible Arrhythmia - 1.3.6.1.4.1.19376.1.4.1.6.5.1018

Selection	Definition	Source	Code	Code System Name
Slow-fast AVNRT	Conduction proceeds down the slow pathway and returns via the fast pathway.		112000003820	ACC NCDR
Fast-slow AVNRT	Conduction proceeds down the fast pathway and returns via the slow pathway.		112000003821	ACC NCDR
Slow-slow AVNRT	Conduction involves two slow pathways within the AV node.		112000003822	ACC NCDR
Other AVNRT	The induced arrhythmia is a variant form of AVNRT not otherwise listed.		112000003823	ACC NCDR
Dual AV node physiology without AVNRT	Dual AV node physiology was observed, but AVNRT was not induced		112000003824	ACC NCDR

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 16258 No Inducible Arrhythmia

Coding Instruction: Select if no arrhythmia was induced.

Target Value: N/A

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	NoIndArr
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

Element: 15983 AVNRT Isoproterenol Necessary For Induction

Coding Instruction: Indicate whether isoproterenol was used for the induction of atrioventricular nodal reentrant tachycardia during the ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003819
Code System Name:	ACC NCDR
Short Name:	AVNRTIsoNecInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15982 AVNRT Inducible Arrhythmia
Operator:
Value: Any Value

AND

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 15984 AVNRT Targeted Ablation Substrate

Coding Instruction: Select the specific substrate targeted for ablation during the procedure for atrioventricular nodal reentrant tachycardia (AVNRT).

Target Value: The value on current procedure

Technical Specification

Code:	112000003809
Code System Name:	ACC NCDR
Short Name:	AVNRTTargAblSub
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

AVNRT Targeted Ablation Substrate - 1.3.6.1.4.1.19376.1.4.1.6.5.1019

Selection	Definition	Source	Code	Code System Name
AVN fast pathway			112000003826	ACC NCDR
AVN Slow Pathway Right Inferior Extension			112000004240	ACC NCDR
AVN Slow Pathway Left Inferior Extension			112000004241	ACC NCDR
AVN other or unspecified			112000003827	ACC NCDR

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 15985 Procedure Anatomical Location

Coding Instruction: Select the specific anatomical location where the ablation was performed during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003817
Code System Name:	ACC NCDR
Short Name:	ProcAnaLoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15984 AVNRT Targeted Ablation Substrate
Operator: Equal
Value: AVN Slow Pathway Left Inferior Extension

Element: 15984 AVNRT Targeted Ablation Substrate
Operator: Equal
Value: AVN Slow Pathway Right Inferior Extension

AND

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

AVNRT Procedure Anatomical Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1020

Selection	Definition	Source	Code	Code System Name
Right Inferior Extension in Triangle of Koch			112000004237	ACC NCDR
Left Inferior Extension Via Coronary Sinus			112000004238	ACC NCDR
Left Inferior Extension via Left Atrium			112000004239	ACC NCDR
Other			100000351	ACC NCDR

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 15986 AVNRT Mapping

Coding Instruction: Select the specific mapping parameters used during the electrophysiology study for atrioventricular nodal reentrant tachycardia (AVNRT). These parameters help characterize the electrical activity and pathways in the heart, aiding in the identification of the target area for ablation.

Target Value: The value on current procedure

Technical Specification

Code:	21032000
Code System Name:	SNOMED CT
Short Name:	AVNRTMap
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

AVNRT Mapping - 1.3.6.1.4.1.19376.1.4.1.6.5.1021

Selection	Definition	Source	Code	Code System Name
Signal morphology	Signal morphology refers to the shape and characteristics of the electrical signals (electrograms) analyzed during the study. This can provide insights into the type and location of the arrhythmia.		112000002357	ACC NCDR
Anatomic	Anatomic mapping involves techniques that visualize the heart's structures and pathways, helping to guide catheter placement and ablation through imaging.		112000002355	ACC NCDR
Slow pathway potential	Slow pathway potential mapping focuses on identifying the electrical signals associated with the slow conduction pathway within the AV node, which is often targeted during AVNRT ablation.		112000003830	ACC NCDR
Voltage	Voltage mapping measures the electrical voltage in different areas of the heart. This helps to identify abnormal areas that may sustain arrhythmias based on the voltage readings.		112000002359	ACC NCDR
Activation	Activation mapping determines the sequence and timing of electrical activation across the heart, identifying critical areas involved in the arrhythmia circuit.		112000002354	ACC NCDR
Other			100000351	ACC NCDR

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 15987 Junctional Acceleration Observed During Any Ablation Energy Application

Coding Instruction: Indicate whether junctional acceleration was observed during the ablation procedure for atrioventricular nodal reentrant tachycardia. Junctional acceleration refers to an increase in heart rate originating from the junctional tissue, which may occur as a response to catheter manipulation or other factors during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	233896004
Code System Name:	SNOMED CT
Short Name:	JunAccObsDurAnyAblEnApp
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

Junctional Acceleration Observed During Ablation Energy Application - 1.3.6.1.4.1.19376.1.4.1.6.5.1148

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Not applicable			NA	HL7NullFlavor

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 15988 AVNRT Outcome

Coding Instruction: Indicate the outcome of the ablation procedure for atrioventricular nodal reentrant tachycardia.

Slow pathway and dual AV node physiology should be defined by the presence of a critical AH jump and/or sustained PR > RR interval.

Target Value: The value on end of current procedure

Technical Specification

Code: 112000003807
Code System Name: ACC NCDR
Short Name: AVNRTOut
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

AVNRT Outcome - 1.3.6.1.4.1.19376.1.4.1.6.5.1022

Selection	Definition	Source	Code	Code System Name
Successful - no slow pathway/dual AV node physiology present	No slow pathway/dual AV node physiology present for at least 30 min following successful ablation lesion		112000003831	ACC NCDR
Successful - no slow pathway/dual AV node physiology present but with single echos	No slow pathway/dual AV node physiology present but with single echos for at least 30 min following successful ablation lesion		112000003832	ACC NCDR
Successful - slow pathway/dual AV node physiology present without echos	Slow pathway/dual AVN physiology present without echos for at least 30 min following successful ablation lesion		112000003833	ACC NCDR
Successful - slow pathway/dual AV node physiology present with up to one echo	Slow pathway/dual AVN physiology present with up to one echo for at least 30 min following successful ablation lesion		112000003834	ACC NCDR
Unsuccessful	More than one AV nodal echo or AVNRT regardless of presence of slow pathway/dual AV node physiology		385671000	SNOMED CT
Indeterminant	Unknown, empiric, ambiguous		82334004	SNOMED CT

Section: AVNRT Procedure **Parent: AV Nodal Reentrant Tachycardia**

Element: 15989 AVNRT Isoproterenol Used for Post-Ablation Testing

Coding Instruction: Indicate whether isoproterenol was administered during post-ablation testing.

Target Value: The value on current procedure

Technical Specification

Code:	112000004185
Code System Name:	ACC NCDR
Short Name:	AVNRTIsopro
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15406 AV Nodal Reentrant Tachycardia (AVNRT) Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: AV nodal reentrant tachycardia (AVNRT)

Section: Focal Atrial Tachycardia — Parent: Procedure Information

Element: 15976 Pre-Procedure Indication

Coding Instruction: Select the clinical reasons that prompted the decision to perform an ablation for ectopic atrial tachycardia.

Target Value: The value on current procedure

Technical Specification

Code:	112000003818
Code System Name:	ACC NCDR
Short Name:	PreProdInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Focal atrial tachycardia

Pre-procedure Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.1005

Selection	Definition	Source	Code	Code System Name
Symptoms	The procedure was indicated due to patient-reported symptoms.		418799008	SNOMED CT
Documented arrhythmia			112000004244	ACC NCDR
Heart failure/ventricular dysfunction	The patient presented with heart failure and/or ventricular dysfunction. Heart failure and ventricular dysfunction should be defined by the provider.		57809008	SNOMED CT
Other	N/A		100000351	ACC NCDR

Section: FAT Procedure **Parent: Focal Atrial Tachycardia**

Element: 16229 Focal Atrial Tachycardia Ablation Target Counter

Coding Instruction: The focal atrial tachycardia ablation target counter is used to distinguish individual targets when multiple targets are treated during one procedure.

Note: The software-assigned target counter should start at one and be incremented by one for each target. The target counter is reset back to one for each new lab visit.

Target Value: N/A

Technical Specification

Code:	713424004
Code System Name:	SNOMED CT
Short Name:	FATAblTarCounter
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Focal atrial tachycardia

Element: 15977 Inducible Arrhythmia

Coding Instruction: Indicate whether ectopic atrial tachycardia was induced during the electrophysiological study or ablation procedure

Code 'No' if an ectopic atrial tachycardia was not induced, or if the arrhythmia induced was insufficient for mapping purposes.

Target Value: The value on current procedure

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	EATIndArr
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16229 Focal Atrial Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Focal atrial tachycardia

Section: FAT Procedure **Parent: Focal Atrial Tachycardia**

Element: 15978 Isoproterenol Necessary For Induction

Coding Instruction: Indicate whether isoproterenol was required to induce ectopic atrial tachycardia during the procedure

Target Value: The value on current procedure

Technical Specification

Code:	112000003819
Code System Name:	ACC NCDR
Short Name:	IsoNecInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15977 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16229 Focal Atrial Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Focal atrial tachycardia

Section: FAT Procedure **Parent: Focal Atrial Tachycardia**

Element: 15979 Procedure Anatomical Location

Coding Instruction: Select the anatomical location(s) of the ectopic atrial tachycardia focus that was targeted during the ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003817
Code System Name:	ACC NCDR
Short Name:	ProcAnLoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16229 Focal Atrial Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Focal atrial tachycardia

EAT Procedure Anatomical Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1016

Selection	Definition	Source	Code	Code System Name
Right atrium			73829009	SNOMED CT
Left atrium			82471001	SNOMED CT
Aortic coronary cusp			6530003	SNOMED CT
Coronary sinus/middle coronary vein			90219004	SNOMED CT
Other			100000351	ACC NCDR

Section: FAT Procedure **Parent: Focal Atrial Tachycardia**

Element: 15411 Methods to Localize Electrophysiology Ablation Target

Coding Instruction: Indicate the methods used to localize the target.

Target Value: The value on current procedure

Technical Specification

Code: 21032000
Code System Name: SNOMED CT
Short Name: EPTargetMethod
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16250 Method Used Localize Target Not Documented
Operator: Equal
Value: No

AND

Element: 16229 Focal Atrial Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Focal atrial tachycardia

Cardiac Mapping - 1.3.6.1.4.1.19376.1.4.1.6.5.883

Selection	Definition	Source	Code	Code System Name
Activation	Activation mapping determines the sequence and timing of electrical activation across the heart, identifying critical areas involved in the arrhythmia circuit.		112000002354	ACC NCDR
Anatomic	Anatomic mapping involves techniques that visualize the heart's structures and pathways, helping to guide catheter placement and ablation through imaging.		112000002355	ACC NCDR
High density mapping catheter			112000003908	ACC NCDR
Entrainment mapping	Entrainment mapping uses pacing from specific sites to assess the electrical circuit characteristics, such as in reentrant arrhythmias.		112000002356	ACC NCDR
Pace	Mapping involving pacing from different sites.		112000002358	ACC NCDR
Voltage mapping	Voltage mapping measures the electrical voltage in different areas of the heart. This helps to identify abnormal areas that may sustain arrhythmias based on the voltage readings.		112000002359	ACC NCDR
Insufficient for mapping			423437008	SNOMED CT
Other			100000351	ACC NCDR

Section: FAT Procedure **Parent: Focal Atrial Tachycardia**

Element: 16250 Method Used Localize Target Not Documented

Coding Instruction: Select if no method was used to localize the target or the method was not documented.

Target Value: N/A

Technical Specification

Code:	21032000
Code System Name:	SNOMED CT
Short Name:	MetUsLocTarNotDoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16229 Focal Atrial Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Focal atrial tachycardia

Element: 15980 Outcome

Coding Instruction: Indicate the outcome of the ablation procedure for ectopic atrial tachycardia

Target Value: The value on end of current procedure

Technical Specification

Code:	112000003807
Code System Name:	ACC NCDR
Short Name:	Outcom
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16229 Focal Atrial Tachycardia Ablation Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Focal atrial tachycardia

EAT Procedure Outcome - 1.3.6.1.4.1.19376.1.4.1.6.5.1137

Selection	Definition	Source	Code	Code System Name
Successful	No spontaneous or inducible tachycardia > 1 beat of same morphology as the target arrhythmia for at least 30 min following successful ablation lesion		385669000	SNOMED CT
Unsuccessful	Spontaneous or inducible tachycardia > 1 beat of same morphology as the target arrhythmia		385671000	SNOMED CT
Indeterminant	Unknown, empiric, ambiguous		82334004	SNOMED CT

Section: Macroreentrant Atrial Tachycardia — Parent: Procedure Information

Element: 16069 Pre-procedure Indications

Coding Instruction: Identify the primary clinical reason(s) that led to the decision to perform an ablation for Atrial Flutter, Intra-Atrial Reentrant Tachycardia (IART), or Macro-entrant Atrial Tachycardia (MAT).

Target Value: The value on current procedure

Technical Specification

Code:	112000003818
Code System Name:	ACC NCDR
Short Name:	PreProcInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Pre-procedure Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.1060

Selection	Definition	Source	Code	Code System Name
Symptoms	The procedure was performed due to patient-reported symptoms		418799008	SNOMED CT
Failure of medical therapy	The procedure was performed because prior medical therapy failed to control the arrhythmia effectively.		112000001944	ACC NCDR
Medication intolerance	The patient was unable to tolerate medical therapy due to side effects or adverse reactions.		59037007	SNOMED CT
Pre-operative	The ablation was performed as part of a preoperative strategy for another surgical or interventional procedure.		112000003812	ACC NCDR
Acute hemodynamic compromise/syncope	The procedure was performed due to acute hemodynamic instability (e.g., hypotension, shock) or syncope.		271594007	SNOMED CT
Medication declined	The patient chose ablation as an alternative to long-term medication use.		406149000	SNOMED CT
Documented Arrhythmia			112000004244	ACC NCDR
Heart Failure	Select if there is documentation of heart failure, a multi-dimensional clinical syndrome characterized by symptoms such as dyspnea, fatigue, exertional intolerance, or fluid retention. Heart failure results from structural or functional impairment in ventricular filling or blood ejection and may necessitate new or escalated pharmacologic therapy to manage symptoms.		84114007	SNOMED CT
Other			100000351	ACC NCDR

Section: Macroreentrant Atrial Tachycardia — Parent: Procedure Information

Element: 16129 Prior Cardioversion

Coding Instruction: Indicate whether the patient had a cardioversion prior to the procedure.

Target Value: Any occurrence between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	112000003941
Code System Name:	ACC NCDR
Short Name:	PriCard
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Element: 16070 Prior Cardioversion Method

Coding Instruction: Select the method(s) used to terminate the arrhythmia during a pre-procedure cardioversion. This refers to the specific approach or technique employed to achieve cardioversion and restore a normal heart rhythm.

Target Value: Any occurrence between 6 months prior to arrival at this facility and start of current procedure

Technical Specification

Code:	112000003941
Code System Name:	ACC NCDR
Short Name:	PrioCard
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16129 Prior Cardioversion
Operator: Equal
Value: Yes

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Cardioversion Method - 1.3.6.1.4.1.19376.1.4.1.6.5.1062

Selection	Definition	Source	Code	Code System Name
Pharmacologic	The arrhythmia was terminated using medications administered intravenously or orally.		440142000	SNOMED CT
Pace terminated via CIED	The arrhythmia was terminated using pacing from a cardiac implantable electronic device (CIED), such as a pacemaker or implantable cardioverter-defibrillator (ICD).		112000003942	ACC NCDR
Pace terminated via catheter	The arrhythmia was terminated using pacing via an intracardiac catheter.		19923001	SNOMED CT
Direct current (DC) cardioversion	Restores rhythm through the use of electrical shock(s).		180325003	SNOMED CT

Section: Macroreentrant Atrial Tachycardia **Parent: Procedure Information**

Element: 16071 Pace Terminated Via Catheter Method

Coding Instruction: Select the method used for pace terminated cardioversion via catheter.

Target Value: Any occurrence between 6 months prior to procedure and the start of the current procedure

Technical Specification

Code:	112000003943
Code System Name:	ACC NCDR
Short Name:	PaTerCatMethod
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16070 Prior Cardioversion Method
Operator: Equal
Value: Pace terminated via catheter

AND

Element: 16129 Prior Cardioversion
Operator: Equal
Value: Yes

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Pace Terminated Via Catheter Method - 1.3.6.1.4.1.19376.1.4.1.6.5.1063

Selection	Definition	Source	Code	Code System Name
Intracardiac			264044002	SNOMED CT
Transesophageal			103383005	SNOMED CT

Section: Macroreentrant Atrial Tachycardia **Parent: Procedure Information**

Element: 16072 Prior Surgical Ablation Type

Coding Instruction: Select the type(s) of surgical ablation performed.

Target Value: Any occurrence between birth and start of the current procedure

Technical Specification

Code:	112000003947
Code System Name:	ACC NCDR
Short Name:	PriSurgAblTyp
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15419 History of Electrophysiological Therapy
Operator: Equal
Value: Surgical ablation or arrhythmia surgery

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Prior Surgical Ablation Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1064

Selection	Definition	Source	Code	Code System Name
Localized or site specific	The prior surgical ablation was targeted to a specific site or region, rather than being part of a broader maze procedure.		255471002	SNOMED CT
Right maze	The prior surgical ablation was part of a maze procedure localized to the right atrium.		112000003944	ACC NCDR
Left maze	The prior surgical ablation was part of a maze procedure localized to the left atrium.		112000003945	ACC NCDR
Bilateral maze	The prior surgical ablation was part of a maze procedure that occurred in the right and left atriums.		112000003946	ACC NCDR

Section: Macroreentrant Atrial Tachycardia — Parent: Procedure Information

Element: 16074 Ejection Fraction Assessment

Coding Instruction: Indicate if the ejection fraction was assessed quantitatively (ejection fraction percentage), qualitatively (normal, mildly depressed, etc) or not assessed. If both an ejection fraction percentage and qualitative interpretation are available, then code only the ejection fraction percentage.

Target Value: The last value between 6 months prior to current procedure and current procedure

Technical Specification

Code:	112000003948
Code System Name:	ACC NCDR
Short Name:	EjFraAss
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRATPre Ejection Fraction Assessment - 1.3.6.1.4.1.19376.1.4.1.6.5.1065

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes - Ejection fraction documented	The EF was quantitatively measured and documented as a percentage.		30766002	SNOMED CT
Yes - Qualitative interpretation only	The EF was not measured as a percentage but was documented using qualitative terms such as "normal," or "mildly depressed," as an example.		26716007	SNOMED CT

Element: 16073 Ejection Fraction

Coding Instruction: Record the percentage of blood emptied from the left ventricle at the end of the contraction.

Notes:
Enter a percentage in the range of 01–99. If a percentage range is reported, report the center number in the range (e.g., 50–55% is 52.5 reported to the next whole number is 53%). For EF measurements reported as "less than" or "greater than," code to the nearest whole number (e.g., <40% is coded as 39%, and >40% is coded as 41%).

Target Value: The last value between 6 months prior to current procedure and current procedure

Technical Specification

Code:	112000004292
Code System Name:	ACC NCDR
Short Name:	EjFra
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	5 - 70 %
Valid Range:	1 - 99 %
Data Source:	User

Parent/Child Validation

Element: 16074 Ejection Fraction Assessment
Operator: Equal
Value: Yes - Ejection fraction documented

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Section: Macroreentrant Atrial Tachycardia **Parent: Procedure Information**

Element: 16075 Qualitative Interpretation

Coding Instruction: Select the qualitative interpretation recorded characterizing the ejection fraction.

Note: If two separate categories are documented (ex. mild-moderate) enter the selection associated with the more severe finding.

Target Value: The last value between 6 months prior to procedure and current procedure

Technical Specification

Code:	112000003949
Code System Name:	ACC NCDR
Short Name:	QualInt
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16074 Ejection Fraction Assessment
Operator: Equal
Value: Yes - Qualitative interpretation only

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRATPre Qualitative Interpretation - 1.3.6.1.4.1.19376.1.4.1.6.5.1066

Selection	Definition	Source	Code	Code System Name
Normal			17621005	SNOMED CT
Mildly depressed			255604002	SNOMED CT
Moderately depressed			6736007	SNOMED CT
Severely depressed			24484000	SNOMED CT

Element: 16076 Number of Antiarrhythmics

Coding Instruction: Record the number of antiarrhythmics prescribed.

Target Value: Any occurrence between 6 months prior to the procedure and the procedure

Technical Specification

Code:	112000003941
Code System Name:	ACC NCDR
Short Name:	NumAnti
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Section: MRAT Procedure **Parent: Macroreentrant Atrial Tachycardia**

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter

Coding Instruction: The macroreentrant atrial tachycardia target counter is used to distinguish individual circuits or targets when multiple are treated during one procedure.

Note: The software-assigned target counter should start at one and be incremented by one for each target. The target counter is reset back to one for each new lab visit.

Target Value: N/A

Technical Specification

Code:	735682000
Code System Name:	SNOMED CT
Short Name:	MRATTarCounter
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Element: 16007 Inducible Arrhythmia

Coding Instruction: Indicate whether atrial flutter, intra-atrial reentrant tachycardia (IART), or macro-entrant atrial tachycardia (MAT) was induced during the electrophysiological study or ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	InduArr
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Section: MRAT Procedure **Parent: Macroreentrant Atrial Tachycardia**

Element: 16009 Isoproterenol Necessary for Induction

Coding Instruction: Indicate whether isoproterenol was used to induce the arrhythmia during the procedure

Target Value: The value on current procedure

Technical Specification

Code:	112000003819
Code System Name:	ACC NCDR
Short Name:	IsoNecfoInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16007 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Section: MRAT Procedure **Parent: Macroreentrant Atrial Tachycardia**

Element: 16008 Method of Induction

Coding Instruction: Select the method used to induce the arrhythmia during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003853
Code System Name:	ACC NCDR
Short Name:	MetInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16007 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Method of Induction - 1.3.6.1.4.1.19376.1.4.1.6.5.1031

Selection	Definition	Source	Code	Code System Name
Spontaneous	The arrhythmia occurred naturally without external provocation during the procedure.		5054005	SNOMED CT
Catheter manipulation	The arrhythmia was induced by mechanical stimulation or positioning of the catheter within the heart.		103712006	SNOMED CT
Pacing	Programmed electrical stimulation (pacing) was used to induce the arrhythmia.		18590009	SNOMED CT

Section: MRAT Procedure **Parent: Macroreentrant Atrial Tachycardia**

Element: 16011 Mapping

Coding Instruction: Select the method(s) used for mapping the arrhythmia during the ablation procedure

Target Value: The value on current procedure

Technical Specification

Code: 21032000
Code System Name: SNOMED CT
Short Name: CarMap
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16252 No Mapping Used
Operator: Equal
Value: No

AND

Element: 16007 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Cardiac Mapping - 1.3.6.1.4.1.19376.1.4.1.6.5.883

Selection	Definition	Source	Code	Code System Name
Activation	Activation mapping determines the sequence and timing of electrical activation across the heart, identifying critical areas involved in the arrhythmia circuit.		112000002354	ACC NCDR
Anatomic	Anatomic mapping involves techniques that visualize the heart's structures and pathways, helping to guide catheter placement and ablation through imaging.		112000002355	ACC NCDR
High density mapping catheter			112000003908	ACC NCDR
Entrainment mapping	Entrainment mapping uses pacing from specific sites to assess the electrical circuit characteristics, such as in reentrant arrhythmias.		112000002356	ACC NCDR
Pace	Mapping involving pacing from different sites.		112000002358	ACC NCDR
Voltage mapping	Voltage mapping measures the electrical voltage in different areas of the heart. This helps to identify abnormal areas that may sustain arrhythmias based on the voltage readings.		112000002359	ACC NCDR
Insufficient for mapping			423437008	SNOMED CT
Other			100000351	ACC NCDR

Section: MRAT Procedure **Parent: Macroreentrant Atrial Tachycardia**

Element: 16252 No Mapping Used

Coding Instruction: Select if no arrhythmia mapping was done during the ablation procedure.

Target Value: N/A

Technical Specification

Code:	21032000
Code System Name:	SNOMED CT
Short Name:	NoMapUsed
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16007 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Section: MRAT Procedure **Parent: Macroreentrant Atrial Tachycardia**

Element: 15405 Electrophysiology Imaging System(s)

Coding Instruction: Indicate the imaging system(s) used during the electrophysiology study.

Target Value: The value on current procedure

Technical Specification

Code: 707728009
Code System Name: SNOMED CT
Short Name: EPMapSys
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16253 Electrophysiology Imaging System Not Used
Operator: Equal
Value: No

AND

Element: 16011 Mapping
Operator: Equal
Value: Activation

Element: 16011 Mapping
Operator: Equal
Value: Anatomic

Element: 16011 Mapping
Operator: Equal
Value: Entrainment mapping

Element: 16011 Mapping
Operator: Equal
Value: Other

Element: 16011 Mapping
Operator: Equal
Value: Pace

Element: 16011 Mapping
Operator: Equal
Value: Voltage mapping

AND

Element: 16007 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Imaging System for Electrophysiology Procedure - 1.3.6.1.4.1.19376.1.4.1.6.5.879

Selection	Definition	Source	Code	Code System Name
CARTO 3 System			112000002340	ACC NCDR
CARTO XP System			112000002341	ACC NCDR
CARTO Sound			112000002342	ACC NCDR
EnSite NavX			112000002343	ACC NCDR
EnSite Balloon Array			112000002345	ACC NCDR
Fluoro Only			44491008	SNOMED CT
Other			100000351	ACC NCDR

Section: MRAT Procedure **Parent: Macroreentrant Atrial Tachycardia**

Element: 16253 Electrophysiology Imaging System Not Used

Coding Instruction: Select if an electrophysiology imaging system was not used.

Target Value: N/A

Technical Specification

Code:	707728009
Code System Name:	SNOMED CT
Short Name:	ElecImgSysNotUsed
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16011 Mapping
Operator: Equal
Value: Activation

Element: 16011 Mapping
Operator: Equal
Value: Anatomic

Element: 16011 Mapping
Operator: Equal
Value: Entrainment mapping

Element: 16011 Mapping
Operator: Equal
Value: Other

Element: 16011 Mapping
Operator: Equal
Value: Pace

Element: 16011 Mapping
Operator: Equal
Value: Voltage mapping

AND

Element: 16007 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Section: MRAT High Density Mapping Catheter **Parent: MRAT Procedure**

Element: 16012 High Density Mapping Catheter

Coding Instruction: Select the high-density mapping catheter(s) that was used during the ablation procedure. High-density mapping catheters are specialized tools that provide detailed mapping of the heart's electrical activity by using multiple electrodes for high-resolution data.

Target Value: The value on current procedure

Technical Specification

Code:	21032000
Code System Name:	SNOMED CT
Short Name:	hdMapCath
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16011 Mapping
Operator: Equal
Value: Activation

Element: 16011 Mapping
Operator: Equal
Value: Anatomic

Element: 16011 Mapping
Operator: Equal
Value: Entrainment mapping

Element: 16011 Mapping
Operator: Equal
Value: Other

Element: 16011 Mapping
Operator: Equal
Value: Pace

Element: 16011 Mapping
Operator: Equal
Value: Voltage mapping

AND

Element: 16007 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Section: MRAT **Parent: MRAT Procedure**

Element: 16010 Circuit

Coding Instruction: Select the specific type(s) or location(s) of the reentrant circuit involved in the arrhythmia during the procedure.

Target Value: The value on current procedure

Technical Specification

Code: 112000004186
Code System Name: ACC NCDR
Short Name: Cir
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16011 Mapping
Operator: Equal
Value: Activation

Element: 16011 Mapping
Operator: Equal
Value: Anatomic

Element: 16011 Mapping
Operator: Equal
Value: Entrainment mapping

Element: 16011 Mapping
Operator: Equal
Value: Other

Element: 16011 Mapping
Operator: Equal
Value: Pace

Element: 16011 Mapping
Operator: Equal
Value: Voltage mapping

AND

Element: 16007 Inducible Arrhythmia
Operator: Equal
Value: Yes

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Circuit - 1.3.6.1.4.1.19376.1.4.1.6.5.1032

Selection	Definition	Source	Code	Code System Name
Cavotricuspid isthmus (CTI)			112000003854	ACC NCDR
Cavomitral isthmus (CMI)			112000003855	ACC NCDR
Biatrial			112000003856	ACC NCDR
Right atriotomy			44794004	SNOMED CT
Other incisional circuit (Right)			112000003857	ACC NCDR
Other incisional circuit (Left)			112000003858	ACC NCDR
Other post-ablation/scar circuity (right, left, coronary sinus)			112000003859	ACC NCDR
Peri-mitral			112000003860	ACC NCDR
Upper loop/SVC			48345005	SNOMED CT
Lower loop/IVC			64131007	SNOMED CT
Septal			255584008	SNOMED CT

Section: MRAT **Parent: MRAT Procedure**

Roof (of left or right atrium)	112000003861	ACC NCDR
Fontan baffle	112000003862	ACC NCDR
Other	100000351	ACC NCDR

Element: 16015 Approach

Coding Instruction: Select the approach used during the ablation procedure. The approach refers to the method of catheter access to the heart and the specific anatomical route taken to perform the ablation. If more than one approach was used, select the successful approach.

Target Value: The value on current procedure

Technical Specification

Code: 112000004187
Code System Name: ACC NCDR
Short Name: Appr
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Approach - 1.3.6.1.4.1.19376.1.4.1.6.5.1034

Selection	Definition	Source	Code	Code System Name
IVC			64131007	SNOMED CT
SVC			48345005	SNOMED CT
Transseptal			311996002	SNOMED CT
Transbaffle			112000002349	ACC NCDR
Retrograde aortic			260526008	SNOMED CT
Transhepatic			103381007	SNOMED CT

Section: MRAT **Parent: MRAT Procedure**

Element: 16017 Outcome

Coding Instruction: Select the outcome of the ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003807
Code System Name:	ACC NCDR
Short Name:	Out
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Procedure Outcome - 1.3.6.1.4.1.19376.1.4.1.6.5.1138

Selection	Definition	Source	Code	Code System Name
Successful	No spontaneous or inducible tachycardia > 1 beat and conduction block demonstrated across ablation line for at least 30 min following successful ablation lesion		385669000	SNOMED CT
Unsuccessful	Spontaneous or inducible tachycardia > 1 beat or persistent conduction demonstrated across ablation line		385671000	SNOMED CT
Indeterminant	Unknown, empiric, ambiguous		82334004	SNOMED CT

Section: MRAT **Parent: MRAT Procedure**

Element: 16018 Assessment of Result

Coding Instruction: Select how the outcome of the procedure was assessed.

Target Value: The value on current procedure

Technical Specification

Code:	112000004188
Code System Name:	ACC NCDR
Short Name:	AssRes
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16017 Outcome
Operator: Equal
Value: Indeterminant

Element: 16017 Outcome
Operator: Equal
Value: Successful

AND

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRAT Assessment of Result - 1.3.6.1.4.1.19376.1.4.1.6.5.1035

Selection	Definition	Source	Code	Code System Name
Termination during energy application	The arrhythmia terminated during the delivery of ablation energy.		112000003863	ACC NCDR
Conduction block demonstrated across ablation line	Testing confirmed a conduction block across the ablation line, indicating electrical isolation or disruption of the targeted pathway.		112000003864	ACC NCDR
Non-inducible	The arrhythmia could not be induced following ablation		112000003865	ACC NCDR

Section: MRAT **Parent: MRAT Procedure**

Element: 16077 Procedural Imaging Used

Coding Instruction: Indicate the imaging modality(ies) used during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003951
Code System Name:	ACC NCDR
Short Name:	ProcImg
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

AFIARTMRATPre Prior Imaging - 1.3.6.1.4.1.19376.1.4.1.6.5.1067

Selection	Definition	Source	Code	Code System Name
CT/MRI merge	The process of integrating computed tomography (CT) or magnetic resonance imaging (MRI) scans into a real-time procedural imaging system. This technique enhances anatomical visualization by overlaying or fusing high-resolution 3D models of the patient's anatomy with live imaging.		112000003950	ACC NCDR
Transesophageal echocardiogram			105376000	SNOMED CT
Intracardiac echocardiogram			112000003746	ACC NCDR

Section: MRAT **Parent: MRAT Procedure**

Element: 16019 Isoproterenol Used for Post-Ablation Testing

Coding Instruction: Indicate whether isoproterenol was administered during post-ablation testing.

Target Value: The value on current procedure

Technical Specification

Code:	112000004186
Code System Name:	ACC NCDR
Short Name:	IsoUsPostTest
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16230 Macroreentrant Atrial Tachycardia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Macroreentrant atrial tachycardia

Section: Ventricular Arrhythmias **Parent: Procedure Information**

Element: 16053 Symptoms

Coding Instruction: Select the primary symptom(s) experienced by the patient that prompted the ablation for ventricular arrhythmias. This refers to clinical presentations directly related to the arrhythmia.

Target Value: Any occurrence between 6 months prior to procedure and the start of the current procedure

Vendor Instruction: When Symptoms (16053) is [Asymptomatic], no other selections can be selected

Technical Specification

Code:	418799008
Code System Name:	SNOMED CT
Short Name:	Symp
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

VA Symptoms - 1.3.6.1.4.1.19376.1.4.1.6.5.1051

Selection	Definition	Source	Code	Code System Name
Palpitations	An unpleasant sensation of irregular and/or forceful beating of the heart		80313002	SNOMED CT
Syncope	The patient has experienced syncope, a temporary loss of consciousness usually related to insufficient blood flow to the brain. It's also called fainting or "passing out".		271594007	SNOMED CT
Unstable ventricular tachycardia or sudden cardiac arrest	The patient experienced unstable or sustained ventricular tachycardia requiring urgent medical intervention or an episode of sudden cardiac arrest attributed to ventricular arrhythmias.		112000004034	ACC NCDR
Heart failure	The patient presented with heart failure. Heart failure should be defined by the provider.		84114007	SNOMED CT
Asymptomatic			84387000	SNOMED CT

Section: Ventricular Arrhythmias **Parent: Procedure Information**

Element: 16038 VA Ejection Fraction Assessed

Coding Instruction: Indicate whether ejection fraction was assessed during the procedure, either as an ejection fraction percentage or as a qualitative interpretation. If both are provided, select only ejection fraction percentage.

Target Value: The last value between 6 months prior to current procedure and current procedure

Technical Specification

Code:	112000003887
Code System Name:	ACC NCDR
Short Name:	VAEjFraAss
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Ejection Fraction Assessed - 1.3.6.1.4.1.19376.1.4.1.6.5.1046

Selection	Definition	Source	Code	Code System Name
No	Ejection fraction was not assessed.		100013073	ACC NCDR
Yes - EF percent	The EF was quantitatively measured and documented as a percentage		112000003888	ACC NCDR
Yes - Qualitative interpretation only	The EF was not measured as a percentage but was documented using qualitative terms such as "normal," or "mildly reduced," as an example.		112000003889	ACC NCDR

Element: 16039 Left Ventricular Ejection Fraction

Coding Instruction: Record the left ventricular ejection fraction, in percent.

Notes:
Enter a percentage in the range of 01–99. If a percentage range is reported, report the center number in the range (e.g., 50–55% is 52.5 reported to the next whole number is 53%). For EF measurements reported as "less than" or "greater than," code to the nearest whole number (e.g., <40% is coded as 39%, and >40% is coded as 41%).

Target Value: The last value between 6 months prior to current procedure and current procedure

Technical Specification

Code:	250908004
Code System Name:	SNOMED CT
Short Name:	LTVenEjFra
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	2,0
Selection Type:	Single
Unit of Measure:	%
Default Value:	
Usual Range:	7 - 70 %
Valid Range:	1 - 99 %
Data Source:	User

Parent/Child Validation

Element: 16038 VA Ejection Fraction Assessed
Operator: Equal
Value: Yes - EF percent

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: Ventricular Arrhythmias **Parent: Procedure Information**

Element: 16041 Qualitative Interpretation

Coding Instruction: Select the qualitative assessment of ejection fraction.

Target Value: The last value between 6 months prior to current procedure and current procedure

Technical Specification

Code:	112000003891
Code System Name:	ACC NCDR
Short Name:	VAQualInt
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16038 VA Ejection Fraction Assessed
Operator: Equal
Value: Yes - Qualitative interpretation only

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Left Ventricular Ejection Fraction Qualitative Assessment - 1.3.6.1.4.1.19376.1.4.1.6.5.1047

Selection	Definition	Source	Code	Code System Name
Normal			17621005	SNOMED CT
Mildly depressed			255604002	SNOMED CT
Moderately depressed			6736007	SNOMED CT
Severely depressed			24484000	SNOMED CT

Element: 16067 Ventricular Arrhythmia in the Setting of an Inherited Arrhythmia Syndrome

Coding Instruction: Indicate whether the ventricular arrhythmia is associated with an inherited arrhythmia syndrome.

Target Value: The value on current procedure

Technical Specification

Code:	112000003921
Code System Name:	ACC NCDR
Short Name:	AssocInArrSynd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: Ventricular Arrhythmias **Parent: Procedure Information**

Element: 16068 Inherited Arrhythmia Syndrome

Coding Instruction: Select the type of inherited arrhythmia syndrome associated with the ventricular arrhythmia.

Target Value: The value on current procedure

Technical Specification

Code:	112000003935
Code System Name:	ACC NCDR
Short Name:	InArrSynd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16067 Ventricular Arrhythmia in the Setting of an Inherited Arrhythmia Syndrome
Operator: Equal
Value: Yes

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Inherited Arrhythmia Syndrome - 1.3.6.1.4.1.19376.1.4.1.6.5.1059

Selection	Definition	Source	Code	Code System Name
Long QT syndrome	Disorder characterized by prolongation of the heart rate corrected QT interval that predisposes to ventricular arrhythmias and sudden death. As calculated by the Bazett formula.	Source: A Report of the ACC/AHA TF on CDS JACC Vol 70. No 8, August 22, 2017: 1029-95	9651007	SNOMED CT
Catecholaminergic polymorphic ventricular tachycardia	A rare genetic arrhythmia syndrome triggered by physical activity or emotional stress, characterized by polymorphic ventricular tachycardia.		419671004	SNOMED CT
Arrhythmogenic cardiomyopathy	A genetic disorder involving fibrofatty replacement of right ventricular myocardium, predisposing to arrhythmias and potential heart failure.		281170005	SNOMED CT
Brugada syndrome	Polymorphic ventricular tachycardia in the absence of structural heart disease, associated with a baseline ECG pattern during sinus rhythm showing right bundle branch block with ST segment elevation in leads V1 through V3. It can also be characterized by documentation of ECG patterns associated with Brugada Syndrome, some of which may be unmasked when provoked with drugs. The most common genetic mutations identified for Brugada syndrome are in a sodium channel gene (SCN5A). Sodium channel blocking drugs, therefore, may exacerbate the electrocardiographic features and clinical presentation. Brugada syndrome typically presents before the age of 50 years.		418818005	SNOMED CT
Other			100000351	ACC NCDR

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16231 Ventricular Arrhythmia Target Counter

Coding Instruction: The ventricular arrhythmia target counter is used to distinguish individual circuits or targets when multiple are treated during one procedure.

Note: The software-assigned target counter should start at one and be incremented by one for each target. The target counter is reset back to one for each new lab visit.

Target Value: N/A

Technical Specification

Code:	44103008
Code System Name:	SNOMED CT
Short Name:	VATarCounter
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 10
Data Source:	Automatic

Parent/Child Validation

Element:	15409 Targeted Electrophysiology Ablation Substrate
Operator:	Equal
Value:	Ventricular arrhythmias (PVCs, VT, VF)

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16057 VA Inducible Arrhythmia

Coding Instruction: Select the type(s) of ventricular arrhythmia induced during the procedure.

Target Value: The value on current procedure

Technical Specification

Code: 112000003800
Code System Name: ACC NCDR
Short Name: VAIndArr
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Inducible Ventricular Arrhythmia - 1.3.6.1.4.1.19376.1.4.1.6.5.1052

Selection	Definition	Source	Code	Code System Name
Premature ventricular contractions	The arrhythmia consisted of isolated, early ventricular beats interrupting the normal heart rhythm.		427172004	SNOMED CT
Non-sustained monomorphic ventricular tachycardia	The arrhythmia was a short-lasting episode (less than 30 seconds) of regular, repetitive ventricular beats with a uniform QRS morphology.		1237128001	SNOMED CT
Non-sustained polymorphic ventricular tachycardia	The arrhythmia was a short-lasting episode (less than 30 seconds) of irregular ventricular beats with varying QRS morphologies.		112000003912	ACC NCDR
Sustained monomorphic ventricular tachycardia	The arrhythmia lasted 30 seconds or longer and consisted of regular, repetitive ventricular beats with a uniform QRS morphology.		1237127006	SNOMED CT
Sustained polymorphic ventricular tachycardia	The arrhythmia lasted 30 seconds or longer and consisted of regular, repetitive ventricular beats with a varying QRS morphology.		112000003911	ACC NCDR
Ventricular fibrillation	A life-threatening heart rhythm that results in a rapid, inadequate heartbeat.		71908006	SNOMED CT

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16058 VA Mechanism

Coding Instruction: Indicate whether the ventricular arrhythmia was focal or reentrant. This refers to the underlying physiological process driving the arrhythmia. If it is not clearly documented, select 'unknown'.

Target Value: The value on current procedure

Technical Specification

Code:	112000003910
Code System Name:	ACC NCDR
Short Name:	VAMech
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Ventricular Arrhythmia Mechanism - 1.3.6.1.4.1.19376.1.4.1.6.5.1053

Selection	Definition	Source	Code	Code System Name
Focal	The arrhythmia arises from abnormal impulse generation due to enhanced automaticity in ventricular cells.		87017008	SNOMED CT
Reentrant	The arrhythmia is caused by a reentrant circuit		112000003913	ACC NCDR
Unknown	The underlying mechanism of the ventricular arrhythmia could not be determined.		261665006	SNOMED CT

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16059 Arrhythmia Mechanism Automatic Location

Coding Instruction: If the arrhythmia mechanism was identified as automatic, select the location(s) of the automatic ventricular arrhythmia.

Target Value: The value on current procedure

Technical Specification

Code: 112000003817
Code System Name: ACC NCDR
Short Name: ArrMechAutoLoc
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16058 VA Mechanism
Operator: Equal
Value: Focal

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Automatic Ventricular Arrhythmia Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1054

Selection	Definition	Source	Code	Code System Name
Outflow right	Ventricular arrhythmia is originating from the right ventricular outflow tract.		112000003914	ACC NCDR
Outflow left	Ventricular arrhythmia is originating from the left ventricular outflow tract.		112000003915	ACC NCDR
Aortic coronary cusp	Ventricular arrhythmia originates near the aortic coronary cusp.		112000003916	ACC NCDR
Left ventricular fascicular	Ventricular arrhythmia originates within the left ventricular fascicular system.		112000003917	ACC NCDR
Right ventricle - not outflow	Ventricular arrhythmia originates in the right ventricle, excluding the outflow tract.		112000003918	ACC NCDR
Left ventricular - not outflow or fascicular	Ventricular arrhythmia originates in the left ventricle, excluding the outflow tract and fascicular system.		112000003919	ACC NCDR
Single ventricle or other unknown ventricle morphology	Single Ventricle or Other Unknown Ventricle Morphology		112000003920	ACC NCDR

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16060 Arrhythmia Mechanism

Coding Instruction: Indicate the mechanism of ventricular arrhythmia in patients with single ventricle physiology or unknown ventricular morphology.

Target Value: The value on current procedure

Technical Specification

Code: 112000003921
Code System Name: ACC NCDR
Short Name: ArrMech
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16059 Arrhythmia Mechanism Automatic Location
Operator: Equal
Value: Single ventricle or other unknown ventricle morphology

AND

Element: 16058 VA Mechanism
Operator: Equal
Value: Focal

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Automatic Mechanism in Single Ventricle or Unknown Morphology - 1.3.6.1.4.1.19376.1.4.1.6.5.1055

Selection	Definition	Source	Code	Code System Name
Incisional	The arrhythmia mechanism is related to a surgical incision from a previous procedure.		112000003922	ACC NCDR
Scar based	The arrhythmia mechanism arises from scarring, not related to an incision.		112000003923	ACC NCDR
Other			100000351	ACC NCDR

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16061 Ventricular Reentrant Mechanism Location

Coding Instruction: Select the location(s) of the reentrant arrhythmia mechanism. This refers to the anatomical site within the heart where the reentrant circuit is sustaining the arrhythmia.

Target Value: The value on current procedure

Technical Specification

Code:	112000003924
Code System Name:	ACC NCDR
Short Name:	VenReMechLoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16058 VA Mechanism
Operator: Equal
Value: Reentrant

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Ventricular Reentrant Mechanism Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1056

Selection	Definition	Source	Code	Code System Name
Left ventricle	The reentrant arrhythmia is located in the left ventricle, including the free wall or other areas not specifically fascicular.		87878005	SNOMED CT
Fascicular of left ventricle	The reentrant arrhythmia is located in the left ventricular fascicular pathways, which may involve specialized conduction tissue, often seen in idiopathic VT.		112000003925	ACC NCDR
Right ventricle	The reentrant arrhythmia is located in the right ventricle, which may involve areas such as the right ventricular outflow tract or other regions involved in VT circuits.		53085002	SNOMED CT

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16062 Tetralogy of Fallot or Tetralogy of Fallot Variant

Coding Instruction: Indicate, for a patient with reentrant ventricular arrhythmias, whether a Tetralogy of Fallot or Tetralogy of Fallot variant is present.

Target Value: The value on current procedure

Technical Specification

Code:	112000003910
Code System Name:	ACC NCDR
Short Name:	ToFVar
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16058 VA Mechanism
Operator: Equal
Value: Reentrant

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16063 Tetralogy of Fallot or Tetralogy of Fallot Variant Reentrant Mechanism Locations

Coding Instruction: Select the location(s) of the reentrant arrhythmia mechanism if the patient has Tetralogy of Fallot (ToF) or a ToF variant.

Target Value: The value on current procedure

Technical Specification

Code: 112000003926
Code System Name: ACC NCDR
Short Name: ToFVarLoc
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16062 Tetralogy of Fallot or Tetralogy of Fallot Variant
Operator: Equal
Value: Yes

AND

Element: 16058 VA Mechanism
Operator: Equal
Value: Reentrant

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Tetralogy of Fallot or Tetralogy of Fallot Variant Reentrant Mechanism Locations - 1.3.6.1.4.1.19376.1.4.1.6.5.1057

Selection	Definition	Source	Code	Code System Name
Tricuspid annulus and scar or patch in the anterior right ventricular outflow isthmus	A reentrant mechanism involving the region between the tricuspid annulus and a scar or surgical patch located in the anterior right ventricular outflow tract.		112000003927	ACC NCDR
Pulmonary annulus and right ventricular free wall scar or patch isthmus	A reentrant mechanism involving the region between the pulmonary annulus and a scar or patch along the right ventricular free wall.		112000003928	ACC NCDR
Pulmonary annulus and septal scar or patch isthmus	A reentrant mechanism involving the region between the pulmonary annulus and a scar or patch on the interventricular septum.		112000003929	ACC NCDR
Septal scar or patch and tricuspid annulus isthmus	A reentrant mechanism involving the region between a septal scar or patch and the tricuspid annulus.		112000003930	ACC NCDR
Other			100000351	ACC NCDR

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16064 Reentrant Ventricular Arrhythmia Origin

Coding Instruction: Select the origin of the reentrant ventricular arrhythmia.

Target Value: The value on current procedure

Technical Specification

Code:	112000003931
Code System Name:	ACC NCDR
Short Name:	ReentVentArrOri
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16062 Tetralogy of Fallot or Tetralogy of Fallot Variant
Operator: Equal
Value: No

AND

Element: 16058 VA Mechanism
Operator: Equal
Value: Reentrant

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Reentrant Ventricular Arrhythmia Origin - 1.3.6.1.4.1.19376.1.4.1.6.5.1058

Selection	Definition	Source	Code	Code System Name
Right ventricle			53085002	SNOMED CT
Left ventricle			87878005	SNOMED CT
Single ventricle or unknown ventricular morphology			21814001	SNOMED CT

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16065 Reentrant Mechanism in Right Ventricle

Coding Instruction: Select the reentrant mechanism in the right ventricle.

Target Value: The value on current procedure

Technical Specification

Code:	112000003932
Code System Name:	ACC NCDR
Short Name:	ReentMechRV
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16064 Reentrant Ventricular Arrhythmia Origin
Operator: Equal
Value: Right ventricle

AND

Element: 16062 Tetralogy of Fallot or Tetralogy of Fallot Variant
Operator: Equal
Value: No

AND

Element: 16058 VA Mechanism
Operator: Equal
Value: Reentrant

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Automatic Mechanism in Single Ventricle or Unknown Morphology - 1.3.6.1.4.1.19376.1.4.1.6.5.1055

Selection	Definition	Source	Code	Code System Name
Incisional	The arrhythmia mechanism is related to a surgical incision from a previous procedure.		112000003922	ACC NCDR
Scar based	The arrhythmia mechanism arises from scarring, not related to an incision.		112000003923	ACC NCDR
Other			100000351	ACC NCDR

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16066 Reentrant Mechanism in Left Ventricle

Coding Instruction: Select the reentrant mechanism in the left ventricle.

Target Value: The value on current procedure

Technical Specification

Code:	112000003933
Code System Name:	ACC NCDR
Short Name:	ReentMechLV
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16064 Reentrant Ventricular Arrhythmia Origin
Operator: Equal
Value: Left ventricle

AND

Element: 16062 Tetralogy of Fallot or Tetralogy of Fallot Variant
Operator: Equal
Value: No

AND

Element: 16058 VA Mechanism
Operator: Equal
Value: Reentrant

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Automatic Mechanism in Single Ventricle or Unknown Morphology - 1.3.6.1.4.1.19376.1.4.1.6.5.1055

Selection	Definition	Source	Code	Code System Name
Incisional	The arrhythmia mechanism is related to a surgical incision from a previous procedure.		112000003922	ACC NCDR
Scar based	The arrhythmia mechanism arises from scarring, not related to an incision.		112000003923	ACC NCDR
Other			100000351	ACC NCDR

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16043 Procedure Imaging Used

Coding Instruction: Indicate the imaging modality(ies) used during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000000960
Code System Name:	ACC NCDR
Short Name:	ProcImUs
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Procedure Imaging Used - 1.3.6.1.4.1.19376.1.4.1.6.5.1048

Selection	Definition	Source	Code	Code System Name
Computerized tomography magnetic resonance imaging merge			113091000	SNOMED CT
Transesophageal echocardiogram			105376000	SNOMED CT
Intracardiac echocardiogram			40701008	SNOMED CT

Element: 16052 Isoproterenol Used For Induction

Coding Instruction: Indicate whether isoproterenol was necessary for induction.

Target Value: The value on current procedure

Technical Specification

Code:	112000003893
Code System Name:	ACC NCDR
Short Name:	IsoUsefoInduc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16044 Method of Induction

Coding Instruction: Select the method(s) of induction of the ventricular arrhythmia.

Target Value: The value on current procedure

Technical Specification

Code:	112000003893
Code System Name:	ACC NCDR
Short Name:	VAMetInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16256 None or Insufficient PVC Burden or Tachycardia to Map
Operator: Equal
Value: No

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Method of Induction - 1.3.6.1.4.1.19376.1.4.1.6.5.1049

Selection	Definition	Source	Code	Code System Name
Spontaneous	The arrhythmia occurred naturally without external provocation during the procedure.		5054005	SNOMED CT
Catheter manipulation or placement	The arrhythmia was induced by mechanical stimulation or positioning of the catheter within the heart.		103712006	SNOMED CT
Programmed stimulation	Programmed electrical stimulation (pacing) was used to induce the arrhythmia.		129272000	SNOMED CT
Ventricular fibrillation only	Ventricular fibrillation was the only arrhythmia induced.		71908006	SNOMED CT

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16256 None or Insufficient PVC Burden or Tachycardia to Map

Coding Instruction: Select if the arrhythmia could not be adequately induced or sustained for mapping purposes.

Target Value: N/A

Technical Specification

Code:	112000004269
Code System Name:	ACC NCDR
Short Name:	NoneInsuffBurdtoMap
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16045 Mapping

Coding Instruction: Select the type(s) of mapping used during the ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	21032000
Code System Name:	SNOMED CT
Short Name:	VAMap
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16251 No Mapping
Operator: Equal
Value: No

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Cardiac Mapping - 1.3.6.1.4.1.19376.1.4.1.6.5.883

Selection	Definition	Source	Code	Code System Name
Activation	Activation mapping determines the sequence and timing of electrical activation across the heart, identifying critical areas involved in the arrhythmia circuit.		112000002354	ACC NCDR
Anatomic	Anatomic mapping involves techniques that visualize the heart's structures and pathways, helping to guide catheter placement and ablation through imaging.		112000002355	ACC NCDR
High density mapping catheter			112000003908	ACC NCDR
Entrainment mapping	Entrainment mapping uses pacing from specific sites to assess the electrical circuit characteristics, such as in reentrant arrhythmias.		112000002356	ACC NCDR
Pace	Mapping involving pacing from different sites.		112000002358	ACC NCDR
Voltage mapping	Voltage mapping measures the electrical voltage in different areas of the heart. This helps to identify abnormal areas that may sustain arrhythmias based on the voltage readings.		112000002359	ACC NCDR
Insufficient for mapping			423437008	SNOMED CT
Other			100000351	ACC NCDR

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16251 No Mapping

Coding Instruction: Select if no mapping was used during the ablation procedure.

Target Value: N/A

Technical Specification

Code:	21032000
Code System Name:	SNOMED CT
Short Name:	NoMapping
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16046 Mapping System

Coding Instruction: Select the mapping system used during the ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003894
Code System Name:	ACC NCDR
Short Name:	MapSys
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16045 Mapping
Operator: Equal
Value: Activation

Element: 16045 Mapping
Operator: Equal
Value: Anatomic

Element: 16045 Mapping
Operator: Equal
Value: Entrainment mapping

Element: 16045 Mapping
Operator: Equal
Value: Other

Element: 16045 Mapping
Operator: Equal
Value: Pace

Element: 16045 Mapping
Operator: Equal
Value: Voltage mapping

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16047 High Density Catheter Used

Coding Instruction: Select the high density catheter used during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000004193
Code System Name:	ACC NCDR
Short Name:	HiDenCatUs
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16045 Mapping
Operator: Equal
Value: Activation

Element: 16045 Mapping
Operator: Equal
Value: Anatomic

Element: 16045 Mapping
Operator: Equal
Value: Entrainment mapping

Element: 16045 Mapping
Operator: Equal
Value: Other

Element: 16045 Mapping
Operator: Equal
Value: Pace

Element: 16045 Mapping
Operator: Equal
Value: Voltage mapping

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16049 Outcome

Coding Instruction: Select the outcome of the ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000003807
Code System Name:	ACC NCDR
Short Name:	VAOut
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

VT Procedure Outcome - 1.3.6.1.4.1.19376.1.4.1.6.5.1139

Selection	Definition	Source	Code	Code System Name
Successful	No spontaneous or inducible tachycardia > 1 beat and conduction block demonstrated across ablation line for reentrant circuits for at least 30 min following successful ablation lesion		385669000	SNOMED CT
Unsuccessful	Spontaneous or inducible tachycardia > 1 beat or persistent conduction demonstrated across ablation line for reentrant circuits		385671000	SNOMED CT
Indeterminant	Unknown, empiric, ambiguous		82334004	SNOMED CT

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16050 Assessment of Result

Coding Instruction: Select the specific outcomes that were achieved during a successful ventricular ablation.

Target Value: The value on current procedure

Technical Specification

Code:	112000003897
Code System Name:	ACC NCDR
Short Name:	AssofRes
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16049 Outcome
Operator: Equal
Value: Indeterminant

Element: 16049 Outcome
Operator: Equal
Value: Successful

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Successful Ventricular Ablation Outcomes - 1.3.6.1.4.1.19376.1.4.1.6.5.1050

Selection	Definition	Source	Code	Code System Name
Termination during energy application	The arrhythmia terminated during the delivery of ablation energy.		112000003863	ACC NCDR
Conduction block demonstrated across ablation line	Testing confirmed a conduction block across the ablation line, indicating electrical isolation or disruption of the targeted pathway.		112000003864	ACC NCDR
Not Inducible	The arrhythmia could not be induced following ablation		112000003865	ACC NCDR

Section: VA Procedure **Parent: Ventricular Arrhythmias**

Element: 16051 Isoproterenol Used for Post-Ablation Testing

Coding Instruction: Indicate whether isoproterenol was used to test inducibility of the ventricular arrythmia.

Target Value: The value on current procedure

Technical Specification

Code:	112000003819
Code System Name:	ACC NCDR
Short Name:	IsoUse
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16050 Assessment of Result
Operator: Equal
Value: Not Inducible

AND

Element: 16049 Outcome
Operator: Equal
Value: Indeterminant

Element: 16049 Outcome
Operator: Equal
Value: Successful

AND

Element: 16231 Ventricular Arrhythmia Target Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Ventricular arrhythmias (PVCs, VT, VF)

Section: Junctional Tachycardia **Parent: Procedure Information**

Element: 15990 JT Pre-Procedure Indications

Coding Instruction: Select the clinical reasons that prompted the decision to perform a junctional tachycardia ablation.

Target Value: The value on current procedure

Technical Specification

Code:	112000003818
Code System Name:	ACC NCDR
Short Name:	JTPreProcInd
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15409 Targeted Electrophysiology Ablation Substrate
Operator:	Equal
Value:	Junctional tachycardia

JT Pre-procedure Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.1023

Selection	Definition	Source	Code	Code System Name
Symptoms	The procedure was performed due to patient-reported symptoms		418799008	SNOMED CT
Low cardiac output syndrome	The procedure was indicated due to low cardiac output syndrome. This is defined as inadequate cardiac output leading to hypoperfusion, tissue hypoxia.		44088000	SNOMED CT
Hemodynamic collapse/arrest	The procedure was performed in response to a hemodynamic emergency, such as cardiac arrest, profound hypotension, or shock		112000003839	ACC NCDR
Heart failure/ventricular dysfunction	The patient presented with heart failure and/or ventricular dysfunction. Heart failure and ventricular dysfunction should be defined by the provider.		84114007	SNOMED CT
Other			100000351	ACC NCDR

Section: Junctional Tachycardia — Parent: Procedure Information

Element: 15991 — Junctional Tachycardia Type

Coding Instruction: Select the type of junctional tachycardia that the patient has based on clinical presentation and diagnosis.

Target Value: The value on current procedure

Technical Specification

Code:	251155001
Code System Name:	SNOMED CT
Short Name:	JTTyp
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

Junctional Tachycardia Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1024

Selection	Definition	Source	Code	Code System Name
Congenital	The patient's junctional tachycardia is determined to be congenital in origin. This refers to cases where the JT is present from birth, often due to inherent heart conduction system abnormalities.		255399007	SNOMED CT
Post-operative	The patient's junctional tachycardia occurred as a result of an interventional or surgical cardiac procedure.		262061000	SNOMED CT
Idiopathic (non-congenital)	The patient's junctional tachycardia cannot be attributed to congenital nor post-surgical causes.		54690008	SNOMED CT
Other			100000351	ACC NCDR

Element: 16035 — Number of Post Operative Days

Coding Instruction: Record the number of days that have passed since the procedure or surgery that contributed to the junctional tachycardia.

Note: Date of Procedure is Day 0.

Target Value: The value on current procedure

Technical Specification

Code:	251155001
Code System Name:	SNOMED CT
Short Name:	NumPostOpDays
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	3
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15991 Junctional Tachycardia Type
Operator: Equal
Value: Post-operative

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

Section: Junctional Tachycardia **Parent: Procedure Information**

Element: 15992 Pattern of Arrhythmia

Coding Instruction: Select the description of the junctional tachycardia based on frequency of the arrhythmia.

Target Value: The value on current procedure

Technical Specification

Code:	112000004189
Code System Name:	ACC NCDR
Short Name:	PatArr
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

JT Pattern of Arrhythmia - 1.3.6.1.4.1.19376.1.4.1.6.5.1025

Selection	Definition	Source	Code	Code System Name
Incessant junctional tachycardia	The junctional tachycardia is present continuously, without significant breaks or periods of normal sinus rhythm		112000003840	ACC NCDR
Persistent junctional tachycardia	The junctional tachycardia is ongoing, but there are occasional periods of another rhythm. The arrhythmia is not incessant but tends to recur frequently over time, lasting for minutes to hours.		112000003841	ACC NCDR
Paroxysmal junctional tachycardia	The junctional tachycardia occurs in sudden, brief episodes that start and stop spontaneously. The episodes are usually intermittent and may last for a few seconds to minutes, with longer periods of normal sinus rhythm between episodes.		112000003842	ACC NCDR
Not documented	Rhythm is not documented.		112000001830	ACC NCDR
Other			100000351	ACC NCDR

Section: Junctional Tachycardia **Parent: Procedure Information**

Element: 15997 Antiarrhythmic Class

Coding Instruction: Indicate the class(es) of antiarrhythmics prescribed.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code: 112000004191
Code System Name: ACC NCDR
Short Name: AntiClas
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16257 Antiarrhythmic Class Not Documented
Operator: Equal
Value: No

AND

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Antiarrhythmic Drug

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

Antiarrhythmic Class - 1.3.6.1.4.1.19376.1.4.1.6.5.1027

Selection	Definition	Source	Code	Code System Name
Class I antiarrhythmic agent	Sodium-channel blockers Examples include Proainamide, Quinidine, Mexiletine, Lidocaine, Felcainide, Propafenone.		373260001	SNOMED CT
Class II antiarrhythmic agent	Beta blockers Examples include Atenolol, Metroprolol, Propranolol.		373278006	SNOMED CT
Class III antiarrhythmic agent	Potassium blockers. Examples include Amiodarone, Sotalol.		372855004	SNOMED CT
Class IV antiarrhythmic agent	Calcium channel blockers or other agents Examples include Verapamil, Diltiazem.		372693007	SNOMED CT

Section: Junctional Tachycardia **Parent: Procedure Information**

Element: 16257 Antiarrhythmic Class Not Documented

Coding Instruction: Select if antiarrhythmic class is not documented.

Target Value: N/A

Technical Specification

Code:	112000004191
Code System Name:	ACC NCDR
Short Name:	AntiarrClassNotDoc
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Antiarrhythmic Drug

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

Section: Junctional Tachycardia **Parent: Procedure Information**

Element: 16036 Number of Antiarrhythmic Medications

Coding Instruction: Indicate the number of antiarrhythmic medications prescribed or administered to the patient.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

Technical Specification

Code:	112000004189
Code System Name:	ACC NCDR
Short Name:	NumAntiArrMed
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15032 Pre-Procedure Medications
Operator: Equal
Value: Antiarrhythmic Drug

--- AND ---

Element: 6991 PreProcedure Medication Administered
Operator: Equal
Value: Yes

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

Element: 15993 Spontaneous Junctional Tachycardia Present

Coding Instruction: Indicate whether the junctional tachycardia (JT) was present spontaneously during the ablation procedure, without the need for external induction.

Target Value: The value on current procedure

Technical Specification

Code:	251155001
Code System Name:	SNOMED CT
Short Name:	SponJTPres
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

Section: Junctional Tachycardia **Parent: Procedure Information**

Element: 15994 Inducible Junctional Tachycardia

Coding Instruction: Indicate whether the junctional tachycardia (JT) was inducible during the ablation procedure, meaning the arrhythmia could be initiated or provoked by external means.

Target Value: The value on current procedure

Technical Specification

Code:	112000003800
Code System Name:	ACC NCDR
Short Name:	IndJuncTach
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15993 Spontaneous Junctional Tachycardia Present
Operator: Equal
Value: No

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

Section: Junctional Tachycardia **Parent: Procedure Information**

Element: 15995 Conditions That Induced Junctional Tachycardia

Coding Instruction: Indicate the conditions under which the junctional tachycardia was successfully induced during the ablation procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000004190
Code System Name:	ACC NCDR
Short Name:	CondIndJT
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15994 Inducible Junctional Tachycardia
Operator: Equal
Value: Yes

AND

Element: 15993 Spontaneous Junctional Tachycardia Present
Operator: Equal
Value: No

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

JT Conditions that induced arrhythmia - 1.3.6.1.4.1.19376.1.4.1.6.5.1026

Selection	Definition	Source	Code	Code System Name
Inducible at baseline	The arrhythmia was induced without pharmacological agents.		112000003843	ACC NCDR
Inducible with isoproterenol	The arrhythmia was induced after administering isoproterenol.		112000003844	ACC NCDR

Section: Junctional Tachycardia **Parent: Procedure Information**

Element: 15996 Ablation Outcome

Coding Instruction: Indicate the result of the ablation procedure for junctional tachycardia based on whether the arrhythmia was successfully treated.

Target Value: The value on current procedure

Technical Specification

Code:	112000003807
Code System Name:	ACC NCDR
Short Name:	AblOut
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

JT Procedure Outcome - 1.3.6.1.4.1.19376.1.4.1.6.5.1140

Selection	Definition	Source	Code	Code System Name
Successful	No spontaneous or inducible tachycardia > 1 beat of same morphology as the target arrhythmia for at least 30 min following successful ablation lesion		385669000	SNOMED CT
Unsuccessful	Spontaneous or inducible tachycardia > 1 beat of same morphology as the target arrhythmia		385671000	SNOMED CT
Indeterminant	Unknown, empiric, ambiguous		82334004	SNOMED CT

Element: 15998 Isoproterenol Used for Post-ablation Testing

Coding Instruction: Indicate whether isoproterenol was administered during post-ablation testing.

Target Value: The value on current procedure

Technical Specification

Code:	112000003819
Code System Name:	ACC NCDR
Short Name:	IsoUsed
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator: Equal
Value: Junctional tachycardia

Section: Device Information **Parent: Procedure Information**

Element: 16214 Targeted Substrate Performed Device Counter

Coding Instruction: The targeted substrate counter distinguishes individual devices when multiple are used during one procedure.

Note: The software-assigned device counter should start at one and be incremented by one for each device used.

Target Value: N/A

Technical Specification

Code:	112000003584
Code System Name:	ACC NCDR
Short Name:	TarSubPerfDevCount
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Parent/Child Validation

Element:	15409 Targeted Electrophysiology Ablation Substrate
Operator:	
Value:	Any Value

Section: Device Information **Parent: Procedure Information**

Element: 16003 Device Targeted Substrate

Coding Instruction: Select the substrate(s) that were targeted during the electrophysiology (EP) ablation.

Target Value: The value on current procedure

Technical Specification

Code: 112000003809
Code System Name: ACC NCDR
Short Name: DevTarSub
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16214 Targeted Substrate Performed Device Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator:
Value: Any Value

Ablation Information - 1.3.6.1.4.1.19376.1.4.1.6.5.1134

Selection	Definition	Source	Code	Code System Name
Wolff-Parkinson-White (WPW)			74390002	SNOMED CT
Concealed accessory pathway/permanent junctional reciprocating tachycardia			233922008	SNOMED CT
AV nodal reentrant tachycardia (AVNRT)			251166008	SNOMED CT
Focal atrial tachycardia			713424004	SNOMED CT
Macroreentrant atrial tachycardia			735682000	SNOMED CT
Ventricular arrhythmias (PVCs, VT, VF)			44103008	SNOMED CT
Junctional tachycardia			426648003	SNOMED CT
Other	Select only when the substrate is not represented by any existing options. Use this category exclusively when no other selection is appropriate.		100000351	ACC NCDR

Section: Device Information **Parent: Procedure Information**

Element: 15414 Electrophysiology Ablation Catheter Identification Number

Coding Instruction: Indicate all ablation catheters utilized during the current EP procedure.

Note: Code all devices used during the procedure.

Target Value: The value on current procedure

Vendor Instruction: Electrophysiology Ablation Catheter Identification Number (15414) cannot be Null when Targeted Substrate Performed Device Counter (16214) has a value

Technical Specification

Code: 63653004
Code System Name: SNOMED CT
Short Name: EPAblationCathID
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16214 Targeted Substrate Performed Device Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator:
Value: Any Value

Element: 16037 Energy Source

Coding Instruction: Select the energy source used by the ablation catheter.

Target Value: The value on current procedure

Technical Specification

Code: 112000004298
Code System Name: ACC NCDR
Short Name: EnerSour
Missing Data: Report
Harvested: Yes (EP)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple (Dynamic List)
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16214 Targeted Substrate Performed Device Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator:
Value: Any Value

Ablation Energy Source - 1.3.6.1.4.1.19376.1.4.1.6.5.947

Selection	Definition	Source	Code	Code System Name
Cryoablation			112000003639	ACC NCDR
Pulsed field ablation			112000003642	ACC NCDR
Non-irrigated radio frequency			112000003851	ACC NCDR
Irrigated radio frequency			112000003850	ACC NCDR

Section: Device Information **Parent: Procedure Information**

Element: 16004 Device Successful Catheter

Coding Instruction: Indicate whether the ablation catheter used was successful in achieving the intended outcome. This refers to selecting the specific catheter that created the lesion that was felt to be responsible for definitive change. Only one catheter should be marked as successful per substrate. Ensure that all catheters used in the procedure are documented, even if they were not successful.

Target Value: The value on current procedure

Technical Specification

Code:	112000003809
Code System Name:	ACC NCDR
Short Name:	DevSucCath
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16214 Targeted Substrate Performed Device Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator:
Value: Any Value

Element: 16005 Device Number of Lesions

Coding Instruction: Record the number of lesions created during the ablation procedure by a catheter.

Target Value: The value on current procedure

Technical Specification

Code:	112000003809
Code System Name:	ACC NCDR
Short Name:	DevNumLes
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16214 Targeted Substrate Performed Device Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator:
Value: Any Value

Section: Device Information **Parent: Procedure Information**

Element: 16236 Total Lesion Time

Coding Instruction: Indicate the total duration of energy application (lesion time) during the ablation procedure, measured in minutes. This represents the cumulative time across all lesions delivered by a catheter. It refers to the duration that an energy source was actively applied to tissue during the procedure.

Target Value: The value on current procedure

Technical Specification

Code:	112000004293
Code System Name:	ACC NCDR
Short Name:	TotLesTim
Missing Data:	Report
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	PQ
Precision:	4,1
Selection Type:	Single
Unit of Measure:	min
Default Value:	
Usual Range:	0.1 - 30.0 min
Valid Range:	0.1 - 300.0 min
Data Source:	User

Parent/Child Validation

Element: 16214 Targeted Substrate Performed Device Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator:
Value: Any Value

Element: 16006 Unique Device Identifier - IMPACT Ablation

Coding Instruction: Indicate the unique device identifier (UDI) of the device. Enter all characters including the parenthesis. Leave blank if the UDI is unknown or unable to be collected due to state/local privacy laws.

Target Value: The value on current procedure

Supporting Definition: **General Definition**

The UDI identifies the specific individual device; no two devices have the same UDI. Refer to the FDA website for detailed explanation of UDIs.

The UDI is made up of five different identifiers and each identifier is preceded by a number in parentheses.

Example UDI below: Device Identifier (01), Expiration Date (17), Manufacturing date (11), Lot Number (10), and Serial Number (21)

Source:

Technical Specification

Code:	112000001973
Code System Name:	ACC NCDR
Short Name:	UDIImpAbl
Missing Data:	No Action
Harvested:	Yes (EP)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	150
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16214 Targeted Substrate Performed Device Counter
Operator:
Value: Any Value

AND

Element: 15409 Targeted Electrophysiology Ablation Substrate
Operator:
Value: Any Value

Section: New Cardiovascular Implantable Electronic Device **Parent: Procedure Information**

Element: 15794 Final Device Type

Coding Instruction: Indicate the device type(s) that was implanted at the completion of the procedure.

Target Value: Any occurrence on current procedure

Technical Specification

Code:	260846005
Code System Name:	SNOMED CT
Short Name:	Final_Device_Type
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator
Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Implantation Device Type - Dynamic - 1.3.6.1.4.1.19376.1.4.1.6.5.982

Selection	Definition	Source	Code	Code System Name
Cardiac resynchronization therapy - defibrillator	A cardiac resynchronization therapy device and a biventricular pacemaker that sends electrical signals to both ventricles that resynchronizes the heart chambers and helps it pump more effectively. It may or may not have an atrial pacing wire.		100001216	ACC NCDR
Extravascular ICD	The extravascular (EV) ICD system has a lead (thin wire) placed outside the heart and veins, under the sternum (breastbone).		112000003612	ACC NCDR
ICD dual chamber	A dual-chamber ICD defibrillates the ventricle and paces the atrium and ventricle.		100001215	ACC NCDR
ICD single chamber	A single-chamber ICD defibrillates the ventricle and paces the ventricle.		100001214	ACC NCDR
Subcutaneous ICD	The subcutaneous ICD consists of an ICD generator and a defibrillation lead however, the defibrillation lead remains completely outside the chest cavity. The SICD is implanted under the left breast, and the lead is placed under the skin along the left side of the breastbone.		100001217	ACC NCDR
Single chamber transvenous pacemaker	A type of pacemaker that uses one transvenous lead to stimulate either the right atrium or right ventricle of the heart.		112000003680	ACC NCDR
Dual chamber transvenous	A type of pacemaker that uses two transvenous leads to stimulate both the right atrium and right ventricle of the heart.		112000003679	ACC NCDR
Cardiac resynchronization therapy - pacemaker	A cardiac resynchronization therapy device and a biventricular pacemaker that sends electrical signals to both ventricles that resynchronizes the heart chambers and helps it pump more effectively. It may or may not have an atrial pacing wire.		704708004	SNOMED CT
Leadless single chamber pacemaker	A self-contained transvenous pacemaker generator and electrode system implanted directly into the right ventricle. The device is implanted via a femoral vein transcatheter approach; it requires no chest incision or subcutaneous generator pocket.		112000002030	ACC NCDR
Leadless dual chamber pacemaker	A self-contained transvenous pacemaker generator and electrode system implanted directly into the right ventricle and right atrium. The device is implanted via a femoral vein transcatheter approach; it requires no chest incision or subcutaneous generator pocket.		112000003671	ACC NCDR
His bundle pacemaker	His-bundle pacing is a method for delivering permanent pacing. It produces physiological ventricular activation via the His-Purkinje system		112000003669	ACC NCDR

Section: New Cardiovascular Implantable Electronic Device	Parent: Procedure Information		
Left bundle pacemaker	Left bundle pacing is a method for delivering permanent pacing. It produces physiological ventricular activation via the Left bundle.	112000003670	ACC NCDR
Leadless left ventricle endocardial pacemaker	Left ventricular (LV) endocardial pacing is a treatment for patients with heart failure, severe LV dysfunction, and electrical dyssynchrony. It's an alternative therapy to cardiac resynchronization therapy (CRT) for patients who don't respond to conventional CRT or when it's not possible to place a lead through the coronary sinus.	112000003709	ACC NCDR

Element: 16203 Single Chamber Leadless Pacemaker Type

Coding Instruction: Select the type of single chamber leadless pacemaker used in the procedure.

Target Value: The value on current procedure

Technical Specification

Code: 112000004296
Code System Name: ACC NCDR
Short Name: SingChamLeadPacTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless single chamber pacemaker

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Pacemaker Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1131

Selection	Definition	Source	Code	Code System Name
Atrial			33331003	SNOMED CT
Ventricular			54974006	SNOMED CT

Section: CIED Device **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7635 Implant Device ID

Coding Instruction: Indicate the assigned identification number associated with the implanted device.

Note(s):

The devices that should be collected in your application are controlled by a Defibrillator or Pacemaker Device Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: Any occurrence on current procedure

Technical Specification

Code:	2.16.840.1.113883.3.3478.6.1.21
Code System Name:	ACC NCDR EP Devices
Short Name:	ICDImplID
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator
Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 7640 Implant Device Serial Number

Coding Instruction: Indicate the serial number of the device that was implanted.

Target Value: Any occurrence on current procedure

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.850
Code System Name:	ACC NCDR
Short Name:	ICDImpSerNo
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	30
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 7635 Implant Device ID
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator
Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Section: CIED Device **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7645 Implant Unique Device Identifier

Coding Instruction: Indicate the direct identifier portion of the Unique Device Identifier (UDI) associated with the device used for implant. This ID is provided by the device manufacturer, and is either a GTIN or HIBC number.

Target Value: Any occurrence on current procedure

Supporting Definition: **Unique Device Identifier (UDI)**

An identifier that is the main (primary) lookup for a medical device product and meets the requirements to uniquely identify a device through its distribution and use. This value is supplied to the FDA by the manufacturer.

Source: US FDA

Technical Specification

Code:	2.16.840.1.113883.3.3719
Code System Name:	ACC NCDR
Short Name:	ICDImpUDI
Missing Data:	No Action
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	150
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Pacemaker pulse generator
Element:	15081 Procedures Performed
Operator:	Equal
Value:	ICD generator

Section: New Pacemaker Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16117 Pacemaker Generator Indication

Coding Instruction: Select the indication(s) for pacemaker generator implantation.

Target Value: The value on current procedure

Technical Specification

Code:	112000003818
Code System Name:	ACC NCDR
Short Name:	ICDPaceGenInd
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15794 Final Device Type
Operator: Equal
Value: Single chamber transvenous pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Dual chamber transvenous

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless single chamber pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless dual chamber pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: His bundle pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Left bundle pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless left ventricle endocardial pacemaker

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

ICD Pacemaker Generator Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.1089

Selection	Definition	Source	Code	Code System Name
Sinus node dysfunction	The pacemaker was implanted to treat conditions like sinus bradycardia, sinus arrest, or chronotropic incompetence.		60423000	SNOMED CT
AV junctional rhythm	The pacemaker was implanted to manage a junctional rhythm.		11849007	SNOMED CT
2nd degree or high grade block	The pacemaker was implanted to address any second-degree AV block or high-grade AV block.		195042002	SNOMED CT
Complete heart block	The pacemaker was implanted to treat complete (third-degree) AV block.		27885002	SNOMED CT
Ventricular dysfunction	The pacemaker was implanted to improve ventricular function.		112000004022	ACC NCDR
SVT treatment	The pacemaker was implanted to manage supraventricular tachycardias, such as through		6456007	SNOMED CT

Section: New Pacemaker Generator **Parent: New Cardiovascular Implantable Electronic Device**

overdrive pacing.

Other	100000351	ACC NCDR

Element: 16118 Pacemaker Change

Coding Instruction: Indicate whether the pacemaker procedure is for a pacemaker change. This refers to the replacement or upgrade of an existing pacemaker device.

Target Value: The value on current procedure

Technical Specification

Code: 112000004023
Code System Name: ACC NCDR
Short Name: PaceChang
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15794 Final Device Type
Operator: Equal
Value: Single chamber transvenous pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Dual chamber transvenous
Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Leadless single chamber pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Leadless dual chamber pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: His bundle pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Left bundle pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Leadless left ventricle endocardial pacemaker

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator
Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Section: New Pacemaker Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7650 Reason(s) for Generator Replacement

Coding Instruction: Indicate the reason(s) for the replacement.

Target Value: Any occurrence on current procedure

Technical Specification

Code: 100000991
Code System Name: ACC NCDR
Short Name: ReImplantReason
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16118 Pacemaker Change
Operator: Equal
Value: Yes

AND

Element: 15794 Final Device Type
Operator: Equal
Value: Single chamber transvenous pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Dual chamber transvenous

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless single chamber pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless dual chamber pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: His bundle pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Left bundle pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless left ventricle endocardial pacemaker

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Reimplant Reason - 1.3.6.1.4.1.19376.1.4.1.6.5.36

Selection	Definition	Source	Code	Code System Name
Device relocation	The device was replaced because it needed to be relocated.		100001087	ACC NCDR
End of expected battery life	The device was replaced due to its battery reaching the end of its expected lifespan.		100001088	ACC NCDR
Erosion	The device was replaced due to erosion of the device through the skin or surrounding tissue.		100014134	ACC NCDR
Faulty connector/header	A defect or malfunction in the connector block of a device, which is the part where the leads are attached to the device. This issue can compromise the electrical		100001089	ACC NCDR

Section: New Pacemaker Generator **Parent: New Cardiovascular Implantable Electronic Device**

	connection between the device and the leads, potentially leading to improper pacing or sensing functions.		
Infection	The device was replaced due to infection.	100001091	ACC NCDR
Malfunction	The device was replaced due to a device malfunction or failure.	100001090	ACC NCDR
Replaced at time of lead revision	The device was replaced when the leads were being revised.	100001092	ACC NCDR
Replaced at time of upgrade	The device was replaced because an upgrade was being implanted.	100001094	ACC NCDR
Under manufacturer advisory/recalled	The device was replaced following a manufacturer-issued advisory or recall.	100001093	ACC NCDR
Other		112000003710	ACC NCDR

Element: 16119 Pacemaker Change Upgrade Type

Coding Instruction: Select the type of pacemaker change upgrade.

Target Value: The value on current procedure

Technical Specification

Code: 112000004023
Code System Name: ACC NCDR
Short Name: PaceChangUpTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 7650 Reason(s) for Generator Replacement
Operator: Equal
Value: Replaced at time of upgrade

AND

Element: 16118 Pacemaker Change
Operator: Equal
Value: Yes

AND

Element: 15794 Final Device Type
Operator: Equal
Value: Single chamber transvenous pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Dual chamber transvenous
Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Leadless single chamber pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Leadless dual chamber pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: His bundle pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Left bundle pacemaker
Element: 15794 Final Device Type
Operator: Equal
Value: Leadless left ventricle endocardial pacemaker

Section: New Pacemaker Generator **Parent: New Cardiovascular Implantable Electronic Device**

AND
Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator
Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Pacemaker Change Upgrade Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1090

Selection	Definition	Source	Code	Code System Name
Single to dual chamber	The pacemaker was upgraded from a single-chamber system (either atrial or ventricular) to a dual-chamber system, providing pacing for both the atrium and ventricle.		112000003989	ACC NCDR
Pacemaker to cardiac resynchronization therapy with pacemaker	The system was upgraded to include cardiac resynchronization therapy (CRT-P), adding or reconfiguring leads to synchronize ventricular contractions.		112000004024	ACC NCDR
Pacemaker to conduction system pacing	The pacemaker system was modified to pace the heart through the conduction system, such as His-bundle pacing or left bundle branch area pacing.		112000004025	ACC NCDR

Section: New Pacemaker Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16120 Pacemaker Implant Location

Coding Instruction: Select the pacemaker implant location.

Target Value: The value on current procedure

Technical Specification

Code:	112000003817
Code System Name:	ACC NCDR
Short Name:	PaceImpLoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15794 Final Device Type
Operator: Equal
Value: Single chamber transvenous pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Dual chamber transvenous

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless single chamber pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless dual chamber pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: His bundle pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Left bundle pacemaker

Element: 15794 Final Device Type
Operator: Equal
Value: Leadless left ventricle endocardial pacemaker

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Pacemaker Implant Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1091

Selection	Definition	Source	Code	Code System Name
Left axillary			112000004008	ACC NCDR
Left pre-pectoral			112000004006	ACC NCDR
Left sub-pectoral			112000004007	ACC NCDR
Right axillary			112000004013	ACC NCDR
Right pre-pectoral			112000004011	ACC NCDR
Right sub-pectoral			112000004012	ACC NCDR
Intrathoracic			112000004026	ACC NCDR
Subrectus			112000004009	ACC NCDR
Other			100000351	ACC NCDR

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7015 ICD Indication

Coding Instruction: Indicate the ICD procedure indication

Target Value: Any occurrence on current procedure

Technical Specification

Code:	432678004
Code System Name:	SNOMED CT
Short Name:	ICDIndication
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Procedure Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.33

Selection	Definition	Source	Code	Code System Name
Primary prevention	An indication for an ICD to prevent sudden cardiac death. It refers to use of ICDs in individuals who are at risk for but have not yet had an episode of sustained ventricular tachycardia, ventricular fibrillation, or resuscitated cardiac arrest.		315233008	SNOMED CT
Secondary prevention	An indication for ICD exclusively for patients who have survived one or more cardiac arrests or sustained ventricular tachycardia. Patients with cardiac conditions associated with a high risk of sudden death who have unexplained syncope that is likely to be due to ventricular arrhythmias are considered to have a secondary indication.		315234002	SNOMED CT

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16108 ICD Generator Change

Coding Instruction: Indicate whether the current procedure was done to change a prior pacemaker or ICD generator to an ICD generator.

Target Value: The value on current procedure

Technical Specification

Code:	112000003983
Code System Name:	ACC NCDR
Short Name:	ICDGenChan
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16109 ICD Generator Change Rationale

Coding Instruction: Indicate the reason(s) for the implantable cardioverter defibrillator procedure generator change.

Target Value: The value on current procedure

Technical Specification

Code: 112000003983
Code System Name: ACC NCDR
Short Name: ICDGenChangRat
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16108 ICD Generator Change
Operator: Equal
Value: Yes

AND

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

ICD Generator Change Reason - 1.3.6.1.4.1.19376.1.4.1.6.5.1082

Selection	Definition	Source	Code	Code System Name
Device relocation	The device was replaced because it needed to be relocated.		112000003953	ACC NCDR
End of expected battery life	The device was replaced due to its battery reaching the end of its expected lifespan.		112000003984	ACC NCDR
Erosion	The device was replaced due to erosion of the device through the skin or surrounding tissue.		100014134	ACC NCDR
Faulty connector or header	A defect or malfunction in the connector block of a device, which is the part where the leads are attached to the device. This issue can compromise the electrical connection between the device and the leads, potentially leading to improper pacing or sensing functions.		112000003988	ACC NCDR
Infection	The device was replaced due to infection.		40733004	SNOMED CT
Device malfunction	The device was replaced due to a device malfunction or failure.		112000001504	ACC NCDR
Replaced at time of lead revision	The device was replaced when the leads were being revised.		112000003985	ACC NCDR
Replaced at time of upgrade	The device was replaced because an upgrade was being implanted.		112000003986	ACC NCDR

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Under manufacturer advisory/recalled	The device was replaced following a manufacturer-issued advisory or recall.	112000003987	ACC NCDR
Other		100000351	ACC NCDR

Element: 16110 ICD Change Type

Coding Instruction: Select the procedure type (upgrade or downgrade) being done for the implantable cardioverter defibrillator.

Target Value: The value on current procedure

Technical Specification

Code: 112000003994
Code System Name: ACC NCDR
Short Name: ICDChangTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16108 ICD Generator Change
Operator: Equal
Value: Yes

AND

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

ICD Upgrade Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1083

Selection	Definition	Source	Code	Code System Name
Single chamber ICD to dual chamber ICD			112000003989	ACC NCDR
ICD to cardiac resynchronization therapy with defibrillator			112000003990	ACC NCDR
Pacemaker to ICD			112000003991	ACC NCDR
ICD or pacemaker to subcutaneous ICD			112000003992	ACC NCDR
Subcutaneous ICD to transvenous ICD			112000003993	ACC NCDR
Transvenous pacemaker or ICD to EV-ICD			112000004201	ACC NCDR
Subcutaneous ICD to EV-ICD			112000004202	ACC NCDR

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16111 Specify ICD Change

Coding Instruction: For additional detail, select the implantable cardioverter defibrillator procedure upgrade type from the list.

Target Value: The value on current procedure

Technical Specification

Code: 112000004005
Code System Name: ACC NCDR
Short Name: SpecICDChang
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16108 ICD Generator Change
Operator: Equal
Value: Yes

AND

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

ICD Upgrade Type Detail - 1.3.6.1.4.1.19376.1.4.1.6.5.1084

Selection	Definition	Source	Code	Code System Name
Ventricular pacemaker to single chamber ICD			112000003995	ACC NCDR
Ventricular pacemaker to dual chamber ICD			112000003996	ACC NCDR
Ventricular pacemaker to cardiac resynchronization therapy defibrillator			112000003997	ACC NCDR
Ventricular pacemaker to conduction system pacing defibrillator			112000003998	ACC NCDR
Atrial pacemaker to dual chamber ICD			112000003999	ACC NCDR
Atrial pacemaker to cardiac resynchronization therapy defibrillator			112000004000	ACC NCDR
Atrial pacemaker to conduction system pacing defibrillator			112000004001	ACC NCDR
Transvenous ICD to subcutaneous ICD			112000004002	ACC NCDR

Section: ICD Generator	Parent: New Cardiovascular Implantable Electronic Device	
Cardiac resynchronization therapy pacemaker to cardiac resynchronization therapy defibrillator	112000004003	ACC NCDR
Cardiac resynchronization therapy pacemaker to conduction system pacing defibrillator	112000004004	ACC NCDR
Subcutaneous ICD to transvenous ICD	112000004148	ACC NCDR
Single chamber ICD to single chamber PPM	112000004200	ACC NCDR
Transvenous to EV-ICD	112000004201	ACC NCDR
S-ICD to EV-ICD	112000004202	ACC NCDR
Single/dual chamber to CRT-P	112000004203	ACC NCDR
Dual chamber to conduction system pacing	112000004204	ACC NCDR
Single/dual chamber to leadless	112000004205	ACC NCDR
Dual chamber ICD to dual chamber PPM	112000004206	ACC NCDR
Single chamber to conduction system pacing	112000004207	ACC NCDR

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16112 ICD Implant Location

Coding Instruction: Select the implantable cardioverter defibrillator implant location.

Target Value: The value on current procedure

Technical Specification

Code:	112000003817
Code System Name:	ACC NCDR
Short Name:	ICDImpLoc
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Pacemaker Implant Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1091

Selection	Definition	Source	Code	Code System Name
Left axillary			112000004008	ACC NCDR
Left pre-pectoral			112000004006	ACC NCDR
Left sub-pectoral			112000004007	ACC NCDR
Right axillary			112000004013	ACC NCDR
Right pre-pectoral			112000004011	ACC NCDR
Right sub-pectoral			112000004012	ACC NCDR
Intrathoracic			112000004026	ACC NCDR
Subrectus			112000004009	ACC NCDR
Other			100000351	ACC NCDR

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16113 ICD Defibrillation Threshold Testing Performed

Coding Instruction: Indicate whether defibrillation threshold testing was performed.

Target Value: The value on current procedure

Technical Specification

Code:	112000004014
Code System Name:	ACC NCDR
Short Name:	ICDDefibThreshTestPerf
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

ICD Defibrillation Threshold Testing Performed - 1.3.6.1.4.1.19376.1.4.1.6.5.1086

Selection	Definition	Source	Code	Code System Name
No			100013073	ACC NCDR
Yes - Successful			385669000	SNOMED CT
Yes - Unsuccessful			385671000	SNOMED CT

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16114 ICD Defibrillation Threshold Testing Reason Unsuccessful

Coding Instruction: Select the reason the defibrillation threshold testing was not successful.

Target Value: The value on current procedure

Technical Specification

Code: 112000004018
Code System Name: ACC NCDR
Short Name: ICDDefibThreshTestReasUnsuc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16113 ICD Defibrillation Threshold Testing Performed
Operator: Equal
Value: Yes - Unsuccessful

AND

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

ICD Defibrillation Threshold Testing Reason Unsuccessful - 1.3.6.1.4.1.19376.1.4.1.6.5.1087

Selection	Definition	Source	Code	Code System Name
Unable to induce ventricular tachycardia or ventricular fibrillation	DFT testing was unsuccessful because attempts to provoke ventricular arrhythmias for defibrillation assessment were unsuccessful.		112000004015	ACC NCDR
Could not defibrillate	DFT testing was unsuccessful due to failure of the device to successfully terminate ventricular tachycardia (VT) or ventricular fibrillation (VF).		112000004016	ACC NCDR
Ventricular tachycardia or Ventricular fibrillation not detected	DFT testing was unsuccessful because the induced VT or VF could not be sensed by the ICD.		112000004017	ACC NCDR
Other			100000351	ACC NCDR

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16115 ICD Changes Made To Meet Defibrillation Threshold At End Of Procedure

Coding Instruction: If defibrillation threshold testing was unsuccessful, indicate whether adjustments were made to the settings of the ICD to meet the defibrillation thresholds at the end of the procedure. These adjustments may include modifications to shock waveforms, energy levels, or other relevant parameters to achieve a successful outcome.

Target Value: The value on end of current procedure

Technical Specification

Code:	112000003994
Code System Name:	ACC NCDR
Short Name:	ICDChanges
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16113 ICD Defibrillation Threshold Testing Performed
Operator: Equal
Value: Yes - Unsuccessful

AND

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Section: ICD Generator **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16116 ICD Interventions That Led to Meeting Defibrillation Threshold

Coding Instruction: Select the interventions that led to successful defibrillation threshold testing.

Target Value: The value on current procedure

Technical Specification

Code:	112000004019
Code System Name:	ACC NCDR
Short Name:	ICDInterventionsMeetThresh
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16115 ICD Changes Made To Meet Defibrillation Threshold At End Of Procedure
Operator: Equal
Value: Yes

AND

Element: 16113 ICD Defibrillation Threshold Testing Performed
Operator: Equal
Value: Yes - Unsuccessful

AND

Element: 15794 Final Device Type
Operator: Equal
Value: Cardiac resynchronization therapy - defibrillator

Element: 15794 Final Device Type
Operator: Equal
Value: Extravascular ICD

Element: 15794 Final Device Type
Operator: Equal
Value: ICD dual chamber

Element: 15794 Final Device Type
Operator: Equal
Value: ICD single chamber

Element: 15794 Final Device Type
Operator: Equal
Value: Subcutaneous ICD

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

ICD Interventions That Led to Meeting Defibrillation Threshold - 1.3.6.1.4.1.19376.1.4.1.6.5.1088

Selection	Definition	Source	Code	Code System Name
Programming change	Adjustments made to the device's settings or parameters, such as shock waveform, energy level, polarity, or shock sequence, to achieve successful defibrillation.		112000004020	ACC NCDR
Hardware change	Modifications involving physical components of the defibrillation system, such as repositioning leads, replacing a lead or generator, or adding an additional shocking coil to improve defibrillation success.		112000004021	ACC NCDR
Other	Any intervention not encompassed by the categories above that contributed to successful defibrillation		100000351	ACC NCDR

Section: New Implantable Loop Recorder (ILR) **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16078 Indication for New Implantable Loop Recorder

Coding Instruction: Select the reason(s) the loop recorder was implanted.

Target Value: The value on current procedure

Technical Specification

Code:	112000003818
Code System Name:	ACC NCDR
Short Name:	IndNewILR
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

ILRP Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.1068

Selection	Definition	Source	Code	Code System Name
Abnormal ECG or Holter monitor results	The device was implanted due to abnormal findings on prior ECG or Holter monitor studies.		1000142474	ACC NCDR
Palpitations	The device was implanted due to palpitations.		80313002	SNOMED CT
Pre-syncope	The device was implanted to investigate episodes of near-fainting or lightheadedness.		427461000	SNOMED CT
Replacement	The device was implanted as a replacement for a previous device.		384728007	SNOMED CT
Risk of malignant arrhythmia	The device was implanted to monitor for potentially life-threatening arrhythmias.		698247007	SNOMED CT
Syncope	The device was implanted due to syncope.		271594007	SNOMED CT
At Risk Genotype	The device was implanted because of a genetic predisposition to arrhythmias or other cardiac conditions.		112000004230	ACC NCDR
Other			100000351	ACC NCDR

Element: 16079 Reimplantation of Implantable Loop Recorder

Coding Instruction: Indicate whether the procedure involved the reimplantation of an implantable loop recorder (ILR). This refers to the placement of a new ILR device after the removal or malfunction of a previous one.

Target Value: The value on current procedure

Technical Specification

Code:	112000003952
Code System Name:	ACC NCDR
Short Name:	ReimplILR
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Section: New Implantable Loop Recorder (ILR) **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16080 Indication for Reimplantation of Implantable Loop Recorder

Coding Instruction: Select the indication(s) for loop recorder reimplantation.

Target Value: The value on current procedure

Technical Specification

Code:	112000003952
Code System Name:	ACC NCDR
Short Name:	IndReimpILR
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16079 Reimplantation of Implantable Loop Recorder
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Indication For Reimplantation of Implantable Loop Recorder - 1.3.6.1.4.1.19376.1.4.1.6.5.1143

Selection	Definition	Source	Code	Code System Name
Reimplant reason - end of battery life	The device was replaced due to its battery reaching the end of its expected lifespan.		100001088	ACC NCDR
Replaced at time of other surgery	The device was replaced during a surgical procedure performed for an unrelated indication.		112000004229	ACC NCDR
Infection	The device was replaced due to infection.		112000002137	ACC NCDR
Device erosion	The device was replaced due to erosion of the device through the skin or surrounding tissue.		100014134	ACC NCDR
Under manufacturer advisory/recall	The device was replaced following a manufacturer-issued advisory or recall.		100001093	ACC NCDR
Device malfunction	The device was replaced due to a device malfunction or failure.		112000001504	ACC NCDR
Device relocation	The device was replaced because it needed to be relocated.		112000003953	ACC NCDR
Other			100000351	ACC NCDR

Section: New Implantable Loop Recorder (ILR) **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16081 Implantable Loop Recorder Device ID

Coding Instruction: Select the device used from the list of implantable loop recorders.

Note(s):

The devices that should be collected in your application are controlled by a Device Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Technical Specification

Code:	112000003954
Code System Name:	ACC NCDR
Short Name:	DevIDILR
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 16082 Implantable Loop Recorder Device Laterality

Coding Instruction: Select the laterality of the loop recorder after implantation.

Target Value: The value on current procedure

Technical Specification

Code:	112000003955
Code System Name:	ACC NCDR
Short Name:	DevLatILR
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

ILRP Device Laterality - 1.3.6.1.4.1.19376.1.4.1.6.5.1072

Selection	Definition	Source	Code	Code System Name
Right chest			112000003956	ACC NCDR
Left chest			112000003957	ACC NCDR

Section: New Implantable Loop Recorder (ILR) **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16083 Implantable Loop Recorder Location

Coding Instruction: Select the location where the loop recorder was implanted.

Target Value: The value on current procedure

Technical Specification

Code:	112000003817
Code System Name:	ACC NCDR
Short Name:	DevLocILR
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Implantable loop recorder

ILRP Implantable Loop Recorder Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1073

Selection	Definition	Source	Code	Code System Name
Parasternal			261149009	SNOMED CT
Intercostal			1197041002	SNOMED CT
Axillary			91470000	SNOMED CT
Other			100000351	ACC NCDR

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7710 Lead Counter

Coding Instruction: The software-assigned lead counter should start at one and be incremented by one for each new or existing lead documented.

Target Value: N/A

Technical Specification

Code:	112000001858
Code System Name:	ACC NCDR
Short Name:	LeadCounter
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CTR
Precision:	2
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 99
Data Source:	Automatic

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	ICD generator
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Pacemaker pulse generator
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Leads only

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7715 Lead Identification

Coding Instruction: Indicate if the lead is a new or existing lead. All new leads placed or existing leads extracted, abandoned, or reused should be identified in the leads section.

Note(s):
If a lead was attempted, but not actually implanted, do not include it. For example, if a lead turns out to be too short, or with inadequate coil spacing, or is too large/unstable for the coronary sinus branch vein, do not include it in the registry.

Target Value: The value on current procedure

Technical Specification

Code:	100000990
Code System Name:	ACC NCDR
Short Name:	LeadType
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

New or Existing Lead - 1.3.6.1.4.1.19376.1.4.1.6.5.182

Selection	Definition	Source	Code	Code System Name
New			100001047	ACC NCDR
Existing			100001001	ACC NCDR

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7720 Lead Identification Number

Coding Instruction: Indicate the assigned identification for new or existing leads placed, reused, extracted or abandoned during the procedure.

Note(s):
The lead devices that should be collected in your application are controlled by a Leads Device Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Vendor Instruction: Lead Identification Number (7720) cannot be Null when Lead Counter (7710) has a value

Technical Specification

Code:	2.16.840.1.113883.3.3478.6.1.20
Code System Name:	ACC NCDR Lead Devices
Short Name:	LeadID
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7725 Lead Serial Number

Coding Instruction: Indicate the manufacturer's serial number of the lead.

Target Value: The value on current procedure

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.850
Code System Name:	ACC NCDR
Short Name:	LeadSerNo
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	30
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 7730 Lead Unique Device Identifier

Coding Instruction: Indicate the direct identifier portion of the Unique Device Identifier (UDI) associated with the device used for implant. This ID is provided by the device manufacturer, and is either a GTIN or HIBC number.

Target Value: The value on current procedure

Supporting Definition: **Unique Device Identifier (UDI)**

An identifier that is the main (primary) lookup for a medical device product and meets the requirements to uniquely identify a device through its distribution and use. This value is supplied to the FDA by the manufacturer.

Source: US FDA

Technical Specification

Code:	2.16.840.1.113883.3.3719
Code System Name:	ACC NCDR
Short Name:	LeadUDI
Missing Data:	No Action
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	150
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16169 Lead Type

Coding Instruction: Select the cardiac implantable electronic device (CIED) lead type used in the procedure.

Target Value: The value on current procedure

Technical Specification

Code: 112000003942
Code System Name: ACC NCDR
Short Name: LeadTyp
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 7715 Lead Identification
Operator: Equal
Value: New

AND

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

CIED Lead Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1119

Selection	Definition	Source	Code	Code System Name
Atrial pace or sense lead	A lead placed in the atrium to deliver pacing therapy or sense atrial activity.		112000004120	ACC NCDR
Ventricular pace or sense lead	A lead placed in the ventricle to deliver pacing therapy or sense ventricular activity.		112000004121	ACC NCDR
Coronary sinus pace or sense lead	A lead positioned in the coronary sinus, typically used for left ventricular pacing in cardiac resynchronization therapy.		112000004122	ACC NCDR
Implantable cardioverter defibrillator lead	A lead that delivers defibrillation and/or pacing therapy, placed in the right ventricle or another chamber as appropriate.		112000004123	ACC NCDR
Subcutaneous implantable cardioverter defibrillator lead	A lead used with a subcutaneous ICD system.		112000004124	ACC NCDR
Implantable cardioverter defibrillator coil only	A component of the ICD system that functions solely as a defibrillation coil without sensing or pacing capabilities.		112000004125	ACC NCDR
Implantable cardioverter defibrillator patch	A patch electrode used to deliver defibrillation therapy, commonly associated with epicardial or subcutaneous ICD systems.		112000004126	ACC NCDR
Other			100000351	ACC NCDR
Extravascular ICD (EV-ICD) lead	A lead used with the Extravascular ICD (EV-ICD) system.		112000003612	ACC NCDR

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16170 Lead Location

Coding Instruction: Select the location for lead placement.

Target Value: The value on current procedure

Technical Specification

Code: 112000003817
Code System Name: ACC NCDR
Short Name: LeadLoc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 7715 Lead Identification
Operator: Equal
Value: New

AND

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Location of Lead Dislodgement - 1.3.6.1.4.1.19376.1.4.1.6.5.1098

Selection	Definition	Source	Code	Code System Name
Transvenous/endocardial - right atrium			112000004051	ACC NCDR
Transvenous/endocardial - right ventricle			112000004052	ACC NCDR
Transvenous/endocardial - left ventricle			112000004053	ACC NCDR
Transvenous/endocardial - Coronary sinus			112000004054	ACC NCDR
Transvenous/endocardial - baffle			112000004055	ACC NCDR
Transvenous/endocardial - SVC			112000004056	ACC NCDR
Transvenous/endocardial - other			112000004057	ACC NCDR
Epicardial - atrium			112000004058	ACC NCDR
Epicardial - right ventricle			112000004059	ACC NCDR
Epicardial - left ventricle			112000004060	ACC NCDR
Epicardial - single ventricle			112000004061	ACC NCDR
Epicardial - anterior pericardial space			112000004062	ACC NCDR
Epicardial - posterior pericardial space			112000004063	ACC NCDR
Epicardial - other			112000004064	ACC NCDR
Subcutaneous - right axillary			112000004065	ACC NCDR
Subcutaneous - left axillary			112000004066	ACC NCDR
Subcutaneous - right parasternal			112000004067	ACC NCDR
Subcutaneous - left			112000004068	ACC NCDR

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

parasternal		
Subcutaneous - other	112000004069	ACC NCDR
Extravascular	112000004199	ACC NCDR

Element: 16171 Ventricular Lead Location

Coding Instruction: Select the location of the ventricular lead.

Target Value: The value on current procedure

Technical Specification

Code: 112000004232
Code System Name: ACC NCDR
Short Name: VentLeadLoc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16170 Lead Location
Operator: Equal
Value: Epicardial - left ventricle
Element: 16170 Lead Location
Operator: Equal
Value: Epicardial - right ventricle
Element: 16170 Lead Location
Operator: Equal
Value: Epicardial - single ventricle
Element: 16170 Lead Location
Operator: Equal
Value: Transvenous/endocardial - left ventricle
Element: 16170 Lead Location
Operator: Equal
Value: Transvenous/endocardial - right ventricle

AND

Element: 7715 Lead Identification
Operator: Equal
Value: New

AND

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator
Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator
Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Ventricular Lead Dislodgement Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1094

Selection	Definition	Source	Code	Code System Name
Septum			10746000	SNOMED CT
Free wall			112000004045	ACC NCDR

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16172 Septum or Free Wall Lead Location

Coding Instruction: Select the location of the ventricular lead on the free wall or septum.

Target Value: The value on current procedure

Technical Specification

Code: 112000004129
Code System Name: ACC NCDR
Short Name: SepFreWalLeadLoc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16170 Lead Location
Operator: Equal
Value: Epicardial - left ventricle
Element: 16170 Lead Location
Operator: Equal
Value: Epicardial - right ventricle
Element: 16170 Lead Location
Operator: Equal
Value: Epicardial - single ventricle
Element: 16170 Lead Location
Operator: Equal
Value: Transvenous/endocardial - left ventricle
Element: 16170 Lead Location
Operator: Equal
Value: Transvenous/endocardial - right ventricle

AND

Element: 7715 Lead Identification
Operator: Equal
Value: New

AND

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator
Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator
Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Septum or free wall lead location - 1.3.6.1.4.1.19376.1.4.1.6.5.1095

Selection	Definition	Source	Code	Code System Name
Base			112000004046	ACC NCDR
Mid-ventricle			112000004047	ACC NCDR
Apex			112000003978	ACC NCDR
Parahisian			112000004048	ACC NCDR
Targeted left bundle pacing			74031005	SNOMED CT

Section: Leads **Parent: New Cardiovascular Implantable Electronic Device**

Element: 16173 Lead Status After Current CIED Procedure

Coding Instruction: Select the lead status after the current cardiac implantable electronic device (CIED) procedure.

Target Value: The value on current procedure

Technical Specification

Code: 112000004130
Code System Name: ACC NCDR
Short Name: LeadStatAftIEDProc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 7715 Lead Identification
Operator: Equal
Value: Existing

AND

Element: 7710 Lead Counter
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

CIED Lead Status After Procedure - 1.3.6.1.4.1.19376.1.4.1.6.5.1121

Selection	Definition	Source	Code	Code System Name
Active	The lead remains functional and is connected to the device for continued use.		55561003	SNOMED CT
Abandoned	The lead was left in place but is no longer functional or connected to an active device.		100000925	ACC NCDR
Explanted	The lead was physically removed during the procedure.		100001141	ACC NCDR

Section: IPP Events **Parent: Intra- and Post-Procedure Events**

Element: 15153 Intra or Post Procedure Events

Coding Instruction: Indicate if there were any Intra or Post Procedure Events (up to 72 hours post procedure).

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Vendor Instruction: An Intra or Post Procedure Events (15153) should not be duplicated in a lab visit

Technical Specification

Code:	1000142478
Code System Name:	ACC NCDR
Short Name:	PedsProcEvents
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Intra or Post Procedure Events - 1.3.6.1.4.1.19376.1.4.1.6.5.706

Selection	Definition	Source	Code	Code System Name
Arteriovenous (AV) fistula requiring treatment	Select if there is documentation of an arteriovenous fistula at the access site that requires medical or surgical intervention to address abnormal communication between an artery and vein. This condition may result from access site complications during catheterization procedures.		128617001	SNOMED CT
Closure device related injury (access site)	Select if there is documentation of an injury to any vascular access site used during the procedure caused by the use or malfunction of a vascular closure device. This includes complications such as vascular trauma or device-related malfunction requiring additional treatment or intervention. Routine or minor bleeding, such as oozing commonly associated with anticoagulant use, is excluded.		112000003782	ACC NCDR
Hematoma at access site	Select if there is documentation of hematoma at access site meeting any of the following criteria for adult patients (in patients 18 years or older on arrival): 1. A hemoglobin drop of ≥3 g/dL (in patients 18 years or older on arrival). 2. Transfusion of whole blood or packed red blood cells. 3. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding. Or meeting any of the following criteria for pediatric patients (in patients less than 18 years on arrival): 1.Unplanned transfusion of whole blood or packed red blood cells. 2. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding.		385494008	SNOMED CT
Pseudoaneurysm requiring treatment	Select if there is documentation of a pseudoaneurysm, an outpouching of a blood vessel at the access site that does not involve all layers of the vessel wall, requiring medical or surgical intervention.		443089001	SNOMED CT
Pulse loss requiring treatment	Select if there is documentation of the loss of distal pulse or markedly diminished pulses requiring medical or surgical intervention.		112000003790	ACC NCDR
Rebleed after bandaging	Select if there is documentation of bleeding at the		112000003791	ACC NCDR

Section: IPP Events		Parent: Intra- and Post-Procedure Events	
	access site that recurs after initial bandaging or compression, requiring an additional procedural or surgical intervention to control the bleeding.		
Sheath related intimal injury	Select if there is documentation of damage to the intimal layer of a blood vessel caused by the insertion, manipulation, or removal of a vascular sheath.	112000003792	ACC NCDR
Thrombosis (at access site)	Select if there is documentation of thrombus formation at the vascular access site, which may present as arterial and/or venous thrombosis.	439127006	SNOMED CT
Aspiration of gastric contents	Select if there is documentation of gastric contents entering the respiratory tract, occurring during sedation, intubation, extubation, or other instances related to airway management.	14766002	SNOMED CT
Broncho/laryngospasm while intubated	Select if there is documentation of an uncontrolled or involuntary spasm of the bronchioles or vocal cords occurring during intubation, potentially causing airway obstruction or respiratory distress.	112000003781	ACC NCDR
Conscious sedation requiring rescue intubation	Select if there is documentation of the need for intubation during conscious sedation due to airway compromise, respiratory distress, or other complications requiring airway management.	112000003783	ACC NCDR
Corneal abrasion	Select if there is documentation of a corneal abrasion, defined as a scratch or injury to the cornea occurring during anesthetic management.	85848002	SNOMED CT
Delirium	Select if there is documentation of a dissociated state of consciousness following general anesthesia, characterized by confusion, disorientation, inconsolable crying, irritability, or uncooperative behavior.	2776000	SNOMED CT
Dental injury	Select if there is documentation of damage to the teeth, such as fracture, dislodgement, or avulsion, occurring during a procedure or anesthetic management.	284002000	SNOMED CT
Endotrachael tube malposition	Select if there is documentation of improper positioning of the endotracheal tube (ETT) after initial intubation and securing, requiring repositioning. This includes cases where the tube was placed too deep (e.g., mainstem intubation) or too high, identified during post-procedure assessment	112000003787	ACC NCDR
Lung collapse	Select if there is documentation of lung collapse, defined as the partial or complete collapse of the lung or a section of the lung (e.g., a lobe), confirmed by imaging or clinical diagnosis.	46621007	SNOMED CT
Malignant hyperthermia - hyperpyrexia	Select if there is documentation of malignant hyperthermia, a life-threatening hypermetabolic condition triggered by certain anesthetic agents (e.g., volatile anesthetics or succinylcholine), characterized by a rapid and extreme increase in body temperature (hyperpyrexia), muscle rigidity, tachycardia, hypercapnia, and metabolic acidosis.	405501007	SNOMED CT
Post extubation stridor	Select if there is documentation of post-extubation stridor, characterized as a high-pitched, wheezing sound during inhalation caused by partial airway obstruction or narrowing occurring immediately after the removal of an endotracheal tube.	112000003291	ACC NCDR
Oral/airway injury or bleeding	Select if there is documentation of injury to the oral cavity, airway structures, or associated bleeding.	262664007	SNOMED CT
Unanticipated difficult airway	Select if there is documentation of an unanticipated difficult intubation or re-intubation, defined as unforeseen challenges in securing the airway, requiring additional attempts or alternative techniques.	718448006	SNOMED CT
Unplanned extubation	Select if there is documentation of an unplanned extubation, defined as the unintended removal of an endotracheal tube in the operating room (OR), procedure location, or during patient transfer, outside of the intended anesthetic plan.	112000003266	ACC NCDR
Aneurysm	Select if there is documentation of an aneurysm, defined as a localized dilation or ballooning of a blood vessel wall, that developed as a complication of an angioplasty procedure.	432119003	SNOMED CT
Contained tear requiring	Select if there is documentation of a contained	112000003784	ACC NCDR

Section: IPP Events	Parent: Intra- and Post-Procedure Events		
treatment - Angioplasty	tear or dissection, defined as a partial disruption of the blood vessel wall without full rupture, that occurred as a complication of an angioplasty procedure and required treatment.		
Tear/Dissection - Angioplasty related	Select if there is documentation of a tear or dissection, defined as a disruption or splitting of the layers of a blood vessel wall, occurring as a complication of an angioplasty procedure.	112000001090	ACC NCDR
Thrombosis (at target site)	Select if there is documentation of thrombosis, defined as the formation of a blood clot at the site of angioplasty intervention.	112000003798	ACC NCDR
Angioplasty related vessel/conduit rupture	Select if there is documentation of vessel or conduit rupture, defined as a complete tear through the blood vessel or graft wall, occurring as a complication of an angioplasty procedure.	112000003796	ACC NCDR
Arrhythmia requiring treatment	Select if there is documentation of an arrhythmia occurring during or after the procedure that required intervention, such as pharmacologic therapy, direct current cardioversion (DCCV), or the use of temporary or permanent pacing.	698247007	SNOMED CT
Cardiac arrest	Cardiac arrest is defined as acute cardiac event documented by one of the following: ventricular fibrillation, rapid ventricular tachycardia or bradycardia rhythms with hemodynamic compromise causing loss of consciousness, pulseless rhythms (PEA), or asystole requiring cardiopulmonary resuscitation (two or more chest compressions or open chest massage, emergency temporary pacing, pericardiocentesis, institution of ECMO, or defibrillation) and without these measures death would have almost certainly resulted. Note: If an event occurs that meets the above definition of cardiac arrest, code “yes” regardless of a resuscitation status of DNR/Hospice/Comfort care.	410429000	SNOMED CT
Cardiac perforation	Select if there is documentation of a tear or puncture in the cardiac wall resulting in potential or actual leakage of blood into the pericardial space or surrounding structures. This may be identified by imaging, clinical signs, or require intervention to address the condition.	36191001:123005000=302509004	SNOMED CT
Cardiac tamponade	Select if there is documentation of cardiac tamponade, defined as the presence of pericardial fluid in the pericardial space leading to hemodynamic instability and requiring unplanned or emergent intervention.	35304003	SNOMED CT
Coronary artery compression	Select if there is documentation of coronary compression, defined as external pressure on a coronary artery causing obstruction to blood flow, identified by imaging or clinical symptoms.	112000001837	ACC NCDR
Coronary vasospasm requiring treatment	Select if there is documentation of coronary artery vasospasm, defined as transient narrowing of the coronary artery causing myocardial ischemia. The condition must have required intervention, such as pharmacologic therapy (e.g., nitrates, calcium channel blockers) or other procedural measures, to alleviate symptoms or prevent progression to acute coronary syndrome, myocardial infarction, or other serious outcomes.	263924000	SNOMED CT
Event requiring ECMO	Select if there is documentation that the patient experienced an event requiring extracorporeal membrane oxygenation (ECMO) for cardiopulmonary support.	112000004039	ACC NCDR
Heart block	Select if there is an unintended high-grade block at the end of the procedure. There may be more than one successive nonconducted P wave, resulting in several P waves in a row without QRS complexes, termed "advanced" or "high grade AV block." The AV conduction ratio may or may not have a regular pattern (ie, 3:1, 4:1, etc). This is an advanced form of Mobitz type II second-degree AV block.	112000002919	ACC NCDR
Mechanical circulatory support required	Select if there is documentation of a mechanical device to provide temporary or long-term support	232957001	SNOMED CT

Section: IPP Events		Parent: Intra- and Post-Procedure Events	
	for cardiac or respiratory function was required. This includes devices such as intra-aortic balloon pumps (IABP), extracorporeal membrane oxygenation (ECMO), ventricular assist devices (VADs), or other mechanical circulatory support systems required to stabilize hemodynamic status or address cardiac or respiratory failure.		
Pacemaker or ICD implant due to cath complication	A pacemaker or implantable cardioverter defibrillator (ICD) implant was required as a direct result of a complication that occurred during a catheterization procedure.	112000004072	ACC NCDR
Pericardial effusion	Select if there is documentation of pericardial effusion, defined as the accumulation of excess fluid in the pericardial sac surrounding the heart.	373945007	SNOMED CT
New aortic valve insufficiency	Select if there is documentation of new aortic valve insufficiency, defined as the retrograde flow of blood from the aorta into the left ventricle due to incomplete closure of the aortic valve.	60234000	SNOMED CT
New tricuspid valve insufficiency	Select if there is documentation of new tricuspid valve insufficiency, defined as the retrograde flow of blood from the right ventricle into the right atrium due to incomplete closure of the tricuspid valve.	111287006	SNOMED CT
New mitral valve insufficiency	Select if there is documentation of new mitral valve insufficiency, defined as the retrograde flow of blood from the left ventricle into the left atrium due to incomplete closure of the mitral valve.	48724000	SNOMED CT
New pulmonary valve insufficiency	Select if there is documentation of new pulmonary valve insufficiency, defined as the retrograde flow of blood from the pulmonary artery into the right ventricle due to incomplete closure of the pulmonary valve.	91434003	SNOMED CT
Urgent cardiac surgery	Select if there is documentation that the patient required an unplanned or emergent cardiac surgery, defined as a non-elective procedure performed urgently to address an acute cardiac condition.	112000001892	ACC NCDR
Valve injury	Select if there is documentation of valve injury, defined as damage to a heart valve occurring during or as a result of a procedure. This includes, but is not limited to, perforation, rupture, tearing, or functional impairment of the valve, as determined by clinical evaluation, imaging findings, or the need for intervention	762610001	SNOMED CT
Valvular regurgitation	Select if there is documentation that the patient was diagnosed with valvular regurgitation, characterized by the backward flow of blood due to improper closure of one or more heart valves.	40445007	SNOMED CT
Coil embolization	Select if there is documentation of coil embolization, defined as the use of coils to intentionally occlude a blood vessel or vascular abnormality, such as an aneurysm or arteriovenous malformation, as part of a therapeutic intervention.	112000003498	ACC NCDR
Coil malposition	Select if there is documentation of coil malposition, defined as the unintended placement or migration of a coil to a location outside the target site.	112000003497	ACC NCDR
Device embolization	Select if there is documentation of device embolization, defined as the unintended movement or migration of a device from its intended position to another location within the vascular system or body.	112000001324	ACC NCDR
Device embolization for leadless pacemakers requiring retrieval	Select if there is documentation of device embolization associated with leadless pacemaker placement, where the device unintentionally migrates from its intended position to another location within the vascular system or body, necessitating retrieval.	112000004235	ACC NCDR
Device erosion	Select if there is documentation that the device was replaced due to erosion through the skin or surrounding tissue.	100014134	ACC NCDR
Device malposition	Select if there is documentation of device malposition, defined as the incorrect placement or displacement of a device from its intended position	112000003786	ACC NCDR

Section: IPP Events		Parent: Intra- and Post-Procedure Events	
	during or after a procedure.		
Lead dislodgement	Select if there is documentation that the patient experienced lead dislodgement, defined as the unintended movement of a cardiac device lead from its original implantation site within the heart or vascular system.	234233007	SNOMED CT
Set screw problem	Select if there is documentation that the patient experienced a pacing and/or sensing problem associated with high impedance due to a poor connection between a lead and an ICD caused by a loose set screw.	112000004042	ACC NCDR
Contrast allergy	Select if there is documentation of an allergic reaction to contrast material, defined as an adverse immune-mediated response occurring after the administration of contrast agents.	293637006	SNOMED CT
Medication allergy	Select if there is documentation of an allergic reaction to a medication, defined as an adverse immune-mediated response occurring after the administration of a drug.	416098002	SNOMED CT
Air embolus in systemic circulation	Select if there is documentation of an air embolus in the systemic circulation, defined as the presence of air bubbles in the arterial system that may obstruct blood flow to organs or tissues.	112000003416	ACC NCDR
Air embolus in venous/pulmonary circulation	Select if there is documentation of an air embolus in the venous or pulmonary circulation, defined as the presence of air bubbles in the venous system or pulmonary arteries, potentially obstructing blood flow.	112000003417	ACC NCDR
Bleeding Event	Select if there is documentation of a bleeding event meeting any of the following criteria for adult patients (in patients 18 years or older on arrival): 1. A hemoglobin drop of ≥3 g/dL (in patients 18 years or older on arrival). 2. Transfusion of whole blood or packed red blood cells. 3. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding. Or meeting any of the following criteria for pediatric patients (in patients less than 18 years on arrival): 1. Unplanned transfusion of whole blood or packed red blood cells. 2. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding.	131148009	SNOMED CT
Bacteremia (post catheterization)	Select if there is documentation of bacteremia, defined as the presence of bacteria in the bloodstream occurring after a catheterization procedure.	5758002	SNOMED CT
Complication of bladder catheterization	Select if there is documentation of an issue or condition arising from bladder catheterization, defined as any unintended outcome directly related to the use, insertion, or maintenance of a bladder catheter.	410024004	SNOMED CT
Fall	Select if there is documentation of a fall, defined as an unintentional descent to the ground, floor, or lower level.	398117008	SNOMED CT
Gastrointestinal bleeding	Select if there is documentation of gastrointestinal bleeding meeting any of the following criteria for adult patients (in patients 18 years or older on arrival): 1. A hemoglobin drop of ≥3 g/dL (in patients 18 years or older on arrival).	74474003	SNOMED CT

Section: IPP Events **Parent: Intra- and Post-Procedure Events**

	2. Transfusion of whole blood or packed red blood cells. 3. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding. Or meeting any of the following criteria for pediatric patients (in patients less than 18 years on arrival): 1. Unplanned transfusion of whole blood or packed red blood cells. 2. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding.		
Hypoglycemia	Select if there is documentation of hypoglycemia, defined as a blood glucose level below the lower normal threshold (<70 mg/dL or as specified in the medical record).	302866003	SNOMED CT
Hypothermia	Select if there is documentation of hypothermia, defined as a core body temperature below 35°C (95°F).	386689009	SNOMED CT
Infection requiring antibiotics	Select if there is documentation that the patient experienced an infection related to the current device or lead procedure requiring antibiotics.	112000004041	ACC NCDR
Medication error	Select if there is documentation of a medication error, defined as an unintended deviation from the prescribed or intended medication process.	398240004	SNOMED CT
Necrotizing enterocolitis	Select if there is documentation of necrotizing enterocolitis, defined as an acute reduction in the supply of oxygenated blood to the small or large intestine, typically resulting in acidosis, abdominal distention, pneumatosis intestinalis, and/or intestinal perforation.	2707005	SNOMED CT
New requirement for dialysis	Select if there is documentation of acute or worsening renal failure necessitating the initiation of renal dialysis, defined as hemodialysis or peritoneal dialysis. Include patients receiving continuous veno-venous hemofiltration (CVVH) specifically for renal failure and not for fluid removal in the context of heart failure.	100014076	ACC NCDR
Peripheral nerve injury	Select if there is documentation that the patient experienced a peripheral nerve injury, defined as damage to the nerves outside the brain and spinal cord, resulting in symptoms such as weakness, numbness, or pain.	73590005	SNOMED CT
Pressure injury	Select if there is documentation of a localized injury to the skin and/or underlying tissue, typically over a bony prominence, resulting from prolonged pressure or pressure in combination with shear.	1163215007	SNOMED CT
Post procedure fever greater than 38 degrees celcius	Select if there is documentation of a fever exceeding 38°C occurring after a procedure, which may indicate an inflammatory response, infection, or other postoperative complication.	112000003387	ACC NCDR
Radiation exposure injury	Select if there is documentation of tissue damage resulting from exposure to ionizing radiation during a procedure.	218190002	SNOMED CT
RBC transfusion	Select if there was a transfusion(s) of packed red blood cells.	116863004	SNOMED CT
Retained foreign body	Select if there is documentation of an object inadvertently left in the body following a procedure.	125670008	SNOMED CT
Retroperitoneal bleeding	Select if there is documentation of retroperitoneal bleeding meeting any of the following criteria for adult patients (in patients 18 years or older on arrival): 1. A hemoglobin drop of ≥3 g/dL (in patients 18 years or older on arrival). 2. Transfusion of whole blood or packed red blood	95549001	SNOMED CT

	cells. 3. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding. Or meeting any of the following criteria for pediatric patients (in patients less than 18 years on arrival): 1. Unplanned transfusion of whole blood or packed red blood cells. 2. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding.		
Retroperitoneal hematoma	Select if there is documentation of retroperitoneal hematoma meeting any of the following criteria for adult patients (in patients 18 years or older on arrival): 1. A hemoglobin drop of ≥3 g/dL (in patients 18 years or older on arrival). 2. Transfusion of whole blood or packed red blood cells. 3. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding. Or meeting any of the following criteria for pediatric patients (in patients less than 18 years on arrival): 1. Unplanned transfusion of whole blood or packed red blood cells. 2. Procedural intervention or surgery to address bleeding, such as surgical closure, exploration of the arteriotomy site, balloon angioplasty, or similar interventions to stop or correct the bleeding.	236002003	SNOMED CT
Skeletal trauma or injury	Select if there is documentation of damage to bones or the skeletal system occurring as a complication of a procedure or injury.	284003005	SNOMED CT
Transfusion reaction	Select if there is documentation of a transfusion reaction, defined as a response associated with the transfusion of whole blood or one of its components.	112000003344	ACC NCDR
Brachial plexus injury	Select if there is documentation of a brachial plexus injury, defined as damage to the brachial plexus nerves.	6836001	SNOMED CT
Phrenic nerve injury	Select if there is documentation of phrenic nerve injury, defined as a newly acquired or newly recognized deficit in unilateral or bilateral peripheral nerve function, as indicated by physical exam findings, imaging studies, or both.	100001076	ACC NCDR
Seizures (new onset)	Select if there is documentation of new-onset seizures, defined as unprovoked episodes of abnormal electrical activity in the brain.	112000000437	ACC NCDR
Spinal cord ischemia	Select if there is documentation of spinal cord ischemia, defined as reduced blood flow to the spinal cord.	371029002	SNOMED CT
Stroke	Select if there is documentation/diagnosis of any type of stroke. A stroke is defined as an acute episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury. It may be a hemorrhagic stroke, ischemic stroke or an undetermined type of stroke.	100000977	ACC NCDR

Section: IPP Events	Parent: Intra- and Post-Procedure Events		
	Note: Subdural hematomas are not intracranial hemorrhagic events and not strokes.		
Transient ischemic attack	Select if there is documentation that the patient was diagnosed with a transient ischemic attack (TIA), characterized by a temporary episode of neurological dysfunction resulting from a brief interruption in blood supply to the brain.	266257000	SNOMED CT
Phrenic nerve paralysis	Select if there is documentation of a newly acquired or newly recognized deficit of unilateral or bilateral peripheral nerve function indicated by physical exam findings, imaging studies, or both.	277321001	SNOMED CT
Airway event requiring escalation of care	Select if there is documentation that the patient experienced apnea, hypoxia, or airway obstruction requiring unplanned escalation of airway management. Examples of Escalation: Laryngeal Mask Airway (LMA) Continuous Positive Airway Pressure (CPAP) Bilevel Positive Airway Pressure (BIPAP) Bag Mask Ventilation (BMV) Intubation Tracheostomy	112000002228	ACC NCDR
Hemothorax	Select if there is documentation that the patient experienced hemothorax, defined as any accumulation of blood in the thorax/pleural space.	31892009	SNOMED CT
Pneumonia	Select if there is documentation of pneumonia, defined as an infection of one or both lungs caused by bacteria, viruses, fungi, chemicals, or aspiration. Pneumonia is confirmed by clinical symptoms such as cough, chest pain, fever, and difficulty breathing, along with diagnostic imaging or sputum examination.	233604007	SNOMED CT
Pneumothorax	Select if there is documentation of pneumothorax, defined as the presence of air in the pleural cavity, occurring when air accumulates between the parietal and visceral pleura. This condition causes lung collapse and is typically identified by imaging or clinical symptoms.	36118008	SNOMED CT
Pulmonary embolism	Select if there is documentation of a pulmonary embolism, defined as the intravascular migration of a venous thrombus to the pulmonary arterial circulation, resulting in a blood clot in the pulmonary arteries.	59282003	SNOMED CT
Pulmonary hemorrhage	Select if there is documentation of pulmonary hemorrhage, defined as an acute event characterized by bleeding in the lungs, often presenting as bloody discharge from the upper respiratory tract or endotracheal tube.	78144005	SNOMED CT
Reperfusion injury	Select if there is documentation of reperfusion injury, defined as tissue damage resulting from the restoration of blood flow to previously ischemic tissue.	276232006	SNOMED CT
Bronchial compression	Select if there is documentation of bronchial compression, defined as external pressure on the bronchial airways, such as from a great vessel, causing obstruction and resulting in symptoms like inspiratory stridor or expiratory wheezing. This may include specific cases, such as compression of the left mainstem bronchus following aortic arch reconstruction.	3304005	SNOMED CT
Contained tear requiring treatment - Stent	Select if there is documentation of a contained tear or dissection, defined as a tear in a blood vessel or structure that does not result in rupture but requires treatment to prevent progression or complications.	112000003785	ACC NCDR
Coronary artery compression caused by stenting	Documentation of coronary compression, defined as external pressure on a coronary artery causing obstruction to blood flow, identified by imaging or clinical symptoms, specifically occurring in the context of stent deployment or positioning. This includes compression due to the stent itself or mechanical effects from adjacent structures altered by the stent placement.	112000004243	ACC NCDR

Section: IPP Events	Parent: Intra- and Post-Procedure Events		
Jailing of side branch resulting in compromised flow	Select if there is documentation of jailing of a side branch, defined as obstruction or partial blockage of a side branch vessel during a procedure.	112000003788	ACC NCDR
Stent malposition	Select if there is documentation of stent malposition, defined as improper placement or displacement of a stent from its intended position within the vessel or conduit.	112000003759	ACC NCDR
Stent embolization	Select if there is documentation of stent embolization, defined as the migration of a stent from its intended position within the vascular system.	112000003758	ACC NCDR
Stent thrombosis	Select if there is documentation of stent thrombosis, defined as the formation of a blood clot within or adjacent to a stent.	100013014	ACC NCDR
Stent related vessel/conduit rupture	Select if there is documentation of stent-related vessel or conduit rupture, defined as a tear in a vessel or conduit caused by a stent.	112000003797	ACC NCDR
Vascular compression - other adjacent vessel	Select if there is documentation of vascular compression, defined as external pressure on a vessel adjacent to the treatment site, causing compromised blood flow.	112000003793	ACC NCDR
Coronary artery dissection	Select if there is documentation of coronary artery dissection, defined as a tear in the inner layer of a coronary artery that results in separation of the vessel layers and potential disruption of blood flow. This may be identified by the presence of contrast material outside the expected luminal dimensions of the vessel, extending longitudinally beyond the lesion.	732230001	SNOMED CT
Coronary artery injury	Select if there is documentation of coronary artery injury, defined as damage to the coronary artery occurring during or as a result of a procedure. This includes, but is not limited to, coronary artery dissection, perforation, rupture, or thrombosis, leading to clinical symptoms or requiring medical intervention.	112000003852	ACC NCDR
Deep Vein Thrombosis	Select if there is documentation that the patient was diagnosed with a deep vein thrombosis (DVT), which refers to the formation of one or more blood clots (thrombus/thrombi) in one of the body's large veins, most commonly in the lower limbs, such as the lower leg or calf.	128053003	SNOMED CT
Pocket hematoma requiring intervention	Select if there is documentation that the patient developed a pocket hematoma as a result of the procedure, requiring reoperation, evacuation, or transfusion.	112000004040	ACC NCDR
Thrombus (at intervention site)	Select if there is documentation of a thrombus, defined as a blood clot forming at the site of intervention.	1776291018	SNOMED CT
Vascular dissection (vessel other than coronary artery)	Select if there is documentation of vascular dissection, defined as a tear in the inner lining of a vessel, resulting in separation of the vessel layers and potential flow disruption.	112000003794	ACC NCDR
Vascular perforation (vessel other than coronary artery)	Select if there is documentation of vascular perforation, defined as a puncture or tear through a vessel wall.	112000003795	ACC NCDR
Vascular injury requiring treatment	Select if there is documentation of vascular injury requiring treatment, defined as damage to a blood vessel during or as a result of a procedure, necessitating medical or surgical intervention. This includes, but is not limited to, dissection, perforation, rupture, thrombosis, or pseudoaneurysm requiring repair, stenting, thrombectomy, or other therapeutic measures.	30904006:363702006=57662003	SNOMED CT
Other vascular complication requiring treatment	Indicate if there is documentation that the patient experienced any other vascular complication attributable to the current procedure that required an intervention. Vascular complications can include, but are not limited to: access site occlusions, peripheral embolizations, dissections, pseudoaneurysms and/or AV fistulas. Any noted vascular complication must have had an intervention such as a fibrin injection, angioplasty, or surgical repair	213217008	SNOMED CT

Section: IPP Events **Parent: Intra- and Post-Procedure Events**

to qualify. Prolonged pressure does not qualify as an intervention, but ultrasonic guided compression after making a diagnosis of pseudoaneurysm does qualify.

Element: 15207 Intra and Post-Procedure Event(s) Occurred

Coding Instruction: Indicate if the intra or post-procedure event did or did not occur.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Vendor Instruction: Intra and Post-Procedure Event(s) Occurred (15207) cannot be Null when an Intra or Post Procedure Event (15153) is selected

Technical Specification

Code:	1000142479
Code System Name:	ACC NCDR
Short Name:	PedInPostProcEvOc
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15153	Intra or Post Procedure Events
Operator:		
Value:	Any Value	

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15951 Access Site Thrombosis Type

Coding Instruction: Indicate the access site thrombosis type.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Supporting Definition: **Thrombosis**

The formation or presence of a blood clot within a blood vessel.

Source: NCDR

Technical Specification

Code: 112000001720
Code System Name: ACC NCDR
Short Name: AccSitThrombTyp
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Thrombosis (at access site)

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Thrombosis Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1001

Selection	Definition	Source	Code	Code System Name
Venous			111293003	SNOMED CT
Arterial			65198009	SNOMED CT

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15952 Tear/Dissection Resulting in Flow Obstruction - Angioplasty

Coding Instruction: Indicate if there was a tear or dissection that occurred during angioplasty that caused flow (of blood) to become obstructed.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	418285008
Code System Name:	SNOMED CT
Short Name:	DisFloObsAngio
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Tear/Dissection - Angioplasty related

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15949 Arrhythmia (Intra- and Post Procedure Event) Types

Coding Instruction: Record the type(s) of arrythmia's that occurred that required treatment.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	100014018
Code System Name:	ACC NCDR
Short Name:	ArrEvenTyp
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Arrhythmia requiring treatment

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Arrhythmia Type - 1.3.6.1.4.1.19376.1.4.1.6.5.809

Selection	Definition	Source	Code	Code System Name
Atrial fibrillation			49436004	SNOMED CT
Atrial flutter			5370000	SNOMED CT
1st degree AV block			270492004	SNOMED CT
2nd degree AV block			195042002	SNOMED CT
3rd degree AV block			27885002	SNOMED CT
Bradycardia requiring intervention			48867003	SNOMED CT
Bundle branch block (persistent)			6374002	SNOMED CT

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15955 Cardiac Arrest Etiology

Coding Instruction: Indicate the cause of the cardiac arrest.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	410429000
Code System Name:	SNOMED CT
Short Name:	CardArrEt
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 16248 Etiology Unknown
Operator: Equal
Value: No

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Cardiac arrest

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Cardiac Arrest Etiology - 1.3.6.1.4.1.19376.1.4.1.6.5.1002

Selection	Definition	Source	Code	Code System Name
Supraventricular Tachycardia			6456007	SNOMED CT
Ventricular fibrillation			71908006	SNOMED CT
Ventricular Tachycardia			25569003	SNOMED CT
Complete heart block			27885002	SNOMED CT
Pulseless electrical activity			234172002	SNOMED CT
Acute hemorrhage			8573003	SNOMED CT

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Coronary Ischemia	112000004226	ACC NCDR
Cardiac Tamponade	35304003	SNOMED CT
Progressive low cardiac output	112000003305	ACC NCDR
Pulmonary hypertensive crises	112000003312	ACC NCDR
Respiratory arrest	87317003	SNOMED CT

Element: 16248 Etiology Unknown

Coding Instruction: Select if the etiology of the cardiac arrest is unknown.

Target Value: N/A

Technical Specification

Code: 410429000
Code System Name: SNOMED CT
Short Name: EtUnk
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Cardiac arrest

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15953 Biopsy Related Cardiac Perforation

Coding Instruction: Indicate whether cardiac perforation occurred as a result of an endomyocardial biopsy.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Supporting Definition: **Cardiac Perforation**

A perforation of the myocardium, aortic annulus or aorta, with or without tamponade associated with the perforation. If tamponade occurs there would be fluid in the pericardial space compromising cardiac filling, and requiring intervention such as pericardiocentesis or returning to the operating room. This should be documented by either:
1. Echo showing pericardial fluid and signs of tamponade such as right heart compromise, or
2. Systemic hypotension due to pericardial fluid compromising cardiac function.

Source:

Technical Specification

Code:	36191001:123005000=302509004
Code System Name:	SNOMED CT
Short Name:	BiopRelCarPerf
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Cardiac perforation

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 16125 Cardiac Perforation Requiring Treatment

Coding Instruction: Indicate whether the patient experienced a cardiac perforation that required treatment.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	112000004233
Code System Name:	ACC NCDR
Short Name:	CardPerfReqTx
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Cardiac perforation

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 16126 Cardiac Perforation Treatment

Coding Instruction: Select the treatment required for the cardiac perforation. Treatment can include a pericardial drain, implantation of a device to cover the perforation, surgery or extracorporeal membrane oxygenation (ECMO).

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	36191001:123005000=302509004
Code System Name:	SNOMED CT
Short Name:	CardPerfTx
Missing Data:	Report
Harvested:	Yes (CIED)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Multiple
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	16125 Cardiac Perforation Requiring Treatment
Operator:	Equal
Value:	Yes

Cardiac Perfromation Treatment - 1.3.6.1.4.1.19376.1.4.1.6.5.1096

Selection	Definition	Source	Code	Code System Name
Pericardial or pleural drain	The treatment required the placement of a drain to remove fluid or blood from the pericardial or pleural space.		112000004049	ACC NCDR
Surgical procedure	Surgical intervention was required to repair the perforation		387713003	SNOMED CT
Mechanical ventricular support device			360064003	SNOMED CT
Catheter based device	A catheter-based intervention (e.g. placement of covered stent, coil embolization, etc.) was required to repair the perforation.		112000004050	ACC NCDR

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15954 Biopsy Related Tricuspid Valve Injury

Coding Instruction: Indicate if a new tricuspid valve injury occurred as a result of an endomyocardial biopsy.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	112000001539
Code System Name:	ACC NCDR
Short Name:	BioRelTriValInj
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: New tricuspid valve insufficiency

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15956 Embolized Coil Retrieved

Coding Instruction: If there was coil embolization, indicate whether the coil was retrieved (either through surgical extraction or endovascular retrieval).

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code: 112000003498
Code System Name: ACC NCDR
Short Name: EmbCoRet
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Coil embolization

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15945 Embolized Device Retrieved

Coding Instruction: If there was device embolization, indicate if the device was retrieved (either percutaneous or surgical retrieval).

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	112000001324
Code System Name:	ACC NCDR
Short Name:	EmbDevRet
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Device embolization

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 16127 Device Embolization Requiring Retrieval

Coding Instruction: Indicate how the device was retrieved.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code: 112000001324
Code System Name: ACC NCDR
Short Name: DevEmbReqRet
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Device embolization for leadless pacemakers requiring retrieval

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Device Embolization Requiring Retrieval - 1.3.6.1.4.1.19376.1.4.1.6.5.1097

Selection	Definition	Source	Code	Code System Name
Retrieved via catheterization	The implanted device was retrieved via catheterization.		276272002	SNOMED CT
Retrieved via surgery	The implanted device was retrieved via surgery.		387713003	SNOMED CT

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15946 Device Malposition Blood Flow Obstruction

Coding Instruction: Indicate if device malposition caused significant obstruction of blood flow.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	24346005
Code System Name:	SNOMED CT
Short Name:	DevMalBloFlObs
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Device malposition

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15947 Stroke Type

Coding Instruction: Indicate the type of stroke that occurred.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	100000977
Code System Name:	ACC NCDR
Short Name:	StroTyp
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Stroke

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

HAS-BLED Stroke Type - 1.3.6.1.4.1.19376.1.4.1.6.5.773

Selection	Definition	Source	Code	Code System Name
Hemorrhagic Stroke	Indicate whether the patient experienced a hemorrhagic stroke. Hemorrhagic stroke is identified as an acute episode of focal or global cerebral or spinal dysfunction caused by intraparenchymal, intraventricular, or subarachnoid hemorrhage. Hemorrhage may be a consequence of ischemic stroke. In this situation, the stroke is an ischemic stroke with hemorrhagic transformation and NOT a hemorrhagic stroke.		230706003	SNOMED CT

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

	Note: Subdural hematomas are not intracranial hemorrhagic events and not strokes.		
Ischemic Stroke	Indicate whether the patient experienced an ischemic stroke. An ischemic stroke is an acute episode of focal or global neurological dysfunction cause by brain, spinal cord, or retinal vascular injury as a result of infarction of central nervous system tissue.	422504002	SNOMED CT
Undetermined Stroke	Indicate whether the patient experienced a stroke of unknown origin. A stroke with insufficient information to allow categorization as either ischemic or hemorrhagic. A stroke is defined as an acute episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury.	230713003	SNOMED CT

Element: 15948 Intervention Site Thrombosis Type

Coding Instruction: Indicate the procedure site thrombus type.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Supporting Definition: **Thrombosis**

The formation or presence of a blood clot within a blood vessel.

Source: NCDR

Technical Specification

Code: 439127006
Code System Name: SNOMED CT
Short Name: IntSiThrombTyp
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty
Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure
Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention
Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only
Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)
Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure
Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting
Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Thrombus (at intervention site)

--- AND ---

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Thrombosis Type - 1.3.6.1.4.1.19376.1.4.1.6.5.1001

Selection	Definition	Source	Code	Code System Name
Venous			111293003	SNOMED CT
Arterial			65198009	SNOMED CT

Element: 16128 Location of Lead Dislodgement

Coding Instruction: Select the location of the lead that was dislodged.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code: 112000003817
Code System Name: ACC NCDR
Short Name: LocLeadDislod
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Multiple
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Lead dislodgement

--- AND ---

Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Location of Lead Dislodgement - 1.3.6.1.4.1.19376.1.4.1.6.5.1098

Selection	Definition	Source	Code	Code System Name
Transvenous/endocardial - right atrium			112000004051	ACC NCDR
Transvenous/endocardial - right ventricle			112000004052	ACC NCDR
Transvenous/endocardial - left ventricle			112000004053	ACC NCDR
Transvenous/endocardial - Coronary sinus			112000004054	ACC NCDR
Transvenous/endocardial - baffle			112000004055	ACC NCDR
Transvenous/endocardial - SVC			112000004056	ACC NCDR
Transvenous/endocardial - other			112000004057	ACC NCDR
Epicardial - atrium			112000004058	ACC NCDR

Section: IPP Event Details	Parent: Intra- and Post-Procedure Events	
Epicardial - right ventricle	112000004059	ACC NCDR
Epicardial - left ventricle	112000004060	ACC NCDR
Epicardial - single ventricle	112000004061	ACC NCDR
Epicardial - anterior pericardial space	112000004062	ACC NCDR
Epicardial - posterior pericardial space	112000004063	ACC NCDR
Epicardial - other	112000004064	ACC NCDR
Subcutaneous - right axillary	112000004065	ACC NCDR
Subcutaneous - left axillary	112000004066	ACC NCDR
Subcutaneous - right parasternal	112000004067	ACC NCDR
Subcutaneous - left parasternal	112000004068	ACC NCDR
Subcutaneous - other	112000004069	ACC NCDR
Extravascular	112000004199	ACC NCDR

Element: 16123 Ventricular Lead Dislodgement Location

Coding Instruction: Indicate the location of the ventricular lead dislodgement.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code: 234233007
Code System Name: SNOMED CT
Short Name: DislodgLoc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Epicardial - left ventricle

Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Epicardial - right ventricle

Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Epicardial - single ventricle

Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Transvenous/endocardial - right ventricle

Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Transvenous/endocardial - left ventricle

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator

Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder

Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only

Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator

AND

Element: 15153 Intra or Post Procedure Events
Operator: Equal

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Value: Lead dislodgement
--- AND ---
Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal
Value: Yes

Ventricular Lead Dislodgement Location - 1.3.6.1.4.1.19376.1.4.1.6.5.1094

Selection	Definition	Source	Code	Code System Name
Septum			10746000	SNOMED CT
Free wall			112000004045	ACC NCDR

Element: 16124 Septum or Free Wall Lead Dislodgement Location

Coding Instruction: Indicate the location of the septum or free wall lead dislodgement.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code: 112000001884
Code System Name: ACC NCDR
Short Name: SepWalDislogLoc
Missing Data: Report
Harvested: Yes (CIED)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Epicardial - left ventricle
Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Epicardial - right ventricle
Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Epicardial - single ventricle
Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Transvenous/endocardial - right ventricle
Element: 16128 Location of Lead Dislodgement
Operator: Equal
Value: Transvenous/endocardial - left ventricle
AND
Element: 15081 Procedures Performed
Operator: Equal
Value: ICD generator
Element: 15081 Procedures Performed
Operator: Equal
Value: Implantable loop recorder
Element: 15081 Procedures Performed
Operator: Equal
Value: Leads only
Element: 15081 Procedures Performed
Operator: Equal
Value: Pacemaker pulse generator
AND
Element: 15153 Intra or Post Procedure Events
Operator: Equal
Value: Lead dislodgement
--- AND ---
Element: 15207 Intra and Post-Procedure Event (s) Occurred
Operator: Equal

Section: IPP Event Details **Parent: Intra- and Post-Procedure Events**

Value: Yes

Septum or free wall lead location - 1.3.6.1.4.1.19376.1.4.1.6.5.1095

Selection	Definition	Source	Code	Code System Name
Base			112000004046	ACC NCDR
Mid-ventricle			112000004047	ACC NCDR
Apex			112000003978	ACC NCDR
Parahisian			112000004048	ACC NCDR
Targeted left bundle pacing			74031005	SNOMED CT

Section: Post-Procedure Treatments **Parent: Procedure Information**

Element: 15171 Intra or Post Procedure Treatment

Coding Instruction: Indicate if there were any Intra or Post Procedure Treatment (up to 72 hours post procedure).

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code:	1000142478
Code System Name:	ACC NCDR
Short Name:	PedsProcTreatment
Missing Data:	Report
Harvested:	Yes (INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single (Dynamic List)
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	15081 Procedures Performed
Operator:	Equal
Value:	Aortic valvuloplasty
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Atrial septal defect closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Coarctation intervention
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Diagnostic catheterization only
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Other intervention (non-module)
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Premature infant patent ductus arteriosus closure
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Proximal PA stenting
Element:	15081 Procedures Performed
Operator:	Equal
Value:	Transcatheter pulmonary valve replacement

Intra or Post Procedure Treatment - 1.3.6.1.4.1.19376.1.4.1.6.5.822

Selection	Definition	Source	Code	Code System Name
Cardiac surgery - planned	Any surgery involving the coronary arteries, valves, or a structural repair of the heart. Planned refers to a surgery that was scheduled prior to the procedure. This may include a surgery that is part of a staged treatment approach or to address known conditions requiring surgical intervention.		64915003	SNOMED CT
Cardiac surgery - unplanned due to cath complication	The patient subsequently underwent an unplanned cardiac surgery as a direct result of a catheterization-related complication. Examples may include, but are not limited to, sternotomy for cardiac tamponade, CABG, surgical removal of embolized device, establishing a pericardial window for drainage, surgical closure of a septal defect.		112000001892	ACC NCDR
Vascular surgery - unplanned due to cath complication	Any vascular surgery that was not planned and due to a complication from catheterization. Examples may include surgical repair of pseudoaneurysms or AV fistula.		30904006	SNOMED CT
Subsequent cardiac cath due to cath complication	The patient had a cardiac catheterization as a direct result of a complication arising from the initial catheterization procedure. This may include but is not limited to: a second catheterization for stenting or		41976001	SNOMED CT

Section: Post-Procedure Treatments **Parent: Procedure Information**

	vascular repair; to assess or treat vessel occlusion or embolism caused during the initial procedure; to reposition or retrieve a dislodged device or address malfunctioning implants; to manage persistent bleeding or pressure abnormalities; to evaluate or treat residual shunts, stenosis, or valvular issues identified post-procedure.		
Other surgery - unplanned	Any other surgery that occurred due to the primary procedure and is not represented in other selections.	112000000411	ACC NCDR

Element: 15208 Intra and Post-Procedure Treatment(s) Occurred

Coding Instruction: Indicate if the intra or post-procedure treatment did or did not occur.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Vendor Instruction: Intra and Post-Procedure Treatment(s) Occurred (15208) cannot be Null when an Intra or Post Procedure Treatment (15171) is selected

Technical Specification

Code: 112000002243
Code System Name: ACC NCDR
Short Name: PedInPostProcRxOc
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15171 Intra or Post Procedure Treatment
Operator:
Value: Any Value

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Post-Procedure Treatment Details **Parent: Procedure Information**

Element: 15172 Other Unplanned Surgery Due to Cath Complication

Coding Instruction: Indicate if the other unplanned surgery was due to a catherization complication.

Target Value: Any occurrence between start of procedure and 72 hours post procedure and prior to next procedure/surgery or discharge

Technical Specification

Code: 112000000411
Code System Name: ACC NCDR
Short Name: PostOtherSurgCathComp
Missing Data: Report
Harvested: Yes (INTRV)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: BL
Precision:
Selection Type: Single
Unit of Measure:
Default Value:
Usual Range:
Valid Range:
Data Source: User

Parent/Child Validation

Element: 15171 Intra or Post Procedure Treatment
Operator: Equal
Value: Other surgery - unplanned

--- AND ---

Element: 15208 Intra and Post-Procedure Treatment(s) Occurred
Operator: Equal
Value: Yes

AND

Element: 15081 Procedures Performed
Operator: Equal
Value: Aortic valvuloplasty

Element: 15081 Procedures Performed
Operator: Equal
Value: Atrial septal defect closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Coarctation intervention

Element: 15081 Procedures Performed
Operator: Equal
Value: Diagnostic catheterization only

Element: 15081 Procedures Performed
Operator: Equal
Value: Other intervention (non-module)

Element: 15081 Procedures Performed
Operator: Equal
Value: Premature infant patent ductus arteriosus closure

Element: 15081 Procedures Performed
Operator: Equal
Value: Proximal PA stenting

Element: 15081 Procedures Performed
Operator: Equal
Value: Transcatheter pulmonary valve replacement

Section: Discharge **Parent: Root**

Element: 10101 Discharge Date and Time

Coding Instruction: Indicate the date and time the patient was discharged from your facility as identified in the medical record.

Note(s):
Indicate the time (hours:minutes) using the military 24-hour clock, beginning at midnight (00:00 hours).

If the exact discharge time is not specified in the medical record, then code the appropriate time as below.

0000 - 0559 (midnight to before 6AM) code 0300
0600 - 1159 (6AM - before noon) code 0900
1200 - 1759 (noon before 6PM) code 1500
1800 - 2359 (6PM to before midnight) code 2100

Target Value: The value on discharge

Vendor Instruction: Arrival Date and Time (3001) and Discharge Date and Time (10101) must not overlap on multiple episodes

Discharge Date and Time (10101) must be >= 04/01/2026

Technical Specification

Code:	1000142457
Code System Name:	ACC NCDR
Short Name:	DCDateTime
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	TS
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Element: 10105 Discharge Status

Coding Instruction: Indicate whether the patient was alive or deceased at discharge.

Target Value: The value on discharge

Technical Specification

Code:	75527-2
Code System Name:	LOINC
Short Name:	DCStatus
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Discharge Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.42

Selection	Definition	Source	Code	Code System Name
Alive			438949009	SNOMED CT
Deceased			20	HL7 Discharge disposition

Section: Discharge **Parent: Root**

Element: 10120 Death During the Procedure

Coding Instruction: Indicate if the patient expired during the procedure.

Target Value: Any occurrence on discharge

Technical Specification

Code:	100000923
Code System Name:	ACC NCDR
Short Name:	DeathProcedure
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	BL
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	10105	Discharge Status
Operator:	Equal	
Value:	Deceased	

Element: 10125 Cause of Death

Coding Instruction: Indicate the primary cause of death, i.e. the first significant abnormal event which ultimately led to death.

Target Value: The value on time of death

Technical Specification

Code:	184305005
Code System Name:	SNOMED CT
Short Name:	DeathCause
Missing Data:	Report
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	User

Parent/Child Validation

Element:	10105	Discharge Status
Operator:	Equal	
Value:	Deceased	

Cause of Death Clinical Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.88

Selection	Definition	Source	Code	Code System Name
Cardiac			100014107	ACC NCDR
Non-Cardiac			112000000343	ACC NCDR
Undetermined			112000000342	ACC NCDR

Section: Administration **Parent: Root**

Element: 1000 Participant ID

Coding Instruction: Indicate the participant ID of the submitting facility.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.836
Code System Name:	ACC NCDR
Short Name:	PartID
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	8
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Element: 1010 Participant Name

Coding Instruction: Indicate the full name of the facility where the procedure was performed.

Note(s):
Values should be full, official hospital names with no abbreviations or variations in spelling.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.836
Code System Name:	ACC NCDR
Short Name:	PartName
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	100
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Element: 1020 Time Frame of Data Submission

Coding Instruction: Indicate the time frame of data included in the data submission. Format: YYYYQQ. e.g.,2016Q1

Target Value: N/A

Technical Specification

Code:	1.3.6.1.4.1.19376.1.4.1.6.5.45
Code System Name:	ACC NCDR
Short Name:	Timeframe
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	6
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Section: Administration **Parent: Root**

Element: 1040 Transmission Number

Coding Instruction: This is a unique number created, and automatically inserted by the software into export file. It identifies the number of times the software has created a data submission file. The transmission number should be incremented by one every time the data submission files are exported. The transmission number should never be repeated.

Target Value: N/A

Technical Specification

Code:	1.3.6.1.4.1.19376.1.4.1.6.5.45
Code System Name:	ACC NCDR
Short Name:	XmsnId
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	Yes
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	9
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	1 - 999,999,999
Data Source:	Automatic

Element: 1050 Vendor Identifier

Coding Instruction: Vendor identification (agreed upon by mutual selection between the vendor and the NCDR) to identify software vendor. This is entered into the schema automatically by vendor software. Vendors must use consistent name identification across sites. Changes to vendor name identification must be approved by the NCDR.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.840
Code System Name:	ACC NCDR
Short Name:	VendorId
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	15
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Element: 1060 Vendor Software Version

Coding Instruction: Vendor's software product name and version number identifying the software which created this record (assigned by vendor). Vendor controls the value in this field. This is entered into the schema automatically by vendor software.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.847
Code System Name:	ACC NCDR
Short Name:	VendorVer
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	20
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Section: Administration **Parent: Root**

Element: 1070 Registry Identifier

Coding Instruction: The NCDR registry identifier describes the data registry to which these records apply. It is implemented in the software at the time the data is collected and records are created. This is entered into the schema automatically by software.

Target Value: N/A

Technical Specification

Code:	2.16.840.1.113883.3.3478.4.841
Code System Name:	ACC NCDR
Short Name:	RegistryId
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	ST
Precision:	30
Selection Type:	Single
Unit of Measure:	
Default Value:	ACC-NCDR-IMPACT-3.0
Usual Range:	
Valid Range:	
Data Source:	Automatic

Element: 1071 Registry Schema Version

Coding Instruction: Schema version describes the version number of the Registry Transmission Document (RTD) schema to which each record conforms. It is an attribute that includes a constant value indicating the version of schema file. This is entered into the schema automatically by software.

Target Value: N/A

Technical Specification

Code:	1000142438
Code System Name:	ACC NCDR
Short Name:	SchemaVersion
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	NUM
Precision:	3,1
Selection Type:	Single
Unit of Measure:	
Default Value:	1.0
Usual Range:	
Valid Range:	
Data Source:	Automatic

Element: 1085 Submission Type

Coding Instruction: Indicate if the data contained in the harvest/data file contains either standard patient episode of care records (arrival date to discharge only) or if it contains patient follow-up records.

A transmission file with all episode of care records (from Arrival to Discharge only) is considered a 'Base Registry Record'.

A file with patient follow-up records (any follow-up assessments performed during the quarter selected) is considered a 'Follow-Up Record'.

Note(s):
Selecting 'Follow-Up Records Only' will transmit all patient records with Follow-up Assessment Dates (Element Ref# 11000) contained in the selected timeframe, regardless of the procedure or discharge date. For example, if a patient has a procedure on 3/30/2017, is discharged on 3/31/2017, and has a follow-up assessment on 5/6/2017, the patient's episode of care data will be transmitted in the 2017Q1 Base Registry Record file, but the Follow-up data will be transmitted in the 2017Q2 Follow-Up File.

Target Value: N/A

Technical Specification

Code:	1000142423
Code System Name:	ACC NCDR
Short Name:	SubmissionType
Missing Data:	Illegal
Harvested:	Yes (CIED, EP, INTRV)
Is Identifier:	No
Is Base Element:	Yes
Is Followup Element:	No
Data Type:	CD
Precision:	
Selection Type:	Single
Unit of Measure:	
Default Value:	
Usual Range:	
Valid Range:	
Data Source:	Automatic

Submission Type

Selection	Definition	Source	Code	Code System Name
Episode of Care Records Only			1000142424	ACC NCDR

Value Set Member Constraints

Element: 12903
Value Set Name: Condition Histories

Condition History
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.927

Selections	Selection Dependency
Stroke | 100000977	IMPACT Pathway (15836) IN (Diagnostic or interventional catheterization)

Element: 12903
Value Set Name: Condition Histories

Condition History
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.927

Selections	Selection Dependency
Cardiomyopathy | 85898001, Chronic Lung Disease | 413839001, Blood Coagulation Disorder | 64779008, Congenital heart disease | 13213009, Endocarditis | 56819008, Heart Failure | 84114007, Heart transplant | 32413006	IMPACT Pathway (15836) IN (Electrophysiology study with or without ablation)

Element: 15051
Value Set Name: Cardiomyopathy Type

Cardiomyopathy Type
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.193

Selections	Selection Dependency
Arrhythmogenic right ventricular cardiomyopathy | 281170005, Dilated cardiomyopathy | 195021004, Hypertrophic cardiomyopathy | 233873004, Ischemic cardiomyopathy | 426856002, Noncompaction of the ventricular myocardium | 112000002196, Restrictive cardiomyopathy | 415295002, Tachycardia-induced cardiomyopathy | 426300009, Other cardiomyopathy type | 100001065	IMPACT Pathway (15836) IN (Electrophysiology study with or without ablation)

Element: 12905
Value Set Name: Procedure History Names

Procedure History
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.928

Selections	Selection Dependency
Cardiac catheterization | 112000003717, Cardiac Surgery | 64915003	IMPACT Pathway (15836) IN (Diagnostic or interventional catheterization)

Element: 12905
Value Set Name: Procedure History Names

Procedure History
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.928

Selections	Selection Dependency
EP therapy attempted | 252425004	IMPACT Pathway (15836) IN (Electrophysiology study with or without ablation)

Element: 12905
Value Set Name: Procedure History Names

Procedure History
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.928

Selections	Selection Dependency
Cardiac catheterization | 112000003717, Cardiac Surgery | 64915003, Prior cardiovascular implantable electronic device | 100000954	IMPACT Pathway (15836) IN (Cardiovascular implantable electronic device (CIED))

Element: 16205
Value Set Name: Defibrillator Device List

Device ID
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.243

Selections	Selection Dependency
Belos DR | 279, Iforia 7DR-T | 561, Quadra Assura MP | 641, Visia AF VR | 644, Belos DR | 368, Inogen CRT-D | 601, Quadra Assura MP | 640, Visia AF VR | 643, Vigilant X4 CRT-D | 684, Belos DR-T | 281, Ilesto 7 HFT | 587, Visia AF MRI VR SureScan | 642, Belos DR-T | 280, Evera MRI XT VR SureScan | 630, Belos VR | 25, Clinical Trial Device-CRT-D | 573, Belos VR | 282, Itrevia 7 DR-T | 613, Belos VR-T | 392, Inogen EL DR | 599, Belos VR-T | 284, Inventra 7 VR-T DX | 639, Belos VR-T | 283, Inogen Mini VR | 582, Cardiac Airbag | 285, Intensia VR | 625, Cardiac Airbag T | 287, Clinical Trial Device-Single Chamber | 568, Cardiac Airbag T | 286, Itrevia 7 HF-T | 611, Clinical Trial Device | 288, Ilesto 7 DRT | 594, Deikos A+ | 27, Amplia MRI Quad | 637, Kronos LV-T | 327, Dynagen Mini DR | 580, Kronos LV-T | 373, Ilesto 7 VRT | 620, Lexos DR | 289, Clinical Trial Device-Dual Chamber | 563, Lexos DR-T | 291, Dynagen CRT-D | 606, Lexos DR-T | 290, Viva Quad XT | 592, Lexos VR | 292, Iperia 7 DR-T | 632, Lexos VR-T | 294, Clinical Trial Device-Dual Chamber | 575, Lexos VR-T | 293, Inventra 7 VR-T DX | 618, Lumax 300 DR-T | 377, Inogen X4 CRT-D | 584, Lumax 300 DR-T | 376, Intensia CRT-D | 627, Lumax 300 VR-T | 383, Clinical Trial Device-CRT-D | 570, Lumax 300 VR-T | 382, Itrevia 7 HF-T | 610, Lumax 340 DR-T | 375, Inogen EL VR | 596, Lumax 340 DR-T | 374, Amplia MRI | 636, Lumax 340 VR-T | 381, Dynagen Mini VR | 579, Lumax 340 VR-T | 380, Itrevia 7 HF-TQP | 622, Lumax 540 DR-T | 428, Clinical Trial Device-Single Chamber | 565, Lumax 540 HF-T | 429, Dynagen CRT-D | 608, Lumax 540 VR-T | 430, Viva Quad S | 591, Lumax HF-T | 369, Iperia 7 HF-T | 634, Lumax HF-T | 370, Dynagen X4 CRT-D | 577, Lumax HF-T | 371, Ilesto 7 VRT DX | 617, Lumax HF-T | 372, Iforia 7VR-T DX | 560, Lumos DR-T | 295, Dynagen EL VR | 603, Lumos DR-T | 378, Dynagen Mini DR | 589, Lumos VR-T | 296, Evera MRI S DR SureScan | 629, Lumos VR-T | 384, Clinical Trial Device-Dual Chamber | 572, MycroPhylax | 19, Itrevia 7 VR-T | 615, MycroPhylax | 21, Inogen EL DR | 598, nanoPhylax | 28, Compia MRI Quad | 638, Phylax 03 | 12, Inogen X4 CRT-D | 581, Phylax 06 | 13, Ilesto 7 DRT | 624, Phylax 06 | 14, Clinical Trial Device-CRT-D | 567, Phylax 06 | 20, Dynagen CRT-D | 607, Phylax AV | 15, Viva Quad XT | 593, Phylax AV | 22, Iperia 7 DR-T | 633, Phylax XM | 16, Clinical Trial Device-CRT-D | 576, Phylax XM | 17, Itrevia 7 DR-T | 619, Phylax XM | 18, Clinical	IMPACT Pathway (15836) IN (Cardiovascular implantable electronic device (CIED))

Value Set Member Constraints

Trial Device-Single Chamber | 562, Tachos ATx | 297, Dynagen EL DR | 605, Tachos DR | 23, Dynagen Mini VR | 588, Tachos DR | 360, Iperia 7 VR-T DX | 631, Tachos MSA (biA) | 24, Clinical Trial Device-Single Chamber | 574, Tachos MSV (biV) | 26, Itrevia 7 VR-T | 614, Tupos LV | 278, Inogen CRT-D | 600, Xelos | 298, Inogen Mini VR | 586, Xelos | 379, Intensia DR | 626, Cognis 100 HE | 399, Clinical Trial Device-Dual Chamber | 569, Cognis 100 HE | 400, Itrevia 7 DR-T | 612, Livian | 394, Ilesto 7 VRT | 595, Livian | 395, Emblem S-ICD | 621, Livian HE | 396, Clinical Trial Device-CRT-D | 564, Livian HE | 397, Dynagen EL DR | 604, Teligen DR HE | 398, Viva Quad S | 590, Teligen VR HE | 402, Itrevia 7 VR-T | 616, Confient | 393, Dynagen EL VR | 602, Clinical Trial Device | 434, Inogen Mini DR | 585, Alto 2 | 2, Evera MRI XT DR SureScan | 628, Alto 2 | 3, Clinical Trial Device-Single Chamber | 571, Alto DR | 85, Inogen EL VR | 597, Alto MSP | 90, Inogen Mini DR | 583, Alto SR | 91, Ilesto 7 DRT | 623, Alto2 MSP | 299, Clinical Trial Device-Dual Chamber | 566, Aveion (DC) | 11, Dynagen CRT-D | 609, Clinical Trial Device | 300, Iperia 7 HF-T | 635, Defender (DC) | 86, Dynagen X4 CRT-D | 578, Defender II (DC) | 87, Defender II (DC) | 88, Defender III (DC) | 89, Defender IV (DR) | 84, Lyra | 8, Lyra | 9, Lyra | 10, Ovatio | 401, Ovatio DR | 328, Ovatio VR | 329, Sentinel | 4, Sentinel | 5, Sentinel | 6, Sentinel | 7, Foreign | 1, AID B | 354, AID B | 355, AID BR | 356, AID-B | 29, AID-B | 30, AID-B | 31, Clinical Trial Device | 301, Contak CD | 92, Contak CD 2 | 334, Contak CD 2 HE | 335, Contak Renewal | 99, Contak Renewal | 339, Contak Renewal 3 | 95, Contak Renewal 3 | 96, Contak Renewal 3 AVT | 343, Contak Renewal 3 AVT | 344, Contak Renewal 3 HE | 97, Contak Renewal 3 HE | 98, Contak RENEWAL 3 RF | 273, Contak RENEWAL 3 RF | 274, Contak RENEWAL 3 RF HE | 275, Contak RENEWAL 3 RF HE | 276, Contak Renewal TR | 93, Contak Renewal TR | 94, Cosmos II | 350, CyberLith | 345, Dash | 351, InterTach | 347, InterTach II | 348, InterTach II | 349, Metrix | 122, Metrix | 121, Metrix | 337, Relay | 352, Renewal 3 | 340, Renewal 4 HE | 342, Renewal 4 LV | 341, Res-Q | 123, Res-Q | 124, Res-Q DR | 346, Res-Q Micron | 126, Res-Q Micron | 128, ResQ II | 125, ResQ II | 127, ResQ Micron Advantag | 129, Stride | 353, Ventak | 32, Ventak | 33, Ventak | 34, Ventak | 35, Ventak | 36, Ventak AV | 76, Ventak AV | 77, Ventak AV II DDD | 78, Ventak AV II DDD | 80, Ventak AV II DDD | 81, Ventak AV II DR | 79, Ventak AV III DR | 82, Ventak AV III DR | 83, Ventak CHF | 336, Ventak Mini | 50, Ventak Mini | 54, Ventak Mini HC | 52, Ventak Mini HE | 56, Ventak Mini HE | 57, Ventak Mini II | 58, Ventak Mini II | 60, Ventak Mini II+ | 59, Ventak Mini II+ | 61, Ventak Mini III | 62, Ventak Mini III | 67, Ventak Mini III+ | 63, Ventak Mini III+ | 66, Ventak Mini III+ | 68, Ventak Mini III+ | 69, Ventak Mini III+ HE | 70, Ventak Mini III+ HE | 71, Ventak Mini IV | 100, Ventak Mini IV | 72, Ventak Mini IV | 73, Ventak Mini IV | 101, Ventak Mini IV+ | 74, Ventak Mini IV+ | 75, Ventak Mini+ | 51, Ventak Mini+ | 55, Ventak Mini+ HC | 53, Ventak Mini+ HC S | 41, Ventak Mini+ S | 42, Ventak P | 37, Ventak P2 | 38, Ventak P3 | 39, Ventak P3 | 40, Ventak Prizm 2 DR | 111, Ventak Prizm 2 VR | 110, Ventak Prizm AVT | 112, Ventak Prizm DR | 103, Ventak Prizm DR | 107, Ventak Prizm DR HE | 105, Ventak Prizm DR HE | 109, Ventak Prizm VR | 102, Ventak Prizm VR | 106, Ventak Prizm VR HE | 104, Ventak Prizm VR HE | 108, Ventak PRx | 43, Ventak PRx | 44, Ventak PRx II | 45, Ventak PRx II | 46, Ventak PRx III | 47, Ventak PRx III | 49, Ventak PRx III HC | 48, Ventak VR | 64, Ventak VR | 65, Vitality 2 | 114, Vitality 2 | 115, Vitality 2 EL | 116, Vitality 2 EL | 117, Vitality AVT | 302, Vitality AVT | 113, Vitality DR | 338, Vitality DR+ | 411, Vitality DS | 118, Vitality DS | 119, Vitality EL | 120, VITALITY HE | 277, Vitality VR | 410, CD | 130, CD | 131, Chronicle VR | 409, Clinical Trial Device | 304, Concerto | 325, Concerto II | 433, Consulta | 403, En Trust | 326, Entrust | 305, Entrust | 306, Entrust | 132, Entrust | 307, Entrust | 133, Gem | 314, Gem | 315, Gem | 316, Gem | 317, Gem DR (DC) | 183, Gem II DR | 184, Gem II VR | 178, Gem III AT | 134, Gem III DR | 135, Gem III VR | 180, Gem III VR | 136, Gem SR | 173, Gem SR | 174, Gem SR | 175, Gem SR | 176, Gem SR | 177, InSync ICD | 318, Insync II Marquis | 140, InSync II Protect | 319, InSync III Marquis | 361, InSync Marquis | 320, Insync Sentry | 138, Insync Sentry | 139, Intrinsic | 308, Intrinsic | 137, Jewel AF | 313, Jewel AF | 181, Jewel AF | 182, Jewel CD | 147, Jewel CD | 148, Jewel CD | 149, Jewel PCD | 154, Jewel PCD | 155, Jewel PCD | 156, Jewel PCD | 157, Jewel PCD | 158, Jewel PCD | 159, Jewel PCD | 160, Jewel Plus | 161, Jewel Plus | 162, Jewel Plus | 164, Jewel Plus Active Ca | 163, Marquis | 142, Marquis DR | 141, Marquis VR | 179, Marquis VR | 311, Marquis VR | 312, Maximo | 143, Maximo | 144, Maximo DR | 145, Maximo II | 404, Maximo II DR | 406, Maximo II VR | 408, Maximo VR | 309, Maximo VR | 146, Micro Jewel | 165, Micro Jewel | 310, Micro Jewel | 166, Micro Jewel | 167, Micro Jewel | 168, Micro Jewel II | 169, Micro Jewel II | 170, Micro Jewel II | 171, Micro Jewel II | 172, Onyx VR | 321, PCD | 150, PCD | 151, PCD | 152, PCD | 153, Secura DR | 405, Secura VR | 407, Virtuoso | 323, Virtuoso | 324, Virtuoso II DR | 431, Virtuoso II VR | 432, Aegis | 189, Angstrom II | 262, Angstrom II | 263, Angstrom MD | 271, Angstrom MD | 272, Atlas + HF | 366, Atlas DR | 205, Atlas DR | 206, Atlas II DR | 362, Atlas II HF | 359, Atlas II VR | 357, Atlas II+ DR | 358, Atlas II+ HF | 385, Atlas Plus DR | 207, Atlas Plus HF | 211, Atlas Plus HF | 213, Atlas Plus HF (OUS) | 212, Atlas Plus VR | 191, Atlas Plus VR | 192, Atlas VR | 197, Cadence | 223, Cadence | 224, Cadence | 225, Cadence | 226, Cadence | 232, Cadence | 233, Cadence | 234, Cadence | 235, Cadence | 236, Cadence | 237, Cadence | 238, Cadence | 239, Cadence | 240, Cadence | 241, Cadet | 242, Cadet | 243, Cadet | 244, Cadet | 245, Cadet | 246, Cadet LT | 227, Cadet LT | 228, Cadet LT | 229, Cadet LT | 230, Cadet LT | 231, Clinical Trial Device | 322, Contour | 252, Contour | 253, Contour | 254, Contour | 255, Contour | 256, Contour II | 264, Contour II | 265, Contour II | 266, Contour II | 267, Contour II | 268, Contour LT | 247, Contour LT | 248, Contour LT | 249, Contour LT | 250, Contour LT | 251, Contour MD | 257, Contour MD | 363, Contour MD | 258, Contour MD | 259, Contour MD | 260, Contour MD | 261, Convert | 364, Convert+ | 365, Current DR | 386, Current DR RF | 414, Current DR RF | 415, Current Plus DR | 418, Current Plus DR | 419, Current Plus VR | 416, Current Plus VR | 417, Current RF DR | 387, Current RF VR | 389, Current VR | 388, Current VR RF | 412, Current VR RF | 413, Eagle | 190, Epic DR | 200, Epic DR | 201, Epic HF | 208, Epic HF | 209, Epic HF | 367, Epic HF (OUS) | 210, Epic II DR | 333, Epic II HF | 330, Epic II VR | 332, Epic II+ DR | 331, Epic Plus DR | 202, Epic Plus DR | 203, Epic Plus DR | 204, Epic Plus HF (OUS) | 214, Epic Plus VR | 194, Epic Plus VR | 195, Epic VR | 196, Guardian | 215, Guardian | 216, Guardian ATP | 218, Guardian ATP II | 219, Guardian ATP III | 220, Guardian II | 217, Photon

Value Set Member Constraints

Micro DR | 199, Photon Micro VR | 193, Photon DR | 198, Profile MD | 269, Profile MD | 270, Promote | 390, Promote | 422, Promote | 423, Promote Plus | 420, Promote Plus | 421, Promote RF | 391, Promote RF | 424, Promote RF | 425, Promote RF | 426, Promote RF | 427, Sentry | 221, Sentry | 222, Siecure | 188, Paradym | 435, Fortify VR | 436, Fortify VR | 437, Fortify DR | 438, Fortify DR | 439, Unify | 440, Unify | 441, Promote Accel | 442, Promote Accel | 443, Promote Accel | 444, Current Accel DR | 445, Current Accel DR | 446, Current Accel VR | 447, Current Accel VR | 448, Current Accel VR | 449, Current Accel DR | 450, Current Accel DR | 451, Concerto | 452, Paradym | 453, Paradym | 454, Protecta XT DR | 455, Protecta DR | 456, Protecta XT VR | 457, Protecta VR | 458, Protecta XT CRT-D | 459, Protecta CRT-D | 460, Unify Quadra | 461, Unify Quadra | 462, Fortify ST VR | 463, Fortify ST VR | 464, Incepta | 465, Protecta XT DR | 466, Protecta DR | 467, Protecta XT CRT-D | 468, Protecta CRT-D | 469, Energen ICD DF4 VR | 470, Energen ICD DF4 DR | 471, Energen CRT-D IS1 DF4 IS1 | 472, Incepta | 473, Incepta | 474, Incepta | 475, Punctua | 476, Punctua | 477, Punctua | 478, Punctua | 479, Incepta | 480, Incepta | 481, Incepta | 482, Punctua | 483, Energen CRT-D | 484, Energen ICD | 485, Energen ICD | 486, Concerto | 487, Virtuoso | 488, Virtuoso | 489, Secura DR | 490, Secura VR | 491, Secura DR | 492, Secura VR | 493, Secura DR | 494, Secura VR | 495, Virtuoso II DR | 496, Virtuoso II VR | 497, Virtuoso II VR | 498, Maximo II DR | 499, Maximo II VR | 500, Protecta XT VR | 501, Protecta VR | 502, Consulta | 503, Maximo II CRT-D | 504, Teligen VR HE | 505, Teligen DR HE | 506, Paradym RF VR | 507, Paradym RF DR | 508, Paradym RF CRT-D | 509, Ellipse VR | 510, Ellipse VR | 511, Ellipse DR | 512, Ellipse DR | 513, Fortify Assura VR | 514, Fortify Assura VR | 515, Fortify Assura DR | 516, Fortify Assura DR | 517, Unify Assura | 518, Unify Assura | 519, Quadra Assura | 520, Quadra Assura | 521, Lumax 740 VR-T | 522, Lumax 740 VR-T DX | 523, Lumax 740 DR-T | 524, Lumax 740 HF-T | 525, SQ-RX Pulse Generator | 526, Lumax 500 VR-T | 527, Lumax 500 DR-T | 528, Lumax 500 HF-T | 529, Viva S CRT-D | 530, Viva S CRT-D | 531, Viva XT CRT-D | 532, Viva XT CRT-D | 533, Punctua | 534, Evera XT DR | 535, Evera XT DR | 536, Evera S DR | 537, Evera S DR | 538, Evera XT VR | 539, Evera XT VR | 540, Evera S VR | 541, Evera S VR | 542, Ellipse VR Next Generation | 543, Ellipse VR Next Generation | 544, Ellipse DR Next Generation | 545, Ellipse DR Next Generation | 546, Fortify Assura VR Next Generation | 547, Fortify Assura VR Next Generation | 548, Fortify Assura DR Next Generation | 549, Fortify Assura DR Next Generation | 550, Unify Assura Next Generation | 551, Unify Assura Next Generation | 552, Quadra Assura Next Generation | 553, Quadra Assura Next Generation | 554, Ilesto | 555, Ilesto 7 VRT | 556, Ilesto 7 VRT DX | 557, Ilesto 7 DRT | 558, Ilesto 7 HFT | 559, Quadra Assura MP | 646, Quadra Assura MP | 647, Emblem MRI S-ICD | 663, Quadra Assura MP | 648, Amplia MRI Quad | 664, Inventra 7HF-T QP | 649, Emblem MRI S-ICD | 650, Iperia 7 HF-T QP | 651, Platinium VR DF1 | 652, Platinium VR DF4 | 653, Platinium DR DF1 | 654, Platinium DR DF4 | 655, Platinium CRT-D DF1 | 656, Platinium CRT-D DF4 | 657, Evera MRI XT DR SureScan | 658, Visia AF MRI VR SureScan | 659, Quadra Assura MP | 660, Quadra Assura MP | 661, Quadra Assura MP | 645, Evera MRI S DR SureScan | 662, Maximo VR | 665, Maximo VR | 666, Claria | 667, Claria | 668, Claria | 669, Claria | 670, Amplia MRI Quad | 671, Visia AF MRI S VR SureScan | 672, Compia MRI SureScan | 673, Visia AF MRI S VR SureScan | 674, Unify | 675, Intica 7 HF-T QP | 676, Intica 7 VR-T DX | 677, Ilivia 7 VR-T | 678, Ilivia 7 VR-T | 679, Ilivia 7 DR-T | 680, Ilivia 7 DR-T | 681, Ilivia 7 HF-T | 682, Ilivia 7 HF-T QP | 683, Vigilant X4 CRT-D | 685, Vigilant EL | 686, Vigilant EL | 687, Resonate EL | 688, Resonate EL | 689, Resonate X4 | 690, Perciva | 691, Perciva | 692, Perciva | 693, Perciva | 694, MOMENTUM X4 | 695, MOMENTUM | 696, MOMENTUM | 697, MOMENTUM | 698, MOMENTUM | 699, MOMENTUM | 700, Itrevia 7 VR-T | 701, Quadra Assura MP | 702, Quadra Assura MP | 703, Quadra Assura MP | 704, Primo MRI VR SureScan | 705, Primo MRI VR SureScan | 706, Primo MRI DR SureScan | 708, Primo MRI DR SureScan | 707, Intica HF-T | 4301, Rivacor 7 DR-T | 4305, Rivacor 7 VR-T | 4306, Rivacor 7 HF-T QP | 4307, Acticor 7 VR-T DX | 4308, Acticor 7 HF-T | 4309, Acticor 7 HF-QP | 4310, Cobalt VR MRI | 4554, Cobalt VR MRI | 4555, Cobalt DR MRI | 4556, Cobalt DR MRI | 4557, Cobalt HF Quad CRT-D MRI | 4558, Cobalt HF Quad CRT-D MRI | 4559, Cobalt HF CRT-D MRI | 4560, Cobalt HF CRT-D MRI | 4561, Chrome VR MRI | 4562, Chrome VR MRI | 4563, Chrome DR MRI | 4564, Chrome DR MRI | 4565, Chrome HF Quad CRT-D MRI | 4566, Chrome HF Quad CRT-D MRI | 4567, Chrome HF CRT-D MRI | 4568, Chrome HF CRT-D MRI | 4569, Cobalt HF Quad CRT-D MRI | 4579, Cobalt HF Quad CRT-D MRI | 4580, Cobalt HF CRT-D MRI | 4581, Cobalt HF CRT-D MRI | 4582, Chrome HF Quad CRT-D MRI | 4583, Chrome HF Quad CRT -D MRI | 4584, Chrome HF CRT-D MRI | 4585, Chrome HF CRT-D MRI | 4586, Ilivia Neo 7 VR-T | 4597, Intica Neo 7 VR-T | 4598, Intica Neo 5 VR-T | 4599, Ilivia Neo 7 VR-T DX | 4600, Intica Neo 7 VR-T DX | 4601, Intica Neo 5 VR-T DX | 4602, Ilivia Neo 7 DR-T | 4603, Intica Neo 7 DR-T | 4604, Intica Neo 5 DR-T | 4605, Ilivia Neo 7 HF-T | 4606, Intica Neo 7 HF-T | 4607, Intica Neo 5 HF-T | 4608, Ilivia Neo 7 HF-T QP | 4609, Intica Neo 5 HF-T QP | 4610, Intica Neo 7 HF-T QP | 4611, Gallant VR | 4612, Gallant DR | 4613, Gallant HF | 4614, Entrant DR | 4615, Entrant VR | 4616, Entrant HF | 4617, Cobalt XT DR MRI SureScan | 4632, Cobalt XT DR MRI SureScan | 4633, Cobalt XT VR MRI SureScan | 4634, Cobalt XT VR MRI SureScan | 4635, Cobalt XT HF CRT SureScan | 4636, Cobalt XT HF Quad CRT-DMRI SureScan | 4637, Cobalt XT HF Quad CRT-DMRI SureScan | 4638, Cobalt XT HF CRT-DMRI SureScan | 4639, Actros SR B | 4656, Actros SR | 4657, Actros SR | 4658, Actros DR | 4659, Actros DR | 4660, Actros SLR | 4661, Actros SLR | 4662, Actros D | 4663, Actros D | 4664, Actros S | 4665, Actros S | 4666, Actros D-A | 4667, Actros S-B | 4668, Actros DR-A | 4669, Actros DR-B | 4670, Actros DR+ | 4671, Actros S+ | 4672, Actros SR+ | 4673, Actros SR - B | 4674, Actros DR - B | 4675, Axios D | 4676, Axios DR | 4677, Axios S | 4678, Axios SLR | 4679, Axios SR | 4680, Edora 8 SR-T | 4681, Edora 8 DR-T | 4682, Edora 8 HF-T | 4683, Edora 8 HF-T QP | 4684, Eluna 8 SR-T | 4685, Eluna 8 DR-T | 4686, Eluna 8 HF-T | 4687, Etrinsa 6 SR | 4688, Etrinsa 6 SR-T | 4689, Etrinsa 6 DR | 4690, Etrinsa 6 DR-T | 4691, Etrinsa 8 SR-T | 4692, Etrinsa 8 DR-T | 4693, Etrinsa 8 HF-T | 4694, Eluna 8 SR | 4695, Eluna 8 DR | 4696, Entovis SR-T | 4697, Entovis SR-T | 4698, Entovis SR | 4699, Entovis DR-T | 4700, Entovis DR-T | 4701, Entovis DR | 4702, Entovis DR | 4703, Entovis HF-T | 4704, Estella DR-T | 4705, Estella DR | 4706, Estella SR-T |

Value Set Member Constraints

4707, Estella SR | 4708, Evia SR-T | 4709, Evia SR | 4710, Evia DR-T | 4711, Evia DR | 4712, Evia HF-T | 4713, Evia HF | 4714, Philos II S | 4715, Philos II DR | 4716, Philos II SLR | 4717, Philos D | 4718, Philos DR | 4719, Philos DR-T | 4720, Philos SR | 4721, Philos S | 4722, Philos DR-B | 4723, Philos SR-B | 4724, Cylos DR | 4725, Cylos DR-T | 4726, Cylos VR | 4727, Epyra 6 DR-T | 4728, Epyra 6 DR-T ProMRI | 4729, Epyra 6 SR-T | 4730, Epyra 6 SR-T ProMRI | 4731, Epyra 8 DR-T | 4732, Epyra 8 DR-T ProMRI | 4733, Epyra 8 SR-T | 4734, Epyra 8 SR-T ProMRI | 4735, Kairos D | 4736, Kairos D | 4737, Kairos DR | 4738, Kairos DR | 4739, Kairos S | 4740, Kairos S | 4741, Kairos SL | 4742, Kairos SL | 4743, Kairos SR | 4744, Kairos SR | 4745, Kairos DR | 4746, Kairos S | 4747, Kairos SR | 4748, Kairos D-B | 4749, Kairos DR-B | 4750, Kairos D-A | 4751, Kairos DR-A | 4752, Kairos S-A | 4753, Kairos S-B | 4754, Kairos SR-A | 4755, Kairos SR-B | 4756, Protos DR/CLS | 4757, Protos VR/CLS | 4758, Triplos LV | 4759, Triplos LV | 4760, Triplos LV-T | 4761, Triplos LV-T | 4762, Stratos LV | 4763, Stratos LV | 4764, Stratos LA | 4765, Stratos LA | 4766, Advantio SR | 4767, Advantio DR | 4768, Advantio DR | 4769, Advantio MRI SR | 4770, Advantio MRI DR | 4771, Advantio MRI DR | 4772, Advantio SR | 4773, Advantio DDDR | 4774, Advantio DR | 4775, Advantio SR | 4776, Advantio DR | 4777, Advantio DR | 4778, Advantio MRI | 4779, Advantio MRI | 4780, ALTRUA 20 SSIR | 4781, ALTRUA 20 DDDR | 4782, ALTRUA 20 DDDR | 4783, ALTRUA 20 SSIR | 4784, ALTRUA 20 DDDR | 4785, ALTRUA 20 SSIR | 4786, ALTRUA 20 DDDR | 4787, ALTRUA 20 DDD | 4788, ALTRUA 40 SSIR | 4789, ALTRUA 40 DDDR | 4790, ALTRUA 40 DDDR | 4791, ALTRUA 40 DDDR | 4792, ALTRUA 50 SSIR | 4793, ALTRUA 50 DDR | 4794, ALTRUA 50 DDD | 4795, ALTRUA 50 VDD | 4796, ALTRUA 50 SSI | 4797, ALTRUA 60 SSIR | 4798, ALTRUA 60 DDDR | 4799, ALTRUA 60 DDDR | 4800, ALTRUA 60 DDDR | 4801, Accolade SR | 4802, Accolade DR | 4803, Accolade EL DR | 4804, Accolade MRI VR | 4805, Accolade MRI DR | 4806, Accolade MRI DR-EL | 4807, Proponent SR | 4808, Proponent EL MRI DR | 4809, Proponent MRI DR | 4810, Proponent EL DR | 4811, Proponent MRI VDDR | 4812, Proponent MRI SR | 4813, Essentio SR | 4814, Essentio DR | 4815, Essentio DR | 4816, Essentio MRI VR | 4817, Essentio MRI DR | 4818, Essentio MRI DR-EL | 4819, Altrua 2 SR | 4820, Altrua 2 DR | 4821, Altrua 2 EL DR | 4822, Formio DR | 4823, Formio MRI DR | 4824, Formio DR | 4825, Formio DR | 4826, Formio MRI DR | 4827, Vitalio SR | 4828, Vitalio DR | 4829, Vitalio DDDR | 4830, Vitalio MRI SR | 4831, Vitalio MRI DR | 4832, Vitalio MRI DR | 4833, Vitalio SR | 4834, Vitalio DR | 4835, Vitalio DDDR | 4836, Vitalio MRI SR | 4837, Vitalio MRI DR | 4838, Vitalio SR | 4839, Vitalio DR | 4840, Vitalio DR | 4841, Vitalio SR | 4842, Vitalio DR | 4843, Vitalio DR | 4844, Intua | 4845, Intua | 4846, Inliven | 4847, Inliven | 4848, Inliven | 4849, Inliven | 4850, Inliven | 4851, Inliven | 4852, Intua | 4853, Intua | 4854, Intua | 4855, Intua | 4856, Invive | 4857, Invive | 4858, Invive | 4859, Invive | 4860, Invive | 4861, Invive | 4862, VALITUDE | 4863, VALITUDE X4 | 4864, VISIONIST | 4865, VISIONIST | 4866, VISIONIST X4 | 4867, Ingenio SR | 4868, Ingenio DDDR | 4869, Ingenio DR | 4870, Ingenio MRI SR | 4871, Ingenio MRI DR | 4872, Ingenio MRI DR | 4873, Ingenio VDDR | 4874, Ingenio SR | 4875, Ingenio DR | 4876, Ingenio DR | 4877, Ingenio SR | 4878, Ingenio DR | 4879, Ingenio DR | 4880, Ingenio MRI SR | 4881, Ingenio MRI DR | 4882, Ingenio MRI DR | 4883, Prism 2 DR | 4884, Prism 2 VR | 4885, Prism DR | 4886, Prism DR HE | 4887, Prism DR | 4888, Prism DR HE | 4889, Prism VR | 4890, Prism VR HE | 4891, Prism VR | 4892, Prism VR HE | 4893, Accent DR | 4894, Accent DR RF | 4895, Accent SR RF | 4896, Identity ADx XL DR | 4897, Victory XL DR | 4898, Victory DR | 4899, Zephyr DR | 4900, Zephyr XL DR | 4901, Zephyr XL SR | 4902, Allure Quadra MP CRT-P | 4903, Allure RF CRT-P | 4904, Allure Quadra RF CRT-P | 4905, Frontier II CRT-P | 4906, Allure Quadra MP CRT-P | 4907, Anthem RF CRT-P | 4908, Assurity MRI | 4909, Endurity DR | 4910, Assurity DR RF | 4911, Verity ADx XL DR | 4912, Verity ADx XL DR M/S | 4913, Verity ADx XL DC | 4914, Integrity ADx DR | 4915, Identity ADx DR | 4916, Identity ADx XL DR | 4918, Integrity AFx DR | 4919, Integrity AFx DR | 4920, Identity | 4921, Identity XL | 4922, Assurity MRI | 4923, Endurity VR | 4924, Assurity VR | 4925, Accent SR | 4926, Zephyr SR | 4927, Victory SR | 4928, Verity ADx XL SR | 4929, Verity ADx XL SR M/S | 4930, Verity ADx XL SC | 4931, Identity ADx SR | 4932, Identity SR | 4933, Microny | 4934, Microny | 4935, Microny | 4936, Integrity SR | 4937, OPUS | 4938, OPUS | 4939, OPUS | 4940, OPUS | 4941, OPUS | 4942, OPUS | 4943, OPUS | 4944, OPUS | 4945, OPUS | 4946, OPUS | 4947, OPUS | 4948, OPUS | 4949, OPUS | 4950, OPUS | 4951, OPUS | 4952, OPUS RM | 4953, OPUS G | 4954, OPUS G | 4955, OPUS S | 4956, OPUS S | 4957, BRIO SR | 4958, BRIO | 4959, TALENT SR | 4960, Talent | 4961, Talent II | 4962, Talent II DR | 4963, Talent AF DR | 4964, Talent 3 DR | 4965, Talent 3 VDR | 4966, Chorus | 4967, Chorus | 4968, Chorus | 4969, Chorus | 4970, Chorus | 4971, Chorus | 4972, Chorus | 4973, Chorus | 4974, Chorus II | 4975, Chorus II | 4976, Chorus RM | 4977, Chorum | 4978, Chorum | 4979, Brio D | 4980, Brio D | 4981, Brio D | 4982, Talent D | 4983, Talent D | 4984, Talent 3 MSP | 4985, Talent 3 MSP | 4986, Talent MSP | 4987, Talent AF MSP | 4988, Chorum MSP | 4989, Chorum MSP | 4990, Kora 100 SR | 4991, Kora 100 DR | 4992, Reply 200 SR | 4993, Reply 200 DR | 4994, Reply VDR | 4995, Reply SR | 4996, Reply D | 4997, Reply DR | 4998, Reply 250 DR | 4999, Reply CRT | 5000, Kora 200 SR | 5001, Kora 200 DR | 5002, Paradym RF DR | 5003, Paradym RF VR | 5004, Esprit D | 5005, Esprit DR | 5006, Esprit S | 5007, Esprit SR | 5008, Facil DR | 5009, Azure xt dr mri | 5010, Azure XT SR MRI | 5011, Azure S DR MRI | 5012, Azure S SR MRI | 5013, Advisa Single MRI | 5014, Advisa Dual MRI | 5015, Adapta DR | 5016, Adapta | 5017, Adapta DR | 5018, Adapta L DR | 5019, Adapta S DR | 5020, Micra MRI | 5021, Micra AV | 5022, PERCEPTA QUAD CRT-P MRI SURESCAN | 5023, PERCEPTA CRT-P MRI SURESCAN | 5024, Serena Quad CRTP MRI SureScan | 5025, Serena CRTP MRI | 5026, Solara Quad CRTP MRI SureScan | 5027, Solara CRTP MRI SureScan | 5028, Viva | 5029, Sigma | 5030, Sigma | 5031, Sigma | 5032, Sigma | 5033, Sigma | 5034, Sigma | 5035, Sigma | 5036, Sigma | 5037, Sigma | 5038, Sigma | 5039, Sigma | 5040, Sigma | 5041, Sigma | 5042, Sigma | 5043, InSync | 5044, EnRhythm | 5045, Revo MRI | 5046, Consulta | 5047, Consulta | 5048, Percepta/Sorena/Solara MRI | 5049, Percepta/Sorena/Solara MRI | 5050, Percepta/Sorena/Solara MRI | 5051, Percepta/Sorena/Solara MRI | 5052, Percepta/Sorena/Solara MRI | 5053, Percepta/Sorena/Solara MRI | 5054, Attesta | 5055, Attesta | 5056, Attesta | 5057, Attesta | 5058, Sephera | 5059, Sephera | 5060, Sephera |

Value Set Member Constraints

5061, Cylos VR | 5095, OPUS S | 5096, OPUS S | 5097, BRIO DR | 5098, Clinical Trial Device | 5099, Clinical Trial Device | 5100, Clinical Trial Device | 5101, Clinical Trial Device | 5102, Clinical Trial Device | 5103, Clinical Trial Device | 5104, Clinical Trial Device | 5105, Clinical Trial Device | 5106, Clinical Trial Device | 5107, Clinical Trial Device | 5108, Clinical Trial Device | 5109, Clinical Trial Device | 5110, Clinical Trial Device | 5111, Clinical Trial Device | 5112, Clinical Trial Device | 5113, Clinical Trial Device | 5114, Sensia | 5146, Versa | 5148, EnPulse | 5149, Azure | 5150, Azure XT SR | 5153, Versa | 5155, Sensia | 5160, Autogen | 5161, ADAPTA | 5168, ADAPTA | 5169, ADAPTA | 5170, ACCENT MRI | 5254, Resonate HF ICD | 5269, Resonate HF ICD | 5270, Resonate HF CRT-D | 5271, Aveir Single Chamber Leadless Pacemaker | 5304, Neutrino NxT DR | 5305, Micra VR2 Single Chamber Leadless Pacemaker | 5404, Amvia Edge SR-T | 5408, Amvia Edge DR-T | 5409, Aurora EV-ICD | 5410, Amvia Edge HF-T QP | 5435, Aveir Single Chamber Leadless Pacemaker RA | 5454, Aveir Single Chamber Leadless Pacemaker RV | 5455, Gallant VR | 5458, Gallant DR | 5459, Gallant HF | 5460, Abbott Assert-IQ ICM | 5488, Medtronic Reveal LINQ | 5553, Medtronic Reveal XT | 5554, BIOTRONIK BioMonitor 2 | 5555, BIOTRONIK BioMonitor 3 | 5556, Boston Scientific Latitude | 5557, Boston Scientific LuX-Dx ICM | 5558, Vectorious | 5559, Gallant HF | 5560, WiSE CRT | 5775, Device Unknown | 5777, Clinical Trial Device | 5786, Clinical Trial Device | 5787, Clinical Trial Device | 5788

Element: 16193
Value Set Name: ICD Upgrade Type Detail

Specify Change
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1084

Selections	Selection Dependency
Ventricular pacemaker to single chamber ICD | 112000003995, Ventricular pacemaker to dual chamber ICD | 112000003996, Ventricular pacemaker to cardiac resynchronization therapy defibrillator | 112000003997, Ventricular pacemaker to conduction system pacing defibrillator | 112000003998, Atrial pacemaker to dual chamber ICD | 112000003999, Atrial pacemaker to cardiac resynchronization therapy defibrillator | 112000004000, Atrial pacemaker to conduction system pacing defibrillator | 112000004001, Transvenous ICD to subcutaneous ICD | 112000004002, Cardiac resynchronization therapy pacemaker to cardiac resynchronization therapy defibrillator | 112000004003, Cardiac resynchronization therapy pacemaker to conduction system pacing defibrillator | 112000004004, Subcutaneous ICD to transvenous ICD | 112000004148, Single chamber ICD to single chamber PPM | 112000004200, Transvenous to EV-ICD | 112000004201, S-ICD to EV-ICD | 112000004202, Single/dual chamber to CRT-P | 112000004203, Dual chamber to conduction system pacing | 112000004204, Single/dual chamber to leadless | 112000004205, Dual chamber ICD to dual chamber PPM | 112000004206, Single chamber to conduction system pacing | 112000004207	IMPACT Pathway (15836) IN (Cardiovascular implantable electronic device (CIED))

Element: 15081
Value Set Name: IMPACT Procedure Type

Procedures Performed
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.813

Selections	Selection Dependency
Coarctation intervention | 112000002204, Proximal PA stenting | 112000002205, Atrial septal defect closure | 112811009, Transcatheter pulmonary valve replacement | 442525005, Premature infant patent ductus arteriosus closure | 445089003, Aortic valvuloplasty | 77166000, Other intervention (non-module) | 100000351, Diagnostic catheterization only | 41976001	IMPACT Pathway (15836) IN (Diagnostic or interventional catheterization)

Element: 15081
Value Set Name: IMPACT Procedure Type

Procedures Performed
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.813

Selections	Selection Dependency
EP study without ablation | 112000003838, EP study with ablation | 112000003837	IMPACT Pathway (15836) IN (Electrophysiology study with or without ablation)

Element: 15081
Value Set Name: IMPACT Procedure Type

Procedures Performed
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.813

Selections	Selection Dependency
ICD generator | 112000003836, Implantable loop recorder | 1344962007, Leads only | 112000003835, Pacemaker pulse generator | 118378005	IMPACT Pathway (15836) IN (Cardiovascular implantable electronic device (CIED))

Element: 15032
Value Set Name: Pre-Procedure Medication

Medications
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.216

Selections	Selection Dependency
Angiotensin converting enzyme inhibitor (Any) | 41549009, Angiotensin II receptor blocker (Any) | 372913009, Antiarrhythmic (Any) | 67507000, Anticoagulant - DOAC/NOAC | 112000002174, Anticoagulant - Warfarin | 11289, Antiplatelet (Any) | 372560006, Beta blocker (Any) | 33252009, Diuretic (Any) | 372695000, Pulmonary vasodilator (Any) | 112000003722, Prostaglandin Infusion | 26351002	Procedures Performed (15081) IN (Coarctation intervention, Proximal PA stenting, Atrial septal defect closure, Transcatheter pulmonary valve replacement, Premature infant patent ductus arteriosus closure, Aortic valvuloplasty, Other intervention (non-module), Diagnostic catheterization only)

Element: 15032
Value Set Name: Pre-Procedure Medication

Medications
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.216

Selections	Selection Dependency
Antiarrhythmic (Any) | 67507000, Anticoagulant - DOAC/NOAC | 112000002174,	Procedures Performed (15081) IN (EP study without ablation, EP study with ablation)

Value Set Member Constraints

Anticoagulant - Low molecular weight heparin | 373294004, Anticoagulant - Unfractionated heparin | 96382006, Anticoagulant - Warfarin | 11289, Anticoagulant - Other | 100001064, Antiplatelet (Any) | 372560006

Element: 15032
Value Set Name: Pre-Procedure Medication

Medications
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.216

Selections	Selection Dependency
Antiarrhythmic (Any) | 67507000, Anticoagulant - DOAC/NOAC | 112000002174, Anticoagulant - Low molecular weight heparin | 373294004, Anticoagulant - Warfarin | 11289, Anticoagulant - Other | 100001064, Antiplatelet (Any) | 372560006	Procedures Performed (15081) IN (ICD generator, Implantable loop recorder, Leads only, Pacemaker pulse generator)

Element: 16213
Value Set Name: Cardiomyopathy Type

Cardiomyopathy Type
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.193

Selections	Selection Dependency
Arrhythmogenic right ventricular cardiomyopathy | 281170005, Dilated cardiomyopathy | 195021004, Hypertrophic cardiomyopathy | 233873004, Noncompaction of the ventricular myocardium | 112000002196, Pacemaker induced | 112000001511, Restrictive cardiomyopathy | 415295002, Tachycardia-induced cardiomyopathy | 426300009, Other cardiomyopathy type | 100001065	IMPACT Pathway (15836) IN (Cardiovascular implantable electronic device (CIED))

Element: 15071
Value Set Name: Procedure Status

Procedure Status
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.226

Selections	Selection Dependency
Elective | 71388002:260870009=103390000, Urgent | 71388002:260870009=103391001, Emergent | 112000000481, Salvage | 112000001279	Procedures Performed (15081) IN (Coarctation intervention, Proximal PA stenting, Atrial septal defect closure, Transcatheter pulmonary valve replacement, Premature infant patent ductus arteriosus closure, Aortic valvuloplasty, Other intervention (non-module), Diagnostic catheterization only)

Element: 15071
Value Set Name: Procedure Status

Procedure Status
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.226

Selections	Selection Dependency
Elective | 71388002:260870009=103390000, Urgent | 71388002:260870009=103391001, Emergent | 112000000481	Procedures Performed (15081) IN (EP study without ablation, EP study with ablation)

Element: 15274
Value Set Name: IMPACT Device Master List v2

Stent
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1117

Selections	Selection Dependency
Multi-Link Zeta Stent | 5591, Multi-Link Vision Stent | 5592, Omnilink Stent | 5593, Herculink Elite Renal and Biliary Stent | 5594, Xience Alpine Stent | 5595, Xience Skypoint Stent | 5596, iCAST Covered Stent | 5597, BeGraft Stent | 5598, Pro-Kinetic Energy Stent | 5599, Express LD Stent | 5600, Express LD Biliary Premounted Stent | 5601, Express SD Renal Premounted Stent | 5602, Liberte Stent | 5603, Promus Elite Stent | 5604, Promus Premier Stent | 5605, Rebel Coronary Stent | 5606, Veriflex Stent | 5607, NuDEL CP Stent | 5608, Formula 414 Renal Balloon-Expandable Stent | 5609, Formula 418 Biliary Balloon-Expandable Stent | 5610, Formula 418 Renal Balloon-Expandable Stent | 5611, Palmaz Blue Transhepatic Biliary Stent | 5612, Palmaz Genesis Peripheral Stent | 5613, Palmaz Genesis Transhepatic Biliary Stent | 5614, Palmaz XL Transhepatic Biliary Stent | 5615, IntraStent DoubleStrut LD Biliary Stent | 5616, IntraStent Max LD Biliary Stent | 5617, IntraStent Mega LD Biliary Stent | 5618, ParaMount Mini GPS Balloon-Expandable Biliary Stent | 5619, Protege EverFlex Self-Expanding Biliary Stent | 5620, Visi-Pro Balloon-Expandable Biliary Stent | 5621, Gore Excluder - Aortic Extender | 5622, Gore Tag Endoprosthesis | 5623, Tag Thoracic Endoprosthesis | 5624, Viabahn VBX Balloon-Expandable Endoprosthesis | 5625, Viabahn VBX | 5626, Integrity BMS | 5627, Integrity Coronary Stent | 5628, Onyx Frontier Stent | 5629, Resolute Onyx DES | 5630, Covered CP Stent | 5631, Covered Mounted CP Stent | 5632, G-Armor Covered Stent 8 Zig | 5633, G-Armor Covered Stent 10 Zig | 5634, RelayPro Stent-Graft Non-Bare Stent | 5635, Synergy Megatron | 5636, Minima Stent System | 5637	Procedures Performed (15081) IN (Coarctation intervention)

Element: 15253
Value Set Name: IMPACT Device Master List v2

Stent(s)
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1117

Selections	Selection Dependency
Multi-Link Zeta Stent | 5591, Multi-Link Vision Stent | 5592, Omnilink Stent | 5593, Herculink Elite Renal and Biliary Stent | 5594, Xience Alpine Stent | 5595, Xience Skypoint Stent | 5596, iCAST Covered Stent | 5597, BeGraft Stent | 5598, Pro-Kinetic Energy Stent | 5599, Express LD Stent | 5600, Express LD Biliary Premounted Stent | 5601, Express SD Renal Premounted Stent | 5602, Liberte Stent | 5603, Promus Elite Stent | 5604, Promus Premier Stent | 5605, Rebel Coronary Stent | 5606, Veriflex Stent | 5607, NuDEL CP Stent | 5608, Formula 414 Renal Balloon-Expandable Stent | 5609, Formula 418 Biliary Balloon-Expandable Stent | 5610, Formula 418 Renal Balloon-Expandable Stent | 5611, Palmaz Blue Transhepatic Biliary Stent | 5612, Palmaz Genesis Peripheral Stent | 5613, Palmaz Genesis Transhepatic Biliary Stent | 5614, Palmaz XL Transhepatic Biliary Stent | 5615, IntraStent DoubleStrut LD Biliary Stent |	Procedures Performed (15081) IN (Proximal PA stenting)

Value Set Member Constraints

5616, IntraStent Max LD Biliary Stent | 5617, IntraStent Mega LD Biliary Stent | 5618, ParaMount Mini GPS Balloon-Expandable Biliary Stent | 5619, Protege EverFlex Self-Expanding Biliary Stent | 5620, Visi-Pro Balloon-Expandable Biliary Stent | 5621, Gore Excluder - Aortic Extender | 5622, Gore Tag Endoprosthesis | 5623, Tag Thoracic Endoprosthesis | 5624, Viabahn VBX Balloon-Expandable Endoprosthesis | 5625, Viabahn VBX | 5626, Integrity BMS | 5627, Integrity Coronary Stent | 5628, Onyx Frontier Stent | 5629, Resolute Onyx DES | 5630, Covered CP Stent | 5631, Covered Mounted CP Stent | 5632, G-Armor Covered Stent 8 Zig | 5633, G-Armor Covered Stent 10 Zig | 5634, RelayPro Stent-Graft Non-Bare Stent | 5635, Synergy Megatron | 5636, Minima Stent System | 5637

Element: 15203
Value Set Name: IMPACT Device Master List v2

Device(s)
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1117

Selections	Selection Dependency
Amplatzer Talisman PFO Occluder | 5638, Amplatzer Vascular Plug II (AVP II) - 3mm | 5639, Amplatzer Vascular Plug II (AVP II) - 4mm | 5640, Amplatzer Vascular Plug II (AVP II) - 6mm | 5641, Amplatzer Vascular Plug II (AVP II) - 8mm | 5642, Amplatzer Vascular Plug II (AVP II) - 10mm | 5643, Amplatzer Vascular Plug II (AVP II) - 12mm | 5644, Amplatzer Vascular Plug II (AVP II) - >12mm | 5645, MVP Microvascular Plug system - 3Q | 5646, MVP Microvascular Plug system - 5Q | 5647, MVP Microvascular Plug system - 7Q | 5648, MVP Microvascular Plug system - 9Q | 5649, Amplatzer Piccolo Occluder - 3mm waist, 2mm length | 5650, Amplatzer Piccolo Occluder - 3mm waist, 4mm length | 5651, Amplatzer Piccolo Occluder - 3mm waist, 6mm length | 5652, Amplatzer Piccolo Occluder - 4mm waist, 2mm length | 5653, Amplatzer Piccolo Occluder - 4mm waist, 4mm length | 5654, Amplatzer Piccolo Occluder - 4mm waist, 6mm length | 5655, Amplatzer Piccolo Occluder - 5mm waist, 2mm length | 5656, Amplatzer Piccolo Occluder - 5mm waist, 4mm length | 5657, Amplatzer Piccolo Occluder - 5mm waist, 6mm length | 5658, Micro Plug Device - 3mm | 5659, Micro Plug Device - 4mm | 5660, Micro Plug Device - 5mm | 5661, Micro Plug Device - 6mm | 5662, Amplatzer Septal Occluder | 5663, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 18mm, Waist 3mm | 5664, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 25mm, Waist 3mm | 5665, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 30mm, Waist 3mm | 5666, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 35mm, Waist 3mm | 5667, Gore Cardioform Septal Occluder | 5668, Starflex | 5669, ASD Occluder | 5670, CardioSEAL | 5671	Procedures Performed (15081) IN (Atrial septal defect closure)

Element: 15290
Value Set Name: IMPACT Device Master List v2

Device Used for Closure
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1117

Selections	Selection Dependency
Amplatzer Talisman PFO Occluder | 5638, Amplatzer Vascular Plug II (AVP II) - 3mm | 5639, Amplatzer Vascular Plug II (AVP II) - 4mm | 5640, Amplatzer Vascular Plug II (AVP II) - 6mm | 5641, Amplatzer Vascular Plug II (AVP II) - 8mm | 5642, Amplatzer Vascular Plug II (AVP II) - 10mm | 5643, Amplatzer Vascular Plug II (AVP II) - 12mm | 5644, Amplatzer Vascular Plug II (AVP II) - >12mm | 5645, MVP Microvascular Plug system - 3Q | 5646, MVP Microvascular Plug system - 5Q | 5647, MVP Microvascular Plug system - 7Q | 5648, MVP Microvascular Plug system - 9Q | 5649, Amplatzer Piccolo Occluder - 3mm waist, 2mm length | 5650, Amplatzer Piccolo Occluder - 3mm waist, 4mm length | 5651, Amplatzer Piccolo Occluder - 3mm waist, 6mm length | 5652, Amplatzer Piccolo Occluder - 4mm waist, 2mm length | 5653, Amplatzer Piccolo Occluder - 4mm waist, 4mm length | 5654, Amplatzer Piccolo Occluder - 4mm waist, 6mm length | 5655, Amplatzer Piccolo Occluder - 5mm waist, 2mm length | 5656, Amplatzer Piccolo Occluder - 5mm waist, 4mm length | 5657, Amplatzer Piccolo Occluder - 5mm waist, 6mm length | 5658, Micro Plug Device - 3mm | 5659, Micro Plug Device - 4mm | 5660, Micro Plug Device - 5mm | 5661, Micro Plug Device - 6mm | 5662, Amplatzer Septal Occluder | 5663, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 18mm, Waist 3mm | 5664, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 25mm, Waist 3mm | 5665, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 30mm, Waist 3mm | 5666, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 35mm, Waist 3mm | 5667, Gore Cardioform Septal Occluder | 5668, Starflex | 5669, ASD Occluder | 5670, CardioSEAL | 5671	Procedures Performed (15081) IN (Premature infant patent ductus arteriosus closure)

Element: 15340
Value Set Name: IMPACT Device Master List v2

TPVR Device(s)
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1117

Selections	Selection Dependency
Sapien 3 | 5583, Sapien 3 Ultra Resilia | 5584, Sapien 3 Ultra | 5585, Sapien XT | 5586, Harmony 22 | 5587, Harmony 25 | 5588, Melody 16 | 5589, Melody 18 | 5590	Procedures Performed (15081) IN (Transcatheter pulmonary valve replacement)

Element: 15937
Value Set Name: IMPACT Device Master List v2

Device(s) Used
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1117

Selections	Selection Dependency
Sapien 3 | 5583, Sapien 3 Ultra Resilia | 5584, Sapien 3 Ultra | 5585, Sapien XT | 5586, Harmony 22 | 5587, Harmony 25 | 5588, Melody 16 | 5589, Melody 18 | 5590, Multi-Link Zeta Stent | 5591, Multi-Link Vision Stent | 5592, Omnilink Stent | 5593, Herculink Elite Renal and Biliary Stent | 5594, Xience Alpine Stent | 5595, Xience Skypoint Stent | 5596, iCAST Covered Stent | 5597, BeGraft Stent | 5598, Pro-Kinetic Energy Stent | 5599, Express LD Stent | 5600, Express LD Biliary Premounted Stent | 5601, Express SD Renal Premounted Stent | 5602,	Procedures Performed (15081) IN (Other intervention (non-module))

Value Set Member Constraints

Liberte Stent | 5603, Promus Elite Stent | 5604, Promus Premier Stent | 5605, Rebel Coronary Stent | 5606, Veriflex Stent | 5607, NuDEL CP Stent | 5608, Formula 414 Renal Balloon-Expandable Stent | 5609, Formula 418 Biliary Balloon-Expandable Stent | 5610, Formula 418 Renal Balloon-Expandable Stent | 5611, Palmaz Blue Transhepatic Biliary Stent | 5612, Palmaz Genesis Peripheral Stent | 5613, Palmaz Genesis Transhepatic Biliary Stent | 5614, Palmaz XL Transhepatic Biliary Stent | 5615, IntraStent DoubleStrut LD Biliary Stent | 5616, IntraStent Max LD Biliary Stent | 5617, IntraStent Mega LD Biliary Stent | 5618, ParaMount Mini GPS Balloon-Expandable Biliary Stent | 5619, Protege EverFlex Self-Expanding Biliary Stent | 5620, Visi-Pro Balloon-Expandable Biliary Stent | 5621, Gore Excluder - Aortic Extender | 5622, Gore Tag Endoprosthesis | 5623, Tag Thoracic Endoprosthesis | 5624, Viabahn VBX Balloon-Expandable Endoprosthesis | 5625, Viabahn VBX | 5626, Integrity BMS | 5627, Integrity Coronary Stent | 5628, Onyx Frontier Stent | 5629, Resolute Onyx DES | 5630, Covered CP Stent | 5631, Covered Mounted CP Stent | 5632, G-Armor Covered Stent 8 Zig | 5633, G-Armor Covered Stent 10 Zig | 5634, RelayPro Stent-Graft Non-Bare Stent | 5635, Synergy Megatron | 5636, Minima Stent System | 5637, Amplatzer Talisman PFO Occluder | 5638, Amplatzer Vascular Plug II (AVP II) - 3mm | 5639, Amplatzer Vascular Plug II (AVP II) - 4mm | 5640, Amplatzer Vascular Plug II (AVP II) - 6mm | 5641, Amplatzer Vascular Plug II (AVP II) - 8mm | 5642, Amplatzer Vascular Plug II (AVP II) - 10mm | 5643, Amplatzer Vascular Plug II (AVP II) - 12mm | 5644, Amplatzer Vascular Plug II (AVP II) - >12mm | 5645, MVP Microvascular Plug system - 3Q | 5646, MVP Microvascular Plug system - 5Q | 5647, MVP Microvascular Plug system - 7Q | 5648, MVP Microvascular Plug system - 9Q | 5649, Amplatzer Piccolo Occluder - 3mm waist, 2mm length | 5650, Amplatzer Piccolo Occluder - 3mm waist, 4mm length | 5651, Amplatzer Piccolo Occluder - 3mm waist, 6mm length | 5652, Amplatzer Piccolo Occluder - 4mm waist, 2mm length | 5653, Amplatzer Piccolo Occluder - 4mm waist, 4mm length | 5654, Amplatzer Piccolo Occluder - 4mm waist, 6mm length | 5655, Amplatzer Piccolo Occluder - 5mm waist, 2mm length | 5656, Amplatzer Piccolo Occluder - 5mm waist, 4mm length | 5657, Amplatzer Piccolo Occluder - 5mm waist, 6mm length | 5658, Micro Plug Device - 3mm | 5659, Micro Plug Device - 4mm | 5660, Micro Plug Device - 5mm | 5661, Micro Plug Device - 6mm | 5662, Amplatzer Septal Occluder | 5663, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 18mm, Waist 3mm | 5664, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 25mm, Waist 3mm | 5665, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 30mm, Waist 3mm | 5666, Amplatzer Multifenestrated Septal Occluder - Cribriform - Disc 35mm, Waist 3mm | 5667, Gore Cardioform Septal Occluder | 5668, Starflex | 5669, ASD Occluder | 5670, CardioSEAL | 5671, Admiral Xtreme PTA Catheter | 5672, Advance 18LP PTA Balloon Catheter | 5673, Advance 35LP Balloon Catheter | 5674, Advance ATB PTA Dilation Catheter | 5675, AngioSculpt PTCA Catheter | 5676, Apex Balloon Catheter | 5677, NC Merlin PTCA Catheter | 5678, Armada 35 PTA Catheter | 5679, BIB Balloon | 5680, Charger Balloon | 5681, Coefficient PTV Catheter | 5682, Coyote ES Balloon Dilatation Catheter | 5683, Cristal Balloon | 5684, Cutting Balloon | 5685, Dura Star PTCA Dilatation Catheter | 5686, Emerge PTCA Dilatation Catheter | 5687, Empira NC PTCA Catheter RX | 5688, Euphora Balloon | 5689, Euphora NC | 5690, EverCross PTA Balloon Catheter | 5691, Fire Star PTCA Dilatation Catheter | 5692, Fox Plus PTA | 5693, Highsail Coronary Dilatation Catheter | 5694, Jocath Maestro PTCA Catheter | 5695, Maverick Balloon | 5696, Maverick XL | 5697, Maxi LD PTA Dilatation Catheter | 5698, Mini Ghost | 5699, Mullins-X Ultra High Pressure Dilatation Catheter | 5700, Mustang | 5701, NC Emerge PTCA | 5702, NC Quantum Apex PTCA Dilatation Catheter | 5703, NC Sprinter | 5704, NC Trek | 5705, Nucleus-X Percutaneous Transluminal Valvuloplasty Catheter | 5706, Opta Pro PTA Dilatation Catheter | 5707, Passeo-18 | 5708, Powerflex Extreme PTA | 5709, Powerflex P3 PTA Dilatation Catheter | 5710, Powerflex Pro PTA Dilatation Catheter 1 | 5711, Powersail Coronary Dilatation Catheter | 5712, PTS Balloon Catheter | 5713, Quantum Maverick Dilatation Catheter | 5714, Saber PTA Dilatation Catheter | 5715, Savvy PTA Dilatation Catheter | 5716, Special Tyshak Balloon | 5717, Sprinter Legend Balloon | 5718, Sterling Balloon | 5719, Synergy Standard | 5720, Trek Coronary Dilatation Catheter | 5721, Tyshak II PTV Catheter | 5722, Tyshak Mini 1 | 5723, Tyshak Mini Pediatric PTV | 5724, Tyshak Mini PVC | 5725, Tyshak PTV Catheter | 5726, Ultra-thin Diamond Balloon Dilatation Catheter | 5727, Ultra-thin SDS Balloon Dilatation Catheter | 5728, Viatrac 14 plus | 5729, Voyager NC Coronary Dilatation Catheter | 5730, Voyager Coronary Dilatation Catheter | 5731, XXL Balloon Dilatation Catheter | 5732, Z-Med II PTV Catheter | 5733, Z-Med II Special Order | 5734, Z-Med II-X PTV Catheter | 5735, Z-Med PTV Catheter | 5736, Z-Med-X PTV Catheter | 5737, NC Trek Neo | 5738, Sapphire II Pro | 5739

Element: 15972 — Inducible Arrhythmia
Value Set Name: Inducible arrhythmia — OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1007

Selections	Selection Dependency
Orthodromic reciprocating tachycardia (ORT) | 233898003, Antidromic reciprocating tachycardia | 233899006, Sustained AFI/AF | 5370000, None | 260413007, Other | 100000351	Targeted Substrate (15409) IN (Wolff-Parkinson-White (WPW))

Element: 15958 — Pre-procedure Indication
Value Set Name: Pre-procedure Indications — OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1005

Selections	Selection Dependency
Symptoms | 418799008, Documented arrhythmia | 112000004244, Heart failure/ventricular dysfunction | 57809008, Other | 100000351	Targeted Substrate (15409) IN (Concealed accessory pathway/permanent junctional reciprocating tachycardia)

Element: 15960 — Inducible Arrhythmia
Value Set Name: Inducible arrhythmia — OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1007

Value Set Member Constraints

Selections	Selection Dependency
Orthodromic reciprocating tachycardia (ORT) | 233898003, Atrial Fibrillation | 49436004, None | 260413007, Other | 100000351	Targeted Substrate (15409) IN (Concealed accessory pathway/permanent junctional reciprocating tachycardia)

Element: 15976
Value Set Name: Pre-procedure Indications

Pre-procedure Indication
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1005

Selections	Selection Dependency
Symptoms | 418799008, Documented arrhythmia | 112000004244, Other | 100000351	Targeted Substrate (15409) IN (Focal atrial tachycardia)

Element: 15411
Value Set Name: Cardiac Mapping

Methods Used to Localize
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.883

Selections	Selection Dependency
Activation | 112000002354, Anatomic | 112000002355, High density mapping catheter | 112000003908, Pace | 112000002358, Other | 100000351	Targeted Substrate (15409) IN (Focal atrial tachycardia)

Element: 16011
Value Set Name: Cardiac Mapping

Mapping
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.883

Selections	Selection Dependency
Activation | 112000002354, Anatomic | 112000002355, Entrainment mapping | 112000002356, Pace | 112000002358, Voltage mapping | 112000002359, Insufficient for mapping | 423437008, Other | 100000351	Targeted Substrate (15409) IN (Macroreentrant atrial tachycardia)

Element: 16045
Value Set Name: Cardiac Mapping

Mapping
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.883

Selections	Selection Dependency
Activation | 112000002354, Anatomic | 112000002355, Entrainment mapping | 112000002356, Pace | 112000002358, Voltage mapping | 112000002359, Other | 100000351	Targeted Substrate (15409) IN (Ventricular arrhythmias (PVCs, VT, VF))

Element: 7635
Value Set Name: Defibrillator Device List

Device ID
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.243

Selections	Selection Dependency
Belos DR | 279, Iforia 7DR-T | 561, Quadra Assura MP | 641, Visia AF VR | 644, Belos DR | 368, Inogen CRT-D | 601, Quadra Assura MP | 640, Visia AF VR | 643, Vigilant X4 CRT-D | 684, Belos DR-T | 281, Ilesto 7 HFT | 587, Visia AF MRI VR SureScan | 642, Belos DR-T | 280, Evera MRI XT VR SureScan | 630, Belos VR | 25, Clinical Trial Device-CRT-D | 573, Belos VR | 282, Itrevia 7 DR-T | 613, Belos VR-T | 392, Inogen EL DR | 599, Belos VR-T | 284, Inventra 7 VR-T DX | 639, Belos VR-T | 283, Inogen Mini VR | 582, Cardiac Airbag | 285, Intensia VR | 625, Cardiac Airbag T | 287, Clinical Trial Device-Single Chamber | 568, Cardiac Airbag T | 286, Itrevia 7 HF-T | 611, Clinical Trial Device | 288, Ilesto 7 DRT | 594, Deikos A+ | 27, Amplia MRI Quad | 637, Kronos LV-T | 327, Dynagen Mini DR | 580, Kronos LV-T | 373, Ilesto 7 VRT | 620, Lexos DR | 289, Clinical Trial Device-Dual Chamber | 563, Lexos DR-T | 291, Dynagen CRT-D | 606, Lexos DR-T | 290, Viva Quad XT | 592, Lexos VR | 292, Iperia 7 DR-T | 632, Lexos VR-T | 294, Clinical Trial Device-Dual Chamber | 575, Lexos VR-T | 293, Inventra 7 VR-T DX | 618, Lumax 300 DR-T | 377, Inogen X4 CRT-D | 584, Lumax 300 DR-T | 376, Intensia CRT-D | 627, Lumax 300 VR-T | 383, Clinical Trial Device-CRT-D | 570, Lumax 300 VR-T | 382, Itrevia 7 HF-T | 610, Lumax 340 DR-T | 375, Inogen EL VR | 596, Lumax 340 DR-T | 374, Amplia MRI | 636, Lumax 340 VR-T | 381, Dynagen Mini VR | 579, Lumax 340 VR-T | 380, Itrevia 7 HF-TQP | 622, Lumax 540 DR-T | 428, Clinical Trial Device-Single Chamber | 565, Lumax 540 HF-T | 429, Dynagen CRT-D | 608, Lumax 540 VR-T | 430, Viva Quad S | 591, Lumax HF-T | 369, Iperia 7 HF-T | 634, Lumax HF-T | 370, Dynagen X4 CRT-D | 577, Lumax HF-T | 371, Ilesto 7 VRT DX | 617, Lumax HF-T | 372, Iforia 7VR-T DX | 560, Lumos DR-T | 295, Dynagen EL VR | 603, Lumos DR-T | 378, Dynagen Mini DR | 589, Lumos VR-T | 296, Evera MRI S DR SureScan | 629, Lumos VR-T | 384, Clinical Trial Device-Dual Chamber | 572, MycroPhylax | 19, Itrevia 7 VR-T | 615, MycroPhylax | 21, Inogen EL DR | 598, nanoPhylax | 28, Compia MRI Quad | 638, Phylax 03 | 12, Inogen X4 CRT-D | 581, Phylax 06 | 13, Ilesto 7 DRT | 624, Phylax 06 | 14, Clinical Trial Device-CRT-D | 567, Phylax 06 | 20, Dynagen CRT-D | 607, Phylax AV | 15, Viva Quad XT | 593, Phylax AV | 22, Iperia 7 DR-T | 633, Phylax XM | 16, Clinical Trial Device-CRT-D | 576, Phylax XM | 17, Itrevia 7 DR-T | 619, Phylax XM | 18, Clinical Trial Device-Single Chamber | 562, Tachos ATx | 297, Dynagen EL DR | 605, Tachos DR | 23, Dynagen Mini VR | 588, Tachos DR | 360, Iperia 7 VR-T DX | 631, Tachos MSA (biA) | 24, Clinical Trial Device-Single Chamber | 574, Tachos MSV (biV) | 26, Itrevia 7 VR-T | 614, Tupos LV | 278, Inogen CRT-D | 600, Xelos | 298, Inogen Mini VR | 586, Xelos | 379, Intensia DR | 626, Cognis 100 HE | 399, Clinical Trial Device-Dual Chamber | 569, Cognis 100 HE | 400, Itrevia 7 DR-T | 612, Livian | 394, Ilesto 7 VRT | 595, Livian | 395, Emblem S-ICD | 621, Livian HE | 396, Clinical Trial Device-CRT-D | 564, Livian HE | 397, Dynagen EL DR | 604, Teligen DR HE | 398, Viva Quad S | 590, Teligen VR HE | 402, Itrevia 7 VR-T | 616, Confient | 393, Dynagen EL VR | 602, Clinical Trial Device | 434, Inogen Mini DR | 585, Alto 2 | 2, Evera MRI XT DR SureScan | 628, Alto 2 | 3, Clinical Trial Device-Single Chamber | 571, Alto DR | 85, Inogen EL VR | 597, Alto MSP | 90, Inogen Mini DR | 583, Alto SR | 91, Ilesto 7 DRT | 623, Alto2 MSP | 299, Clinical Trial Device-Dual Chamber | 566, Aveion (DC) | 11, Dynagen CRT-D | 609, Clinical Trial Device	IMPACT Pathway (15836) IN (Cardiovascular implantable electronic device (CIED))

Value Set Member Constraints

| 300, Iperia 7 HF-T | 635, Defender (DC) | 86, Dynagen X4 CRT-D | 578, Defender II (DC) | 87, Defender II (DC) | 88, Defender III (DC) | 89, Defender IV (DR) | 84, Lyra | 8, Lyra | 9, Lyra | 10, Ovatio | 401, Ovatio DR | 328, Ovatio VR | 329, Sentinel | 4, Sentinel | 5, Sentinel | 6, Sentinel | 7, Foreign | 1, AID B | 354, AID B | 355, AID BR | 356, AID-B | 29, AID-B | 30, AID-B | 31, Clinical Trial Device | 301, Contak CD | 92, Contak CD 2 | 334, Contak CD 2 HE | 335, Contak Renewal | 99, Contak Renewal | 339, Contak Renewal 3 | 95, Contak Renewal 3 | 96, Contak Renewal 3 AVT | 343, Contak Renewal 3 AVT | 344, Contak Renewal 3 HE | 97, Contak Renewal 3 HE | 98, Contak RENEWAL 3 RF | 273, Contak RENEWAL 3 RF | 274, Contak RENEWAL 3 RF HE | 275, Contak RENEWAL 3 RF HE | 276, Contak Renewal TR | 93, Contak Renewal TR | 94, Cosmos II | 350, CyberLith | 345, Dash | 351, InterTach | 347, InterTach II | 348, InterTach II | 349, Metrix | 122, Metrix | 121, Metrix | 337, Relay | 352, Renewal 3 | 340, Renewal 4 HE | 342, Renewal 4 LV | 341, Res-Q | 123, Res-Q | 124, Res-Q DR | 346, Res-Q Micron | 126, Res-Q Micron | 128, ResQ II | 125, ResQ II | 127, ResQ Micron Advantag | 129, Stride | 353, Ventak | 32, Ventak | 33, Ventak | 34, Ventak | 35, Ventak | 36, Ventak AV | 76, Ventak AV | 77, Ventak AV II DDD | 78, Ventak AV II DDD | 80, Ventak AV II DDD | 81, Ventak AV II DR | 79, Ventak AV III DR | 82, Ventak AV III DR | 83, Ventak CHF | 336, Ventak Mini | 50, Ventak Mini | 54, Ventak Mini HC | 52, Ventak Mini HE | 56, Ventak Mini HE | 57, Ventak Mini II | 58, Ventak Mini II | 60, Ventak Mini II+ | 59, Ventak Mini II+ | 61, Ventak Mini III | 62, Ventak Mini III | 67, Ventak Mini III+ | 63, Ventak Mini III+ | 66, Ventak Mini III+ | 68, Ventak Mini III+ | 69, Ventak Mini III+ HE | 70, Ventak Mini III+ HE | 71, Ventak Mini IV | 100, Ventak Mini IV | 72, Ventak Mini IV | 73, Ventak Mini IV | 101, Ventak Mini IV+ | 74, Ventak Mini IV+ | 75, Ventak Mini+ | 51, Ventak Mini+ | 55, Ventak Mini+ HC | 53, Ventak Mini+ HC S | 41, Ventak Mini+ S | 42, Ventak P | 37, Ventak P2 | 38, Ventak P3 | 39, Ventak P3 | 40, Ventak Prizm 2 DR | 111, Ventak Prizm 2 VR | 110, Ventak Prizm AVT | 112, Ventak Prizm DR | 103, Ventak Prizm DR | 107, Ventak Prizm DR HE | 105, Ventak Prizm DR HE | 109, Ventak Prizm VR | 102, Ventak Prizm VR | 106, Ventak Prizm VR HE | 104, Ventak Prizm VR HE | 108, Ventak PRx | 43, Ventak PRx | 44, Ventak PRx II | 45, Ventak PRx II | 46, Ventak PRx III | 47, Ventak PRx III | 49, Ventak PRx III HC | 48, Ventak VR | 64, Ventak VR | 65, Vitality 2 | 114, Vitality 2 | 115, Vitality 2 EL | 116, Vitality 2 EL | 117, Vitality AVT | 302, Vitality AVT | 113, Vitality DR | 338, Vitality DR+ | 411, Vitality DS | 118, Vitality DS | 119, Vitality EL | 120, VITALITY HE | 277, Vitality VR | 410, CD | 130, CD | 131, Chronicle VR | 409, Clinical Trial Device | 304, Concerto | 325, Concerto II | 433, Consulta | 403, En Trust | 326, Entrust | 305, Entrust | 306, Entrust | 132, Entrust | 307, Entrust | 133, Gem | 314, Gem | 315, Gem | 316, Gem | 317, Gem DR (DC) | 183, Gem II DR | 184, Gem II VR | 178, Gem III AT | 134, Gem III DR | 135, Gem III VR | 180, Gem III VR | 136, Gem SR | 173, Gem SR | 174, Gem SR | 175, Gem SR | 176, Gem SR | 177, InSync ICD | 318, Insync II Marquis | 140, InSync II Protect | 319, InSync III Marquis | 361, InSync Marquis | 320, Insync Sentry | 138, Insync Sentry | 139, Intrinsic | 308, Intrinsic | 137, Jewel AF | 313, Jewel AF | 181, Jewel AF | 182, Jewel CD | 147, Jewel CD | 148, Jewel CD | 149, Jewel PCD | 154, Jewel PCD | 155, Jewel PCD | 156, Jewel PCD | 157, Jewel PCD | 158, Jewel PCD | 159, Jewel PCD | 160, Jewel Plus | 161, Jewel Plus | 162, Jewel Plus | 164, Jewel Plus Active Ca | 163, Marquis | 142, Marquis DR | 141, Marquis VR | 179, Marquis VR | 311, Marquis VR | 312, Maximo | 143, Maximo | 144, Maximo DR | 145, Maximo II | 404, Maximo II DR | 406, Maximo II VR | 408, Maximo VR | 309, Maximo VR | 146, Micro Jewel | 165, Micro Jewel | 310, Micro Jewel | 166, Micro Jewel | 167, Micro Jewel | 168, Micro Jewel II | 169, Micro Jewel II | 170, Micro Jewel II | 171, Micro Jewel II | 172, Onyx VR | 321, PCD | 150, PCD | 151, PCD | 152, PCD | 153, Secura DR | 405, Secura VR | 407, Virtuoso | 323, Virtuoso | 324, Virtuoso II DR | 431, Virtuoso II VR | 432, Aegis | 189, Angstrom II | 262, Angstrom II | 263, Angstrom MD | 271, Angstrom MD | 272, Atlas + HF | 366, Atlas DR | 205, Atlas DR | 206, Atlas II DR | 362, Atlas II HF | 359, Atlas II VR | 357, Atlas II+ DR | 358, Atlas II+ HF | 385, Atlas Plus DR | 207, Atlas Plus HF | 211, Atlas Plus HF | 213, Atlas Plus HF (OUS) | 212, Atlas Plus VR | 191, Atlas Plus VR | 192, Atlas VR | 197, Cadence | 223, Cadence | 224, Cadence | 225, Cadence | 226, Cadence | 232, Cadence | 233, Cadence | 234, Cadence | 235, Cadence | 236, Cadence | 237, Cadence | 238, Cadence | 239, Cadence | 240, Cadence | 241, Cadet | 242, Cadet | 243, Cadet | 244, Cadet | 245, Cadet | 246, Cadet LT | 227, Cadet LT | 228, Cadet LT | 229, Cadet LT | 230, Cadet LT | 231, Clinical Trial Device | 322, Contour | 252, Contour | 253, Contour | 254, Contour | 255, Contour | 256, Contour II | 264, Contour II | 265, Contour II | 266, Contour II | 267, Contour II | 268, Contour LT | 247, Contour LT | 248, Contour LT | 249, Contour LT | 250, Contour LT | 251, Contour MD | 257, Contour MD | 363, Contour MD | 258, Contour MD | 259, Contour MD | 260, Contour MD | 261, Convert | 364, Convert+ | 365, Current DR | 386, Current DR RF | 414, Current DR RF | 415, Current Plus DR | 418, Current Plus DR | 419, Current Plus VR | 416, Current Plus VR | 417, Current RF DR | 387, Current RF VR | 389, Current VR | 388, Current VR RF | 412, Current VR RF | 413, Eagle | 190, Epic DR | 200, Epic DR | 201, Epic HF | 208, Epic HF | 209, Epic HF | 367, Epic HF (OUS) | 210, Epic II DR | 333, Epic II HF | 330, Epic II VR | 332, Epic II+ DR | 331, Epic Plus DR | 202, Epic Plus DR | 203, Epic Plus DR | 204, Epic Plus HF (OUS) | 214, Epic Plus VR | 194, Epic Plus VR | 195, Epic VR | 196, Guardian | 215, Guardian | 216, Guardian ATP | 218, Guardian ATP II | 219, Guardian ATP III | 220, Guardian II | 217, Photon Micro DR | 199, Photon Micro VR | 193, Photon DR | 198, Profile MD | 269, Profile MD | 270, Promote | 390, Promote | 422, Promote | 423, Promote Plus | 420, Promote Plus | 421, Promote RF | 391, Promote RF | 424, Promote RF | 425, Promote RF | 426, Promote RF | 427, Sentry | 221, Sentry | 222, Siecure | 188, Paradym | 435, Fortify VR | 436, Fortify VR | 437, Fortify DR | 438, Fortify DR | 439, Unify | 440, Unify | 441, Promote Accel | 442, Promote Accel | 443, Promote Accel | 444, Current Accel DR | 445, Current Accel DR | 446, Current Accel VR | 447, Current Accel VR | 448, Current Accel VR | 449, Current Accel DR | 450, Current Accel DR | 451, Concerto | 452, Paradym | 453, Paradym | 454, Protecta XT DR | 455, Protecta DR | 456, Protecta XT VR | 457, Protecta VR | 458, Protecta XT CRT-D | 459, Protecta CRT-D | 460, Unify Quadra | 461, Unify Quadra | 462, Fortify ST VR | 463, Fortify ST VR | 464, Incepta | 465, Protecta XT DR | 466, Protecta DR | 467, Protecta XT CRT-D | 468, Protecta CRT-D | 469, Energen ICD DF4 VR | 470, Energen ICD DF4 DR | 471, Energen CRT-D IS1 DF4 IS1 | 472,

Value Set Member Constraints

Incepta | 473, Incepta | 474, Incepta | 475, Punctua | 476, Punctua | 477, Punctua | 478, Punctua | 479, Incepta | 480, Incepta | 481, Incepta | 482, Punctua | 483, Energen CRT-D | 484, Energen ICD | 485, Energen ICD | 486, Concerto | 487, Virtuoso | 488, Virtuoso | 489, Secura DR | 490, Secura VR | 491, Secura DR | 492, Secura VR | 493, Secura DR | 494, Secura VR | 495, Virtuoso II DR | 496, Virtuoso II VR | 497, Virtuoso II VR | 498, Maximo II DR | 499, Maximo II VR | 500, Protecta XT VR | 501, Protecta VR | 502, Consulta | 503, Maximo II CRT-D | 504, Teligen VR HE | 505, Teligen DR HE | 506, Paradym RF VR | 507, Paradym RF DR | 508, Paradym RF CRT-D | 509, Ellipse VR | 510, Ellipse VR | 511, Ellipse DR | 512, Ellipse DR | 513, Fortify Assura VR | 514, Fortify Assura VR | 515, Fortify Assura DR | 516, Fortify Assura DR | 517, Unify Assura | 518, Unify Assura | 519, Quadra Assura | 520, Quadra Assura | 521, Lumax 740 VR-T | 522, Lumax 740 VR-T DX | 523, Lumax 740 DR-T | 524, Lumax 740 HF-T | 525, SQ-RX Pulse Generator | 526, Lumax 500 VR-T | 527, Lumax 500 DR-T | 528, Lumax 500 HF-T | 529, Viva S CRT-D | 530, Viva S CRT-D | 531, Viva XT CRT-D | 532, Viva XT CRT-D | 533, Punctua | 534, Evera XT DR | 535, Evera XT DR | 536, Evera S DR | 537, Evera S DR | 538, Evera XT VR | 539, Evera XT VR | 540, Evera S VR | 541, Evera S VR | 542, Ellipse VR Next Generation | 543, Ellipse VR Next Generation | 544, Ellipse DR Next Generation | 545, Ellipse DR Next Generation | 546, Fortify Assura VR Next Generation | 547, Fortify Assura VR Next Generation | 548, Fortify Assura DR Next Generation | 549, Fortify Assura DR Next Generation | 550, Unify Assura Next Generation | 551, Unify Assura Next Generation | 552, Quadra Assura Next Generation | 553, Quadra Assura Next Generation | 554, Ilesto | 555, Ilesto 7 VRT | 556, Ilesto 7 VRT DX | 557, Ilesto 7 DRT | 558, Ilesto 7 HFT | 559, Quadra Assura MP | 646, Quadra Assura MP | 647, Emblem MRI S-ICD | 663, Quadra Assura MP | 648, Amplia MRI Quad | 664, Inventra 7HF-T QP | 649, Emblem MRI S-ICD | 650, Iperia 7 HF-T QP | 651, Platinium VR DF1 | 652, Platinium VR DF4 | 653, Platinium DR DF1 | 654, Platinium DR DF4 | 655, Platinium CRT-D DF1 | 656, Platinium CRT-D DF4 | 657, Evera MRI XT DR SureScan | 658, Visia AF MRI VR SureScan | 659, Quadra Assura MP | 660, Quadra Assura MP | 661, Quadra Assura MP | 645, Evera MRI S DR SureScan | 662, Maximo VR | 665, Maximo VR | 666, Claria | 667, Claria | 668, Claria | 669, Claria | 670, Amplia MRI Quad | 671, Visia AF MRI S VR SureScan | 672, Compia MRI SureScan | 673, Visia AF MRI S VR SureScan | 674, Unify | 675, Intica 7 HF-T QP | 676, Intica 7 VR-T DX | 677, Ilivia 7 VR-T | 678, Ilivia 7 VR-T | 679, Ilivia 7 DR-T | 680, Ilivia 7 DR-T | 681, Ilivia 7 HF-T | 682, Ilivia 7 HF-T QP | 683, Vigilant X4 CRT-D | 685, Vigilant EL | 686, Vigilant EL | 687, Resonate EL | 688, Resonate EL | 689, Resonate X4 | 690, Perciva | 691, Perciva | 692, Perciva | 693, Perciva | 694, MOMENTUM X4 | 695, MOMENTUM | 696, MOMENTUM | 697, MOMENTUM | 698, MOMENTUM | 699, MOMENTUM | 700, Itrevia 7 VR-T | 701, Quadra Assura MP | 702, Quadra Assura MP | 703, Quadra Assura MP | 704, Primo MRI VR SureScan | 705, Primo MRI VR SureScan | 706, Primo MRI DR SureScan | 708, Primo MRI DR SureScan | 707, Intica HF-T | 4301, Rivacor 7 DR-T | 4305, Rivacor 7 VR-T | 4306, Rivacor 7 HF-T QP | 4307, Acticor 7 VR-T DX | 4308, Acticor 7 HF-T | 4309, Acticor 7 HF-QP | 4310, Cobalt VR MRI | 4554, Cobalt VR MRI | 4555, Cobalt DR MRI | 4556, Cobalt DR MRI | 4557, Cobalt HF Quad CRT-D MRI | 4558, Cobalt HF Quad CRT-D MRI | 4559, Cobalt HF CRT-D MRI | 4560, Cobalt HF CRT-D MRI | 4561, Chrome VR MRI | 4562, Chrome VR MRI | 4563, Chrome DR MRI | 4564, Chrome DR MRI | 4565, Chrome HF Quad CRT-D MRI | 4566, Chrome HF Quad CRT-D MRI | 4567, Chrome HF CRT-D MRI | 4568, Chrome HF CRT-D MRI | 4569, Cobalt HF Quad CRT-D MRI | 4579, Cobalt HF Quad CRT-D MRI | 4580, Cobalt HF CRT-D MRI | 4581, Cobalt HF CRT-D MRI | 4582, Chrome HF Quad CRT-D MRI | 4583, Chrome HF Quad CRT-D MRI | 4584, Chrome HF CRT-D MRI | 4585, Chrome HF CRT-D MRI | 4586, Ilivia Neo 7 VR-T | 4597, Intica Neo 7 VR-T | 4598, Intica Neo 5 VR-T | 4599, Ilivia Neo 7 VR-T DX | 4600, Intica Neo 7 VR-T DX | 4601, Intica Neo 5 VR-T DX | 4602, Ilivia Neo 7 DR-T | 4603, Intica Neo 7 DR-T | 4604, Intica Neo 5 DR-T | 4605, Ilivia Neo 7 HF-T | 4606, Intica Neo 7 HF-T | 4607, Intica Neo 5 HF-T | 4608, Ilivia Neo 7 HF-T QP | 4609, Intica Neo 5 HF-T QP | 4610, Intica Neo 7 HF-T QP | 4611, Gallant VR | 4612, Gallant DR | 4613, Gallant HF | 4614, Entrant DR | 4615, Entrant VR | 4616, Entrant HF | 4617, Cobalt XT DR MRI SureScan | 4632, Cobalt XT DR MRI SureScan | 4633, Cobalt XT VR MRI SureScan | 4634, Cobalt XT VR MRI SureScan | 4635, Cobalt XT HF CRT SureScan | 4636, Cobalt XT HF Quad CRT-DMRI SureScan | 4637, Cobalt XT HF Quad CRT-DMRI SureScan | 4638, Cobalt XT HF CRT-DMRI SureScan | 4639, Actros SR B | 4656, Actros SR | 4657, Actros SR | 4658, Actros DR | 4659, Actros DR | 4660, Actros SLR | 4661, Actros SLR | 4662, Actros D | 4663, Actros D | 4664, Actros S | 4665, Actros S | 4666, Actros D-A | 4667, Actros S-B | 4668, Actros DR-A | 4669, Actros DR-B | 4670, Actros DR+ | 4671, Actros S+ | 4672, Actros SR+ | 4673, Actros SR - B | 4674, Actros DR - B | 4675, Axios D | 4676, Axios DR | 4677, Axios S | 4678, Axios SLR | 4679, Axios SR | 4680, Edora 8 SR-T | 4681, Edora 8 DR-T | 4682, Edora 8 HF-T | 4683, Edora 8 HF-T QP | 4684, Eluna 8 SR-T | 4685, Eluna 8 DR-T | 4686, Eluna 8 HF-T | 4687, Etrinsa 6 SR | 4688, Etrinsa 6 SR-T | 4689, Etrinsa 6 DR | 4690, Etrinsa 6 DR-T | 4691, Etrinsa 8 SR-T | 4692, Etrinsa 8 DR-T | 4693, Etrinsa 8 HF-T | 4694, Eluna 8 SR | 4695, Eluna 8 DR | 4696, Entovis SR-T | 4697, Entovis SR-T | 4698, Entovis SR | 4699, Entovis DR-T | 4700, Entovis DR-T | 4701, Entovis DR | 4702, Entovis DR | 4703, Entovis HF-T | 4704, Estella DR-T | 4705, Estella DR | 4706, Estella SR-T | 4707, Estella SR | 4708, Evia SR-T | 4709, Evia SR | 4710, Evia DR-T | 4711, Evia DR | 4712, Evia HF-T | 4713, Evia HF | 4714, Philos II S | 4715, Philos II DR | 4716, Philos II SLR | 4717, Philos D | 4718, Philos DR | 4719, Philos DR-T | 4720, Philos SR | 4721, Philos S | 4722, Philos DR-B | 4723, Philos SR-B | 4724, Cylos DR | 4725, Cylos DR-T | 4726, Cylos VR | 4727, Epyra 6 DR-T | 4728, Epyra 6 DR-T ProMRI | 4729, Epyra 6 SR-T | 4730, Epyra 6 SR-T ProMRI | 4731, Epyra 8 DR-T | 4732, Epyra 8 DR-T ProMRI | 4733, Epyra 8 SR-T | 4734, Epyra 8 SR-T ProMRI | 4735, Kairos D | 4736, Kairos D | 4737, Kairos DR | 4738, Kairos DR | 4739, Kairos S | 4740, Kairos S | 4741, Kairos SL | 4742, Kairos SL | 4743, Kairos SR | 4744, Kairos SR | 4745, Kairos DR | 4746, Kairos S | 4747, Kairos SR | 4748, Kairos D-B | 4749, Kairos DR-B | 4750, Kairos D-A | 4751, Kairos DR-A | 4752, Kairos S-A | 4753, Kairos S-B | 4754, Kairos SR-A | 4755, Kairos SR-B | 4756, Protos DR/CLS | 4757, Protos VR/CLS | 4758, Triplos LV | 4759, Triplos LV | 4760, Triplos LV-T | 4761, Triplos LV-T | 4762, Stratos LV | 4763, Stratos LV |

Value Set Member Constraints

4764, Stratos LA | 4765, Stratos LA | 4766, Advantio SR | 4767, Advantio DR | 4768, Advantio DR | 4769, Advantio MRI SR | 4770, Advantio MRI DR | 4771, Advantio MRI DR | 4772, Advantio SR | 4773, Advantio DDDR | 4774, Advantio DR | 4775, Advantio SR | 4776, Advantio DR | 4777, Advantio DR | 4778, Advantio MRI | 4779, Advantio MRI | 4780, ALTRUA 20 SSIR | 4781, ALTRUA 20 DDDR | 4782, ALTRUA 20 DDDR | 4783, ALTRUA 20 SSIR | 4784, ALTRUA 20 DDDR | 4785, ALTRUA 20 SSIR | 4786, ALTRUA 20 DDDR | 4787, ALTRUA 20 DDD | 4788, ALTRUA 40 SSIR | 4789, ALTRUA 40 DDDR | 4790, ALTRUA 40 DDDR | 4791, ALTRUA 40 DDDR | 4792, ALTRUA 50 SSIR | 4793, ALTRUA 50 DDR | 4794, ALTRUA 50 DDD | 4795, ALTRUA 50 VDD | 4796, ALTRUA 50 SSI | 4797, ALTRUA 60 SSIR | 4798, ALTRUA 60 DDDR | 4799, ALTRUA 60 DDDR | 4800, ALTRUA 60 DDDR | 4801, Accolade SR | 4802, Accolade DR | 4803, Accolade EL DR | 4804, Accolade MRI VR | 4805, Accolade MRI DR | 4806, Accolade MRI DR-EL | 4807, Proponent SR | 4808, Proponent EL MRI DR | 4809, Proponent MRI DR | 4810, Proponent EL DR | 4811, Proponent MRI VDDR | 4812, Proponent MRI SR | 4813, Essentio SR | 4814, Essentio DR | 4815, Essentio DR | 4816, Essentio MRI VR | 4817, Essentio MRI DR | 4818, Essentio MRI DR-EL | 4819, Altrua 2 SR | 4820, Altrua 2 DR | 4821, Altrua 2 EL DR | 4822, Formio DR | 4823, Formio MRI DR | 4824, Formio DR | 4825, Formio DR | 4826, Formio MRI DR | 4827, Vitalio SR | 4828, Vitalio DR | 4829, Vitalio DDDR | 4830, Vitalio MRI SR | 4831, Vitalio MRI DR | 4832, Vitalio MRI DR | 4833, Vitalio SR | 4834, Vitalio DR | 4835, Vitalio DDDR | 4836, Vitalio MRI SR | 4837, Vitalio MRI DR | 4838, Vitalio SR | 4839, Vitalio DR | 4840, Vitalio DR | 4841, Vitalio SR | 4842, Vitalio DR | 4843, Vitalio DR | 4844, Intua | 4845, Intua | 4846, Inliven | 4847, Inliven | 4848, Inliven | 4849, Inliven | 4850, Inliven | 4851, Inliven | 4852, Intua | 4853, Intua | 4854, Intua | 4855, Intua | 4856, Invive | 4857, Invive | 4858, Invive | 4859, Invive | 4860, Invive | 4861, Invive | 4862, VALITUDE | 4863, VALITUDE X4 | 4864, VISIONIST | 4865, VISIONIST | 4866, VISIONIST X4 | 4867, Ingenio SR | 4868, Ingenio DDDR | 4869, Ingenio DR | 4870, Ingenio MRI SR | 4871, Ingenio MRI DR | 4872, Ingenio MRI DR | 4873, Ingenio VDDR | 4874, Ingenio SR | 4875, Ingenio DR | 4876, Ingenio DR | 4877, Ingenio SR | 4878, Ingenio DR | 4879, Ingenio DR | 4880, Ingenio MRI SR | 4881, Ingenio MRI DR | 4882, Ingenio MRI DR | 4883, Prism 2 DR | 4884, Prism 2 VR | 4885, Prism DR | 4886, Prism DR HE | 4887, Prism DR | 4888, Prism DR HE | 4889, Prism VR | 4890, Prism VR HE | 4891, Prism VR | 4892, Prism VR HE | 4893, Accent DR | 4894, Accent DR RF | 4895, Accent SR RF | 4896, Identity ADx XL DR | 4897, Victory XL DR | 4898, Victory DR | 4899, Zephyr DR | 4900, Zephyr XL DR | 4901, Zephyr XL SR | 4902, Allure Quadra MP CRT-P | 4903, Allure RF CRT-P | 4904, Allure Quadra RF CRT-P | 4905, Frontier II CRT-P | 4906, Allure Quadra MP CRT-P | 4907, Anthem RF CRT-P | 4908, Assurity MRI | 4909, Endurity DR | 4910, Assurity DR RF | 4911, Verity ADx XL DR | 4912, Verity ADx XL DR M/S | 4913, Verity ADx XL DC | 4914, Integrity ADx DR | 4915, Identity ADx DR | 4916, Identity ADx XL DR | 4918, Integrity AFx DR | 4919, Integrity AFx DR | 4920, Identity | 4921, Identity XL | 4922, Assurity MRI | 4923, Endurity VR | 4924, Assurity VR | 4925, Accent SR | 4926, Zephyr SR | 4927, Victory SR | 4928, Verity ADx XL SR | 4929, Verity ADx XL SR M/S | 4930, Verity ADx XL SC | 4931, Identity ADx SR | 4932, Identity SR | 4933, Microny | 4934, Microny | 4935, Microny | 4936, Integrity SR | 4937, OPUS | 4938, OPUS | 4939, OPUS | 4940, OPUS | 4941, OPUS | 4942, OPUS | 4943, OPUS | 4944, OPUS | 4945, OPUS | 4946, OPUS | 4947, OPUS | 4948, OPUS | 4949, OPUS | 4950, OPUS | 4951, OPUS | 4952, OPUS RM | 4953, OPUS G | 4954, OPUS G | 4955, OPUS S | 4956, OPUS S | 4957, BRIO SR | 4958, BRIO | 4959, TALENT SR | 4960, Talent | 4961, Talent II | 4962, Talent II DR | 4963, Talent AF DR | 4964, Talent 3 DR | 4965, Talent 3 VDR | 4966, Chorus | 4967, Chorus | 4968, Chorus | 4969, Chorus | 4970, Chorus | 4971, Chorus | 4972, Chorus | 4973, Chorus | 4974, Chorus II | 4975, Chorus II | 4976, Chorus RM | 4977, Chorum | 4978, Chorum | 4979, Brio D | 4980, Brio D | 4981, Brio D | 4982, Talent D | 4983, Talent D | 4984, Talent 3 MSP | 4985, Talent 3 MSP | 4986, Talent MSP | 4987, Talent AF MSP | 4988, Chorum MSP | 4989, Chorum MSP | 4990, Kora 100 SR | 4991, Kora 100 DR | 4992, Reply 200 SR | 4993, Reply 200 DR | 4994, Reply VDR | 4995, Reply SR | 4996, Reply D | 4997, Reply DR | 4998, Reply 250 DR | 4999, Reply CRT | 5000, Kora 200 SR | 5001, Kora 200 DR | 5002, Paradym RF DR | 5003, Paradym RF VR | 5004, Esprit D | 5005, Esprit DR | 5006, Esprit S | 5007, Esprit SR | 5008, Facil DR | 5009, Azure xt dr mri | 5010, Azure XT SR MRI | 5011, Azure S DR MRI | 5012, Azure S SR MRI | 5013, Advisa Single MRI | 5014, Advisa Dual MRI | 5015, Adapta DR | 5016, Adapta | 5017, Adapta DR | 5018, Adapta L DR | 5019, Adapta S DR | 5020, Micra MRI | 5021, Micra AV | 5022, PERCEPTA QUAD CRT-P MRI SURESCAN | 5023, PERCEPTA CRT-P MRI SURESCAN | 5024, Serena Quad CRTP MRI SureScan | 5025, Serena CRTP MRI | 5026, Solara Quad CRTP MRI SureScan | 5027, Solara CRTP MRI SureScan | 5028, Viva | 5029, Sigma | 5030, Sigma | 5031, Sigma | 5032, Sigma | 5033, Sigma | 5034, Sigma | 5035, Sigma | 5036, Sigma | 5037, Sigma | 5038, Sigma | 5039, Sigma | 5040, Sigma | 5041, Sigma | 5042, Sigma | 5043, InSync | 5044, EnRhythm | 5045, Revo MRI | 5046, Consulta | 5047, Consulta | 5048, Percepta/Sorena/Solara MRI | 5049, Percepta/Sorena/Solara MRI | 5050, Percepta/Sorena/Solara MRI | 5051, Percepta/Sorena/Solara MRI | 5052, Percepta/Sorena/Solara MRI | 5053, Percepta/Sorena/Solara MRI | 5054, Attesta | 5055, Attesta | 5056, Attesta | 5057, Attesta | 5058, Sephera | 5059, Sephera | 5060, Sephera | 5061, Cylos VR | 5095, OPUS S | 5096, OPUS S | 5097, BRIO DR | 5098, Clinical Trial Device | 5099, Clinical Trial Device | 5100, Clinical Trial Device | 5101, Clinical Trial Device | 5102, Clinical Trial Device | 5103, Clinical Trial Device | 5104, Clinical Trial Device | 5105, Clinical Trial Device | 5106, Clinical Trial Device | 5107, Clinical Trial Device | 5108, Clinical Trial Device | 5109, Clinical Trial Device | 5110, Clinical Trial Device | 5111, Clinical Trial Device | 5112, Clinical Trial Device | 5113, Clinical Trial Device | 5114, Sensia | 5146, Versa | 5148, EnPulse | 5149, Azure | 5150, Azure XT SR | 5153, Versa | 5155, Sensia | 5160, Autogen | 5161, ADAPTA | 5168, ADAPTA | 5169, ADAPTA | 5170, ACCENT MRI | 5254, Resonate HF ICD | 5269, Resonate HF ICD | 5270, Resonate HF CRT-D | 5271, Aveir Single Chamber Leadless Pacemaker | 5304, Neutrino NxT DR | 5305, Micra VR2 Single Chamber Leadless Pacemaker | 5404, Amvia Edge SR-T | 5408, Amvia Edge DR-T | 5409, Aurora EV-ICD | 5410, Amvia Edge HF-T QP | 5435, Aveir Single Chamber Leadless Pacemaker RA | 5454, Aveir Single Chamber

Value Set Member Constraints

Leadless Pacemaker RV | 5455, Gallant VR | 5458, Gallant DR | 5459, Gallant HF | 5460, Gallant HF | 5560, WiSE CRT | 5775, Clinical Trial Device | 5786, Clinical Trial Device | 5787, Clinical Trial Device | 5788

Element: 16111
Value Set Name: ICD Upgrade Type Detail

Specify Change
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.1084

Selections	Selection Dependency
Ventricular pacemaker to single chamber ICD | 112000003995, Ventricular pacemaker to dual chamber ICD | 112000003996, Ventricular pacemaker to cardiac resynchronization therapy defibrillator | 112000003997, Ventricular pacemaker to conduction system pacing defibrillator | 112000003998, Atrial pacemaker to dual chamber ICD | 112000003999, Atrial pacemaker to cardiac resynchronization therapy defibrillator | 112000004000, Atrial pacemaker to conduction system pacing defibrillator | 112000004001, Transvenous ICD to subcutaneous ICD | 112000004002, Cardiac resynchronization therapy pacemaker to cardiac resynchronization therapy defibrillator | 112000004003, Cardiac resynchronization therapy pacemaker to conduction system pacing defibrillator | 112000004004, Subcutaneous ICD to transvenous ICD | 112000004148, Transvenous to EV-ICD | 112000004201, S-ICD to EV-ICD | 112000004202	IMPACT Pathway (15836) IN (Cardiovascular implantable electronic device (CIED))

Element: 16081
Value Set Name: Defibrillator Device List

New ILR Device ID
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.243

Selections	Selection Dependency
Abbott Assert-IQ ICM | 5488, Medtronic Reveal LINQ | 5553, Medtronic Reveal XT | 5554, BIOTRONIK BioMonitor 2 | 5555, BIOTRONIK BioMonitor 3 | 5556, Boston Scientific Latitude | 5557, Boston Scientific LuX-Dx ICM | 5558, Vectorious | 5559	IMPACT Pathway (15836) IN (Cardiovascular implantable electronic device (CIED))

Element: 15153
Value Set Name: Intra or Post Procedure Events

Event(s)
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.706

Selections	Selection Dependency
Arteriovenous (AV) fistula requiring treatment | 128617001, Closure device related injury (access site) | 112000003782, Hematoma at access site | 385494008, Pseudoaneurysm requiring treatment | 443089001, Pulse loss requiring treatment | 112000003790, Rebleed after bandaging | 112000003791, Sheath related intimal injury | 112000003792, Thrombosis (at access site) | 439127006, Aspiration of gastric contents | 14766002, Broncho/laryngospasm while intubated | 112000003781, Conscious sedation requiring rescue intubation | 112000003783, Corneal abrasion | 85848002, Delirium | 2776000, Dental injury | 284002000, Endotrachael tube malposition | 112000003787, Lung collapse | 46621007, Malignant hyperthermia - hyperpyrexia | 405501007, Post extubation stridor | 112000003291, Oral/airway injury or bleeding | 262664007, Unanticipated difficult airway | 718448006, Unplanned extubation | 112000003266, Aneurysm | 432119003, Contained tear requiring treatment - Angioplasty | 112000003784, Tear/Dissection - Angioplasty related | 112000001090, Thrombosis (at target site) | 112000003798, Angioplasty related vessel/conduit rupture | 112000003796, Arrhythmia requiring treatment | 698247007, Cardiac arrest | 410429000, Cardiac perforation | 36191001:123005000=302509004, Cardiac tamponade | 35304003, Coronary vasospasm requiring treatment | 263924000, Mechanical circulatory support required | 232957001, Pacemaker or ICD implant due to cath complication | 112000004072, Pericardial effusion | 373945007, New aortic valve insufficiency | 60234000, New tricuspid valve insufficiency | 111287006, New mitral valve insufficiency | 48724000, New pulmonary valve insufficiency | 91434003, Coil embolization | 112000003498, Coil malposition | 112000003497, Device embolization | 112000001324, Device malposition | 112000003786, Contrast allergy | 293637006, Medication allergy | 416098002, Air embolus in systemic circulation | 112000003416, Air embolus in venous/pulmonary circulation | 112000003417, Bacteremia (post catheterization) | 5758002, Complication of bladder catheterization | 410024004, Fall | 398117008, Gastrointestinal bleeding | 74474003, Hypoglycemia | 302866003, Hypothermia | 386689009, Medication error | 398240004, Necrotizing enterocolitis | 2707005, New requirement for dialysis | 100014076, Pressure injury | 1163215007, Post procedure fever greater than 38 degrees celcius | 112000003387, Radiation exposure injury | 218190002, Retained foreign body | 125670008, Retroperitoneal bleeding | 95549001, Retroperitoneal hematoma | 236002003, Skeletal trauma or injury | 284003005, Transfusion reaction | 112000003344, Brachial plexus injury | 6836001, Seizures (new onset) | 112000000437, Spinal cord ischemia | 371029002, Stroke | 100000977, Transient ischemic attack | 266257000, Hemothorax | 31892009, Pneumonia | 233604007, Pneumothorax | 36118008, Pulmonary embolism | 59282003, Pulmonary hemorrhage | 78144005, Reperfusion injury | 276232006, Bronchial compression | 3304005, Contained tear requiring treatment - Stent | 112000003785, Coronary artery compression caused by stenting | 112000004243, Jailing of side branch resulting in compromised flow | 112000003788, Stent malposition | 112000003759, Stent embolization | 112000003758, Stent thrombosis | 100013014, Stent related vessel/conduit rupture | 112000003797, Vascular compression - other adjacent vessel | 112000003793, Coronary artery dissection | 732230001, Thrombus (at intervention site) | 1776291018, Vascular dissection (vessel other than coronary artery) | 112000003794, Vascular perforation (vessel other than coronary artery) | 112000003795	Procedures Performed (15081) IN (Coarctation intervention, Proximal PA stenting, Atrial septal defect closure, Transcatheter pulmonary valve replacement, Premature infant patent ductus arteriosus closure, Aortic valvuloplasty, Other intervention (non-module), Diagnostic catheterization only)

Element: 15153
Value Set Name: Intra or Post Procedure Events

Event(s)
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.706

Value Set Member Constraints

Selections	Selection Dependency
Cardiac arrest | 410429000, Cardiac perforation | 36191001:123005000=302509004, Cardiac tamponade | 35304003, Heart block | 112000002919, Valve injury | 762610001, Bleeding Event | 131148009, RBC transfusion | 116863004, Phrenic nerve injury | 100001076, Stroke | 100000977, Coronary artery injury | 112000003852, Vascular injury requiring treatment | 30904006:363702006=57662003	Procedures Performed (15081) IN (EP study without ablation, EP study with ablation)

Element: 15153
Value Set Name: Intra or Post Procedure Events

Event(s)
OID: 1.3.6.1.4.1.19376.1.4.1.6.5.706

Selections	Selection Dependency
Cardiac arrest | 410429000, Cardiac perforation | 36191001:123005000=302509004, Cardiac tamponade | 35304003, Coronary artery compression | 112000001837, Event requiring ECMO | 112000004039, Urgent cardiac surgery | 112000001892, Valvular regurgitation | 40445007, Device embolization for leadless pacemakers requiring retrieval | 112000004235, Device erosion | 100014134, Lead dislodgement | 234233007, Set screw problem | 112000004042, Air embolus in systemic circulation | 112000003416, Air embolus in venous/pulmonary circulation | 112000003417, Bleeding Event | 131148009, Infection requiring antibiotics | 112000004041, Peripheral nerve injury | 73590005, Radiation exposure injury | 218190002, RBC transfusion | 116863004, Stroke | 100000977, Transient ischemic attack | 266257000, Phrenic nerve paralysis | 277321001, Airway event requiring escalation of care | 112000002228, Pneumothorax | 36118008, Pulmonary embolism | 59282003, Deep Vein Thrombosis | 128053003, Pocket hematoma requiring intervention | 112000004040, Other vascular complication requiring treatment | 213217008	Procedures Performed (15081) IN (ICD generator, Implantable loop recorder, Leads only, Pacemaker pulse generator)

Section Containment Structure

Container Class	Section	Section Code	Section Type	Cardinality
patientContainer	Demographics	DEMOGRAPHICS	Section	1 .. 1
episodeContainer	Episode of Care	EPISODEOFCARE	Section	1 .. 1
episodeContainer	Research Study	RSTUDY	Repeater Section	0 .. n
episodeContainer	Pathway	PATHWAY	Section	1 .. 1
episodeContainer	Primary Diagnosis	PDX	Section	0 .. 1
episodeContainer	History and Risk Factors	HISTORYANDRISK	Section	0 .. 1
episodeContainer	Condition History	CONDHX	Repeater Section	0 .. n
episodeContainer	Condition History Details	CONDHXDET	Section	0 .. 1
episodeContainer	Procedure History	PROCHX	Repeater Section	0 .. n
episodeContainer	Procedure History Details	PROCHXDET	Section	0 .. 1
episodeContainer	Cardiac Catheterization History	CARDIACCATHHX	Section	0 .. 1
episodeContainer	Cardiac Catheterization History	CARDIACCATHHX2	Repeater Section	0 .. n
episodeContainer	Cardiac Surgery History	CARDIACSURGHX	Section	0 .. 1
episodeContainer	Cardiac Surgery History	CARDIACSURGHX2	Repeater Section	0 .. n
episodeContainer	EP Therapy History	EPTHERAPY	Section	0 .. 1
episodeContainer	EP Therapy Catheter Ablation	EPCATHABL	Repeater Section	0 .. n
episodeContainer	EP Threapy Previous Ablation	EPPREVABLLOC	Repeater Section	0 .. n
episodeContainer	EP Therapy Same Target	EPSAMETARGET	Section	0 .. 1
episodeContainer	History and Risk Factors	HISTORYANDRISK2	Section	0 .. 1
episodeContainer	Prior Device History	PRIORDEVHX	Section	0 .. 1
episodeContainer	Prior Device	PRIORDEV	Repeater Section	0 .. n
episodeContainer	Diagnostic Studies	DIAGSTUDIES	Section	0 .. 1
episodeContainer	Lab Visit	LABVISIT	Repeater Section	1 .. n
episodeContainer	Concurrent Conditions	CCCONDS	Section	0 .. 1
episodeContainer	Non-cardiac Comorbidity	NONCARDIACCOMOR	Repeater Section	0 .. n
episodeContainer	Cardiac Comorbidity	CARDIACCOMOR	Repeater Section	0 .. n
episodeContainer	Arrhythmias	ARRHYTHMIAS	Section	0 .. 1
episodeContainer	Pre-Procedure	PREPROC	Section	0 .. 1
episodeContainer	Pre-Procedure Medications	PREPROCMEDS	Repeater Section	0 .. n
episodeContainer	Pre-Procedure Medication Details	PREPROCMEDDET	Section	0 .. 1
episodeContainer	Pre-Procedure Diagnosis	PREPROCDX	Section	0 .. 1
episodeContainer	Pre-Procedure Diagnosis Codes	PREPROCDXCODES	Repeater Section	0 .. n
episodeContainer	Pre-Procedure Diagnosis CIED	PREPROCDXCIED	Section	0 .. 1
episodeContainer	Procedure Information	PROCINFO	Section	0 .. 1
episodeContainer	Operator Information	OPRINFO	Repeater Section	0 .. n
episodeContainer	Fellow Information	FELLOW	Section	0 .. 1
episodeContainer	Procedure Information	PROCINFO2	Section	0 .. 1
episodeContainer	Hemodynamics	HEMO	Section	0 .. 1
episodeContainer	Imaging, Radiation and Contrast	IMGRADCON	Section	0 .. 1
episodeContainer	Imaging, Radiation and Contrast EP	IMGRADCONEP	Section	0 .. 1
episodeContainer	Electrophysiology Study	EPSTUDY	Section	0 .. 1
episodeContainer	EP Inducible Arrhythmia	EPINDARR	Repeater Section	0 .. n
episodeContainer	EP Ablation Information	EPABLINFO	Section	0 .. 1
episodeContainer	Coarctation of the Aorta Intervention	COARC	Section	0 .. 1
episodeContainer	Coarctation Pre-intervention	COARCPREINTERV	Section	0 .. 1
episodeContainer	Coarctation Post-intervention	COARCPOSTINTERV	Section	0 .. 1
episodeContainer	Coarctation Balloon Dilation	COARCBALLOON	Section	0 .. 1
episodeContainer	Coarctation Balloon Dilation Only	COARCBALLOONONLY	Section	0 .. 1
episodeContainer	Coarctation Stent Implantation	COARCSTENT	Section	0 .. 1
episodeContainer	Coarctation Device	COARCDEV	Repeater Section	0 .. n
episodeContainer	Proximal Pulmonary Artery Stenting	PPAS	Section	0 .. 1
episodeContainer	Proximal PAS Pre-intervention	PPASPREINTERV	Section	0 .. 1
episodeContainer	Proximal PAS Post-intervention	PPASPOSTINTERV	Section	0 .. 1
episodeContainer	Proximal PAS Device	PPASDEV	Repeater Section	0 .. n
episodeContainer	Atrial Septal Defect Closure	ASD	Section	0 .. 1
episodeContainer	ASD Imaging View 1	ASDIMGV1	Section	0 .. 1
episodeContainer	ASD Imaging View 2	ASDIMGV2	Section	0 .. 1
episodeContainer	ASD Imaging	ASDIMG	Section	0 .. 1
episodeContainer	ASD Device	ASDDEV	Repeater Section	0 .. n
episodeContainer	ASD Closure	ASD2	Section	0 .. 1
episodeContainer	Aortic Valvuloplasty	AV	Section	0 .. 1
episodeContainer	Patent Ductus Arteriosus (PDA) Closure	PDA	Section	0 .. 1
episodeContainer	PDA Intra-Procedure	PDAINTRAPROC	Section	0 .. 1
episodeContainer	PDA Closure Device	PDADEV	Repeater Section	0 .. n
episodeContainer	PDA Outcome	PDAOUTCOME	Section	0 .. 1
episodeContainer	Transcatheter Pulmonary Valve Replacement	TPVR	Section	0 .. 1
episodeContainer	TPVR Device	TPVRDEV	Repeater Section	0 .. n
episodeContainer	TPVR Valve Deployed	TPVRVALVE	Section	0 .. 1

Section Containment Structure

Container Class	Section	Section Code	Section Type	Cardinality
episodeContainer	TPVR Imaging	TPVRIMG	Section	0 .. 1
episodeContainer	Non-module Intervention	NMI	Repeater Section	0 .. n
episodeContainer	Non-module Intervention Device	NMIDEV	Repeater Section	0 .. n
episodeContainer	Wolff-Parkinson-White Syndrome	WPW	Section	0 .. 1
episodeContainer	WPW Procedure	WPWPROC	Repeater Section	0 .. n
episodeContainer	Concealed Accessory Pathway and Permanent Junctional Reciprocating Tachycardia	CAPPJRT	Section	0 .. 1
episodeContainer	CAPPJRT Procedure	CAPPJRTPROC	Repeater Section	0 .. n
episodeContainer	AV Nodal Reentrant Tachycardia	AVNRT	Section	0 .. 1
episodeContainer	AVNRT Procedure	AVNRTPROC	Repeater Section	0 .. n
episodeContainer	Focal Atrial Tachycardia	FAT	Section	0 .. 1
episodeContainer	FAT Procedure	FATPROC	Repeater Section	0 .. n
episodeContainer	Macroreentrant Atrial Tachycardia	MRAT	Section	0 .. 1
episodeContainer	MRAT Procedure	MRATPROC	Repeater Section	0 .. n
episodeContainer	MRAT High Density Mapping Catheter	MRATMAPCATH	Repeater Section	0 .. n
episodeContainer	MRAT	MRAT2	Section	0 .. 1
episodeContainer	Ventricular Arrhythmias	VA	Section	0 .. 1
episodeContainer	VA Procedure	VAPROC	Repeater Section	0 .. n
episodeContainer	Junctional Tachycardia	JT	Section	0 .. 1
episodeContainer	Device Information	DEVINFO	Repeater Section	0 .. n
episodeContainer	New Cardiovascular Implantable Electronic Device	NCIED	Section	0 .. 1
episodeContainer	CIED Device	CIEDDEV	Repeater Section	0 .. n
episodeContainer	New Pacemaker Generator	NPPM	Section	0 .. 1
episodeContainer	ICD Generator	ICDGEN	Section	0 .. 1
episodeContainer	New Implantable Loop Recorder (ILR)	NILR	Section	0 .. 1
episodeContainer	Leads	LEADS	Repeater Section	0 .. n
episodeContainer	Intra- and Post-Procedure Events	INTPOSTEVENT	Section	0 .. 1
episodeContainer	IPP Events	IPPEVENTS	Repeater Section	0 .. n
episodeContainer	IPP Event Details	IPPEVENTDET	Section	0 .. 1
episodeContainer	Post-Procedure Treatments	POSTPROCTX	Repeater Section	0 .. n
episodeContainer	Post-Procedure Treatment Details	POSTPROCTXDET	Section	0 .. 1
episodeContainer	Discharge	DISCHARGE	Section	1 .. 1
submissionInfoContainer	Administration	ADMIN	Section	1 .. 1

Reference Code System Listing

Code System Name	Code System
ACC NCDR	2.16.840.1.113883.3.3478.6.1
United States Social Security Number (SSN)	2.16.840.1.113883.4.1
HL7 Race	2.16.840.1.113883.5.104
HL7 Ethnicity	2.16.840.1.113883.5.50
SNOMED CT	2.16.840.1.113883.6.96
LOINC	2.16.840.1.113883.6.1
ACC NCDR EP Devices	2.16.840.1.113883.3.3478.6.1.21
ACC NCDR Lead Devices	2.16.840.1.113883.3.3478.6.1.20
ACC NCDR Catheter Ablation Devices	2.16.840.1.113883.3.3478.6.1.22
PHDSC	2.16.840.1.113883.3.221.5
HL7 Administrative Gender	2.16.840.1.113883.5.1
HL7NullFlavor	2.16.840.1.113883.5.1008
HL7 Discharge disposition	2.16.840.1.113883.12.112
RxNorm	2.16.840.1.113883.6.88
USPostalCodes	2.16.840.1.113883.6.231
ACC NCDR Intracoronary Devices	2.16.840.1.113883.3.3478.6.1.101
Centers for Medicare & Medicaid Services	2.16.840.1.113883.4.927
clinicaltrials.gov	2.16.840.1.113883.3.1077