A. DEMOGRAPHICS

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

Supporting Definition:

Technical Specification

Short Name: LastName
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 2010 First Name

Coding Instruction: Indicate the patient's first name.

Target Value: The value on arrival at this facility

Supporting Definition:

Technical Specification

Short Name: FirstName
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

A. DEMOGRAPHICS

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

Supporting Definition:

Technical Specification

Short Name: MidName
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: 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

Supporting Definition:

Technical Specification

Short Name: SSN
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (9)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

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

A. DEMOGRAPHICS

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

Supporting Definition:

Technical Specification

Short Name: SSNNA
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

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

Supporting Definition:

Technical Specification

Short Name: NCDRPatientID
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: Integer (9)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range: 1-999999999
DataSource: Automatic

A. DEMOGRAPHICS

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

Supporting Definition:

Technical Specification

Short Name: OtherID
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 2050 Birth Date

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

Target Value: The value on arrival at this facility

Supporting Definition:

Technical Specification

Short Name: DOB
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

A. DEMOGRAPHICS

Element: 2060 Sex

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

Target Value: The value on arrival at this facility

Supporting Definition:

Technical Specification

Short Name: Sex
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Code System	Code	Selection Text	Definition
HL7 Administrative Gender	M	Male	
HL7 Administrative Gender	F	Female	

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

Supporting Definition:

Technical Specification

Short Name: ZipCode
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (5)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

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

A. DEMOGRAPHICS

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

Supporting Definition:

Technical Specification

Short Name: ZipCodeNA
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: 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 (race)**

Having origins in any of the original peoples of Europe, the Middle East, or North Africa.

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

Technical Specification

Short Name: RaceWhite
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

A. DEMOGRAPHICS

Element: 2071 Race - Black/African American

Coding Instruction: Indicate if the patient is Black or African American 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: **Black/African American (race)**

Having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."

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

Technical Specification

Short Name: RaceBlack
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: 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 (race)**

Having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

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

Technical Specification

Short Name: RaceAsian
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

A. DEMOGRAPHICS

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 Alaskan Native (race)**

Having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

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

Technical Specification

Short Name: RaceAmIndian
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

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: **Race - Native Hawaiian/Pacific Islander - Native Hawaiian**

Having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

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

Technical Specification

Short Name: RaceNatHaw
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

A. DEMOGRAPHICS

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 Ethnicity**

A person of Cuban, Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."

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

Technical Specification

Short Name: HispOrig
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 2080 Race - Asian Indian

Coding Instruction: Indicate if the patient is Asian Indian 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 Indian**

Having origins in any of the original peoples of India.

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

Technical Specification

Short Name: RaceAsianIndian
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2072 Race - Asian
Value: Yes

A. DEMOGRAPHICS

Element: 2081 Race - Chinese

Coding Instruction: Indicate if the patient is Chinese 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 - Chinese**

Having origins in any of the original peoples of China.

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

Technical Specification

Short Name: RaceChinese
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2072 Race - Asian
Value: Yes

Element: 2082 Race - Filipino

Coding Instruction: Indicate if the patient is Filipino 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 - Filipino**

Having origins in any of the original peoples of the Philippines.

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

Technical Specification

Short Name: RaceFilipino
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2072 Race - Asian
Value: Yes

A. DEMOGRAPHICS

Element: 2083 Race - Japanese

Coding Instruction: Indicate if the patient is Japanese 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 - Japanese**

Having origins in any of the original peoples of Japan.

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

Technical Specification

Short Name: RaceJapanese
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2072 Race - Asian
Value: Yes

Element: 2084 Race - Korean

Coding Instruction: Indicate if the patient is Korean 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 - Korean**

Having origins in any of the original peoples of Korea.

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

Technical Specification

Short Name: RaceKorean
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2072 Race - Asian
Value: Yes

A. DEMOGRAPHICS

Element: 2085 Race - Vietnamese

Coding Instruction: Indicate if the patient is Vietnamese 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 - Vietnamese**

Having origins in any of the original peoples of Viet Nam.

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

Technical Specification

Short Name: RaceVietnamese
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2072 Race - Asian
Value: Yes

Element: 2086 Race - Other Asian

Coding Instruction: Indicate if the patient is of Other Asian descent 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 - Other Asian**

Having origins in any of the original peoples elsewhere in Asia.

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

Technical Specification

Short Name: RaceAsianOther
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2072 Race - Asian
Value: Yes

A. DEMOGRAPHICS

Element: 2090 Race - Native Hawaiian

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**

Having origins in any of the original peoples of the islands of Hawaii.

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

Technical Specification

Short Name: RaceNativeHawaii
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2074 Race - Native Hawaiian/Pacific Islander
Value: Yes

Element: 2091 Race - Guamanian or Chamorro

Coding Instruction: Indicate if the patient is Guamanian or Chamorro 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/Pacific Islander - Guamanian or Chamorro**

Having origins in any of the original peoples of the Mariana Islands or the island of Guam.

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

Technical Specification

Short Name: RaceGuamChamorro
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2074 Race - Native Hawaiian/Pacific Islander
Value: Yes

A. DEMOGRAPHICS

Element: 2092 Race - Samoan

Coding Instruction: Indicate if the patient is Samoan 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/Pacific Islander - Samoan**

Having origins in any of the original peoples of the island of the Samoa.

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

Technical Specification

Short Name: RaceSamoan
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2074 Race - Native Hawaiian/Pacific Islander
Value: Yes

Element: 2093 Race - Other Pacific Islander

Coding Instruction: Indicate if the patient is Other 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/Pacific Islander - Other Pacific Island**

Having origins in any of the original peoples of any other island in the Pacific.

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

Technical Specification

Short Name: RacePacificIslandOther
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2074 Race - Native Hawaiian/Pacific Islander
Value: Yes

A. DEMOGRAPHICS

Element: 2100 Hispanic Ethnicity Type - Mexican, Mexican-American, Chicano

Coding Instruction: Indicate if the patient is Mexican, Mexican - American, or Chicano 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 Ethnicity - Mexican/Mexican American/Chicano**

Having origins in any of the original peoples of Mexico.

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

Technical Specification

Short Name: HispEthnicityMexican
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2076 Hispanic or Latino Ethnicity
Value: Yes

Element: 2101 Hispanic Ethnicity Type - Puerto Rican

Coding Instruction: Indicate if the patient is Puerto Rican 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 Ethnicity - Puerto Rican**

Having origins in any of the original peoples of Puerto Rico.

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

Technical Specification

Short Name: HispEthnicityPuertoRico
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2076 Hispanic or Latino Ethnicity
Value: Yes

A. DEMOGRAPHICS

Element: 2102 Hispanic Ethnicity Type - Cuban

Coding Instruction: Indicate if the patient is Cuban 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 Ethnicity - Cuban**

Having origins in any of the original peoples of Cuba.

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

Technical Specification

Short Name: HispEthnicityCuban
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2076 Hispanic or Latino Ethnicity
Value: Yes

Element: 2103 Hispanic Ethnicity Type - Other Hispanic, Latino or Spanish Origin

Coding Instruction: Indicate if the patient is another Hispanic, Latino, or Spanish origin 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 Ethnicity - Other Hispanic/Latino/Spanish Origin**

Having origins in any of the originals peoples in other Hispanic, Latino or Spanish territories.

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

Technical Specification

Short Name: HispEthnicityOtherOrigin
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 2076 Hispanic or Latino Ethnicity
Value: Yes

B. EPISODE OF CARE

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

Supporting Definition:

Technical Specification

Short Name: EpisodeKey
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: Automatic

Element: 3000 Arrival Date

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

Target Value: N/A

Supporting Definition:

Technical Specification

Short Name: ArrivalDate
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

B. EPISODE OF CARE

Element: 3040 Reason for Admission

Coding Instruction: Indicate the primary reason for admission to your facility.

Target Value: The value on arrival at this facility

Supporting Definition:

Technical Specification

Short Name: ReasonForAdmit
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Code System	Code	Selection Text	Definition
ACC NCDR	100001133	Admitted for procedure	The patient was admitted specifically to have the ICD or lead procedure.
ACC NCDR	100001134	Admitted for Heart Failure	Heart failure is the primary reason the patient was admitted to this facility.
ACC NCDR	100001227	Other Reason	A cardiac problem (excluding heart failure) or non-cardiac problem is the primary reason the patient was admitted to this facility.

Element: 3005 Health Insurance

Coding Instruction: Indicate if the patient has health insurance.

Target Value: The value on arrival at this facility

Supporting Definition:

Technical Specification

Short Name: HealthIns
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

B. EPISODE OF CARE

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

Supporting Definition:

Technical Specification

Short Name: HIPS
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Multiple
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 3005 Health Insurance
Value: Yes

Code System	Code	Selection Text	Definition
PHDSC	5	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.
PHDSC	1	Medicare	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.
PHDSC	2	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.
PHDSC	31	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).
PHDSC	36	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.

B. EPISODE OF CARE

PHDSC	33	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-HIS facilities.
ACC NCDR	100000812	Non-US Insurance	Non-US insurance refers to individuals with a payor that does not originate in the United States.

Element: 3015 Health Insurance Claim Number (HIC)

Coding Instruction: Indicate the patient's Health Insurance Claim (HIC) number.

Note(s):
Enter the Health Insurance Claim (HIC) number for those patients covered by Medicaid. Patients with other insurances will not have a HIC number.

Target Value: The value on arrival at this facility

Supporting Definition: **Health Insurance Claim Number**

The Health Insurance Claim (HIC) number is the unique identifier issued to all Medicare eligible beneficiaries by either the Social Security Administration (SSA) or the Centers for Medicare & Medicaid Services.

Source: Centers for Medicare and Medicaid Services

Technical Specification

Short Name: HIC
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (20)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

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.

Note(s):
Code 'Yes' for those patients enrolled in a research study.

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

Technical Specification

Short Name: EnrolledStudy
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

B. EPISODE OF CARE

Element: 3035 Patient Restriction

Coding Instruction: Indicate if the patient requested for their information not to be used for any research or studies for the associated episode of care.

Note(s):
Documentation must be found in the patient record to support the request of removal of their information.

Target Value: The value on arrival at this facility

Supporting Definition:

Technical Specification

Short Name: PtRestriction
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

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

Supporting Definition:

Technical Specification

Short Name: StudyName
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 3020 Patient Enrolled in Research Study
Value: Yes

B. EPISODE OF CARE

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.

Target Value: N/A

Supporting Definition:

Technical Specification

Short Name: StudyPtID

Missing Data: Report

Harvested: Yes (LDS)

Data Type: String (50)

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 3020 Patient Enrolled in Research Study

Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4000 Prior Heart Failure

Coding Instruction: Indicate if the patient has been diagnosed with heart failure.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **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.

Source: 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

Technical Specification	
Short Name:	HF
Missing Data:	Report
Harvested:	Yes
Data Type:	Boolean
Selection Type:	Single
Unit of Measure:	
Default Value:	Null
Usual Range:	
Valid Range:	
DataSource:	User

C. HISTORY AND RISK FACTORS

Element: 4010 NYHA Functional Classification

Coding Instruction: Indicate the patient's New York Heart Association (NYHA) Functional Classification based upon the physician documented classification at the time of the current procedure.

Note(s):
The NYHA Functional Classification must be specifically documented in the medical record and not coded by the abstractor based upon patient symptoms.

Target Value: The highest value on the first procedure in this admission

Supporting Definition: **NYHA**

The NYHA classes focus on exercise capacity and the symptomatic status of the disease.

Source: 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

Technical Specification

Short Name: NYHA
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4000 Prior Heart Failure
Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	420300004	Class I	Patients with cardiac disease but without resulting limitations of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, or dyspnea.
SNOMED CT	421704003	Class II	Patients with cardiac disease resulting in slight limitation of physical activity. They are comfortable at rest. Ordinary physical activity results in fatigue, palpitation, or dyspnea.
SNOMED CT	420913000	Class III	Patients with cardiac disease resulting in marked limitation of physical activity. They are comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea.
SNOMED CT	422293003	Class IV	Patients with cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms are present even at rest or minimal exertion. If any physical activity is undertaken, discomfort is increased.

C. HISTORY AND RISK FACTORS

Element: 4150 Prior LVEF Assessed

Coding Instruction: Indicate if a left ejection fraction percentage has been assessed.

Target Value: Any occurrence between 12 months prior to arrival and start of the first procedure

Supporting Definition:

Technical Specification

Short Name: PriorLVEFAssessed
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4155 Most Recent LVEF Date

Coding Instruction: Indicate the date of the implanting physician cited LVEF or the most recent LVEF assessed if the implanting physician value is not available.

Note(s):
If the month or day of the LVEF 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 LVEF" documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: Any occurrence between 12 months prior to arrival and start of the first procedure

Supporting Definition:

Technical Specification

Short Name: PriorLVEFDate
Missing Data: Report
Harvested: Yes
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4150 Prior LVEF Assessed
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4160 Most Recent LVEF %

Coding Instruction: Indicate the left ventricular ejection fraction cited by the implanting physician as the indication for the ICD. In the absence of a physician cited LVEF, indicate the most recent left ventricular ejection fraction. The left ventricular ejection fraction can be assessed via invasive (i.e. LV gram), or non-invasive (i.e. Echo, MR, CT or Nuclear) testing.

Note(s):
Enter a percentage in the range of 01 - 99. If a percentage range is reported, report the lowest number of the range (i.e.50-55%, is reported as 50%).

Target Value: The last value between 12 months prior to arrival and start of the first procedure

Supporting Definition: **Most Recent LVEF %**

The left ventricular ejection fraction is the percentage of blood emptied from the left ventricle at the end of contraction.

Source: ACC Clinical Data Standards, Society for Thoracic Surgeons Adult Cardiac Surgery Database (STS)

Technical Specification

Short Name: PriorLVEF
Missing Data: Report
Harvested: Yes
Data Type: Physical Quantity (2,0)
Selection Type: Single
Unit of Measure: %
Default Value: Null
Usual Range: 5-70 %
Valid Range: 1-99 %
DataSource: User

Parent\Child Validation

Element: 4150 Prior LVEF Assessed
Value: Yes

Element: 4165 Syndromes with Risk of Sudden Death

Coding Instruction: Indicate if the patient has a syndrome that puts him/her at risk for sudden death.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: SyndromeRiskDeath
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4170 Syndromes with Risk of Sudden Death Type

Coding Instruction: Indicate the type of syndrome that puts the patient at risk for sudden death.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: SyndromeRiskType

Missing Data: Report

Harvested: Yes

Data Type: Concept Descriptor

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 4165 Syndromes with Risk of Sudden Death

Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	9651007	Long QT syndrome	History of ECG findings of prolonged QT interval. Long QT Syndrome includes prolongation of the corrected QT interval beyond 440 ms for adult males, 460 ms for adult females and 500 ms in the presence of ventricular depolarization abnormalities (i.e., bundle branch blocks or IVCB more than 120 ms. Note: A normal QT interval in a resting ECG with a failure to shorten with an increase in heart rate qualifies as Long QT Syndrome.
SNOMED CT	698272007	Short QT syndrome	History of ECG findings of short QT interval. Short QT Syndrome is characterized by a QT interval of <=300 ms.
SNOMED CT	418818005	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.

C. HISTORY AND RISK FACTORS

ACC NCDR	100000956	Catecholaminergic polymorphic VT	Ventricular Tachycardia associated with syncope and/or cardiac arrest triggered by emotion or exercise in patients whose baseline ECG is normal.
ACC NCDR	100001014	Idiopathic/primary VT/VF	Ventricular tachycardia or ventricular fibrillation whose cause is unknown.

Element: 4175 Familial Syndrome with Risk of Sudden Death

Coding Instruction: Indicate if the patient has any first degree family member, who is a direct blood relative (parents, siblings, children), who has been diagnosed with a syndrome with risk of sudden death.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Familial Syndrome with Risk of Sudden Death**

Sudden cardiac death may result from a combination of epidemiological risk factors, structural, metabolic and genetic determinants. Syndromes with risk of sudden death may include:
- Brugada Syndrome
- Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT)
- Long QT Syndrome (LQTS)
- Short QT Syndrome (SQTS)
- Timothy Syndrome
- Wolff Parkinson White (WPW)

Other related conditions may include structural malformations of the heart muscle. A dysplasia (misplaced) or cardiomyopathy (thickening) of the heart muscle can be related to Arrhythmogenic Right Ventricular Dysplasia/Cardiomyopathy (ARVD/C), hypertrophic cardiomyopathy (HCM), or Dilated Cardiomyopathy (DM).

Source: Circulation. 2008; 118: 1854-1863 doi: 10.1161/CIRCULATIONAHA.108.783654

Technical Specification

Short Name: FamilialSyndSuddenDeath
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4180 Familial History of Non-Ischemic Cardiomyopathy

Coding Instruction: Indicate if the patient has any first degree family member, who is a direct blood relative (parents, siblings, children), who has a history of non-ischemic cardiomyopathy.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: FamilialHxNICM
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4185 Ischemic Cardiomyopathy

Coding Instruction: Indicate if the patient has been diagnosed with a history of ischemic cardiomyopathy.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Ischemic Cardiomyopathy**

Indicate if the patient has a history of ischemic cardiomyopathy documented by heart failure and reduced systolic function (ejection fraction <40%) and history of any one of the following:
1. History of myocardial infarction (MI) manifested as
a) Wall motion abnormality felt consistent with MI on echocardiography, nuclear imaging, ventriculography, cardiac MR, or other imaging;
b) ECG evidence of prior MI or acute MI;
c) Cardiac biomarker elevation and clinical presentation (e.g., chest pain) consistent with MI;

2. History of Percutaneous Coronary Angioplasty;

3. History of Coronary Artery Bypass Graft Surgery;

4. Conventional coronary angiography demonstrates >=70% stenosis in at least one major coronary artery.

5. Stress testing (with or without imaging) diagnostic of coronary artery disease.

Source: NCDR

Technical Specification

Short Name: ISCM
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4190 Ischemic Cardiomyopathy Timeframe

Coding Instruction: Indicate the timeframe since the initial diagnosis of ischemic cardiomyopathy.

Target Value: The first value between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: ISCMTimeframe
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4185 Ischemic Cardiomyopathy
Value: Yes

Code System	Code	Selection Text	Definition
ACC NCDR	100001028	Less than 3 months	
ACC NCDR	100000924	3 months or more	

C. HISTORY AND RISK FACTORS

Element: 4195 Ischemic Cardiomyopathy Guideline Directed Medical Therapy Maximum Dose

Coding Instruction: Indicate if patient has been on guideline directed medical therapy at least 3 months.

Target Value: The first value between birth and the first procedure in this admission

Supporting Definition: **Ischemic Guideline Directed Medical Therapy Maximum Dose**

For heart failure in the setting of LV systolic dysfunction, this may require individualization but typically should include the combination of an angiotensin-converting enzyme inhibitor or angiotensin receptor blocker and beta blocker therapy adjusted to target doses as tolerated, with diuretics adjusted if/as needed to control fluid retention. In selected patients, the addition of aldosterone antagonists is appropriate. In addition, in some cases the use of a combination of hydralazine and nitrates may be used instead of an ACE inhibitor / angiotensin receptor blocker. Patients who are going to receive substantial benefit from medical treatment alone usually show some clinical improvement during the first 3 to 6 months. Medical therapy is also assumed to include adequate rate control for tachyarrhythmias, including atrial fibrillation. Therefore, it is recommended that GDMT be provided for at least 3 months before planned reassessment of LV function to consider device implantation. If LV function improves to the point where primary prevention indications no longer apply, then device implantation is not indicated. For stable ischemic heart disease, GDMT should include aspirin (or a thienopyridine if aspirin is not tolerated), statin therapy, angiotensin-converting enzyme inhibition (or an angiotensin receptor blocker) and the use of beta-blockers after myocardial infarction. Therapy for angina/ischemia should include at least 1 of the following medications: beta-blockers, calcium channel antagonists, or nitrates. Therapy should also be directed at optimizing the treatment of associated conditions such as diabetes and uncontrolled hypertension.

Source: 1) O'Gara PT, Kushner FG, Ascheim DD, et al. 2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 2013;61
2) Russo AM, Stainback RF, Bailey SR, et al. ACCF/HRS/AHA/ASE/HFSA/SCAI/SCCT/SCMR 2013 appropriate use criteria for implantable cardioverter-defibrillators and cardiac resynchronization therapy. J Am Coll Cardiol 2013;61:1318-68. doi: 10.1016/j.jacc.2012.12.017

Technical Specification

Short Name: ISCMGDMTDose
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4185 Ischemic Cardiomyopathy
Value: Yes

Code System	Code	Selection Text	Definition
ACC NCDR	100001037	Yes (for 3 months)	The patient has been prescribed guideline directed medical therapy for at least 3 months.
ACC NCDR	100001036	Not Documented	There is no documentation of guideline directed medical therapy being prescribed.
ACC NCDR	100001035	Not Attempted	Guideline directed medical therapy was not attempted on the patient.

C. HISTORY AND RISK FACTORS

ACC NCDR	100001038	Inability to complete	The patient was unable to continue the guideline directed medical therapy for 3 months or the patient is on guideline directed medical therapy but it has been less than 3 months.

Element: 4200 Non-Ischemic Cardiomyopathy

Coding Instruction: Indicate if the patient has been diagnosed with a history of non-ischemic cardiomyopathy.

Note(s):
A patient with heart failure or a documented history of heart failure and an ejection fraction less than 40 would qualify as a 'Yes' if the operator identifies the cardiomyopathy is non-ischemic in origin.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: NICM
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4205 Non-Ischemic Cardiomyopathy Timeframe

Coding Instruction: Indicate the timeframe since the initial diagnosis of non-ischemic cardiomyopathy.

Target Value: The first value between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: NICMTimeframe
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4200 Non-Ischemic Cardiomyopathy
Value: Yes

Code System	Code	Selection Text	Definition
ACC NCDR	100001028	Less than 3 months	
ACC NCDR	100000924	3 months or more	

C. HISTORY AND RISK FACTORS

Element: 4210 Non-Ischemic Guideline Directed Medical Therapy Maximum Dose

Coding Instruction: Indicate if patient has been on guideline directed medical therapy for at least 3 months.

Target Value: The first value between birth and the first procedure in this admission

Supporting Definition: **Non-Ischemic Guideline Directed Medical Therapy Maximum Dose**

For heart failure in the setting of LV systolic dysfunction, this may require individualization but typically should include the combination of an angiotensin-converting enzyme inhibitor or angiotensin receptor blocker and beta blocker therapy adjusted to target doses as tolerated, with diuretics adjusted if/as needed to control fluid retention. In selected patients, the addition of aldosterone antagonists is appropriate. In addition, in some cases the use of a combination of hydralazine and nitrates may be used instead of an ACE inhibitor / angiotensin receptor blocker. Patients who are going to receive substantial benefit from medical treatment alone usually show some clinical improvement during the first 3 to 6 months. Medical therapy is also assumed to include adequate rate control for tachyarrhythmias, including atrial fibrillation. Therefore, it is recommended that GDMT be provided for at least 3 months before planned reassessment of LV function to consider device implantation. If LV function improves to the point where primary prevention indications no longer apply, then device implantation is not indicated. For stable ischemic heart disease, GDMT should include aspirin (or a thienopyridine if aspirin is not tolerated), statin therapy, angiotensin-converting enzyme inhibition (or an angiotensin receptor blocker) and the use of beta-blockers after myocardial infarction. Therapy for angina/ischemia should include at least 1 of the following medications: beta-blockers, calcium channel antagonists, or nitrates. Therapy should also be directed at optimizing the treatment of associated conditions such as diabetes and uncontrolled hypertension.

Source: 1) O'Gara PT, Kushner FG, Ascheim DD, et al. 2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 2013;61
2) Russo AM, Stainback RF, Bailey SR, et al. ACCF/HRS/AHA/ASE/HFSA/SCAI/SCCT/SCMR 2013 appropriate use criteria for implantable cardioverter-defibrillators and cardiac resynchronization therapy. J Am Coll Cardiol 2013;61:1318-68. doi: 10.1016/j.jacc.2012.12.017

Technical Specification

Short Name: NICMGDMTDose
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4200 Non-Ischemic Cardiomyopathy
Value: Yes

Code System	Code	Selection Text	Definition
ACC NCDR	100001037	Yes (for 3 months)	The patient has been prescribed guideline directed medical therapy for at least 3 months.
ACC NCDR	100001036	Not Documented	There is no documentation of guideline directed medical therapy being prescribed.
ACC NCDR	100001035	Not Attempted	Guideline directed medical therapy was not attempted on the patient.

C. HISTORY AND RISK FACTORS

ACC NCDR	100001038	Inability to complete	The patient was unable to continue the guideline directed medical therapy for 3 months or the patient is on guideline directed medical therapy but it has been less than 3 months.

Element: 4215 On Inotropic Support

Coding Instruction: Indicate if the patient is currently prescribed positive IV inotropic agents.

Target Value: The last value between birth and the first procedure in this admission

Supporting Definition: **On Inotropic Support**

On inotropic support includes beta adrenergic receptor agonist in an attempt to achieve beneficial hemodynamic effects in the patient with systolic heart failure (HF).

Source: O'Gara PT, Kushner FG, Ascheim DD, et al. 2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 2013;61

Technical Specification

Short Name: InotropicSupport
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4220 Prior Cardiac Arrest

Coding Instruction: Indicate if the patient experienced cardiac arrest due to arrhythmia.

Note(s):
Code 'No' if a patient experienced ventricular fibrillation caused by lead manipulation during the procedure, and it required defibrillation.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Cardiac Arrest**

"Sudden" Cardiac arrest is the sudden cessation of cardiac activity. The victim becomes unresponsive with no normal breathing and no signs of circulation. If corrective measures are not taken rapidly, this condition progresses to sudden death. Cardiac arrest should be used to signify an event as described above that is reversed, usually by CPR and/or defibrillation or cardioversion or cardiac pacing.

Source: ACCF/AHA 2011 Key Data Elements and Definitions of a Base Cardiovascular Vocabulary for Electronic Health Records. JACC Vol. 58, No. 2, 2011 Weintraub et al. 203; July 5, 2011:202-22

Technical Specification

Short Name: CardiacArrest
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4225 Most Recent Cardiac Arrest Date

Coding Instruction: Indicate the date of the most recent cardiac arrest.

Note(s):
If the month or day of the cardiac arrest 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 cardiac arrest" documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: The last value between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: CardiacArrestDate
Missing Data: Report
Harvested: Yes
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4220 Prior Cardiac Arrest
Value: Yes

Element: 4230 VTach Arrest

Coding Instruction: Indicate if the cardiac arrest was a result of ventricular tachycardia as defined below.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Ventricular Tachycardia**

Ventricular Tachycardia (VT) is a cardiac arrhythmia of 3 or more consecutive complexes in duration emanating from the ventricles at a rate 100 bpm (cycle length: 600 ms).

Source: JACC Vol. 48, No. 11, 2006 ACC/AHA/HRS Clinical Data Standards December 5, 2006:2360-96

Technical Specification

Short Name: VTachArrest
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4220 Prior Cardiac Arrest
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4235 VFib Arrest

Coding Instruction: Indicate if the cardiac arrest was a result of ventricular fibrillation as defined below.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **VFib Arrest**

Rapid, usually more than 300 bpm (cycle length: 180 ms or less), grossly irregular ventricular rhythm with marked variability in QRS cycle length, morphology, and amplitude.

Source: JACC Vol. 48, No. 11, 2006 ACC/AHA/HRS Clinical Data Standards December 5, 2006:2360-96

Technical Specification

Short Name: VFibArrest
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4220 Prior Cardiac Arrest
Value: Yes

Element: 4240 Bradycardia Arrest

Coding Instruction: Indicate if the cardiac arrest was a result of bradycardia.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: BradyArrest
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4220 Prior Cardiac Arrest
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4245 Ventricular Tachycardia

Coding Instruction: Indicate if the patient has a history of ventricular tachycardia (VT). To qualify as history, VT should be spontaneous and not induced.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Ventricular Tachycardia**

Ventricular Tachycardia (VT) is a cardiac arrhythmia of 3 or more consecutive complexes in duration emanating from the ventricles at a rate 100 bpm (cycle length: 600 ms).

Source: JACC Vol. 48, No. 11, 2006 ACC/AHA/HRS Clinical Data Standards December 5, 2006:2360-96

Technical Specification

Short Name: VT
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4250 Most Recent Ventricular Tachycardia Date

Coding Instruction: Indicate the date of the most recent ventricular tachycardia.

Note(s):
If the month or day of the ventricular tachycardia 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 ventricular tachycardia" documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: The last value between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: VTDate
Missing Data: Report
Harvested: Yes
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4245 Ventricular Tachycardia
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4255 Ventricular Tachycardia Occurred Post Cardiac Surgery

Coding Instruction: Indicate if the ventricular tachycardia occurred within the 48 hours after cardiac surgery.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: VTPostCardiacSurgery
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4245 Ventricular Tachycardia
Value: Yes

Element: 4260 Bradycardia dependent Ventricular Tachycardia

Coding Instruction: Indicate if the ventricular tachycardia is bradycardia dependent.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: BradyDependent
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4245 Ventricular Tachycardia
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4265 Ventricular Tachycardia Reversible Cause

Coding Instruction: Indicate if the ventricular tachycardia was deemed to be a result of a reversible cause. This could include, but is not limited to, drug abuse or electrolyte imbalance.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Ventricular Tachycardia Reversible Cause**

Definition of ventricular tachycardia due to a reversible cause. The most common putative reversible causes of arrest are acute ischemia and electrolyte imbalance. Other common potential causes to which cardiac arrest is attributed include proarrhythmic effects of antiarrhythmic drugs (see supporting references).

1) Electrolyte abnormalities, including hypokalemia and hypomagnesemia, facilitate development of VT in predisposed patients receiving antiarrhythmic agents and other drugs associated with the LQTS. However, hypokalemia can also result from cardiac arrest and should not otherwise be assumed to be the cause of cardiac arrest, except under unusual circumstances.(see reference below) Correction of hypokalemia does not affect inducibility of monomorphic VT occurring after MI. Electrolyte abnormalities should not be assumed to be the cause of cardiac arrest, except in the presence of drug-induced LQTS.

2) Drugs: In patients who develop polymorphic VT in association with drug-induced QT prolongation, withdrawal of the offending antiarrhythmic or other agent (e.g., antipsychotic) is usually sufficient to prevent arrhythmia recurrence. If ventricular function is normal, no therapy beyond drug withdrawal, avoidance of future drug exposure, and correction of electrolyte abnormalities is necessary. However, if ventricular function is abnormal, cardiac arrest or syncope should not be attributed solely to antiarrhythmic drugs, and evaluation and treatment should be similar to patients experiencing such events in the absence of antiarrhythmic drugs. Occasionally, patients develop monomorphic sustained VT only in the presence of antiarrhythmic drugs without QT prolongation. In such cases, it may appear that the development of spontaneous VT is dependent on drug administration. In most patients exhibiting this behavior, the monomorphic VT is inducible by EP testing in the absence of antiarrhythmic drugs.

Source: ACC/AHA/ESC 2006 Guidelines for Management of Patients With Ventricular Arrhythmias

Technical Specification

Short Name: VTReverseCause
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4245 Ventricular Tachycardia
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4270 Ventricular Tachycardia with Hemodynamic Instability

Coding Instruction: Indicate if the patient demonstrated hemodynamic instability while having episodes of sustained or non-sustained ventricular tachycardia.

Note(s):
Hemodynamic instability can include periods of reduced, unstable, or abnormal blood pressure with near syncope, or episodes of syncope. It creates a state of hypoperfusion that does not support normal organ perfusion or function.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: HemoInstability
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4245 Ventricular Tachycardia
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4275 Ventricular Tachycardia Type

Coding Instruction: Indicate the type of ventricular tachycardia.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: VTType
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4245 Ventricular Tachycardia
Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	444658006	Non Sustained Ventricular tachycardia	Non-sustained or un-sustained ventricular tachycardia (VT) is three or more beats in duration, terminating spontaneously in <30 seconds. Non-sustained VT can be monomorphic or polymorphic.
SNOMED CT	251158004	Ventricular tachycardia, monomorphic	Sustained monomorphic ventricular tachycardia (VT) is VT >30 seconds in duration or requiring termination due to hemodynamic compromise in <30 seconds that has a stable, single QRS morphology.
SNOMED CT	251159007	Ventricular tachycardia, polymorphic	Sustained polymorphic ventricular tachycardia (VT) is VT >30 seconds in duration or requiring termination due to hemodynamic compromise in <30 seconds that has a changing or multiform QRS morphology at cycle length >180 milliseconds.
ACC NCDR	100001127	Ventricular tachycardia, monomorphic and polymorphic	The patient has a history of both sustained monomorphic and sustained polymorphic ventricular tachycardia.

C. HISTORY AND RISK FACTORS

Element: 4280 Syncope

Coding Instruction: Indicate if the patient has a history of syncope, due to, or highly suspicious for, arrhythmic origin.

Note(s):
Code 'No' if the patient reports pre-syncope/near syncope (as described by dizziness, lightheadedness, feeling faint, or graying out).

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: Syncope
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4285 Coronary Artery Disease

Coding Instruction: Indicate if the patient has a history of coronary artery disease (CAD).

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Coronary Artery Disease**

Current or previous history of any of the following:
- Coronary artery stenosis >=50% (by cardiac catheterization or other modality or of direct imaging of the coronary arteries)
- Previous CABG surgery
- Previous PCI
- Previous MI

Source: ACCF/AHA 2011 Key Data Elements and Definitions of a Base Cardiovascular Vocabulary for Electronic Health Records (JACC 2011;58;202-222).

Technical Specification

Short Name: CAD
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4290 Prior Myocardial Infarction

Coding Instruction: Indicate if the patient has ever been diagnosed with a myocardial infarction.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Myocardial Infarction/Prior MI**

Criteria for acute myocardial infarction:
The term acute myocardial infarction (MI) should be used when there is evidence of myocardial necrosis in a clinical setting consistent with acute myocardial ischemia. Under these conditions any one of the following criteria meets the diagnosis for MI:
- Detection of a rise and/or fall of cardiac biomarker values [preferably cardiac troponin (cTn) with at least one value above the 99th percentile upper reference limit (URL) and with at least one of the following:

Symptoms of ischemia.
New or presumed new significant ST-segment-T wave (ST-T) changes or new left bundle branch block (LBBB). Development of pathological Q waves in the ECG.
Imaging evidence of new loss of viable myocardium or new regional wall motion abnormality. Identification of an intracoronary thrombus by angiography or autopsy.

- Cardiac death with symptoms suggestive of myocardial ischemia and presumed new ischemic ECG changes or new LBBB, but death occurred before cardiac biomarkers were obtained, or before cardiac biomarker values would be increased.

- Percutaneous coronary intervention (PCI) related MI is arbitrarily defined by elevation of cTn values (>5 x 99th percentile URL) in patients with normal baseline values (99th percentile URL) or a rise of cTn values >20% if the baseline values are elevated and are stable or falling. In addition, either (i) symptoms suggestive of myocardial ischemia or (ii) new ischemic ECG changes or (iii) angiographic findings consistent with a procedural complication or (iv) imaging demonstration of new loss of viable myocardium or new regional wall motion abnormality are required.

- Stent thrombosis associated with MI when detected by coronary angiography or autopsy in the setting of myocardial ischemia and with a rise and/or fall of cardiac biomarker values with at least one value above the 99th percentile URL.

- Coronary artery bypass grafting (CABG) related MI is arbitrarily defined by elevation of cardiac biomarker values (>10 x 99th percentile URL) in patients with normal baseline cTn values (99th percentile URL). In addition, either (i) new pathological Q waves or new LBBB, or (ii) angiographic documented new graft or new native coronary artery occlusion, or (iii) imaging evidence of new loss of viable myocardium or new regional wall motion abnormality.

Any one of the following criteria meets the diagnosis for prior MI:
- Pathological Q waves with or without symptoms in the absence of non-ischemic causes.

Technical Specification	
Short Name:	PriorMI
Missing Data:	Report
Harvested:	Yes
Data Type:	Boolean
Selection Type:	Single
Unit of Measure:	
Default Value:	Null
Usual Range:	
Valid Range:	
DataSource:	User

C. HISTORY AND RISK FACTORS

- Imaging evidence of a region of loss of viable myocardium that is thinned and fails to contract, in the absence of a non-ischemic cause.
- Pathological findings of a prior MI.

Source: Thygesen K, Alpert JS, Jaffe AS, et al. Third Universal Definition of Myocardial Infarction. J Am Coll Cardiol. 2012;60(16):1581-1598. doi:10.1016/j.jacc.2012.08.001.

Element: 4295 Most Recent MI Date

Coding Instruction: Indicate the date of the most recent myocardial infarction.

Note(s):
If the month or day of the myocardial infarction 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 myocardial infarction" documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: The last value between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: PriorMIDate
Missing Data: Report
Harvested: Yes
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4290 Prior Myocardial Infarction
Value: Yes

Element: 4300 Coronary Angiography

Coding Instruction: Indicate if the patient has had a prior diagnostic coronary angiography.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Coronary Angiography**

Coronary angiography is defined as the passage of a catheter into the aortic root or other great vessels for angiography of the native coronary arteries or bypass grafts supplying native coronary arteries. This element would NOT include noninvasive CT angiography.

Source: American College of Cardiology and American Heart Association Task Force on Clinical Data Standards (Writing Committee to Develop Artery Disease: A Report of the American College of Cardiology Foundation/American.
Management and Outcomes of Patients With Acute Coronary Syndromes and Coronary 2013 ACCF/AHA Key Data Elements and Definitions for Measuring the Clinical Circulation. 2013;127:1052-1089; originally published online January 28, 2013;

Technical Specification

Short Name: CoronaryAngio
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4305 Performed After Most Recent Cardiac Arrest

Coding Instruction: Indicate if the coronary angiography was performed after the most recent cardiac arrest.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: PerfAfterRecentCA

Missing Data: Report

Harvested: Yes

Data Type: Boolean

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 4300 Coronary Angiography

Value: Yes

Element: 4220 Prior Cardiac Arrest

Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4310 Results of Angiography

Coding Instruction: Indicate the result of the coronary angiography performed.

Target Value: Any occurrence between birth and the procedure

Supporting Definition:

Technical Specification

Short Name: CoronaryAngioResults
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4300 Coronary Angiography
Value: Yes

Code System	Code	Selection Text	Definition
ACC NCDR	100000641	No significant disease	There was <50% stenosis in the left main coronary artery and <70% in all major coronary artery branches >= 2.0 mm.
ACC NCDR	100001223	Significant disease	There was >= 50% stenosis in the left main coronary artery and/or >=70% stenosis in any major coronary artery (>= 2.0 mm).
ACC NCDR	100001220	Non-revascularizable significant disease	The patient is not a candidate for revascularization of their significant coronary artery disease.

C. HISTORY AND RISK FACTORS

Element: 4315 Revascularization Performed

Coding Instruction: Indicate if an attempt at revascularization of the coronary artery disease was performed.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: RevascPerf
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4310 Results of Angiography
Value: Significant disease

Element: 4320 Revascularization Outcome

Coding Instruction: Indicate the outcome of the revascularization.

Target Value: The last value between birth and current procedure

Supporting Definition:

Technical Specification

Short Name: RevascOutcome
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4315 Revascularization Performed
Value: Yes

Code System	Code	Selection Text	Definition
ACC NCDR	100001221	Complete revascularization	Residual stenosis <50% in all revascularizable diseased coronary arteries.
ACC NCDR	100001222	Incomplete revascularization	Not all revascularizable diseased coronary arteries resulted in <50% stenosis.

C. HISTORY AND RISK FACTORS

Element: 4325 Prior Cardiovascular Implantable Electronic Device

Coding Instruction: Indicate if the patient currently has a permanent pacemaker or defibrillator present or if they had at any time in the past.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: PriorCIED
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4330 Indications for Permanent Pacemaker

Coding Instruction: Indicate if the patient has a clinical condition for which a permanent pacemaker is indicated.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Indications for Permanent Pacemaker**

Refer to the source for the supporting definition.

Source: Gillis AM, Russo AM, Ellenbogen KA, et al. HRS/ACCF expert consensus statement on pacemaker device and mode selection: developed in partnership between the Heart Rhythm Society (HRS) and the American College of Cardiology Foundation (ACCF) and in collaboration with the Society of Thoracic Surgeons. Heart Rhythm 2012;9:1344-65

Technical Specification

Short Name: Pacemaker
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4335 Class I or Class II Guideline Bradycardia Pacemaker Indication Present

Coding Instruction: Indicate if the patient has a Class I or Class II guideline bradycardia indication for pacemaker therapy present independent of requirements for the ICD placement.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Class I or Class II Guideline Bradycardiac Pacemaker Indication Present**

Refer to the source for the supporting definition.

Source: Gillis AM, Russo AM, Ellenbogen KA, et al. HRS/ACCF expert consensus statement on pacemaker device and mode selection: developed in partnership between the Heart Rhythm Society (HRS) and the American College of Cardiology Foundation (ACCF) and in collaboration with the Society of Thoracic Surgeons. Heart Rhythm 2012;9:1344-65

Technical Specification

Short Name: Class1Class2Brady
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4330 Indications for Permanent Pacemaker
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4340 Pacemaker Pacing Type

Coding Instruction: Indicate the type of guideline-directed pacing indicated.

Target Value: The highest value between birth and the first procedure in this admission

Supporting Definition: **Pacemaker Pacing Type**

Refer to the source for the supporting definition.

Source: Epstein AE, DiMarco JP, Ellenbogen KA, Estes NAM III, Freedman RA, et al. ACC/AHA/HRS 2008 guidelines for device-based therapy of cardiac rhythm abnormalities: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Revise the ACC/AHA/NASPE 2002 Guideline Update for Implantation of Cardiac Pacemakers and Antiarrhythmia Devices). J Am Coll Cardiol 2008;51:e1-62

Technical Specification

Short Name: PacemakerPacingType
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4330 Indications for Permanent Pacemaker
Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	251268003	Atrial	
SNOMED CT	251266004	Ventricular	
SNOMED CT	251267008	Both	

C. HISTORY AND RISK FACTORS

Element: 4345 Reason Pacing Indicated

Coding Instruction: Indicate the reason for permanent pacemaker.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Reason Pacing Indicated**

Refer to the source for the supporting definition.

Source: Russo AM, Stainback RF, Bailey SR, et al. ACCF/HRS/AHA/ ASE/HFSA/SCAI/SCCT/SCMR 2013 appropriate use criteria for implantable cardioverter-defibrillators and cardiac resynchronization therapy. J Am Coll Cardiol 2013;61:1318–68. doi: 10.1016/j.jacc.2012.12.017

Technical Specification

Short Name: PacingTypeReason
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4330 Indications for Permanent Pacemaker
Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	36083008	Sick sinus syndrome	
SNOMED CT	27885002	Complete heart block	
SNOMED CT	427989008	Chronotropic incompetence	
SNOMED CT	28189009	Mobitz Type II	
SNOMED CT	54016002	2:1 AV Block	
ACC NCDR	100000940	Atrial lead implant for SVT discrimination	

C. HISTORY AND RISK FACTORS

Element: 4350 Anticipated Requirement of >40% RV Pacing

Coding Instruction: Indicate if the clinician has indicated he/she anticipates the patient will require right ventricular pacing >40% of the time.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: RVAnticipatedRequire
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4330 Indications for Permanent Pacemaker
Value: Yes

Element: 4355 On Heart Transplant Waiting List

Coding Instruction: Indicate if the patient is currently on a waiting list to receive a heart transplant.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: TransplantWaitList
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4360 Candidate for Transplant

Coding Instruction: Indicate if the patient has been identified as a candidate for a heart transplant or is actively under consideration by an advanced heart failure/cardiac team.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Candidate for Transplant**

Refer to the source for the supporting definition

Source: Mehra MR, Kobashigawa J, Starling R, et al. Listing criteria for heart transplantation: International Society for Heart and Lung Transplantation guidelines for the care of cardiac transplant candidates-2006. J Heart Lung Transplant. 2006;25:1024-42

Technical Specification

Short Name: TransplantCandidate
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4365 Candidate for LVAD

Coding Instruction: Indicate if the patient has been identified as a candidate for left ventricular assist device (LVAD) as a patient with refractory end-stage HF.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Candidate for LVAD**

Refer to the source for the supporting definition.

Source: Jessup M, Abraham WT, Casey DE, et al. 2009 focused update: ACCF/AHA guidelines for the diagnosis and management of heart failure in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 2009;53:1343-82

Technical Specification

Short Name: LVADCandidate
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4370 Currently on LVAD

Coding Instruction: Indicate if the patient is currently on a left ventricular assist device (LVAD).

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: CurrentLVAD
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4399 Atrial Fibrillation

Coding Instruction: Indicate if the patient has a history of atrial fibrillation.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: AFib
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4400 Atrial Fibrillation Classification

Coding Instruction: Indicate the type of atrial fibrillation experienced by the patient.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Atrial Fibrillation Classification**

Atrial Fibrillation is a supraventricular tachyarrhythmia with uncoordinated atrial activation and consequently ineffective atrial contraction.

Electrocardiogram (ECG) characteristics include:
1) irregular R-R intervals (when atrioventricular [AV] conduction is present),
2) absence of distinct repeating P waves, and
3) irregular atrial activity.

Atrial Fibrillation can be further characterized as:

- Paroxysmal AF is defined as AF that terminates spontaneously or with intervention within seven days of onset. Episodes may recur with variable frequency.
- Persistent AF is defined as AF that fails to self-terminate within seven days. Episodes often require pharmacologic or electrical cardioversion to restore sinus rhythm.
- Long-standing persistent AF is defined as AF that has lasted for more than 12 month
-Permanent AF is defined as when the patient and clinician make a joint decision to stop further attempts to restore and/or maintain sinus rhythm. Acceptance of AF represents a therapeutic attitude on the part of the patient and clinician rather than an inherent pathophysiological attribute of AF. Acceptance of AF may change as symptoms, efficacy of therapeutic interventions, and patient and clinician preferences evolve.

Source: January CT, Wann LS, Alpert JS, et al. 2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. J Am Coll Cardiol 2014. DOI: 10.1016/j.jacc.2014.03.022

Technical Specification

Short Name: AFibClass
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4399 Atrial Fibrillation
Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	26593000	Paroxysmal	AF that terminates spontaneously or with intervention within 7 days of onset. Episodes may recur with variable frequency.
SNOMED CT	62459000	Persistent	Continuous AF that is sustained >7 days or with electrical or pharmacological termination.
ACC NCDR	100001029	Long-standing Persistent	Continuous AF of >12 months duration.

C. HISTORY AND RISK FACTORS

SNOMED CT	6934004	Permanent	The term “permanent AF” is used when the patient and clinician make a joint decision to stop further attempts to restore and/or maintain sinus rhythm. - Acceptance of AF represents a therapeutic attitude on the part of the patient and clinician rather than an inherent pathophysiological attribute of the AF. - Acceptance of AF may change as symptoms, the efficacy of therapeutic interventions, and patient and clinician preferences evolve.

Element: 4405 Plans for Cardioversion of Atrial Fibrillation

Coding Instruction: Indicate if there is a planned cardioversion for atrial fibrillation.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: AFibFlutterCardioPlans
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4399 Atrial Fibrillation
Value: Yes

Element: 4490 Paroxysmal SVT History

Coding Instruction: Indicate if the patient has a history of paroxysmal supraventricular tachycardia (SVT).

Target Value: Any occurrence between birth and the procedure

Supporting Definition:

Technical Specification

Short Name: ParoxySVTHistory
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4495 Prior Percutaneous Coronary Intervention

Coding Instruction: Indicate if the patient had a percutaneous coronary intervention (PCI), prior to this admission.

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

Supporting Definition:

Technical Specification

Short Name: PriorPCI
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4500 Most Recent Percutaneous Coronary Intervention Date

Coding Instruction: Indicate the date of the most recent percutaneous coronary intervention (PCI) that the patient received prior to this admission.

Note(s):
If the month or day of the PCI 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 PCI" 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

Supporting Definition:

Technical Specification

Short Name: PriorPCIDate
Missing Data: Report
Harvested: Yes
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4495 Prior Percutaneous Coronary Intervention
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4505 Prior PCI Elective

Coding Instruction: Indicate if the prior PCI was performed as an elective procedure and was not performed in an urgent or emergent situation. For stable inpatients, the procedure was performed during the hospitalization for convenience and ease of scheduling and NOT because the patient's clinical situation demanded the procedure prior to discharge.

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

Supporting Definition:

Technical Specification

Short Name: PriorPCIElective
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4495 Prior Percutaneous Coronary Intervention
Value: Yes

Element: 4510 Cardiomyopathy prior to PCI

Coding Instruction: Indicate if the patient had pre-existing cardiomyopathy prior to the PCI procedure.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: PriorPCICardioPresent
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4495 Prior Percutaneous Coronary Intervention
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4515 Prior Coronary Artery Bypass Graft

Coding Instruction: Indicate if the patient had coronary artery bypass graft (CABG) surgery prior to this admission.

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

Supporting Definition:

Technical Specification

Short Name: PriorCABG
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4520 Most Recent Coronary Artery Bypass Graft Date

Coding Instruction: Indicate the date of the most recent CABG that the patient received prior to this admission.

Note(s):
If the month or day of the CABG 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 CABG" 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

Supporting Definition:

Technical Specification

Short Name: PriorCABGDate
Missing Data: Report
Harvested: Yes
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4515 Prior Coronary Artery Bypass Graft
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4525 Prior CABG Elective

Coding Instruction: Indicate if the prior CABG was performed as an elective procedure and was not performed in an urgent or emergent situation. For stable inpatients, the procedure was performed during the hospitalization for convenience and ease of scheduling and NOT because the patient's clinical situation demanded the procedure prior to discharge.

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

Supporting Definition:

Technical Specification

Short Name: PriorCABGElective
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4515 Prior Coronary Artery Bypass Graft
Value: Yes

Element: 4530 Cardiomyopathy prior to Coronary Artery Bypass Graft

Coding Instruction: Indicate if the patient had pre-existing cardiomyopathy prior to the CABG procedure.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: PriorCABGCardioPresent
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4515 Prior Coronary Artery Bypass Graft
Value: Yes

C. HISTORY AND RISK FACTORS

Element: 4535 Primary Valvular Heart Disease

Coding Instruction: Indicate if the patient has a history of primary valvular heart disease that is moderately severe or severe.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: PrimaryValvularHD
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4540 Other Structural Abnormalities

Coding Instruction: Indicate if the patient has any other structural abnormality of the heart, ventricles or great vessels (excluding primary valvular heart disease). These conditions are frequently found in imaging reports such as echo, MRI, CAT scan, MUGA or other imaging studies.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: OtherStructAbn
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4545 Structural Abnormality Type

Coding Instruction: Indicate the structural abnormality type(s).

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Structural Abnormality Type**

Left Ventricular Structural Abnormality Associated with Risk for Sudden Cardiac Arrest - Refer to the source for the supporting definition.

Hypertrophic Cardiomyopathy with High Risk Features:
High risk features include:
- Cardiac arrest (VF)
- Spontaneous sustained VT
- Family history of premature sudden death
- Unexplained syncope
- LV thickness greater than or equal to 30 mm
- Abnormal exercise BP
- Nonsustained spontaneous VT
- AF
- Myocardial ischemia
- LV outflow obstruction
- High-risk mutation
- Intense (competitive) physical exertion

Source: Zipes DP, Camm AJ, Borggrefe M, et al. ACC/AHA/ESC 2006 guidelines for management of patients with ventricular arrhythmias and the prevention of sudden cardiac death: a report of the American College of Cardiology/American Heart Association Task Force and the European Society of Cardiology Committee for Practice Guidelines (Writing Committee to Develop Guidelines for Management of Patients With Ventricular Arrhythmias and the Prevention of Sudden Cardiac Death). Circulation. 2006;114:e385-e484.

Technical Specification

Short Name: StructAbnType
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Multiple
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 4540 Other Structural Abnormalities
Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	87878005	LV structural abnormality associated with risk for sudden cardiac arrest	Left ventricular structural abnormalities including but not limited to left ventricular aneurysm, LV non-compaction syndrome that put the patient at risk for sudden cardiac arrest.
SNOMED CT	233873004	Hypertrophic cardiomyopathy (HCM) with high risk features	
ACC NCDR	100001018	Infiltrative	Infiltrative structural abnormalities including but not limited to amyloidosis, sarcoidosis, giant cell myocarditis, and Chagas disease.
SNOMED CT	281170005	Arrhythmogenic right ventricular cardiomyopathy (ARVC)	
SNOMED CT	13213009	Congenital heart disease associated with sudden cardiac arrest	Congenital heart disease including but not limited to Tetralogy of Fallot and Ventricular Septal Defect that put the patient at risk for sudden cardiac arrest.

C. HISTORY AND RISK FACTORS

Element: 4550 Cerebrovascular Disease

Coding Instruction: Indicate if the patient has a history of cerebrovascular disease.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Cerebrovascular Disease**

Refer to the source for the supporting definition.

Source: Gillis AM, Russo AM, Ellenbogen KA, et al. HRS/ACCF expert consensus statement on pacemaker device and mode selection: developed in partnership between the Heart Rhythm Society (HRS) and the American College of Cardiology Foundation (ACCF) and in collaboration with the Society of Thoracic Surgeons. Heart Rhythm 2012;9:1344-65.

Technical Specification

Short Name: PriorCVD
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4555 Diabetes Mellitus

Coding Instruction: Indicate if the patient has a history of diabetes mellitus regardless of duration of disease or need for diabetic medications.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Diabetes Mellitus**

The American Diabetes Association criteria include documentation of the following:
1. A1c >=6.5%; or
2. Fasting plasma glucose >=126 mg/dl (7.0 mmol/l); or
3. Two-hour plasma glucose >=200 mg/dl (11.1 mmol/l) during an oral glucose tolerance test; or
4. In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose >=200 mg/dl (11.1 mmol/l)

This does not include gestational diabetes.

Source: American Diabetes Association Care. 2011;34 Suppl 1:S4-10.

Technical Specification

Short Name: Diabetes
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

C. HISTORY AND RISK FACTORS

Element: 4560 Currently on Dialysis

Coding Instruction: Indicate if the patient is currently undergoing either hemodialysis or peritoneal dialysis on an ongoing basis as a result of renal failure.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: CurrentDialysis
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 4575 Chronic Lung Disease

Coding Instruction: Indicate if the patient has a history of chronic lung disease.

Note(s):
A history of chronic inhalation reactive disease (asbestosis, mesothelioma, black lung disease or pneumoconiosis) may qualify as chronic lung disease. Radiation induced pneumonitis or radiation fibrosis also qualifies as chronic lung disease. A history of atelectasis is a transient condition and does not qualify.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Chronic Lung Disease**

Chronic lung disease can include patients with chronic obstructive pulmonary disease, chronic bronchitis, or emphysema. It can also include a patient who is currently being chronically treated with inhaled or oral pharmacological therapy (e.g., beta-adrenergic agonist, anti-inflammatory agent, leukotriene receptor antagonist, or steroid). Patients with asthma or seasonal allergies are not considered to have chronic lung disease.

Source: ACC/AHA Key Data Elements and Definitions for Measuring the Clinical Management and Outcomes of Patients With Chronic Heart Failure Circulation. 2005;112:1888-1916

Technical Specification

Short Name: ChronicLungDisease
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

D. DIAGNOSTIC STUDIES

Element: 5000 Electrophysiology Study

Coding Instruction: Indicate if the patient had an electrophysiology study (EPS).

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition: **Electrophysiology Study**

One or more catheters capable of recording and pacing are placed in one or more of the cardiac chambers. The catheters may be used to measure conduction of the impulse from the sinus node to the ventricle; induce a tachycardia; and/or localize (map) the location where the tachycardia originates.

Source: NCDR

Technical Specification

Short Name: EPStudy
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 5005 Electrophysiology Study Date

Coding Instruction: Indicate the date in which the most recent electrophysiology study (EPS) was performed.

Note(s):
If the month or day of the EP study 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 EP study" 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 the first procedure in this admission

Supporting Definition: **Electrophysiology Study**

One or more catheters capable of recording and pacing are placed in one or more of the cardiac chambers. The catheters may be used to measure conduction of the impulse from the sinus node to the ventricle; induce a tachycardia; and/or localize (map) the location where the tachycardia originates.

Source: NCDR

Technical Specification

Short Name: EPStudyDate
Missing Data: Report
Harvested: Yes
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 5010 Electrophysiology Study Date Unknown
Value: No (or Not Answered)

D. DIAGNOSTIC STUDIES

Element: 5010 Electrophysiology Study Date Unknown

Coding Instruction: Indicate if the date when the electrophysiology study (EPS) was performed is unknown.

Target Value: The last value between birth and the first procedure in this admission

Supporting Definition: **Electrophysiology Study**

One or more catheters capable of recording and pacing are placed in one or more of the cardiac chambers. The catheters may be used to measure conduction of the impulse from the sinus node to the ventricle; induce a tachycardia; and/or localize (map) the location where the tachycardia originates.

Source: NCDR

Technical Specification

Short Name: EPStudyDateUnk
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 5000 Electrophysiology Study
Value: Yes

Element: 5015 Clinically Relevant Ventricular Arrhythmias Induced

Coding Instruction: Indicate if clinically relevant ventricular arrhythmias were induced during the electrophysiology study.

Notes(s):
A clinically relevant ventricular arrhythmia induced during electrophysiology study most often represents sustained monomorphic ventricular tachycardia, but can include other clinically relevant, sustained ventricular tachyarrhythmias thought to contribute to syncope, aborted cardiac death, or other serious clinical presentations.

Target Value: Any occurrence between birth and the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: VentArrythInduced
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 5000 Electrophysiology Study
Value: Yes

D. DIAGNOSTIC STUDIES

Element: 5030 Electrocardiogram Performed

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

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: ECG
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 5035 Electrocardiogram Date

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

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: ECGDate
Missing Data: Report
Harvested: Yes
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 5030 Electrocardiogram Performed
Value: Yes

D. DIAGNOSTIC STUDIES

Element: 5040 Electrocardiogram Normal

Coding Instruction: Indicate if the electrocardiogram (ECG) clinical interpretation notes normal sinus rhythm ECG.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: ECGNormal
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 5030 Electrocardiogram Performed
Value: Yes

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 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: VPQRS
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

D. DIAGNOSTIC STUDIES

Element: 5050 Ventricular Paced QRS Duration

Coding Instruction: Indicate the duration of the ventricular paced QRS complex in milliseconds that was derived from the surface electrocardiogram (ECG). Surface ECGs are obtained from the surface of the body and do not include intracardiac ECGs.

Note(s):
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 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: VPacedQRS
Missing Data: Report
Harvested: Yes
Data Type: Physical Quantity (3,0)
Selection Type: Single
Unit of Measure: msec
Default Value: Null
Usual Range: 20-250 msec
Valid Range: 10-300 msec
DataSource: User

Parent\Child Validation

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

Element: 5055 Non-Ventricular Paced QRS duration

Coding Instruction: Indicate the duration of the non-ventricular paced or intrinsic QRS complex, in milliseconds, that was derived from the surface electrocardiogram (ECG). Surface ECGs are obtained from the surface of the body and do not include intracardiac ECGs.

Note(s):
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 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: NVPQRS
Missing Data: Report
Harvested: Yes
Data Type: Physical Quantity (3,0)
Selection Type: Single
Unit of Measure: msec
Default Value: Null
Usual Range: 20-250 msec
Valid Range: 10-300 msec
DataSource: User

Parent\Child Validation

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

D. DIAGNOSTIC STUDIES

Element: 5060 Abnormal Intraventricular Conduction

Coding Instruction: Indicate if the patient has abnormal intraventricular conduction, bundle branch blocks, or non-specific conduction delays.

Note(s):
Code 'No' if the abnormal intraventricular conduction is determined by the physician to be transient or rate related.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: AbConduction
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 5065 Abnormal Intraventricular Conduction Types

Coding Instruction: Indicate the type of intraventricular conduction(s) the patient has.

Note(s):
If the patient has multiple intraventricular conduction types, select all types.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition: **Intraventricular Conduction Types**

-Left Bundle Branch is characterized by QRS duration 120 ms or longer, delayed onset of intrinsicoid deflection in 1, V5, and V6 >60 ms, broad and notched or slurred R waves in I, aVL, V5, and V6, rS or QS complexes in right precordial leads, ST-segment and T waves in opposite polarity to the major QRS deflection.
-Non-Specific abnormal Intraventricular conduction delays are characterized by a QRS duration of 110 ms or more with morphology different from LBBB or RBBB.
-Right Bundle Branch Block is characterized by a QRS duration of 120 ms, rsR'or rSR' complexes in V1 and V2, Delayed onset of intrinsicoid, deflection in V1 and V2 >50 ms, Broad, slurred S wave in 1, V5, and V6 Secondary ST-T wave changes.

Source: ACC/AHA/HRS 2006 Key Data Elements and Definitions for Electrophysiological Studies and Procedures.

Technical Specification

Short Name: IntraVentConductionType
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Multiple
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 5060 Abnormal Intraventricular Conduction
Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	164909002	Left bundle branch block	
SNOMED CT	164907000	Right bundle branch block	
SNOMED CT	698252002	Delay, Non-specific	
SNOMED CT	32758004	Alternating RBBB and LBBB	

D. DIAGNOSTIC STUDIES

Element: 5100 Atrial Rhythm

Coding Instruction: Indicate the patient's atrial rhythm at the start of the procedure.

Note(s):
If the patient has multiple atrial rhythms, select all that apply.

In the event that a patient is ventricular paced, indicate the underlying atrial rhythm.

Target value applies to the first procedure captured for this registry.

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 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: AtrialRhythm
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Multiple
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Code System	Code	Selection Text	Definition
SNOMED CT	106067008	Sinus node rhythm	
SNOMED CT	49436004	Atrial fibrillation	
SNOMED CT	276796006	Atrial tachycardia	
SNOMED CT	5370000	Atrial flutter	
SNOMED CT	5609005	Sinus arrest	
ACC NCDR	100000941	Atrial paced	
ACC NCDR	100001116	Undocumented atrial rhythm	

Element: 5105 Ventricular Paced

Coding Instruction: Indicate if the patient is ventricular paced.

Note(s):
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 on start of the procedure

Supporting Definition:

Technical Specification

Short Name: VPaced
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

E. LABS

Element: 6025 Blood Urea Nitrogen

Coding Instruction: Indicate the blood urea nitrogen (BUN) value, in mg/dL.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: BUN
Missing Data: Report
Harvested: Yes
Data Type: Physical Quantity (2,0)
Selection Type: Single
Unit of Measure: mg/dL
Default Value: Null
Usual Range: 5-20 mg/dL
Valid Range: 1-99 mg/dL
DataSource: User

Parent\Child Validation

Element: 6026 BUN Not Drawn
Value: No (or Not Answered)

Element: 6026 BUN Not Drawn

Coding Instruction: Indicate if a blood urea nitrogen (BUN) was not drawn.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: BUNND
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

E. LABS

Element: 6030 Hemoglobin

Coding Instruction: Indicate the hemoglobin (Hgb) value in g/dL.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: HGB
Missing Data: Report
Harvested: Yes
Data Type: Physical Quantity (4,2)
Selection Type: Single
Unit of Measure: g/dL
Default Value: Null
Usual Range: 5-20 g/dL
Valid Range: 1-50 g/dL
DataSource: User

Parent\Child Validation

Element: 6031 Hemoglobin Not Drawn
Value: No (or Not Answered)

Element: 6031 Hemoglobin Not Drawn

Coding Instruction: Indicate if the hemoglobin value was not drawn.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: HGBND
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

E. LABS

Element: 6035 Sodium

Coding Instruction: Indicate the sodium (Na) level, in mEq/L.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: Sodium
Missing Data: Report
Harvested: Yes
Data Type: Physical Quantity (3,0)
Selection Type: Single
Unit of Measure: mEq/L
Default Value: Null
Usual Range: 120-150 mEq/L
Valid Range: 1-300 mEq/L
DataSource: User

Parent\Child Validation

Element: 6036 Sodium Not Drawn
Value: No (or Not Answered)

Element: 6036 Sodium Not Drawn

Coding Instruction: Indicate if the sodium level was not drawn.

Target Value: The last value within 30 days prior to the first procedure in this admission

Supporting Definition:

Technical Specification

Short Name: SodiumND
Missing Data: Report
Harvested: Yes
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

F. PROCEDURE INFORMATION

Element: 7000 Procedure Start Date and Time

Coding Instruction: Indicate the date and time the procedure started. The time of the procedure is the time that the skin incision, vascular access, or its equivalent, was made in order to start the procedure.

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

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: ProcedureStartDateTime
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: Time Stamp
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 7005 Procedure End Date and Time

Coding Instruction: Indicate the ending date and time at which the operator breaks scrub at the end of the procedure.

Note(s):
If more than one operator is involved in the case then use the date and time the last operator breaks scrub.

Target Value: N/A

Supporting Definition:

Technical Specification

Short Name: ProcedureEndDateTime
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Time Stamp
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

F. PROCEDURE INFORMATION

Element: 7010 ICD Procedure Type

Coding Instruction: Indicate the procedure that was performed.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: ProcedureType
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Code System	Code	Selection Text	Definition
SNOMED CT	233170003	Initial Generator Implant	The patient is receiving an ICD generator for the first time. Complete all sections of the data collection form for all patients having an initial generator implant.
SNOMED CT	428625001	Generator change	The patient already has an ICD and is receiving a generator that is an upgrade or a change from one that was previously implanted. Complete all sections of the data collection form for all patients having a generator change/upgrade.
SNOMED CT	233171004	Generator explant	Patient already has an ICD and is having the generator removed without re-implant of another generator during the current procedure.
ACC NCDR	100001025	Lead Only	A lead procedure is being performed without a generator change. Complete all sections of the data collection form, except section D (Diagnostic Studies), section E (Labs), and section G (ICD Implant/Explant) for all patients having a procedure where new leads were implanted and/or existing leads were reused, extracted or abandoned.

F. PROCEDURE INFORMATION

Element: 7015 ICD Indication

Coding Instruction: Indicate the ICD procedure indication

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: ICDIndication

Missing Data: Report

Harvested: Yes

Data Type: Concept Descriptor

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7010 ICD Procedure Type
Value: Initial Generator Implant

Element: 7010 ICD Procedure Type
Value: Generator change

Element: 7010 ICD Procedure Type
Value: Generator explant

Code System	Code	Selection Text	Definition
SNOMED CT	315233008	Primary prevention	Primary Prevention is 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.
SNOMED CT	315234002	Secondary prevention	Secondary prevention refers to 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.

F. PROCEDURE INFORMATION

Element: 7020 Premarket Clinical Trial

Coding Instruction: Indicate if the ICD procedure (generator implant or lead procedure) is part of a clinical trial, excluding post-market surveillance trials.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification	
Short Name:	ClinicalTrial
Missing Data:	Report
Harvested:	Yes (LDS)
Data Type:	Boolean
Selection Type:	Single
Unit of Measure:	
Default Value:	Null
Usual Range:	
Valid Range:	
DataSource:	User

G. ICD IMPLANT/EXPLANT

Element: 7600 Generator Operator Last Name

Coding Instruction: Indicate the last name of the operator who is implanting the device.

Note(s):
If the name exceeds 50 characters, enter the first 50 letters only.

Target Value: The value on current procedure

Supporting Definition:

Technical Specification

Short Name: GenOpLName
Missing Data: Report
Harvested: Yes
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 7605 Generator Operator First Name

Coding Instruction: Indicate the first name of the operator who is implanting the device.

Note(s):
If the name exceeds 50 characters, enter the first 50 letters only.

Target Value: The value on current procedure

Supporting Definition:

Technical Specification

Short Name: GenOpFName
Missing Data: Report
Harvested: Yes
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

G. ICD IMPLANT/EXPLANT

Element: 7610 Generator Operator Middle Name

Coding Instruction: Indicate the middle name of the operator who is implanting the device.

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 current procedure

Supporting Definition:

Technical Specification

Short Name: GenOpMName
Missing Data: Report
Harvested: Yes
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 7615 Generator Operator NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the operator who is implanting the device. 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

Supporting Definition:

Technical Specification

Short Name: GenOpNPI
Missing Data: Report
Harvested: Yes
Data Type: Integer (10)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

G. ICD IMPLANT/EXPLANT

Element: 7620 Device Implanted

Coding Instruction: Indicate if an ICD device was implanted.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: DeviceImplanted

Missing Data: Illegal

Harvested: Yes

Data Type: Boolean

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7010 ICD Procedure Type

Value: Initial Generator Implant

Element: 7010 ICD Procedure Type

Value: Generator change

G. ICD IMPLANT/EXPLANT

Element: 7625 Final Device Type

Coding Instruction: Indicate the ICD type that was implanted at the completion of the procedure.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: FinalDeviceType

Missing Data: Report

Harvested: Yes

Data Type: Concept Descriptor

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7620 Device Implanted

Value: Yes

Code System	Code	Selection Text	Definition
ACC NCDR	100001214	Single chamber	A single-chamber ICD defibrillates the ventricle and paces the ventricle.
ACC NCDR	100001215	Dual chamber	A dual-chamber ICD defibrillates the ventricle and paces the atrium and ventricle.
ACC NCDR	100001216	CRT-D	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.
ACC NCDR	100001217	S-ICD (Sub Q)	A subcutaneous only defibrillator.

G. ICD IMPLANT/EXPLANT

Element: 7630 Coronary Sinus/Left Ventricular (CS/LV) lead

Coding Instruction: Indicate if the coronary sinus/left ventricular (CS/LV) lead was implanted during the current procedure.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: CSLVLead
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 7620 Device Implanted
Value: Yes

Code System	Code	Selection Text	Definition
ACC NCDR	100001143	Implant unsuccessful	
ACC NCDR	100001057	Not Attempted	
ACC NCDR	100001107	Successfully Implanted	
ACC NCDR	100001084	Previously Implanted	

G. ICD IMPLANT/EXPLANT

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 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

Supporting Definition:

Technical Specification

Short Name: ICDImpID
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor (Dynamic List)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 7620 Device Implanted
Value: Yes

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

Supporting Definition:

Technical Specification

Short Name: ICDImpSerNo
Missing Data: Report
Harvested: Yes
Data Type: String (30)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 7620 Device Implanted
Value: Yes

G. ICD IMPLANT/EXPLANT

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

Short Name: ICDImpUDI

Missing Data: No Action

Harvested: Yes

Data Type: String (150)

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7620 Device Implanted

Value: Yes

G. ICD IMPLANT/EXPLANT

Element: 7650 Reason for ICD Generator Re-Implant

Coding Instruction: Indicate the reason(s) for the re-implant.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: ReImplantReason
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor
Selection Type: Multiple
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 7010 ICD Procedure Type
Value: Generator change

Code System	Code	Selection Text	Definition
ACC NCDR	100001088	Reimplant Reason - End of Battery Life	
ACC NCDR	100001092	Reimplant Reason - Replaced At Time of Lead Revision	
ACC NCDR	100001094	Reimplant Reason - Upgrade	
ACC NCDR	100001091	Reimplant Reason - Infection	
ACC NCDR	100001093	Reimplant Reason - Under Manufacturer Advisory/Recall	
ACC NCDR	100001089	Reimplant Reason - Faulty Connector/Header	
ACC NCDR	100001087	Reimplant Reason - Device Relocation	
ACC NCDR	100001090	Reimplant Reason - Generator Malfunction	

G. ICD IMPLANT/EXPLANT

Element: 7655 Reason for ICD Generator Upgrade

Coding Instruction: Indicate the reason for the upgrade.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: ReasonUpgrade

Missing Data: Report

Harvested: Yes

Data Type: Concept Descriptor

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7650 Reason for ICD Generator Re-Implant

Value: Reimplant Reason - Upgrade

Code System	Code	Selection Text	Definition
ACC NCDR	100001102	Single ICD to Dual ICD	Indicate if a single chamber ICD was removed and replaced by a dual chamber ICD.
ACC NCDR	100001013	ICD to CRT-D	Indicate if a single or dual chamber ICD was removed and replaced by a CRT-D.

G. ICD IMPLANT/EXPLANT

Element: 7660 ICD Generator Explanted

Coding Instruction: Indicate if the previous ICD was explanted.

Target Value: Any occurrence between previous ICD implant and current procedure

Supporting Definition:

Technical Specification

Short Name: DeviceExplant

Missing Data: Report

Harvested: Yes

Data Type: Concept Descriptor

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7010 ICD Procedure Type

Value: Generator explant

Element: 7010 ICD Procedure Type

Value: Generator change

Code System	Code	Selection Text	Definition
ACC NCDR	100001140	Not explanted	
ACC NCDR	100001141	Explanted	
ACC NCDR	100001083	Previously explanted	

G. ICD IMPLANT/EXPLANT

Element: 7665 Prior Generator Explant Date

Coding Instruction: Indicate the date the device was explanted.

Note(s):
If the month or day of the device explanted 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 device explanted documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: The last value between previous ICD implant and current procedure

Supporting Definition:

Technical Specification

Short Name: ExplantDate

Missing Data: Report

Harvested: Yes

Data Type: Date

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7660 ICD Generator Explanted

Value: Previously explanted

G. ICD IMPLANT/EXPLANT

Element: 7670 Explant Treatment Recommendation

Coding Instruction: Indicate the planned treatment post explant of the ICD/CRT-D device at the time of the current procedure.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: ExplantTreatment

Missing Data: Report

Harvested: Yes

Data Type: Concept Descriptor

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7010 ICD Procedure Type

Value: Generator explant

Code System	Code	Selection Text	Definition
ACC NCDR	100001049	No Re-implant	The ICD/CRT-D device has been explanted with no re-implant of any device with pacing or defibrillation capabilities during the current procedure.
ACC NCDR	100000995	Downgrade	The ICD/CRT-D device has been explanted with re-implant of a device with only pacing and no defibrillation capabilities during the current procedure.

G. ICD IMPLANT/EXPLANT

Element: 7675 Explant Device ID

Coding Instruction: Indicate the assigned identification number associated with the explanted device.

Note(s):
The devices that should be collected in your application are controlled by a Defibrillator 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 between previous ICD implant and current procedure

Supporting Definition:

Technical Specification

Short Name: ICDExpID
Missing Data: Report
Harvested: Yes
Data Type: Concept Descriptor (Dynamic List)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 7660 ICD Generator Explanted
Value: Explanted

Element: 7680 Explant Device Serial Number

Coding Instruction: Indicate the serial number of the explanted device.

Target Value: Any occurrence between previous ICD implant and current procedure

Supporting Definition:

Technical Specification

Short Name: ICDExpSerNo
Missing Data: Report
Harvested: Yes
Data Type: String (30)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 7660 ICD Generator Explanted
Value: Explanted

G. ICD IMPLANT/EXPLANT

Element: 7685 Explant 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

Short Name: ICDExplantUDI

Missing Data: No Action

Harvested: Yes

Data Type: String (150)

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 7660 ICD Generator Explanted

Value: Explanted

H. LEAD ASSESSMENT

Element: 7690 Lead Operator Last Name

Coding Instruction: Indicate the last name of the operator who is performing the lead procedure.

Note(s):
If the name exceeds 50 characters, enter the first 50 letters only.

If more than one physician performs the lead procedure, code the operator of record.

Target Value: The value on current procedure

Supporting Definition:

Technical Specification

Short Name: LeadOpLName
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 7695 Lead Operator First Name

Coding Instruction: Indicate the first name of the operator who is performing the lead procedure.

Note(s):
If the name exceeds 50 characters, enter the first 50 letters only.

If more than one physician performs the lead procedure, code the operator of record.

Target Value: The value on current procedure

Supporting Definition:

Technical Specification

Short Name: LeadOpFName
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

H. LEAD ASSESSMENT

Element: 7700 Lead Operator Middle Name

Coding Instruction: Indicate the middle name of the operator who is performing the lead procedure.

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 current procedure

Supporting Definition:

Technical Specification

Short Name: LeadOpMName
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (50)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 7705 Lead Operator NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the operator who is performing the lead 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

Supporting Definition:

Technical Specification

Short Name: LeadOpNPI
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Integer (10)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

H. LEAD ASSESSMENT

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

Supporting Definition:

Technical Specification

Short Name: LeadCounter
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Integer (2)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range: 1-99
DataSource: Automatic

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

Supporting Definition:

Technical Specification

Short Name: LeadType
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Code System	Code	Selection Text	Definition
ACC NCDR	100001047	New	A lead that is implanted for the first time.
ACC NCDR	100001001	Existing	A lead that has been previously implanted.

H. LEAD ASSESSMENT

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

Supporting Definition:

Technical Specification

Short Name: LeadID
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor (Dynamic List)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 7725 Lead Serial Number

Coding Instruction: Indicate the manufacturer's serial number of the lead.

Target Value: The value on current procedure

Supporting Definition:

Technical Specification

Short Name: LeadSerNo
Missing Data: Report
Harvested: Yes (LDS)
Data Type: String (30)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

H. LEAD ASSESSMENT

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	
Short Name:	LeadUDI
Missing Data:	No Action
Harvested:	Yes (LDS)
Data Type:	String (150)
Selection Type:	Single
Unit of Measure:	
Default Value:	Null
Usual Range:	
Valid Range:	
DataSource:	User

H. LEAD ASSESSMENT

Element: 7735 Lead Location

Coding Instruction: Indicate the location of the lead.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: LeadLocation
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Code System	Code	Selection Text	Definition
SNOMED CT	3194006	RA endocardial	A pacing lead placed transvenously into the right atrial endocardium.
ACC NCDR	100001135	LV epicardial	A pacing or defibrillation lead placed transthoracically onto the left ventricular epicardium.
SNOMED CT	304059001	RV endocardial	A pacing or defibrillation lead placed transvenously into the right ventricular endocardium.
ACC NCDR	100001137	Superior Vena Cava/subclavian	A defibrillating lead placed in the superior vena cava or subclavian vein.
ACC NCDR	100001136	LV via coronary venous system	A pacing or defibrillating lead placed transvenously onto the left ventricle through the coronary venous system.
ACC NCDR	100001138	Subcutaneous ICD	A defibrillation lead placed subcutaneously.
ACC NCDR	100001106	Subcutaneous array	A defibrillation electrode that is placed subcutaneously.
ACC NCDR	100001066	Other Lead location	A lead placed in a location not specified above.

H. LEAD ASSESSMENT

Element: 7740 Existing Lead Implant Date

Coding Instruction: Indicate the date the existing lead was initially implanted.

Note(s):
If the month or day of the implant 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 a lead implant documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: The last value between birth and current procedure

Supporting Definition:

Technical Specification

Short Name: ExLeadDate
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 7715 Lead Identification
Value: Existing

Element: 7745 Existing Lead Status

Coding Instruction: Indicate the status of the existing lead.

Target Value: Any occurrence on current procedure

Supporting Definition:

Technical Specification

Short Name: ExLeadStat
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 7715 Lead Identification
Value: Existing

Code System	Code	Selection Text	Definition
ACC NCDR	100001004	Extracted	The existing lead was extracted in whole or part and removed.
ACC NCDR	100000925	Abandoned	The existing lead was left in situ, abandoned and not reused.
ACC NCDR	100001099	Reused	The existing lead was left in situ and reused.

I. INTRA OR POST PROCEDURE EVENTS

Element: 9000 Cardiac Arrest

Coding Instruction: Indicate if the patient experienced cardiac arrest.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition: **Cardiac Arrest**

"Sudden" Cardiac arrest is the sudden cessation of cardiac activity. The victim becomes unresponsive with no normal breathing and no signs of circulation. If corrective measures are not taken rapidly, this condition progresses to sudden death. Cardiac arrest should be used to signify an event as described above that is reversed, usually by CPR and/or defibrillation or cardioversion or cardiac pacing.

Source: ACCF/AHA 2011 Key Data Elements and Definitions of a Base Cardiovascular Vocabulary for Electronic Health Records. JACC Vol. 58, No. 2, 2011 Weintraub et al. 203; July 5, 2011:202-22

Technical Specification

Short Name: CArrest
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

I. INTRA OR POST PROCEDURE EVENTS

Element: 9005 Myocardial Infarction

Coding Instruction: Indicate if the patient had a myocardial infarction.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition: **Myocardial Infarction/Prior MI**

Criteria for acute myocardial infarction:
The term acute myocardial infarction (MI) should be used when there is evidence of myocardial necrosis in a clinical setting consistent with acute myocardial ischemia. Under these conditions any one of the following criteria meets the diagnosis for MI:
- Detection of a rise and/or fall of cardiac biomarker values [preferably cardiac troponin (cTn) with at least one value above the 99th percentile upper reference limit (URL) and with at least one of the following:

Symptoms of ischemia.
New or presumed new significant ST-segment-T wave (ST-T) changes or new left bundle branch block (LBBB). Development of pathological Q waves in the ECG.
Imaging evidence of new loss of viable myocardium or new regional wall motion abnormality. Identification of an intracoronary thrombus by angiography or autopsy.

- Cardiac death with symptoms suggestive of myocardial ischemia and presumed new ischemic ECG changes or new LBBB, but death occurred before cardiac biomarkers were obtained, or before cardiac biomarker values would be increased.

- Percutaneous coronary intervention (PCI) related MI is arbitrarily defined by elevation of cTn values (>5 x 99th percentile URL) in patients with normal baseline values (99th percentile URL) or a rise of cTn values >20% if the baseline values are elevated and are stable or falling. In addition, either (i) symptoms suggestive of myocardial ischemia or (ii) new ischemic ECG changes or (iii) angiographic findings consistent with a procedural complication or (iv) imaging demonstration of new loss of viable myocardium or new regional wall motion abnormality are required.

- Stent thrombosis associated with MI when detected by coronary angiography or autopsy in the setting of myocardial ischemia and with a rise and/or fall of cardiac biomarker values with at least one value above the 99th percentile URL.

- Coronary artery bypass grafting (CABG) related MI is arbitrarily defined by elevation of cardiac biomarker values (>10 x 99th percentile URL) in patients with normal baseline cTn values (99th percentile URL). In addition, either (i) new pathological Q waves or new LBBB, or (ii) angiographic documented new graft or new native coronary artery occlusion, or (iii) imaging evidence of new loss of viable myocardium or new regional wall motion abnormality.

Any one of the following criteria meets the diagnosis for prior MI:
- Pathological Q waves with or without symptoms in the absence of non-ischemic causes.

Technical Specification

Short Name:	PostMI
Missing Data:	Report
Harvested:	Yes (LDS)
Data Type:	Boolean
Selection Type:	Single
Unit of Measure:	
Default Value:	Null
Usual Range:	
Valid Range:	
DataSource:	User

I. INTRA OR POST PROCEDURE EVENTS

- Imaging evidence of a region of loss of viable myocardium that is thinned and fails to contract, in the absence of a non-ischemic cause.
- Pathological findings of a prior MI.

Source: Thygesen K, Alpert JS, Jaffe AS, et al. Third Universal Definition of Myocardial Infarction. J Am Coll Cardiol. 2012;60(16):1581-1598. doi:10.1016/j.jacc.2012.08.001.

Element: 9010 Cardiac Perforation

Coding Instruction: Indicate if the patient had a new cardiac perforation occurred.

Note(s):
Cardiac perforation may or may not be symptomatic and may or may not be self sealing. It can be documented by migration of pacing or defibrillator leads to the epicardial surface, resulting in pain and/or hypotension, pericardial effusion, cardiac tamponade, failure to capture, capture of the diaphragm, phrenic nerve or intercostals muscle of sufficient magnitude to require repositioning.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: CardiacPerf
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 9015 Coronary Venous Dissection

Coding Instruction: Indicate if the patient had a coronary venous dissection as documented by manipulation of the pacing or defibrillating leads in the coronary sinus which can result in a tear of the coronary sinus endothelium with dissection into the coronary sinus wall sometimes at times referred to as "staining" following contrast injection. This can also result in perforation of the coronary sinus.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: CVDissect
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

I. INTRA OR POST PROCEDURE EVENTS

Element: 9055 Cardiac Tamponade

Coding Instruction: Indicate if the patient experienced fluid in the pericardial space compromising cardiac filling and requiring intervention.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: Tamponade
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 9120 Stroke

Coding Instruction: Indicate if the patient was diagnosed with a stroke.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition: **Stroke (CVA)**

An ischemic stroke is an acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of infarction of central nervous system tissue. 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. A hemorrhagic stroke is defined as an acute episode of focal or global cerebral or spinal dysfunction caused by intraparenchymal, intraventricular, or subarachnoid hemorrhage (note: subdural hematomas are intracranial hemorrhagic events and not strokes).

Source: Hicks KA, Tcheng JE, Bozkurt B, et al. 2014 ACC/AHA Key Data Elements and Definitions for Cardiovascular Endpoint Events in Clinical Trials: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Data Standards (Writing Committee to Develop Cardiovascular Endpoints Data Standards). J Am Coll Cardiol. 2015;():. Doi:10.1016/j.jacc.2014.12.018.

Technical Specification

Short Name: Stroke
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

I. INTRA OR POST PROCEDURE EVENTS

Element: 9140 Transient Ischemic Attack (TIA)

Coding Instruction: Indicate if the patient had a transient ischemic attack (TIA).

Note(s):
Persistence of symptoms is an acceptable indicator of acute infarction. If it is used, duration of symptom persistence that will be used to distinguish between transient ischemia and acute infarction should be defined for any clinical trial in which it is used.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition: **Transient Ischemic Attack (TIA)**

Transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia without acute infarction.

Source: Hicks KA, Tcheng JE, Bozkurt B, et al. 2014 ACC/AHA Key Data Elements and Definitions for Cardiovascular Endpoint Events in Clinical Trials: A Report of the

Technical Specification

Short Name: PostTIA
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 9180 Hematoma

Coding Instruction: Indicate if the patient experienced a pocket hematoma as a result of the procedure, requiring a reoperation, evacuation or transfusion.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: Hematoma
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

I. INTRA OR POST PROCEDURE EVENTS

Element: 9195 Infection Requiring Antibiotics

Coding Instruction: Indicate if the patient experienced an infection related to the procedure which required antibiotics.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: InfectionReqAnti
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 9205 Hemothorax

Coding Instruction: Indicate if the patient experienced a hemothorax as documented by accumulation of blood in the thorax.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: Hemothorax
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

I. INTRA OR POST PROCEDURE EVENTS

Element: 9215 Pneumothorax

Coding Instruction: Indicate if the patient experienced a pneumothorax as documented by air in the thorax.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: Pneumothorax
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 9250 Urgent Cardiac Surgery

Coding Instruction: Indicate if the patient needed to have urgent, unplanned cardiac surgery.

Target Value: Any occurrence between start of procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: UrgentSurgery
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

I. INTRA OR POST PROCEDURE EVENTS

Element: 9255 Set Screw Problem

Coding Instruction: Indicate if the patient had a pacing and/or sensing problem associated with high impedance due to a poor connection between a lead and ICD caused by a loose set screw.

Target Value: Any occurrence between completion of the procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: SetScrew
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 9260 Lead Dislodgement

Coding Instruction: Indicate if the patient experienced a lead dislodgement as documented by movement of a lead that requires repositioning and reoperation.

Target Value: Any occurrence between completion of the procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: LeadDislodge
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

I. INTRA OR POST PROCEDURE EVENTS

Element: 9265 Lead Location (Dislodgement)

Coding Instruction: Indicate the location of the lead in which the dislodgement occurred.

Target Value: Any occurrence between completion of the procedure and until next procedure or discharge

Supporting Definition:

Technical Specification

Short Name: LeadDislodgeLoc
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 9260 Lead Dislodgement
Value: Yes

Code System	Code	Selection Text	Definition
SNOMED CT	3194006	RA endocardial	A pacing lead placed transvenously into the right atrial endocardium.
ACC NCDR	100001135	LV epicardial	A pacing or defibrillation lead placed transthoracically onto the left ventricular epicardium.
SNOMED CT	304059001	RV endocardial	A pacing or defibrillation lead placed transvenously into the right ventricular endocardium.
ACC NCDR	100001137	Superior Vena Cava/subclavian	A defibrillating lead placed in the superior vena cava or subclavian vein.
ACC NCDR	100001136	LV via coronary venous system	A pacing or defibrillating lead placed transvenously onto the left ventricle through the coronary venous system.
ACC NCDR	100001138	Subcutaneous ICD	A defibrillation lead placed subcutaneously.
ACC NCDR	100001106	Subcutaneous array	A defibrillation electrode that is placed subcutaneously.
ACC NCDR	100001066	Other Lead location	A lead placed in a location not specified above.

J. DISCHARGE

Element: 10005 Coronary Artery Bypass Graft

Coding Instruction: Indicate if coronary artery bypass graft (CABG) Surgery was performed.

Target Value: Any occurrence between arrival and discharge

Supporting Definition:

Technical Specification

Short Name: CABG
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 10010 Coronary Artery Bypass Graft Date

Coding Instruction: Indicate the date of the coronary artery bypass graft (CABG) surgery.

Note(s):
If the month or day of the CABG 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 CABG documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: The first value between arrival and discharge

Supporting Definition:

Technical Specification

Short Name: CABGDate
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 10005 Coronary Artery Bypass Graft
Value: Yes

J. DISCHARGE

Element: 10015 Percutaneous Coronary Intervention

Coding Instruction: Indicate if the patient had a percutaneous coronary intervention

Target Value: Any occurrence between arrival and discharge

Supporting Definition:

Technical Specification

Short Name: PCI
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Boolean
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 10020 Percutaneous Coronary Intervention Date

Coding Instruction: Indicate the date of the percutaneous coronary intervention (PCI) procedure.

Note(s):
If the month or day of the PCI 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 PCI documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: The first value between arrival and discharge

Supporting Definition:

Technical Specification

Short Name: PCIDate
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 10015 Percutaneous Coronary Intervention
Value: Yes

J. DISCHARGE

Element: 10100 Discharge Date

Coding Instruction: Indicate the date on which the patient was discharged from your facility.

Target Value: The value on discharge

Supporting Definition:

Technical Specification

Short Name: DCDate
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: Date
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Element: 10105 Discharge Status

Coding Instruction: Indicate whether the patient was alive or deceased at discharge.

Target Value: The value on discharge

Supporting Definition:

Technical Specification

Short Name: DCStatus
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Code System	Code	Selection Text	Definition
SNOMED CT	438949009	Alive	
HL7 Discharge disposition	20	Deceased	

J. DISCHARGE

Element: 10110 Discharge Location

Coding Instruction: Indicate the location to which the patient was discharged.

Target Value: The value on discharge

Supporting Definition:

Technical Specification

Short Name: DCLocation
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 10105 Discharge Status
Value: Alive

Code System	Code	Selection Text	Definition
HL7 Discharge disposition	01	Home	
HL7 Discharge disposition	62	Discharged/transferred to an Extended care/TCU/rehab	Continued "non-acute" care at an extended care facility, transitional care unit, or rehabilitation unit.
HL7 Discharge disposition	02	Other acute care hospital	
HL7 Discharge disposition	64	Skilled Nursing facility	
HL7 Discharge disposition	07	Left against medical advice (AMA)	The patient was discharged or eloped against medical advice.
ACC NCDR	100001249	Other Discharge Location	

J. DISCHARGE

Element: 10120 Death During the Procedure

Coding Instruction: Indicate if the patient expired during the procedure.

Target Value: Any occurrence on discharge

Supporting Definition:

Technical Specification

Short Name: DeathProcedure

Missing Data: Report

Harvested: Yes (LDS)

Data Type: Boolean

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 10105 Discharge Status

Value: Deceased

J. DISCHARGE

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

Supporting Definition: **Cause of Death**

Death is classified into 1 of 3 categories: 1) cardiovascular death; 2) non - cardiovascular death; and 3) undetermined cause of death.

The intent of the classification schema is to identify one, and only one, of the categories as the underlying cause of death. The key priority is differentiating between cardiovascular and non-cardiovascular causes of death.

Source: Hicks KA, Tcheng JE, Bozkurt B, et al. 2014 ACC/AHA Key Data Elements and Definitions for Cardiovascular Endpoint Events in Clinical Trials: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Data Standards (Writing Committee to Develop Cardiovascular Endpoints Data Standards). J Am Coll Cardiol. 2015;():. Doi:10.1016/j.jacc.2014.12.018.

Technical Specification

Short Name: DeathCause

Missing Data: Report

Harvested: Yes (LDS)

Data Type: Concept Descriptor

Selection Type: Single

Unit of Measure:

Default Value: Null

Usual Range:

Valid Range:

DataSource: User

Parent\Child Validation

Element: 10105 Discharge Status

Value: Deceased

Code System	Code	Selection Text	Definition
ACC NCDR	100000960	Acute myocardial infarction	Death by any cardiovascular mechanism (e.g., arrhythmia, sudden death, heart failure, stroke, pulmonary embolus, peripheral arterial disease) within 30 days after an acute myocardial infarction, related to the immediate consequences of the MI, such as progressive HF or recalcitrant arrhythmia. There may be other assessable (attributable) mechanisms of cardiovascular death during this time period, but for simplicity, if the cardiovascular death occurs <=30 days of an acute myocardial infarction, it will be considered a death due to myocardial infarction.
ACC NCDR	100000978	Sudden cardiac death	Death that occurs unexpectedly, and not within 30 days of an acute MI.
ACC NCDR	100000964	Heart failure	Death associated with clinically worsening symptoms and/or signs of heart failure.
ACC NCDR	100000977	Stroke	Death after a stroke that is either a direct consequence of the stroke or a complication of the stroke.
ACC NCDR	100000962	Cardiovascular procedure	Death caused by the immediate complication(s) of a cardiovascular procedure.
ACC NCDR	100000961	Cardiovascular hemorrhage	Death related to hemorrhage such as a non-stroke intracranial hemorrhage, non-procedural or non-traumatic vascular rupture (e.g., aortic aneurysm), or hemorrhage causing cardiac tamponade.
ACC NCDR	100000972	Other cardiovascular reason	Cardiovascular death not included in the above categories but with a specific, known cause (e.g., pulmonary embolism, peripheral arterial disease).

J. DISCHARGE

ACC NCDR	100000975	Pulmonary	Non-cardiovascular death attributable to disease of the lungs (excludes malignancy).
ACC NCDR	100000976	Renal	Non-cardiovascular death attributable to renal failure.
ACC NCDR	100000963	Gastrointestinal	Non-cardiovascular death attributable to disease of the esophagus, stomach, or intestines (excludes malignancy).
ACC NCDR	100000966	Hepatobiliary	Non-cardiovascular death attributable to disease of the liver, gall bladder, or biliary ducts (exclude malignancy).
ACC NCDR	100000974	Pancreatic	Non-cardiovascular death attributable to disease of the pancreas (excludes malignancy).
ACC NCDR	100000967	Infection	Non-cardiovascular death attributable to an infectious disease.
ACC NCDR	100000968	Inflammatory/Immunologic	Non-cardiovascular death attributable to an inflammatory or immunologic disease process.
ACC NCDR	100000965	Hemorrhage	Non-cardiovascular death attributable to bleeding that is not considered cardiovascular hemorrhage or stroke per this classification.
ACC NCDR	100000971	Non-cardiovascular procedure or surgery	Death caused by the immediate complication(s) of a non-cardiovascular procedure or surgery.
ACC NCDR	100000980	Trauma	Non-cardiovascular death attributable to trauma.
ACC NCDR	100000979	Suicide	Non-cardiovascular death attributable to suicide.
ACC NCDR	100000970	Neurological	Non-cardiovascular death attributable to disease of the nervous system (excludes malignancy).
ACC NCDR	100000969	Malignancy	Non-cardiovascular death attributable to malignancy.
ACC NCDR	100000973	Other non-cardiovascular reason	Non-cardiovascular death attributable to a cause other than those listed in this classification (specify organ system).

J. DISCHARGE

Element: 10200 Discharge Medication Code

Coding Instruction: Indicate the assigned identification number associated with the medications the patient was prescribed upon discharge.

Note(s):
Discharge medications not required for patients who expired, discharged to "Other acute care hospital", "Left against medical advice (AMA)" or are receiving Hospice Care.

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: The value on discharge

Supporting Definition:

Technical Specification

Short Name: DC_MedID
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor (Dynamic List)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

J. DISCHARGE

Element: 10205 Discharge Medication Prescribed

Coding Instruction: Indicate if the medication was prescribed, not prescribed, or was not prescribed for either a medical or patient reason.

Target Value: The value on discharge

Supporting Definition:

Technical Specification

Short Name: DC_MedAdmin
Missing Data: Report
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: User

Parent\Child Validation

Element: 10200 Discharge Medication Code
Value: Any Value

Code System	Code	Selection Text	Definition
ACC NCDR	100001247	Yes - Prescribed	Code 'Yes' if this medication was initiated (or prescribed) post procedure and for discharge.
ACC NCDR	100001048	Not Prescribed - No Reason	Code 'No' if this medication was not prescribed post procedure or for discharge and there was no mention of a reason why it was not ordered within the medical documentation.
ACC NCDR	100001034	Not Prescribed - Medical Reason	Code 'No Medical Reason' if this medication was not prescribed post procedure or for discharge and there was a reason documented related to a medical issue or medical concern for not prescribing the medicine.
ACC NCDR	100001071	Not Prescribed - Patient Reason	Code 'No, Patient Reason' if this medication was not prescribed post procedure or for discharge and there was a reason documented related to the patient's preference.

Z. ADMINISTRATION

Element: 1000 Participant ID

Coding Instruction: Indicate the participant ID of the submitting facility.

Target Value: N/A

Supporting Definition: **Participant ID**

Participant ID is a unique number assigned to each database participant by NCDR. A database participant is defined as one entity that signs a Participation Agreement with the NCDR, submits one data submission file to the harvest, and receives one report on their data.

Each participant's data if submitted to harvest must be in one data submission file for a quarter. If one participant keeps their data in more than one file (e.g. at two sites), then the data must be combined into a single data submission to the system to file for the harvest. If two or more participants share a single purchased software, and enter cases into one database, then the data must be exported into different data submission files, one for each participant ID.

Source: NCDR

Technical Specification

Short Name: PartID
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: Integer (6)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range: 1-999999
DataSource: 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

Supporting Definition:

Technical Specification

Short Name: PartName
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: String (100)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: Automatic

Z. ADMINISTRATION

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

Supporting Definition:

Technical Specification

Short Name: Timeframe
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: String (6)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: Automatic

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

Supporting Definition:

Technical Specification

Short Name: XmsnId
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: Integer (9)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range: 1-999999999
DataSource: Automatic

Z. ADMINISTRATION

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

Supporting Definition:

Technical Specification

Short Name: VendorId
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: String (15)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: 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

Supporting Definition:

Technical Specification

Short Name: VendorVer
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: String (20)
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: Automatic

Z. ADMINISTRATION

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

Supporting Definition:

Technical Specification

Short Name: RegistryId
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: String (30)
Selection Type: Single
Unit of Measure:
Default Value: ACC-NCDR-ICD-2.2
Usual Range:
Valid Range:
DataSource: Automatic

Element: 1090 Patient Population

Coding Instruction: Indicate the population of patients and procedures that are included in the data submission.

Target Value: N/A

Supporting Definition:

Technical Specification

Short Name: PatientPop
Missing Data: Illegal
Harvested: Yes (LDS)
Data Type: Concept Descriptor
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
DataSource: Automatic

Code System	Code	Selection Text	Definition
ACC NCDR	100000930	All Patients	All patients, all procedures, regardless of insurance payor, ICD indication, or procedure performed.
ACC NCDR	100001239	Medicare Primary Prevention Patients	Patient procedures in which Insurance Payor is coded as 'Medicare', Procedure Performed is coded as 'Initial Implant', 'Generator Change' or 'Generator Explant' and ICD Indication is coded as 'Primary Prevention'.