Section: Demographics — Parent: Root

Element: 2000 — Last Name

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

Target Value: The value on arrival at this facility

Element: 2010 — First Name

Coding Instruction: Indicate the patient's first name.

Target Value: The value on arrival at this facility

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

Element: 2050 — Birth Date

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

Target Value: The value on arrival at this facility

Element: 2030 — SSN

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

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

Target Value: The value on arrival at this facility

Vendor Instruction: Patient's SSN must be 9 numeric characters long

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

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

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

Element: 2060 — Sex

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

Target Value: The value on arrival at this facility

Person Sex - 1.3.6.1.4.1.19376.1.4.1.6.5.19

Selection	Definition	Source	Code	Code System
Male			M	HL7 Administrative Gender

Section: Demographics **Parent: Root**

Female F HL7 Administrative Gender

Element: 2065 Patient Zip Code

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

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

Target Value: The value on arrival at this facility

Vendor Instruction: Patient's zip code must be 5 numeric characters long.

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

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

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

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

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

Section: Demographics **Parent: Root**

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

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

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

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

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

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

Section: Demographics **Parent: Root**

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

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

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

Element: 2090 Race - Native Hawaiian

Coding Instruction: Indicate if the patient is Native Hawaiian 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

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

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

Element: 2093 Race - Other Pacific Islander

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

Section: Demographics **Parent: Root**

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

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 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

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

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

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

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

Section: Demographics **Parent: Root**

Element: 14780 Original Patient ID

Coding Instruction: This is the ID generated when the patient was first submitted to the STS/ACC TVT Registry. This field will be provided to vendors as part of the participant vendor migration process for all patients currently in the Registry. For patients submitted to the STS/ACC TVT Registry the first time by a vendor, it should be populated with the NCDR Patient ID assigned by the vendor.

Target Value: N/A

Element: 14781 Original NCDR Vendor

Coding Instruction: This is the vendor identifier of the vendor who first submitted the patient to the STS/ACC TVT Registry. This field will be provided to vendors as part of the vendor migration process for all patients currently in the registry. For patients submitted to the STS/ACC TVT Registry for the first time by a vendor, it should be populated with the Vendor Identifier of the submitting vendor.

Target Value: N/A

Section: Episode Information — Parent: 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

Element: 3001 — Arrival Date and Time

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

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

Target Value: N/A

Vendor Instruction: Arrival Date and Time (3001) must be Less than or Equal to Procedure Start Date and Time (7000)

Arrival Date and Time (3001) must be Less than or Equal to Discharge Date (10100)

Element: 3005 — Health Insurance

Coding Instruction: Indicate if the patient has health insurance.

Target Value: The value on arrival at this facility

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.

If there is uncertainty regarding how to identify a specific health insurance plan, please discuss with your billing department to understand how it should be identified in the registry.

Target Value: The value on arrival at this facility

Payor Category - 1.3.6.1.4.1.19376.1.4.1.6.5.5

Selection	Definition	Source	Code	Code System
Private Health Insurance	Private health insurance is coverage by a health plan provided through an employer or union or purchased by an individual from a private health insurance company. A health maintenance organization (HMO) is considered private health insurance.		5	PHDSC
Medicare Fee-For-Service	Medicare is the Federal program which helps pay health care costs for people 65 and older and for certain people under 65 with long-term disabilities.		1	PHDSC
Medicare Advantage			112000002025	ACC NCDR
Medicaid	Medicaid is a program administered at the state level, which provides medical assistance to the needy. Families with dependent children, the aged, blind, and disabled who are in financial need are eligible for Medicaid. It may be known by different names.		2	PHDSC
Military Health Care	Military Health care - Military health care includes TRICARE/CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) and CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs (VA).		31	PHDSC
State-Specific Plan (non-Medicaid)	State Specific Plans - Some states have their own health insurance programs for low-income uninsured individuals. These health plans may be known by different names in different states.		36	PHDSC
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.		33	PHDSC
Non-US Insurance	Non-US insurance refers to individuals with a payor that does not originate in the United States.		100000812	ACC NCDR

Element: 12846 — Medicare Beneficiary Identifier

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

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

Target Value: The value on arrival at this facility

Supporting Definition: **Medicare Beneficiary Identifier**

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

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

Element: 13803 Residence

Coding Instruction: Indicate the primary residence of the patient prior to arrival. If the primary residence is not available, code not documented.

Target Value: The value on arrival at this facility

Residence - 1.3.6.1.4.1.19376.1.4.1.6.5.562

Selection	Definition	Source	Code	Code System
Home with No Health Aid	The patient lives at home with no health-aid (this includes living in senior living facilities with no assistance).		112000001507	ACC NCDR
Home with Health Aid	The patient lives at home with health-aid (this includes living in senior living facilities with assistance).		112000001508	ACC NCDR
Long Term Care	The patient lives in a long-term care facility that provides the person's health or personal care needs during a short or long period of time.	National Institute of Aging at the National Institutes of Health	42665001	SNOMED CT
Other			100000351	ACC NCDR

Element: 13804 Residence Not Documented

Coding Instruction: Indicate if the primary residence of the patient prior to arrival was not documented.

Target Value: N/A

Element: 3020 Patient Enrolled in Research Study

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

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

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

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

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

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

Element: 13171 TVT Pathway

Coding Instruction: Indicate all TVT Registry procedures performed during this episode of care.

Target Value: The value between arrival at this facility and discharge

Transcatheter Valve Therapy Pathway - 1.3.6.1.4.1.19376.1.4.1.6.5.450

Selection	Definition	Source	Code	Code System
TAVR	A TVT pathway where the patient underwent a transcatheter aortic valve replacement during the current episode of care.		112000001168	ACC NCDR
TMVr	A TVT Pathway where the patient underwent a transcatheter mitral valve repair during the current episode of care.		112000001169	ACC NCDR
TMVR	A TVT Pathway where the patient underwent a transcatheter mitral valve replacement during the		112000001170	ACC NCDR

Section: Episode Information		Parent: Episode of Care	
	current episode of care.		
Tricuspid Valve Procedure	A TVT Pathway where the patient underwent a transcatheter tricuspid valve repair or replacement procedure during the current episode of care.	112000001171	ACC NCDR

Section: Admitting Providers **Parent: Episode Information**

Element: 3050 Admitting Provider Last Name

Coding Instruction: Indicate the last name of the admitting provider.

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

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: The value on arrival at this facility

Element: 3051 Admitting Provider First Name

Coding Instruction: Indicate the first name of the admitting provider.

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

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: The value on arrival at this facility

Element: 3052 Admitting Provider Middle Name

Coding Instruction: Indicate the middle name of the admitting provider.

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.

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: The value on arrival at this facility

Element: 3053 Admitting Provider NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the provider that admitted the patient. NPI's, assigned by the Centers for Medicare and Medicaid Services (CMS), are used to uniquely identify physicians for Medicare billing purposes.

Note(s):
The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: The value on arrival at this facility

Section: Attending Providers **Parent: Episode Information**

Element: 3055 Attending Provider Last Name

Coding Instruction: Indicate the last name of the attending provider.

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

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: All values between arrival at this facility and discharge

Element: 3056 Attending Provider First Name

Coding Instruction: Indicate the first name of the attending provider.

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

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: All values between arrival at this facility and discharge

Vendor Instruction: An Attending Provider - combination First Name (3056), Last Name (3055) and NPI (3058) - may only be entered/selected once

Element: 3057 Attending Provider Middle Name

Coding Instruction: Indicate the middle name of the attending provider.

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.

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: All values between arrival at this facility and discharge

Element: 3058 Attending Provider NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the provider that will be listed as the physician of record during the hospitalization. NPI's, assigned by the Centers for Medicare and Medicaid Services (CMS), are used to uniquely identify physicians for Medicare billing purposes.

Note(s):
The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: All values between arrival at this facility and discharge

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

Element: 3025 Research Study Name

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

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

Target Value: N/A

Vendor Instruction: Research Study Name (3025) must be a valid study name for TVT 3.0

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

When Patient Enrolled in Research Study (3020) is 'Yes' Research Study Name (3025) cannot be Null

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

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

Element: 6000 Height

Coding Instruction: Indicate the patient's height in centimeters.

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

Element: 6005 Weight

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

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

Element: 13697 Number of Prior Open Heart Cardiac Surgeries

Coding Instruction: Indicate the number of open heart cardiac surgeries the patient has had prior to this procedure. This includes open heart coronary artery bypass, or valve replacement/repairs.

Note: If the patient had more than 4 open heart procedures and the total number is not known, code 4 prior open heart surgeries.

Target Value: Any occurrence between birth and start of the current procedure

Element: 13707 Heart Failure Hospitalization Within Past Year

Coding Instruction: Indicate if the patient has been admitted to the hospital for an inpatient admission with a diagnosis of heart failure within the past year.

Target Value: Any occurrence between 1 year prior to arrival at this facility and arrival at this facility

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 14253 Heart Failure Hospitalization within Past Year Not Documented

Coding Instruction: Indicate if an inpatient admission with a diagnosis of heart failure within the past year was not documented.

Target Value: N/A

Element: 13172 Anticipated Life Expectancy of Less than 1 Year

Coding Instruction: Indicate if there is physician documentation of the patient's anticipated life expectancy being less than one year, based on comorbidities and other factors not related to the aortic stenosis (factors that would not be expected to be favorably altered by valve replacement).

Target Value: The value on start of current procedure

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 14454 Anticipated Life Expectancy of Less than 1 Year Not Documented

Coding Instruction: Indicate if there is no physician documentation of the patient's anticipated life expectancy being less than one year.

Target Value: N/A

Element: 13881 Oxygen at Home

Coding Instruction: Indicate whether patient uses supplemental oxygen at home.

Target Value: The value on arrival at this facility

Element: 13882 Immunocompromise Present

Coding Instruction: Indicate whether immunocompromise is present due to immunosuppressive medication therapy or an existing medical condition. This includes, but is not limited to systemic steroid therapy, anti-rejection medications and chemotherapy. This does not include topical steroid applications, one time systemic therapy, inhaled steroid therapy or preprocedure protocol.

Target Value: The last value on start of the first procedure

Element: 13880 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.

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

Note(s):
If a patient is receiving continuous veno-venous hemofiltration (CVVH) as a result of renal failure (and not as treatment to remove fluid for heart failure), code 'Yes'.

Target Value: The last value on start of the first procedure

Element: 4625 Tobacco Use

Coding Instruction: Indicate the frequency that the patient uses tobacco.

Note(s): Consider use of any tobacco product as equivalent to a cigarette for referenced definitions.

Target Value: The value on arrival at this facility

Tobacco Use - 1.3.6.1.4.1.19376.1.4.1.6.5.427

Selection	Definition	Source	Code	Code System
Never	An individual who has not smoked 100 or more cigarettes during his/her lifetime.	The Office of the National Coordinator for Health Information Technology 2014 Edition Test Procedure for §170.314.a.11.Smoking status	266919005	SNOMED CT
Former	An individual who has smoked at least 100 cigarettes during his/her lifetime but does not currently smoke.		8517006	SNOMED CT
Current - Every Day	An individual who has smoked at least 100 cigarettes during his/her lifetime and still regularly smokes every day.		449868002	SNOMED CT
Current - Some Days	An individual who has smoked at least 100 cigarettes during his/her lifetime and still regularly smokes periodically (not every day), yet consistently.		428041000124106	SNOMED CT
Smoker - Current Status Unknown	An individual known to have smoked at least 100 cigarettes in the past, but whether they currently still smoke is unknown.		77176002	SNOMED CT
Unknown if ever smoked	An individual whose current and prior smoking status is not known.		266927001	SNOMED CT

Element: 4626 Tobacco Type

Coding Instruction: Indicate all the tobacco type(s) reported by the patient.

Target Value: The value on arrival at this facility

Tobacco Type

Selection	Definition	Source	Code	Code System
Cigarettes			65568007	SNOMED CT
Cigars			59978006	SNOMED CT
Pipe			82302008	SNOMED CT
Smokeless			713914004	SNOMED CT

Element: 4627 Smoking Amount

Coding Instruction: Indicate the amount of cigarette smoking reported by the patient.

Target Value: The value on arrival at this facility

Tobacco Amount - 1.3.6.1.4.1.19376.1.4.1.6.5.457

Selection	Definition	Source	Code	Code System
Light tobacco use (<10/day)	The patient smokes less than 10 cigarettes daily.		428061000124105	SNOMED CT
Heavy tobacco use (>= 10/day)	The patient smokes 10 or more cigarettes daily.		428071000124103	SNOMED CT

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

Element: 12297 Home Medication Code

Coding Instruction: Indicate the medication the patient has been taking routinely at home prior to this hospitalization.

Target Value: N/A

Vendor Instruction: When a Home Medication Code (12297) is selected then Home Medication Prescribed (13903) must not be Null

Home Medications - 2.16.840.1.113883.3.3478.6.5.302

Selection	Definition	Source	Code	Code System
Angiotensin Converting Enzyme Inhibitor			41549009	SNOMED CT
Aldosterone Antagonist			372603003	SNOMED CT
Angiotensin Receptor-Neprilysin Inhibitor			112000001832	ACC NCDR
Anticoagulant			112000001416	ACC NCDR
Aspirin			1191	RxNorm
Angiotensin II Receptor Blocker			372913009	SNOMED CT
Beta Blocker			33252009	SNOMED CT
Diuretics Not Otherwise Specified			112000001417	ACC NCDR
Loop Diuretics			29051009	SNOMED CT
Thiazides			372747003	SNOMED CT
P2Y12 Antagonist			112000001003	ACC NCDR
Selective Sinus Node I/f Channel Inhibitor			112000001831	ACC NCDR

Element: 13903 Home Medication Prescribed

Coding Instruction: Indicate whether the patient received the medication at home prior to this hospitalization.

Target Value: The value on arrival at this facility

Home Medication Prescribed - 1.3.6.1.4.1.19376.1.4.1.6.5.710

Selection	Definition	Source	Code	Code System
Yes			100001247	ACC NCDR
Not Prescribed - No Reason			100001048	ACC NCDR

Element: 14575 Loop Diuretic Dose

Coding Instruction: Specify the total daily dose of the loop diuretic the patient was taking routinely at home prior to this hospitalization.

Target Value: The value on arrival at this facility

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

Element: 12903 Condition History Name

Coding Instruction: The list of medical conditions from which the patient's history is to be determined.

Target Value: N/A

Condition History Name - 1.3.6.1.4.1.19376.1.4.1.6.5.340

Selection	Definition	Source	Code	Code System
Atrial Fibrillation	AF is a supraventricular tachyarrhythmia with uncoordinated atrial activation and consequently ineffective atrial contraction. Characteristics on an electrocardiogram (ECG) include: 1) irregular R-R intervals (when atrioventricular [AV] conduction is present), 2) absence of distinct repeating P waves, and 3) irregular atrial activity.	January CT, Wann LS, 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. JACC Vol 64, #21, 2014.	49436004	SNOMED CT
Atrial Flutter			5370000	SNOMED CT
Cardiomyopathy			85898001	SNOMED CT
Carotid Artery Stenosis	When one or both carotid arteries was determined from any diagnostic test to have >= 50% stenosis.	Society for Thoracic Surgeons (STS)	64586002	SNOMED CT
Cerebrovascular Accident	An acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction, where the neurological dysfunction lasts for greater than 24 hours.	Society for Thoracic Surgeons (STS)	230690007	SNOMED CT
Cerebrovascular Disease	Cerebrovascular disease includes any of the following: A. Stroke: Stroke is an acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction, where the neurological dysfunction lasts for greater than 24 hours. B. TIA: is defined as a transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours. C. Noninvasive or invasive arterial imaging test demonstrating >=50% stenosis of any of the major extracranial or intracranial vessels to the brain. D. Vertebral artery and internal carotid and intercranial consistent with atherosclerotic disease with document presence as CVD. External carotid disease is excluded. E. Previous cervical or cerebral artery revascularization surgery or percutaneous intervention. F. Brain/cerebral aneurysm. G. Occlusion of veterbral artery, internal carotid artery, and intercranial due to dissection. Note: This does not include chronic (nonvascular) neurological diseases or other acute neurological insults such as metabolic and anoxic ischemic encephalopathy. Subdural hematoma or AVM is not cerebral vascular disease.	Society for Thoracic Surgeons (STS)	62914000	SNOMED CT
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.	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	413839001	SNOMED CT
Conduction Defect	Conduction disorder as evidenced by a right or left bundle branch block, sick sinus syndrome, or first, second or third degree heart block on ECG.		44808001	SNOMED CT
COVID-19 Positive	The patient had a diagnosis of COVID-19, confirmed with a laboratory performed polymerase chain reaction (PCR) test. Notes: It is acceptable to code the diagnosis of COVID-19 based on testing that was NOT		112000001982	ACC NCDR

Section: Condition History		Parent: History and Risk Factors		
	performed at your facility if it is accompanied by appropriate documentation in the medical record by the provider. Code no if documentation ONLY included antibody testing (IgG).			
Dementia - Moderate to Severe	Patients with moderate dementia (also termed moderate or severe cognitive decline) are typically oriented to person but not place and time. They are patients who need assistance with activities of daily living.		112000001493	ACC NCDR
Diabetes Mellitus	The American Diabetes Association criteria include documentation of the following: 1. FPG >=126 mg/dL (7.0 mmol/L). Fasting is defined as no caloric intake for at least 8 h. OR 2. 2-h PG >=200 mg/dL (11.1 mmol/L) during an OGTT. The test should be performed as described by the WHO, using a glucose load containing the equivalent of 75 g anhydrous glucose dissolved in water. OR 3. A1C >=6.5% (48 mmol/mol). The test should be performed in a laboratory using a method that is NGSP certified and standardized to the DCCT assay. OR 4. In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose >=200 mg/dL (11.1 mmol/L).	American Diabetes Association Care. 2017;40 Suppl 1:S13.	73211009	SNOMED CT
Endocarditis	Endocarditis must meet the current CDC definition: Endocarditis must meet at least 1 of the following criteria: 1. Patient has organisms cultured from valve or vegetation. 2. Patient has 2 or more of the following signs or symptoms: fever (>38°C), new or changing murmur*, embolic phenomena*, skin manifestations* (i.e., petechiae, splinter hemorrhages, painful subcutaneous nodules), congestive heart failure*, or cardiac conduction abnormality* * With no other recognized cause and at least 1 of the following: 1) Organisms cultured from 2 or more blood cultures 2) Organisms seen on Gram's stain of valve when culture is negative or not done 3) Valvular vegetation seen during an invasive procedure or autopsy 4) Positive laboratory test on blood or urine (e.g., antigen tests for H influenzae, S pneumoniae, N meningitidis, or Group B Streptococcus) 5) Evidence of new vegetation seen on echocardiogram and if diagnosis is made antemortem, physician institutes appropriate antimicrobial therapy. Notes: 1. Choose "Yes" for patients with pre-operative endocarditis who begin antibiotics post-op. 2. Code "Yes" for patients who are diagnosed intraoperatively. 3. Marantic Endocarditis (Nonbacterial Thrombotic Endocarditis) (Lupus) should not be coded as infectious endocarditis.	Society of Thoracic Surgeons (STS)	56819008	SNOMED CT
Heart Failure	Heart failure is a complex clinical syndrome that results from any structural or functional impairment of ventricular filling or ejection of blood. The cardinal manifestations of HF are dyspnea and fatigue, which may limit exercise tolerance, and fluid retention, which may lead to pulmonary and/or splanchnic congestion and/or peripheral edema. Some patients have exercise intolerance but little evidence of fluid retention, whereas others complain primarily of edema, dyspnea, or fatigue. Because some patients present without signs or symptoms of volume overload, the term "heart	2013 ACCF/AHA Guideline for the Management of Heart Failure; J Am Coll Cardiol. 2013;62(16):e147-e239. doi:10.1016/j.jacc.2013.05.019	84114007	SNOMED CT

Section: Condition History		Parent: History and Risk Factors		
	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.			
Hostile Chest	A medical condition that precludes an open chest procedure and that is documented in the medical record. This can include any of the following or other reasons that make redo operation through sternotomy or right anterior thoracotomy prohibitively hazardous: 1. Evidence of abnormal chest wall anatomy due to severe kyphoscoliosis or other skeletal abnormalities (including thoracoplasty, Potts' disease, sternal bone destruction, evidence of indetectable plane between posterior sternal table and important mediastinal structures) 2. Complications from prior surgery 3. Prior radiation involving the mediastinum/thoracic, or evidence of severe radiation damage (e.g., skin burns, bone destruction, muscle loss, lung fibrosis or esophageal stricture) 4. History of multiple recurrent pleural effusions causing internal adhesions. 5. Chronic, ongoing open skin defects or extremely severe soft tissue atrophy. 6. Complete absence of reconstructive options based on plastic surgeon consult.		112000001489	ACC NCDR
Hypertension	Hypertension is defined by any one of the following: 1. Documentation of hypertension as a medical problem OR 2. Documentation of blood pressure greater than or equal to 130 mm Hg systolic or 80 mm Hg diastolic on at least 2 encounters	Derived from: 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. J Am Coll Cardiol 2018;71:e127-e248.	38341003	SNOMED CT
Liver Disease	A history of hepatitis B, hepatitis C, drug induced hepatitis, autoimmune hepatitis, cirrhosis, portal hypertension, esophageal varices, liver transplant, or congestive hepatopathy. Exclude NASH in the absence of cirrhosis.	Society for Thoracic Surgeons (STS)	235856003	SNOMED CT
Myocardial Infarction	Prior myocardial infarction is defined by any of the following: 1. Documentation of myocardial infarction (MI) as a medical problem. OR 2. Any one of the following criteria meets the diagnosis for prior (sometimes called silent/unrecognized) MI: a. Abnormal Q waves with or without symptoms in the absence of nonischemic causes. b. Imaging evidence of loss of viable myocardium in a pattern consistent with ischemic etiology. c. Patho-anatomical findings of a prior MI.	Thygesen, K, Alpert, J.S., et al Fourth Universal Definition of Myocardial Infarction (2018), J Am Coll Cardiol. 2018 Oct 30;72 (18):2231-2264	22298006	SNOMED CT
Peripheral Arterial Disease	Current or previous history of peripheral arterial disease (includes subclavian, iliac, femoral, and upper- and lower-extremity vessels; excludes renal, coronary, cerebral, and mesenteric vessels and aneurysms). This can include: * Claudication on exertion * Amputation for arterial vascular insufficiency * Vascular reconstruction, bypass surgery, or percutaneous revascularization in the arteries of the extremities * Positive noninvasive test (e.g., ankle brachial index <= 0.9, ultrasound, MR or CT imaging of >50% diameter stenosis in any peripheral artery (i.e., subclavian, femoral, iliac) or angiographic imaging)	ACCF/AHA 2011 Key Data Elements and Definitions of a Base Cardiovascular Vocabulary for Electronic Health Records (JACC 2011;58;202-222)	399957001	SNOMED CT
Porcelain Aorta	A porcelain aorta is defined as "severe atherosclerosis of the aorta, calcification may be severe and diffuse, causing an eggshell appearance seen on chest x-ray or CT".	ACCF/AHA/AATS/ACR/ASA/SCA/SCAI/SIR/STS/SVM Guidelines for the Diagnosis and Management of Patients With Thoracic Aortic Disease (JACC, 2010; 55:27-129)	112000001175	ACC NCDR
Transient Ischemic Attack (TIA)	A transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours.	Society for Thoracic Surgeons (STS)	266257000	SNOMED CT

Element: 14264 Condition History Occurrence

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

Coding Instruction: Indicate if the patient does or does not have a history of the indicated medical condition.

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

Element: 14251 Condition History Date

Coding Instruction: Indicate the most recent occurrence date for the condition.

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

Vendor Instruction: Condition History Date (14251) must be Less than or Equal to Procedure Start Date and Time (7000)

Section: Atrial Fibrillation **Parent: Condition History Details**

Element: 13179 Atrial Fibrillation Classification

Coding Instruction: Indicate the classification of atrial fibrillation.

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

Atrial Fibrillation Classification - 1.3.6.1.4.1.19376.1.4.1.6.5.17

Selection	Definition	Source	Code	Code System
Paroxysmal	AF that terminates spontaneously or with intervention within 7 days of onset. Episodes may recur with variable frequency.		26593000	SNOMED CT
Persistent	Continuous AF that is sustained >7 days or with electrical or pharmacological termination.		62459000	SNOMED CT
Long-standing Persistent	Continuous AF of >12 months duration.		100001029	ACC NCDR
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.		6934004	SNOMED CT
None			100001231	ACC NCDR

Element: 14244 Recent Atrial Fibrillation

Coding Instruction: Indicate if the patient has had atrial fibrillation within the past 30 days.

Target Value: Any occurrence between 30 days prior to the procedure and the procedure

Section: Atrial Flutter **Parent: Condition History Details**

Element: 14245 Recent Atrial Flutter

Coding Instruction: Indicate if the patient has had atrial flutter within the past 30 days.

Target Value: Any occurrence between 30 days prior to the procedure and the procedure

Section: Carotid Artery Stenosis **Parent: Condition History Details**

Element: 14265 Current Carotid Artery Stenosis

Coding Instruction: Indicate if the patient has carotid artery stenosis.

Target Value: The value on arrival at this facility

Supporting Definition: **Carotid Artery Stenosis**

A narrowing of the carotid artery lumen. It is usually caused by the formation of an atherosclerotic plaque. Symptoms are usually present when there is severe narrowing or obstruction of the arterial lumen and manifest as ischemic cerebrovascular accidents.

Source: NCImetathesaurus
NCIm Version: 201706 Version 2.8
CUI C0007282

Element: 14230 Carotid Artery Stenosis Location

Coding Instruction: Indicate which carotid artery was determined from any diagnostic test to be greater or equal to 50% stenotic.

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

Supporting Definition: **Carotid Artery Stenosis**

A narrowing of the carotid artery lumen. It is usually caused by the formation of an atherosclerotic plaque. Symptoms are usually present when there is severe narrowing or obstruction of the arterial lumen and manifest as ischemic cerebrovascular accidents.

Source: NCImetathesaurus
NCIm Version: 201706 Version 2.8
CUI C0007282

Carotid Artery Stenosis Location - 1.3.6.1.4.1.19376.1.4.1.6.5.684

Selection	Definition	Source	Code	Code System
Right Carotid Artery Stenosis	There is >=50% stenosis in the right carotid artery.		285201000119100	SNOMED CT
Left Carotid Artery Stenosis	There is >=50% stenosis in the left carotid artery.		285191000119103	SNOMED CT
Bilateral Carotid Artery Stenosis	There is >=50% stenosis in both the right carotid and left carotid arteries.		293821000119107	SNOMED CT

Element: 14329 Carotid Artery Stenosis Location Not Documented

Coding Instruction: Indicate if the severity of carotid artery stenosis was not documented.

Target Value: N/A

Supporting Definition: **Carotid Artery Stenosis**

A narrowing of the carotid artery lumen. It is usually caused by the formation of an atherosclerotic plaque. Symptoms are usually present when there is severe narrowing or obstruction of the arterial lumen and manifest as ischemic cerebrovascular accidents.

Source: NCImetathesaurus
NCIm Version: 201706 Version 2.8
CUI C0007282

Section: Cardiomyopathy **Parent: Condition History Details**

Element: 4570 Cardiomyopathy Type

Coding Instruction: Indicate the type of cardiomyopathy experienced by the patient.

Note(s):
If the patient has had multiple cardiomyopathies, select all applicable types.

Target Value: Any occurrence between birth and the procedure

Cardiomyopathy Type - 1.3.6.1.4.1.19376.1.4.1.6.5.193

Selection	Definition	Source	Code	Code System
Ischemic cardiomyopathy	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) 2. History of Percutaneous Coronary Intervention; 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.		426856002	SNOMED CT
Non-ischemic cardiomyopathy	Includes cardiomyopathies resulting from volume or pressure overload, such as hypertension or valvular heart disease.		111000119104	SNOMED CT
Other Cardiomyopathy Type	Cardiomyopathy not otherwise specified.		100001065	ACC NCDR

Section: Chronic Lung Disease **Parent: Condition History Details**

Element: 13904 Chronic Lung Disease Severity

Coding Instruction: Indicate the severity of chronic lung disease.

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

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

Chronic Lung Disease Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.585

Selection	Definition	Source	Code	Code System
Mild Lung Disease	FEV1 60% to 75% of predicted, and/or on chronic inhaled or oral bronchodilator therapy.	Society of Thoracic Surgeons (STS)	112000001593	ACC NCDR
Moderate Lung Disease	FEV1 50% to 59% of predicted, and/or on chronic steroid therapy aimed at lung disease.	Society of Thoracic Surgeons (STS)	112000001594	ACC NCDR
Severe Lung Disease	FEV1 <50% predicted, and/or Room Air pO2 < 60 or Room Air pCO2 > 50.	Society of Thoracic Surgeons (STS)	112000001595	ACC NCDR

Element: 14459 Chronic Lung Disease Severity Not Documented

Coding Instruction: Indicate true if the severity of chronic lung disease is not documented.

Target Value: N/A

Section: Diabetes Therapy **Parent: Condition History Details**

Element: 14231 Diabetes Therapy

Coding Instruction: Indicate the type of treatment a patient with a diagnosis of diabetes is receiving. Indicate the most aggressive therapy the patient presented with on admission.

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

Diabetes Therapy

Selection	Definition	Source	Code	Code System
None			112000000322	ACC NCDR
Diet			112000000324	ACC NCDR
Oral			112000000323	ACC NCDR
Insulin			161649006	SNOMED CT
Other			112000000325	ACC NCDR

Section: Endocarditis **Parent: Condition History Details**

Element: 14232 Endocarditis Type

Coding Instruction: Indicate the type of endocarditis.

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

Endocarditis Type - 1.3.6.1.4.1.19376.1.4.1.6.5.685

Selection	Definition	Source	Code	Code System
Treated Endocarditis	The patient has been treated previously for endocarditis and is not taking antibiotics for the infection (other than prophylactic medications).		112000001752	ACC NCDR
Active Endocarditis	The patient is currently being treated for endocarditis. This includes patients who are diagnosed and treatment begins post-op.		112000001753	ACC NCDR

Section: Myocardial Infarction **Parent: Condition History Details**

Element: 13174 Myocardial Infarction Timeframe

Coding Instruction: Indicate if the timeframe of the myocardial infarction.

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

Prior Myocardial Infarction Timeframe - 1.3.6.1.4.1.19376.1.4.1.6.5.451

Selection	Definition	Source	Code	Code System
Prior Myocardial Infarction Less than 30 days	Prior myocardial infarction is less than 30 days prior to the procedure.		112000001173	ACC NCDR
Prior Myocardial Infarction Greater than or Equal to 30 days			112000001174	ACC NCDR

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

Element: 12905 Procedure History Name

Coding Instruction: The list of medical procedures from which the patient's history is to be determined.

Target Value: N/A

Vendor Instruction: When a Procedure History Name (12905) is selected then Procedure History Occurrence (14268) must not be Null

Procedure History Name - 1.3.6.1.4.1.19376.1.4.1.6.5.341

Selection	Definition	Source	Code	Code System
Aortic Valve Procedure	Any previous surgical or interventional replacement and/or repair of the aortic valve.		112000001755	ACC NCDR
Aortic Valve Balloon Valvuloplasty			77166000	SNOMED CT
Aortic Valve Repair Surgery			112816004	SNOMED CT
Aortic Valve Replacement Surgery			725351001	SNOMED CT
Aortic Valve Replacement - Transcatheter			41873006	SNOMED CT
Aortic Valve Transcatheter Intervention	Any previous interventional repair of the aortic valve. Note: Do not include surgical aortic valve repairs or transcatheter aortic valve replacements.		112000001768	ACC NCDR
Coronary Artery Bypass Graft			232717009	SNOMED CT
Implantable Cardioverter Defibrillator	Placement of an internal cardioverter defibrillator.		447365002	SNOMED CT
Mitral Valve Procedure	Any previous surgical or interventional replacement and/or repair of the mitral valve.		112000001940	ACC NCDR
Mitral Valve Annuloplasty Ring Surgery			232744004	SNOMED CT
Mitral Valve Repair Surgery			384641003	SNOMED CT
Mitral Valve Replacement Surgery			53059001	SNOMED CT
Mitral Valve Transcatheter Intervention	Any previous interventional repair of the mitral valve. Note: Do not include surgical mitral valve repairs or transcatheter mitral valve replacements.		112000001773	ACC NCDR
PCI			415070008	SNOMED CT
Permanent Pacemaker			449397007	SNOMED CT
Pulmonic Valve Procedure	Any previous surgical or interventional replacement and/or repair of the pulmonic valve.		112000001769	ACC NCDR
Tricuspid Valve Procedure	Any previous surgical or interventional replacement and/or repair of the tricuspid valve.		112000001941	ACC NCDR
Tricuspid Valve Repair Surgery			384643000	SNOMED CT
Tricuspid Valve Replacement Surgery			25236004	SNOMED CT
Tricuspid Valve Replacement - Transcatheter			112000001977	ACC NCDR
Tricuspid Valve Transcatheter Intervention	Any previous interventional repair of the tricuspid valve. Note: Do not include surgical tricuspid valve repairs or transcatheter tricuspid valve replacements.		112000001779	ACC NCDR

Element: 14268 Procedure History Occurrence

Coding Instruction: Indicate if the patient does or does not have a history of the indicated medical procedure.

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

Element: 14252 Procedure History Date

Coding Instruction: Indicate the date the procedure was performed.

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

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

Vendor Instruction: Procedure History Date (14252) must be Less than or Equal to Procedure Start Date and Time (7000)

Section: Aortic Valve Replacement **Parent: Procedure History Details**

Element: 14335 Surgical Aortic Valve Replacement Implant ID

Coding Instruction: Indicate the implant ID of the prosthetic aortic valve.

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

Element: 14519 Surgical Aortic Valve Replacement Implant Diameter

Coding Instruction: Indicate the aortic valve implant size.

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

Element: 14236 Aortic Valve Replacement Type

Coding Instruction: Indicate the type of surgical aortic valve replacement.

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

Aortic Valve Replacement Type - 1.3.6.1.4.1.19376.1.4.1.6.5.686

Selection	Definition	Source	Code	Code System
Stented Valve Replacement	Surgical valve replacement with a bioprosthetic stented valve.		112000001758	ACC NCDR
Stentless Valve Replacement	Surgical valve replacement with a bioprosthetic stentless valve.		112000001760	ACC NCDR

Element: 14237 Aortic Valve Replacement Type Not Documented

Coding Instruction: Indicate if the surgical aortic valve replacement type was not documented.

Target Value: N/A

Section: Transcatheter AV Replacement **Parent: Procedure History Details**

Element: 14249 Transcatheter Aortic Valve Replacement Implant ID

Coding Instruction: Indicate the model ID implanted in the transcatheter aortic valve replacement procedure.

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

Supporting Definition: **TAVR Model ID**

The model ID of the transcatheter valve used for transcatheter valve replacement procedure.

Source:

Element: 14515 Transcatheter Aortic Valve Replacement Implant Diameter

Coding Instruction: Indicate the transcatheter aortic valve implant size.

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

Supporting Definition: **TAVR Model ID**

The model ID of the transcatheter valve used for transcatheter valve replacement procedure.

Source:

Section: ICD **Parent: Procedure History Details**

Element: 14259 Cardiac Resynchronization Therapy Defibrillator

Coding Instruction: Indicate if the ICD includes a cardiac resynchronization therapy (CRT-D) device.

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

Supporting Definition: **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.

Source:

Section: Mitral Valve Annuloplasty **Parent: Procedure History Details**

Element: 14257 Mitral Valve Annuloplasty Ring Type

Coding Instruction: Indicate the type of mitral annuloplasty ring implanted surgically.

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

Mitral Annuloplasty Ring Type - 1.3.6.1.4.1.19376.1.4.1.6.5.690

Selection	Definition	Source	Code	Code System
Circumferential Mitral Annuloplasty Ring	A circumferential mitral annuloplasty ring.		112000001772	ACC NCDR
Partial Mitral Annuloplasty Ring	A partial mitral annuloplasty ring.		112000001771	ACC NCDR

Element: 14258 Mitral Valve Annuloplasty Ring Type Not Documented

Coding Instruction: Indicate if the type of mitral annuloplasty ring implanted surgically was not documented.

Target Value: N/A

Element: 14455 Mitral Ring Implant ID

Coding Instruction: Indicate the implant ID of the mitral ring or mitral band.

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

Element: 14533 Mitral Ring Implant Diameter

Coding Instruction: Indicate the mitral ring implant diameter size.

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

Section: Mitral Valve Replacement **Parent: Procedure History Details**

Element: 14241 Mitral Valve Replacement Type

Coding Instruction: Indicate the type of surgical mitral valve replacement.

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

Mitral Valve Replacement Type - 1.3.6.1.4.1.19376.1.4.1.6.5.734

Selection	Definition	Source	Code	Code System
Mechanical			705991002	SNOMED CT
Stented			112000001758	ACC NCDR
Stentless			112000001760	ACC NCDR

Element: 14242 Mitral Valve Replacement Type Not Documented

Coding Instruction: Indicate if the surgical mitral valve replacement type was not documented.

Target Value: N/A

Element: 14334 Surgical Mitral Valve Replacement Implant ID

Coding Instruction: Indicate the implant ID of the prosthetic mitral valve.

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

Element: 14518 Surgical Mitral Valve Replacement Implant Diameter

Coding Instruction: Indicate the mitral valve implant size.

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

Section: Mitral Valve Transcatheter **Parent: Procedure History Details**

Element: 14261 Mitral Valve Transcatheter Intervention Type

Coding Instruction: Indicate the type of transcatheter mitral valve intervention.

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

Mitral Valve Transcatheter Type - 1.3.6.1.4.1.19376.1.4.1.6.5.691

Selection	Definition	Source	Code	Code System
Leaflet Clip Procedure			112000001778	ACC NCDR
Direct Annuloplasty Intervention			112000001775	ACC NCDR
Coronary Sinus Based Intervention			112000001774	ACC NCDR
Valve in Native Valve Procedure			112000001776	ACC NCDR
Valve in Valve Procedure			112000001286	ACC NCDR
Other Mitral Valve Transcatheter Intervention			112000001777	ACC NCDR

Element: 14510 Transcatheter Mitral Valve Replacement Implant ID

Coding Instruction: Indicate the transcatheter mitral valve replacement implant ID.

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

Element: 14534 Transcatheter Mitral Valve Replacement Implant Diameter

Coding Instruction: Indicate the transcatheter mitral valve replacement implant size.

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

Section: Permanent Pacemaker **Parent: Procedure History Details**

Element: 14260 Cardiac Resynchronization Therapy

Coding Instruction: Indicate if the pacemaker type includes cardiac resynchronization therapy (CRT).

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

Supporting Definition: **Cardiac Resynchronization Therapy Pacemaker Placement**

A CRT procedure is the placement of a biventricular pacemaker that sends electrical signals to both ventricles that resynchronizes the heart chambers and helps it pump more effectively. It may or may not have an atrial pacing wire.

Source:

Section: Tricuspid Valve Repair Surgery **Parent: Procedure History Details**

Element: 14299 Tricuspid Valve Annuloplasty Ring

Coding Instruction: Indicate if the patient had a prior tricuspid annuloplasty ring implanted surgically.

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

Supporting Definition: **Tricuspid Valve**

A three-cusp valve of the heart that regulates the flow of blood between the right atrium and the right ventricle of the heart

Source:

Section: Tricuspid Valve Intervention **Parent: Procedure History Details**

Element: 14300 Transcatheter Tricuspid Valve Intervention Type

Coding Instruction: Indicate the type of transcatheter tricuspid valve intervention.

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

Supporting Definition: **Tricuspid Valve**

A three-cusp valve of the heart that regulates the flow of blood between the right atrium and the right ventricle of the heart

Source:

Tricuspid Valve Intervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.735

Selection	Definition	Source	Code	Code System
Annuloplasty Ring			232782007	SNOMED CT
Other			112000001873	ACC NCDR

Section: Tricuspid Valve Replacement Surgery **Parent: Procedure History Details**

Element: 14298 Surgical Tricuspid Valve Replacement Implant ID

Coding Instruction: Indicate the implant ID of the prosthetic tricuspid valve.

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

Element: 14516 Surgical Tricuspid Valve Replacement Implant Diameter

Coding Instruction: Indicate the tricuspid valve implant size.

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

Section: Transcatheter TV Replacement **Parent: Procedure History Details**

Element: 14301 Transcatheter Tricuspid Valve Replacement Implant ID

Coding Instruction: Indicate the implant ID of the prosthetic tricuspid valve.

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

Element: 14517 Transcatheter Tricuspid Valve Replacement Implant Diameter

Coding Instruction: Indicate the tricuspid valve implant size.

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

Section: Lab Visit **Parent: Root**

Element: 14273 Transcatheter Valve Therapy Procedure Type

Coding Instruction: Indicate the TVT procedure performed.

Target Value: The value on current procedure

Vendor Instruction: Transcatheter Valve Therapy Procedure Type (14273) cannot be (Transcatheter Mitral Valve Repair)
When Procedure History Name (12905) is (Mitral Valve Replacement Surgery) with Procedure History Occurrence as (Yes)
AND
Mitral Valve Transcatheter Intervention Type (14261) is (Valve in Native Valve Procedure OR Valve in Valve Procedure)

Within an episode, a lab visit for Transcatheter Mitral Valve Repair can not happen in any subsequent lab visit(s) for Transcatheter Mitral Valve Replacement.

Transcatheter Valve Therapy Procedure - 1.3.6.1.4.1.19376.1.4.1.6.5.695

Selection	Definition	Source	Code	Code System
TAVR	Transcatheter aortic valve replacement		41873006	SNOMED CT
TMVr	Transcatheter mitral repair procedure		112000001801	ACC NCDR
TMVR	Transcatheter mitral valve replacement		112000001458	ACC NCDR
Tricuspid Valve Procedure	Transcatheter tricuspid valve procedures include either a transcatheter tricuspid valve replacement or transcatheter tricuspid valve repair.		112000001977	ACC NCDR

Element: 13329 Procedure Room Entry Date and Time

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

Target Value: The value on current procedure

Supporting Definition: **Procedure Room Entry**

Concept associated with data elements pertaining to a patient's entry into a procedure room.

Source:

Vendor Instruction: Procedure Room Entry Date and Time (13329) must be Less than or Equal to Procedure Start Date and Time (7000)

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

Vendor Instruction: Procedure Start Date and Time (7000) must be Less than or Equal to Discharge Date (10100)

Element: 7005 Procedure End Date and Time

Coding Instruction: Indicate the ending date and time at which the operator completes the procedure and 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 for the last time.

Target Value: The value on current procedure

Vendor Instruction: Procedure End Date and Time (7005) must be Greater than or Equal to Procedure Start Date and Time (7000)

Procedure End Date and Time (7005) must be Less than or Equal to Discharge Date (10100)

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

Element: 13330 Procedure Room Exit Date and Time

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

Target Value: The value on current procedure

Supporting Definition: **Procedure Room Exit**

Concept associated with data elements pertaining to a patient's exit from a procedure room.

Source:

Element: 13793 Mitral Leaflet Clip Procedure

Coding Instruction: Indicate if a mitral leaflet clip procedure was performed.

Section: Lab Visit **Parent: Root**

Target Value: The value on current procedure

Section: Presentation and Evaluation **Parent: Lab Visit**

Element: 12177 CAD Presentation

Coding Instruction: Indicate the patient's coronary artery disease (CAD) presentation. Choose the worst status.

Target Value: The highest value between 7 days prior to arrival and current procedure

Coronary Artery Disease Symptoms/Presentation - 1.3.6.1.4.1.19376.1.4.1.6.5.736

Selection	Definition	Source	Code	Code System
No Symptoms, No Angina	The patient presents with no symptoms.		LA6111-4	LOINC
Unstable Angina	Unstable angina which includes angina at rest, new onset or increasing angina (change in previously diagnosed pattern) within the past 2 months.		4557003	SNOMED CT
Stable Angina	Angina without a change in frequency or pattern for the six weeks prior to this cath lab presentation. Angina is controlled by rest and/or oral or transcutaneous medications.		233819005	SNOMED CT
Symptoms Unlikely to be Ischemic	Pain or symptoms that are not consistent with pain or discomfort of myocardial ischemic origin within the past two weeks.		112000000120	ACC NCDR
STEMI	The patient presents with a STEMI within the past seven days.		401303003	SNOMED CT
Non-STEMI	The patient presents to the cath lab with an NSTEMI within the past seven days.		401314000	SNOMED CT

Element: 14266 Heart Failure

Coding Instruction: Indicate if there is physician documentation or report that the patient has been in a state of heart failure within the past 2 weeks.

Target Value: Any occurrence between 2 weeks prior to current procedure and current procedure

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

Element: 12163 New York Heart Association Classification

Coding Instruction: Indicate the patient's most severe dyspnea or functional class, coded as the New York Heart Association (NYHA) classification.

Target Value: The highest value between 2 weeks prior to current procedure and current procedure

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

NYHA Functional Classification - 1.3.6.1.4.1.19376.1.4.1.6.5.8

Selection	Definition	Source	Code	Code System
Class I	Patients with cardiac disease but without resulting limitations of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, or dyspnea.	The Criteria Committee of the New York Heart Association. Nomenclature and Criteria for Diagnosis of Diseases of the Heart and Great Vessels. 9th ed. Boston, Mass: Little, Brown & Co; 1994:253-256.	420300004	SNOMED CT
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.		421704003	SNOMED CT
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.		420913000	SNOMED CT
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.		422293003	SNOMED CT

Element: 13175 Cardiogenic Shock

Coding Instruction: Indicate if the patient has been in a state of cardiogenic shock within 24 hrs of procedure.

Section: Presentation and Evaluation **Parent: Lab Visit**

Target Value: Any occurrence between 24 hours prior to current procedure and up to current procedure

Supporting Definition: **Cardiogenic Shock**

Cardiogenic shock is defined as a sustained (>30 min) episode of systolic blood pressure <90 mm Hg and/or cardiac index <2.2 L/min per square meter determined to be secondary to cardiac dysfunction and/or the requirement for parenteral inotropic or vasopressor agents or mechanical support (eg, IABP, extracorporeal circulation, VADs) to maintain blood pressure and cardiac index above those specified levels.

Note: Transient episodes of hypotension reversed with IV fluid or atropine do not constitute cardiogenic shock. The hemodynamic compromise (with or without extraordinary supportive therapy) must persist for at least 30 min.

Source: Cannon CP, et al. 2013 ACCF/AHA Key Data Elements and Definitions for Measuring the Clinical Management and Outcomes of Patients With Acute Coronary Syndromes and Coronary Artery Disease: A Report of the ACC/AHA Task Force on Clinical Data Standards (Writing Committee to Develop Acute Coronary Syndromes and Coronary Artery Disease Clinical Data Standards). J Am Coll Cardiol. 2013;61(9):992-1025.

Element: 14267 Cardiac Arrest

Coding Instruction: Indicate if the patient has had an episode of cardiac arrest within 24 hours of the procedure.

Target Value: Any occurrence between 24 hours prior to current procedure and up to current procedure

Supporting Definition: **Cardiac Arrest**

Cardiac arrest is defined as acute cardiac event documented by one of the following: ventricular fibrillation, rapid ventricular tachycardia or bradycardia rhythms with hemodynamic compromise causing loss of consciousness, pulseless rhythms (PEA), or asystole requiring cardiopulmonary resuscitation (two or more chest compressions or open chest massage, emergency temporary pacing, pericardiocentesis, institution of ECMO, or defibrillation) and without these measures death would have almost certainly resulted.

Source: Data Governance Subcommittee of the NCDR's SQOC

Element: 13186 Symptoms of Aortic Stenosis Present

Coding Instruction: Code yes if the patient has any symptoms of heart failure on arrival or anytime within the past three months.
For example, if a patient had symptoms within the past three months (even if there are no symptoms on arrival to the hospital), code yes. If there is documentation of symptoms (e.g. shortness of breath) but no documentation of heart failure, code yes. These indicate presence of symptomatic aortic stenosis.

Target Value: Any occurrence between 3 months prior to arrival at this facility and start of the procedure

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 13188 Symptoms of Aortic Stenosis Not Documented

Coding Instruction: Indicate whether there is no documentation of symptoms of aortic stenosis.

Target Value: N/A

Element: 13191 Five Meter Walk Test Performed

Coding Instruction: Indicate whether the five meter walk test was performed.

Note: If the five meter walk test was performed, 3 walk tests should be documented. If the patient is unable to walk for all three tests, document the tests that were completed.

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Supporting Definition: **Five Meter Walk Test**

An outcome measure in STS the Adult Cardiac Surgery Database to predict frailty in individuals who are candidates for cardiac surgery.

Source:

Five Meter Walk Test Performed - 1.3.6.1.4.1.19376.1.4.1.6.5.456

Selection	Definition	Source	Code	Code System
Test Not Performed			112000001181	ACC NCDR
Test Performed			112000001180	ACC NCDR
Unable to Walk	The patient is physically unable to walk to perform this test. For example, the patient is wheelchair bound,has shortness of breath or other symptoms that are so severe, they are unable to walk.		112000001182	ACC NCDR

Element: 13710 Six Minute Walk Test

Coding Instruction: Indicate whether the six minute walk test was performed.

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Section: STS Risk Score **Parent: Presentation and Evaluation**

Element: 13698 Society of Thoracic Surgeons Risk Score Type

Coding Instruction: Indicate the patient's predicted risk of mortality for surgical valve replacement or repair as determined by the heart team and based on the Society for Thoracic Surgeon's risk model.

The following STS risk scores should be documented based on the STS Adult Cardiac Surgery Risk Calculator:
TAVR: Isolated aortic valve replacement
TMVR: Isolated mitral valve replacement
Mitral Leaflet Clip Procedure: mitral valve repair and isolated mitral valve replacement

Note: Currently there is not a risk score available for tricuspid procedures.

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

Vendor Instruction: When Society of Thoracic Surgeons Risk Score Type (13698) is Equal to (Society of Thoracic Surgeons Risk Score for Aortic Valve Replacement) then Transcatheter Valve Therapy Procedure Type (14273) must be Equal to (TAVR)

When Society of Thoracic Surgeons Risk Score Type (13698) is Equal to (Society of Thoracic Surgeons Risk Score for Mitral Valve Repair) then Transcatheter Valve Therapy Procedure Type (14273) must be Equal to (TMVr)

When Society of Thoracic Surgeons Risk Score Type (13698) is Equal to (Society of Thoracic Surgeons Risk Score for Mitral Valve Replacement) then Transcatheter Valve Therapy Procedure Type (14273) must be Equal to (TMVR,TMVr)

A Society of Thoracic Surgeons Risk Score Type (13698) may only be entered/selected once

Society of Thoracic Surgeons Risk Score Type - 1.3.6.1.4.1.19376.1.4.1.6.5.693

Selection	Definition	Source	Code	Code System
Society of Thoracic Surgeons Risk Score for Aortic Valve Replacement			112000001796	ACC NCDR
Society of Thoracic Surgeons Risk Score for Mitral Valve Repair			112000001795	ACC NCDR
Society of Thoracic Surgeons Risk Score for Mitral Valve Replacement			112000001793	ACC NCDR

Element: 14271 Society of Thoracic Surgeons Risk Score Measurement

Coding Instruction: Indicate the patient's predicted risk of mortality for surgical valve replacement or repair as determined by the heart team and based on the Society for Thoracic Surgeon's risk calculator (https://www.sts.org/resources/risk-calculator)

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

Section: Shared Decision Making **Parent: Presentation and Evaluation**

Element: 14732 Shared Decision Making

Coding Instruction: Indicate if shared decision making was performed for the procedure.

Target Value: The value on current procedure

Supporting Definition: **Shared Decision Making**

Shared decision making occurs when a health care provider and a patient work together to make a health care decision that is best for the patient.
The optimal decision takes into account evidence-based information about available options, the provider's knowledge and experience, and the patient's values and preferences.

Source: AHRQ.gov

Element: 14733 Shared Decision Making Tool Used

Coding Instruction: Indicate if a shared decision making tool was used.

Target Value: The value on current procedure

Element: 14734 Shared Decision Making Tool Name

Coding Instruction: Indicate what tool was used.
If the tool used is not in the drop-down list, please contact NCDR@acc.org to have a selection added.

Target Value: The value on current procedure

Shared Decision Making Tools - 1.3.6.1.4.1.19376.1.4.1.6.5.765

Selection	Definition	Source	Code	Code System
Other Shared Decision Making Tool			100000351	ACC NCDR

Section: KCCQ12 **Parent: Presentation and Evaluation**

Element: 13843 Kansas City Cardiomyopathy Questionnaire 12 Performed

Coding Instruction: Indicate if the baseline Kansas City Cardiomyopathy Questionnaire (KCCQ-12) was performed.

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Element: 13846 Kansas City Cardiomyopathy Questionnaire 12 Question 1a

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 1a.

Heart Failure Limitation - Showering/bathing

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 1a thru 1c - 1.3.6.1.4.1.19376.1.4.1.6.5.570

Selection	Definition	Source	Code	Code System
1 - Extremely Limited			100001173	ACC NCDR
2 - Quite a Bit Limited			100001171	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Not at All Limited			100001167	ACC NCDR
6 - Limited for Other Reasons or Did Not Do These Activities			100014041	ACC NCDR

Element: 13848 Kansas City Cardiomyopathy Questionnaire 12 Question 1b

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 1b.

Heart Failure Limitation - Walking 1 block on level ground

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 1a thru 1c - 1.3.6.1.4.1.19376.1.4.1.6.5.570

Selection	Definition	Source	Code	Code System
1 - Extremely Limited			100001173	ACC NCDR
2 - Quite a Bit Limited			100001171	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Not at All Limited			100001167	ACC NCDR
6 - Limited for Other Reasons or Did Not Do These Activities			100014041	ACC NCDR

Element: 13849 Kansas City Cardiomyopathy Questionnaire 12 Question 1c

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 1c.

Heart Failure Limitation - Hurrying or jogging

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 1a thru 1c - 1.3.6.1.4.1.19376.1.4.1.6.5.570

Selection	Definition	Source	Code	Code System
1 - Extremely Limited			100001173	ACC NCDR
2 - Quite a Bit Limited			100001171	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Not at All Limited			100001167	ACC NCDR
6 - Limited for Other Reasons or Did Not Do These Activities			100014041	ACC NCDR

Element: 13851 Kansas City Cardiomyopathy Questionnaire 12 Question 2

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 2.

Symptom Frequency - swelling in legs

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 2 - 1.3.6.1.4.1.19376.1.4.1.6.5.571

Selection	Definition	Source	Code	Code System

Section: KCCQ12	Parent: Presentation and Evaluation		
1 - Every Morning		112000001553	ACC NCDR
2 - Three or More Times Per Week But Not Everyday		112000001554	ACC NCDR
3 - One to Two Times Per Week		112000001555	ACC NCDR
4 - Less Than Once a Week		112000001556	ACC NCDR
5 - Never Over the Past Two Weeks		112000001557	ACC NCDR

Element: 13853 Kansas City Cardiomyopathy Questionnaire 12 Question 3

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 3.

Symptom Frequency - fatigue

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 3 and 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.572

Selection	Definition	Source	Code	Code System
1 - All the Time			112000001818	ACC NCDR
2 - Several Times Per Day			112000001559	ACC NCDR
3 - At Least Once Per Day			112000001560	ACC NCDR
4 - Three or More Times Per Week But Not Everyday			112000001554	ACC NCDR
5 - One to Two Times Per Week			112000001555	ACC NCDR
6 - Less Than Once a Week			112000001556	ACC NCDR
7 - Never Over the Past Two Weeks			112000001557	ACC NCDR

Element: 13855 Kansas City Cardiomyopathy Questionnaire 12 Question 4

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 4.

Symptom Frequency - shortness of breath

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 3 and 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.572

Selection	Definition	Source	Code	Code System
1 - All the Time			112000001818	ACC NCDR
2 - Several Times Per Day			112000001559	ACC NCDR
3 - At Least Once Per Day			112000001560	ACC NCDR
4 - Three or More Times Per Week But Not Everyday			112000001554	ACC NCDR
5 - One to Two Times Per Week			112000001555	ACC NCDR
6 - Less Than Once a Week			112000001556	ACC NCDR
7 - Never Over the Past Two Weeks			112000001557	ACC NCDR

Element: 13857 Kansas City Cardiomyopathy Questionnaire 12 Question 5

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 5.

Symptom Frequency - sleep sitting up due to shortness of breath

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 5 - 1.3.6.1.4.1.19376.1.4.1.6.5.704

Selection	Definition	Source	Code	Code System
1 - Every Night			112000001819	ACC NCDR
2 - Three or More Times Per Week But Not Everyday			112000001554	ACC NCDR
3 - One to Two Times Per Week			112000001555	ACC NCDR
4 - Less Than Once a Week			112000001556	ACC NCDR
5 - Never Over the Past Two Weeks			112000001557	ACC NCDR

Element: 13859 Kansas City Cardiomyopathy Questionnaire 12 Question 6

Section: KCCQ12 **Parent: Presentation and Evaluation**

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 6.

Quality of Life - effect on enjoyment of life due to heart failure

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 6 - 1.3.6.1.4.1.19376.1.4.1.6.5.573

Selection	Definition	Source	Code	Code System
1 - It Has Extremely Limited My Enjoyment of Life			100014049	ACC NCDR
2 - It Has Limited My Enjoyment of Life Quite a Bit			100014050	ACC NCDR
3 - It Has Moderately Limited My Enjoyment of Life			100014051	ACC NCDR
4 - It Has Slightly Limited My Enjoyment of Life			100014052	ACC NCDR
5 - It Has Not Limited My Enjoyment of Life at All			100014053	ACC NCDR

Element: 13861 Kansas City Cardiomyopathy Questionnaire 12 Question 7

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 7.

Quality of life - remaining life with heart failure

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 7 - 1.3.6.1.4.1.19376.1.4.1.6.5.574

Selection	Definition	Source	Code	Code System
1 - Not At All Satisfied			112000001561	ACC NCDR
2 - Mostly Dissatisfied			112000001562	ACC NCDR
3 - Somewhat Satisfied			112000001563	ACC NCDR
4 - Mostly Satisfied			112000001564	ACC NCDR
5 - Completely Satisfied			112000001565	ACC NCDR

Element: 13863 Kansas City Cardiomyopathy Questionnaire 12 Question 8a

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 8a.

Social limitation - hobbies, recreational activities

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 8 - 1.3.6.1.4.1.19376.1.4.1.6.5.575

Selection	Definition	Source	Code	Code System
1 - Severely Limited			112000001566	ACC NCDR
2 - Limited Quite a Bit			112000001567	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Did Not Limit at All			112000001569	ACC NCDR
6 - Does Not Apply or Did Not Do for Other Reasons			112000001570	ACC NCDR

Element: 13865 Kansas City Cardiomyopathy Questionnaire 12 Question 8b

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 8b.

Social limitation - working or doing household chores

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 8 - 1.3.6.1.4.1.19376.1.4.1.6.5.575

Selection	Definition	Source	Code	Code System
1 - Severely Limited			112000001566	ACC NCDR
2 - Limited Quite a Bit			112000001567	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Did Not Limit at All			112000001569	ACC NCDR
6 - Does Not Apply or Did Not Do for Other Reasons			112000001570	ACC NCDR

Section: KCCQ12 **Parent: Presentation and Evaluation**

Element: 13867 Kansas City Cardiomyopathy Questionnaire 12 Question 8c

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 8c.

Social limitation - visiting family or friends

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 8 - 1.3.6.1.4.1.19376.1.4.1.6.5.575

Selection	Definition	Source	Code	Code System
1 - Severely Limited			112000001566	ACC NCDR
2 - Limited Quite a Bit			112000001567	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Did Not Limit at All			112000001569	ACC NCDR
6 - Does Not Apply or Did Not Do for Other Reasons			112000001570	ACC NCDR

Element: 14310 KCCQ Overall Summary Score

Coding Instruction: (Auto Calculated) This field is auto-populated by your application.
Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Overall Summary Score.

Note(s): The 12 patient responses are reduced into four summary scores (Physical Limitation Score, Symptom Frequency Score, Quality of Life Score, Social Limitation Score). The four summary scores are used to calculate the Overall Summary Score.
For more information, please refer to the KCCQ-12 Scoring Instructions document
provided by the STS/ACC TVT Registry.

Target Value: The value on start of current procedure

Section: Five Meter Walk Test **Parent: Presentation and Evaluation**

Element: 13199 Five Meter Walk Test Counter

Coding Instruction: The software assigned five meter walk test counter should start at one and be incremented by one for each test performed, in chronological order, during the clinical encounter. The five meter walk test number should be assigned sequentially in ascending order. Do not skip numbers.

Note: If the five meter walk test was performed, 3 walk tests should be documented. If the patient is unable to walk for all three tests, document the tests that were completed.

Target Value: N/A

Supporting Definition: **Five Meter Walk Test**

An outcome measure in STS the Adult Cardiac Surgery Database to predict frailty in individuals who are candidates for cardiac surgery.

Source:

Element: 13201 Five Meter Walk Test Time

Coding Instruction: Indicate the value of the five meter walk test in seconds.

Target Value: The value on current admission

Supporting Definition: **Five Meter Walk Test**

An outcome measure in STS the Adult Cardiac Surgery Database to predict frailty in individuals who are candidates for cardiac surgery.

Source:

Section: Six Minute Walk Test **Parent: Presentation and Evaluation**

Element: 13711 Six Minute Walk Test Date

Coding Instruction: Indicate the date the six minute walk test was performed.

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Element: 13712 Six Minute Walk Test Total Distance

Coding Instruction: Indicate the total distance, in feet, the patient walked.

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Element: 14262 Six Minute Walk Test Reason Not Performed

Coding Instruction: Indicate the reason why the six minute walk test was not performed.

Target Value: The last value between 90 days prior to the start of the current procedure and the start of procedure

Six Minute Walk Test Reason Not Performed - 1.3.6.1.4.1.19376.1.4.1.6.5.544

Selection	Definition	Source	Code	Code System
Non-Cardiac Reason			112000001418	ACC NCDR
Cardiac Reason			112000001419	ACC NCDR
Patient Not Willing to Walk			112000001420	ACC NCDR
Not Performed by Site			112000001421	ACC NCDR

Section: Pre-Procedure Clinical Data **Parent: Presentation and Evaluation**

Element: 6030 Hemoglobin

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

Note(s):
This may include POC (Point of Care) testing results or results obtained prior to arrival at this facility.

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

Supporting Definition: **Hemoglobin**

Hemoglobin (Hb or Hgb) is the iron-containing oxygen-transport metalloprotein in the red blood cells. It carries oxygen from the lungs to the rest of the body (i.e. the tissues) where it releases the oxygen to burn nutrients and provide energy. Hemoglobin concentration measurement is among the most commonly performed blood tests, usually as part of a complete blood count. If the concentration is below normal, this is called anemia. Anemias are classified by the size of red blood cells: "microcytic" if red cells are small, "macrocytic" if they are large, and "normocytic" if otherwise. Dehydration or hyperhydration can greatly influence measured hemoglobin levels.

Source: http://s.details.loinc.org/LOINC/718-7.html?sections=Simple

Element: 6031 Hemoglobin Not Drawn

Coding Instruction: Indicate if the hemoglobin was not drawn.

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

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: **Sodium**

Sodium is an essential nutrient that regulates blood volume, blood pressure, osmotic equilibrium and electrolyte balance. Sodium chloride is the principal source of sodium in the diet, and is used for seasoning and as a preservative. Increased levels of sodium intake can cause hypertension and reportedly leads to 7.6 million premature deaths worldwide. Sodium is also important in neuron function and osmoregulation between cells and the extracellular fluid.

Source: http://s.details.loinc.org/LOINC/2950-4.html?sections=Simple

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

Element: 6050 Creatinine

Coding Instruction: Indicate the creatinine (Cr) level mg/dL.

Note(s):
This may include POC (Point of Care) testing results or results obtained prior to arrival at this facility.

Target Value: The last value between 30 days prior to the procedure and the current procedure

Supporting Definition: **Creatinine**

Creatinine or creatine anhydride, is a breakdown product of creatine phosphate in muscle. The loss of water molecule from creatine results in the formation of creatinine. It is transferred to the kidneys by blood plasma, whereupon it is eliminated by glomerular filtration and partial tubular excretion. Creatinine is usually produced at a fairly constant rate and measuring its serum level is a simple test. A rise in blood creatinine levels is observed only with marked damage to functioning nephrons; therefore this test is not suitable for detecting early kidney disease. Creatine and creatinine are metabolized in the kidneys, muscle, liver and pancreas.

Source: http://s.details.loinc.org/LOINC/2160-0.html?sections=Simple

Element: 6051 Creatinine Not Drawn

Coding Instruction: Indicate if a creatinine level was not drawn.

Target Value: N/A

Element: 6055 Bilirubin (Total)

Coding Instruction: Indicate the total bilirubin (mg/dL)

Note(s):
This may include POC (Point of Care) testing results.

Target Value: The last value between 30 days prior to the procedure and the current procedure

Supporting Definition: **Bilirubin (Total)**

Bilirubin is the brownish yellow breakdown product of normal red blood cell, specifically heme, catabolism. Bilirubin is excreted in bile, and its levels are elevated in certain diseases including bile obstruction, hepatitis, cirrhosis, liver or pancreatic tumor, hemolysis, certain medications and inherited disorders. Levels of bilirubin in amniotic fluid are indicative of the severity of fetal hemolysis as in Rh disease. It is responsible for the brownish yellow color of bruises and in jaundice.

Source: http://s.details.loinc.org/LOINC/42719-5.html?sections=Simple

Element: 6056 — Bilirubin Not Drawn

Coding Instruction: Indicate if the total Bilirubin was not drawn.

Target Value: N/A

Element: 14210 — Albumin

Coding Instruction: Indicate the total albumin (in g/dL).

Target Value: The last value between 30 days prior to the procedure and the current procedure

Element: 14211 — Albumin Not Drawn

Coding Instruction: Indicate true if the total albumin was not drawn

Target Value: N/A

Element: 13213 — Platelet Count

Coding Instruction: Indicate the pre-procedure platelet count in platelets per microliter.

Target Value: The last value between 30 days prior to the procedure and the current procedure

Supporting Definition: **Platelet Count**

A laboratory test used to determine of the number of platelets in a blood sample.

Source: NCI Thesaurus.

Element: 13214 — Platelet Count Not Drawn

Coding Instruction: Indicate if a platelet count was not drawn prior to the procedure.

Target Value: N/A

Supporting Definition: **Platelet Count**

A laboratory test used to determine of the number of platelets in a blood sample.

Source: NCI Thesaurus.

Element: 13203 — INR

Coding Instruction: Indicate the international normalized ratio (INR) if the patient is on routine warfarin or coumadin therapy.

Target Value: The last value between 30 days prior to the procedure and the current procedure

Supporting Definition: **International Normalized Ratio (INR)**

The INR is specifically intented for evaluating protime results on patients stabilized on long term oral anticoagulant therapy. The INR is not appropriate to evalulate hemostatic function in patients with liver disease, for screening for hereditary factor deficiencies or acquired vitamin K deficiencies, or for routine preoperative screening; this should be evaluated on the normal range in seconds. INR is calculated by the equation, INR = (PTR) raised to the power of ISI, where ISI = International Sensitivity Index (assigned to each reagent thromboplastin). PTR = prothrombin time ratio (pat PT/pop mean PT). Computation of the INR of specific thromboplastin reagent should allow for uniformity in prothrombin time testing regardless of the reagent system or instrumentation used.

Source: http://s.details.loinc.org/LOINC/6301-6.html?sections=Simple

Element: 6046 — International Normalized Ratio Not Drawn

Coding Instruction: Indicate if INR was not drawn.

Target Value: N/A

Element: 14280 — BNP

Coding Instruction: Indicate the B-type natriuretic peptide (BNP) value.

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

Supporting Definition: **Natriuretic peptide B**

Brain natriuretic peptide (BNP) is an active fragment (1-32) of ProBNP which is produced by myocardial cells. It increases in both right-sided and left-sided heart failure as well as in systolic and diastolic heart failure. Thus, it is used to diagnose and manage heart failure.

Section: Pre-Procedure Clinical Data **Parent: Presentation and Evaluation**

When a patient is taking recombinant PBN (Natricor), BNP will reflect serum levels. NT-ProBNP, an inactive fragment (1-78) of ProBNP is used to assess the degree of failure. Both of these polypeptides have roughly the same predictive power. NT-ProBNP is commonly called ProBNP.

Source: http://s.details.loinc.org/LOINC/42637-9.html?sections=Simple

Element: 13205 B-Type Natriuretic Peptide Not Drawn

Coding Instruction: Indicate if a pre-procedure B-type natriuretic peptide (BNP) was not collected.

Target Value: N/A

Element: 14279 N-Terminal Pro B-Type Natriuretic Peptide Value

Coding Instruction: Indicate the N-Terminal Pro B-Type Natriuretic Peptide (NT-proBNP) Value.

Target Value: The last value between 6 months prior to procedure and the start of the current procedure

Supporting Definition: **N-Terminal Pro B-Type Natriuretic Peptide Value**

ProBNP is the 108 amino acid pro-hormone of BNP (Brain Naturetic Peptide) that is produced mainly in the left ventricle. The prohormone splits into two polypeptides- the biologically active but shorter BNP (77-108) and the longer N terminal (1-76) fragment called NT-proBNP. Commercial assays are available for NT-proBNP because of its usefulness in predicting cardiovascular risk. In one study, it was the single best predictor of survival among patients with the acute coronary syndrome. It also declines with successful treatment of left ventricular dysfunctionand heart failure and is used by some to track the success of such treatment. No commercial assays exist for proBNP (the whole peptide)- though the trade name for one companies NT-proBNP is "proBNP" -- a misnomer. We include proBNP as the a related name for NT-proBNP so that people who call it proBNP will find it in LOINC.
Source: Regenstrief Help

Source: http://s.details.loinc.org/LOINC/33762-6.html?sections=Simple

Element: 13206 N-Terminal Pro B-Type Natriuretic Peptide Not Drawn

Coding Instruction: Indicate if a pre-procedure N-terminal pro B-type natriuretic peptide (NT-proBNP) was not collected.

Target Value: N/A

Section: Pre-Procedure ECG and Pulmonary Function **Parent: Presentation and Evaluation**

Element: 13216 Forced Expiratory Volume in One Second Predicted

Coding Instruction: Indicate the FEV1 % predicted from the most recent pulmonary function test prior to procedure.

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

Supporting Definition: **FEV1**

A test of lung function, the FEV1 is the volume exhaled during the first second of a forced expiratory maneuver started from the level of total lung capacity. It is the most frequently used index for assessing bronchoconstriction or bronchodilatation.

FEV1% predicted is defined as FEV1% of the patient divided by the average FEV1% in the population for any person of similar age, sex and body composition.

Source: NCI Thesaurus

Element: 13217 Forced Expiratory Volume in One Second Predicted Not Performed

Coding Instruction: Indicate whether % predicted Forced Expiratory Volume (FEV1) was not performed or the patient did not have a pulmonary function test prior to the procedure.

Target Value: N/A

Supporting Definition: **FEV1**

A test of lung function, the FEV1 is the volume exhaled during the first second of a forced expiratory maneuver started from the level of total lung capacity. It is the most frequently used index for assessing bronchoconstriction or bronchodilatation.

FEV1% predicted is defined as FEV1% of the patient divided by the average FEV1% in the population for any person of similar age, sex and body composition.

Source: NCI Thesaurus

Element: 13218 Diffusing Capacity of the Lungs for Carbon Monoxide Predicted

Coding Instruction: Indicate the % predicted diffusing capacity of the lungs for carbon monoxide (DLCO) value obtained for the patient. Choose the value that represents the lowest % predicted whether or not it is the simple DLCO or the DLCO/VA.

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

Supporting Definition: **DLCO**

A measurement of carbon monoxide (CO) transfer from inspired gas to pulmonary capillary blood.

Source: NCI Thesaurus

Element: 13219 Diffusing Capacity of the Lungs for Carbon Monoxide Not Performed

Coding Instruction: Indicate if a lung diffusion test (DLCO) was not performed.

Target Value: N/A

Supporting Definition: **DLCO**

A measurement of carbon monoxide (CO) transfer from inspired gas to pulmonary capillary blood.

Source: NCI Thesaurus

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

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

Section: Pre-Procedure Medication(s) **Parent: Presentation and Evaluation**

Element: 13699 Anticoagulants Administered

Coding Instruction: Indicate whether anticoagulants were administered.

Target Value: Any occurrence between 24 hours prior to current procedure and up to current procedure

Pre-procedure Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.44

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 13643 Positive Inotropes Administered

Coding Instruction: Indicate if positive inotropes was administered.

For patients requiring IV inotropic support, indicate positive inotropes only.

Target Value: Any occurrence between 24 hours prior to current procedure and up to current procedure

Pre-procedure Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.44

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Section: Pre-Procedure Diagnostic Cath Findings **Parent: Presentation and Evaluation**

Element: 13220 Diagnostic Catheterization Performed

Coding Instruction: Indicate whether diagnostic cardiac catheterization was performed.

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

Element: 13222 Diagnostic Catheterization Date

Coding Instruction: Indicate the date the diagnostic catheterization was performed.

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

Element: 13381 Number of Diseased Vessels

Coding Instruction: Indicate the number of diseased major native coronary vessel systems: LAD system, circumflex system, and/or right system with >= 50% narrowing of any vessel preoperatively.

Notes:
1. Do not include coronary artery bypass grafts.
2. Left main disease (>=50%) is counted as TWO vessels (LAD and Circumflex, which may include a Ramus Intermedius). For example, left main and RCA would count as three total.

Target Value: The highest value between birth and start of the procedure

Number of Diseased Vessels - 1.3.6.1.4.1.19376.1.4.1.6.5.380

Selection	Definition	Source	Code	Code System
None			100001231	ACC NCDR
One			112000000788	ACC NCDR
Two			112000000790	ACC NCDR
Three			112000000792	ACC NCDR

Element: 13382 Number of Diseased Vessels Not Documented

Coding Instruction: Indicate true if the number of diseased vessels was not documented in the medical record.

Target Value: N/A

Element: 13260 Left Main Stenosis Greater Than or Equal to 50 Percent

Coding Instruction: Indicate whether the patient has left main coronary disease. Left main coronary disease is present when there is >= 50% compromise of vessel diameter pre-operatively.

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

Supporting Definition: **Left Main Stenosis**

Stenosis of the left main coronary artery.

Source:

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 13261 Left Main Stenosis Not Documented

Coding Instruction: Indicate whether the % stenosis of the left main coronary artery was not documented.

Target Value: N/A

Supporting Definition: **Left Main Stenosis**

Stenosis of the left main coronary artery.

Source:

Element: 13301 Proximal Left Anterior Descending Artery Disease Greater or Equal to 70 percent

Coding Instruction: Indicate whether the percent luminal narrowing of the proximal left anterior descending artery at the point of maximal stenosis is greater than or equal to 70%.

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

Supporting Definition: **LAD Stenosis**

Section: Pre-Procedure Diagnostic Cath Findings **Parent: Presentation and Evaluation**

Narrowing of the left anterior descending coronary artery.

Source:

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 13302 Proximal Left Anterior Descending Artery Disease Greater or Equal to 70 percent Not Documented

Coding Instruction: Indicate whether the % stenosis of the proximal left anterior descending coronary artery was not documented.

Target Value: N/A

Supporting Definition: **LAD Stenosis**

Narrowing of the left anterior descending coronary artery.

Source:

Element: 13496 Syntax Score

Coding Instruction: Indicate the syntax score documented in the medical record. The syntax score is required for patients with left main disease and/or 3 vessel disease in native coronary arteries.

SYNTAX (Synergy between PCI with TAXUS drug-eluting stent and Cardiac Surgery) Score: a grading tool used to determine the complexity of CAD in native vessels.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Syntax Score Tiers - 1.3.6.1.4.1.19376.1.4.1.6.5.504

Selection	Definition	Source	Code	Code System
Low Syntax Score (<22)	Low Syntax Score(<22)		10001424799	ACC NCDR
Intermediate Syntax Score (22-32)	Intermediate Syntax Score (22-32)		10001424798	ACC NCDR
High Syntax Score (>= 33)	High Syntax Score (>= 33)		10001424797	ACC NCDR

Element: 13497 Syntax Score Not Documented

Coding Instruction: Indicate if the syntax score was not documented in the medical record.

Target Value: N/A

Element: 13713 Cardiac Output

Coding Instruction: Indicate the cardiac output in L/min, documented by pre-procedure diagnostic cardiac cath findings.

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

Element: 13714 Cardiac Output Not Documented

Coding Instruction: Indicate if the cardiac output was not documented.

Target Value: N/A

Element: 13715 Pulmonary Capillary Wedge Pressure

Coding Instruction: Indicate the pulmonary capillary wedge pressure, in mm Hg.

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

Element: 13716 Pulmonary Capillary Wedge Pressure Not Documented

Coding Instruction: Indicate if the pulmonary capillary wedge pressure was not documented.

Target Value: N/A

Element: 13719 Pulmonary Artery Mean Pressure

Coding Instruction: Indicate the pulmonary artery mean pressure, in mm Hg.

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

Element: 13720 Pulmonary Artery Mean Pressure Not Documented

Section: Pre-Procedure Diagnostic Cath Findings **Parent: Presentation and Evaluation**

Coding Instruction: Indicate the pulmonary artery mean pressure, in mm Hg.

Target Value: N/A

Element: 13717 Pulmonary Artery Systolic Pressure

Coding Instruction: Indicate the pulmonary artery systolic pressure, in mm Hg.

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

Element: 13718 Pulmonary Artery Systolic Pressure Not Documented

Coding Instruction: Indicate true if the pulmonary artery systolic pressure is not documented

Target Value: N/A

Element: 14291 Pulmonary Vascular Resistance

Coding Instruction: Indicate the pulmonary vascular resistance in Woods units (mm Hg/L/min).

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

Element: 14289 Pulmonary Vascular Resistance Not Documented

Coding Instruction: Indicate if the pulmonary vascular resistance was not documented.

Target Value: N/A

Element: 14272 Right Atrial Pressure

Coding Instruction: Indicate the mean right atrial pressure (RAP) in mm Hg.

This can also documented as the central venous pressure (CVP).

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

Element: 13829 Right Atrial Pressure Not Documented

Coding Instruction: Indicate if the mean right atrial pressure pre-procedure, was not documented.

Target Value: N/A

Element: 13303 Right Ventricular Systolic Pressure

Coding Instruction: Indicate the right ventricular systolic pressure in mm Hg recorded prior to the start of the procedure. Note: If more than one RVSP documented, code the highest value.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Supporting Definition: **RV Systolic Pressure**

The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart

Source: NCI EVS

Element: 13304 Right Ventricular Systolic Pressure Not Documented

Coding Instruction: Indicate if the right ventricular systolic pressure was not documented.

Target Value: N/A

Supporting Definition: **RV Systolic Pressure**

The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart

Source: NCI EVS

Section: Pre-Procedure CTA Findings **Parent: Presentation and Evaluation**

Element: 13422 Aortic Valve Annulus Assessment Method

Coding Instruction: Indicate the method used to assess the aortic valve annulus size.

Note: If the annulus was assessed with more than one method, code the findings based on computed tomography angiography (CTA). If CTA was not performed, code the measurement based on the assessment method (echo or other method) used to assess the annulus size to determine the size of the prosthetic valve implanted during the procedure.

Target Value: The value on current procedure

Supporting Definition: **AV Annulus Assessment Method**

The imaging modality method used to assess the aortic valve annulus.

Source:

Imaging Modalities - 1.3.6.1.4.1.19376.1.4.1.6.5.486

Selection	Definition	Source	Code	Code System
Computed Tomography Angiography			418272005	SNOMED CT
Transthoracic Echo (TTE)			433236007	SNOMED CT
Transesophageal Echocardiogram (TEE)			105376000	SNOMED CT
Other			100000351	ACC NCDR

Element: 13428 Aortic Valve Annulus Minimum Diameter

Coding Instruction: Indicate the minimum diameter of the aortic valve annulus, in mm.

Note: Document aortic valve annulus measurements that are available, preferably measured from a CT.

Target Value: The value on current procedure

Element: 13429 Aortic Valve Annulus Maximum Diameter

Coding Instruction: Indicate the maximum diameter of the aortic valve annulus, in mm.

Note: Document aortic valve annulus measurements that are available, preferably measured from a CT.

Target Value: The value on current procedure

Element: 13438 Aortic Valve Annulus Area

Coding Instruction: Indicate the area of the aortic valve annulus, in mm2.

Note: Document aortic valve annulus measurements that are available, preferably measured from a CT.

Target Value: The value on current procedure

Element: 13439 Aortic Valve Annulus Perimeter

Coding Instruction: Indicate the perimeter of the aortic valve annulus, in mm.

Note: Document aortic valve annulus measurements that are available, preferably measured from a CT.

Target Value: The value on current procedure

Element: 13423 Aortic Valve Calcification Severity

Coding Instruction: Indicate the degree of calcification on the aortic valve, documented by CT.

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

Aortic Valve Calcification - 1.3.6.1.4.1.19376.1.4.1.6.5.489

Selection	Definition	Source	Code	Code System
None			112000001127	ACC NCDR
Minimal			112000001247	ACC NCDR
Moderate/Severe			112000001249	ACC NCDR

Element: 13437 Aortic Valve Calcification Severity Not Documented

Coding Instruction: Indicate if the degree of calcification on the aortic valve was not documented.

Target Value: N/A

Section: Left Ventricular Ejection **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13305 Left Ventricular Ejection Fraction

Coding Instruction: Indicate the percentage of the blood emptied from the left ventricle at the end of the contraction.

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)

Element: 13306 Left Ventricular Ejection Fraction Not Assessed

Coding Instruction: Indicate whether the left ventricular ejection fraction was not assessed or not measured.

Target Value: N/A

Section: Left Ventricular Dimension **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13721 Left Ventricular Internal Systolic Dimension

Coding Instruction: Indicate the left ventricular internal systolic dimension in cm.

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

Element: 13722 Left Ventricular Internal Systolic Dimension Not Measured

Coding Instruction: Indicate if the left ventricular internal systolic dimension was not measured.

Target Value: N/A

Element: 13723 Left Ventricular Internal Diastolic Dimension

Coding Instruction: Indicate the left ventricular internal diastolic dimension in cm.

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

Element: 13724 Left Ventricular Internal Diastolic Dimension Not Measured

Coding Instruction: Indicate if the left ventricular internal diastolic dimension was not measured.

Target Value: N/A

Element: 13725 Left Ventricular End Systolic Volume

Coding Instruction: Indicate the left ventricular end systolic volume in ml documented by echocardiogram.

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

Element: 13727 Left Ventricular End Systolic Volume Not Measured

Coding Instruction: Indicate if the left ventricular end systolic volume was not measured.

Target Value: N/A

Element: 13726 Left Ventricular End Diastolic Volume

Coding Instruction: Indicate the left ventricular end diastolic volume in ml, documented by echocardiogram.

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

Element: 13728 Left Ventricular End Diastolic Volume Not Measured

Coding Instruction: Indicate if the left ventricular end diastolic volume was not measured.

Target Value: N/A

Section: Left Atrial Volume **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13729 Left Atrial Volume

Coding Instruction: Indicate the left atrial volume in ml documented by echocardiogram.

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

Element: 13730 Left Atrial Volume Not Measured

Coding Instruction: Indicate if the left atrial volume was not measured.

Target Value: N/A

Element: 13731 Left Atrial Volume Index

Coding Instruction: Indicate the left atrial volume index in mL/m2, documented by echocardiogram.

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

Element: 13732 Left Atrial Volume Index Not Measured

Coding Instruction: Indicate if the left atrial volume index was not measured.

Target Value: N/A

Section: Aortic Valve Disease Etiology **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13442 Aortic Valve Disease Etiology

Coding Instruction: Indicate primary etiology of aortic valve disease.

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

Supporting Definition: **Aortic Valve Disease Etiology**

The cause of aortic valve disease.

Source:

Aortic Valve Disease Etiology - 1.3.6.1.4.1.19376.1.4.1.6.5.493

Selection	Definition	Source	Code	Code System
Degenerative			112000001254	ACC NCDR
Endocarditis			56819008	SNOMED CT
Rheumatic			58718002	SNOMED CT
Other			100000351	ACC NCDR

Element: 13468 Aortic Valve Morphology

Coding Instruction: Indicate the morphology of the aortic valve.

If a patient was born with a tricuspid valve with two leaflets that are fused, code tricuspid.

Target Value: The value at birth

Supporting Definition: **Aortic Valve Disease**

A disorder characterized by a defect in aortic valve function or structure.

Source:

Aortic Valve Disease Morphology - 1.3.6.1.4.1.19376.1.4.1.6.5.495

Selection	Definition	Source	Code	Code System
Bicuspid Aortic Valve			72352009	SNOMED CT
Tricuspid Valve			46030003	SNOMED CT
Other			100000351	ACC NCDR

Element: 13469 Ascending Aorta Size

Coding Instruction: Indicate the size, in cm, of the ascending aorta.

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

Supporting Definition: **Ascending Aorta Measurement**

Quantitative measurement of the ascending aorta.

Source:

Element: 13470 Ascending Aorta Size Not Documented

Coding Instruction: Indicate if the size of the ascending aorta was not documented in the medical record.

Target Value: N/A

Supporting Definition: **Ascending Aorta Measurement**

Quantitative measurement of the ascending aorta.

Source:

Element: 13471 Aortic Valve Annular Calcification

Coding Instruction: Indicate if annular calcification is present on the aortic valve.

Code yes if echo reports document calcification in the aortic valve leaflets, aorta adjacent to the AV, leaflets or the left ventricular outflow tract (LVOT), or if echo reports document AV calcific degeneration.

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

Element: 13477 Aortic Valve Regurgitation

Coding Instruction: Indicate the severity of aortic valve regurgitation.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Section: Aortic Valve Disease Etiology **Parent: Pre-Procedure Echocardiogram Findings**

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13307 Aortic Stenosis

Coding Instruction: Indicate whether aortic stenosis is present.

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

Element: 13481 Aortic Valve Area

Coding Instruction: Indicate the smallest aortic valve area (in cm squared) obtained from an echocardiogram or cath report.

Target Value: The lowest value between 12 months prior to start of procedure and start of procedure

Element: 13674 Aortic Valve Mean Gradient

Coding Instruction: Indicate the highest MEAN gradient (in mm Hg) across the aortic valve.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Element: 13700 Low Flow

Coding Instruction: Indicate if there was low flow, which is defined as a stroke volume index <35 ml/m2.

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

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 13701 Low Flow Not Documented

Coding Instruction: Indicate if the stroke volume index was not documented.

Target Value: N/A

Element: 13702 Aortic Valve Peak Gradient

Coding Instruction: Indicate the aortic valve peak gradient in mm Hg.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Element: 13703 Aortic Valve Peak Velocity

Coding Instruction: Indicate the aortic valve peak velocity, in meters per second, as determined by continuous wave (CW) spectral velocity recording on echocardiography.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Section: Mitral Valve Disease **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13704 Mitral Valve Disease

Coding Instruction: Indicate whether mitral valve disease is present.

If there was no documentation of mitral valve disease, code no.

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

Element: 13672 Mitral Regurgitation

Coding Instruction: Indicate the severity of regurgitation through the mitral valve.

Note(s):
Code the highest value or most severe regurgitation when a range is reported.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.728

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Moderate-Severe			1000142345	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13733 Paravalvular Mitral Regurgitation

Coding Instruction: Indicate the severity of paravalvular mitral regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13734 Paravalvular Regurgitation Not Documented

Coding Instruction: Indicate if the severity of paravalvular mitral regurgitation was not documented.

Target Value: N/A

Element: 13735 Central Mitral Regurgitation

Coding Instruction: Indicate the severity of central mitral regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13736 Central Regurgitation Not Documented

Coding Instruction: Indicate whether the severity of central regurgitation was not documented.

Target Value: N/A

Element: 13737 Effective Regurgitant Orifice Area

Coding Instruction: Indicate the effective regurgitant orifice area (EROA), in cm2.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Section: Mitral Valve Disease **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13738 Effective Regurgitant Orifice Area Method of Assessment

Coding Instruction: Indicate the method used to assess the effective regurgitant orifice area. If multiple methods are available, code the 3D planimetry method first, then PISA.

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

Effective Regurgitant Orifice Area Method of Assessment - 1.3.6.1.4.1.19376.1.4.1.6.5.547

Selection	Definition	Source	Code	Code System
3D Planimetry			112000001438	ACC NCDR
Proximal Isovelocity Surface Area			112000001439	ACC NCDR
Quantitative Doppler			112000001440	ACC NCDR
Other			100000351	ACC NCDR

Element: 13308 Mitral Stenosis

Coding Instruction: Indicate whether mitral stenosis is present.

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

Element: 13316 Mitral Valve Area

Coding Instruction: Indicate the smallest mitral valve area in centimeters squared.

Target Value: The lowest value between 12 months prior to start of procedure and start of procedure

Supporting Definition: **Mitral Valve Area**

Measurement of mitral valve area.

Source:

Element: 13317 Mitral Valve Mean Gradient

Coding Instruction: Indicate the highest mean gradient (in mm Hg) across the mitral valve.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Supporting Definition: **Mitral Valve Mean Gradient**

The average gradient across the mitral valve occurring during the entire systole.

Source: Baumgartner, H. et. al (2009). Echocardiographic assessment of valve stenosis: EAE/ASE recommendations for clinical practice.

Section: Mitral Valve Disease Etiology **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13490 Mitral Valve Disease Etiology

Coding Instruction: Indicate the etiology of mitral valve disease.

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

Supporting Definition: **Mitral Valve Disease**

A disorder characterized by a defect in mitral valve function or structure.

Source: NCI Thesaurus

Vendor Instruction: When Mitral Valve Disease Etiology (13490) is Equal to (None) then Transcatheter Valve Therapy Procedure Type (14273) must be not Equal to (TMVR,TMVr)

Cannot select option None with any other option: Functional MR (Secondary), Degenerative MR (Primary), Post Inflammatory, Endocarditis or Other

Mitral Valve Disease Etiology - 1.3.6.1.4.1.19376.1.4.1.6.5.548

Selection	Definition	Source	Code	Code System
Functional MR (Secondary)	Typically the valve structures (i.e.. leaflets and chord tendinae) are normal in functional mitral regurgitation, but a variety of diseases (such as a prior myocardial infarction or cardiomyopathy) compromises the leaflets ability to coapt (i.e. form a tight seal when closed) and results in mitral regurgitation.		112000001276	ACC NCDR
Degenerative MR (Primary)	Degenerative mitral valve disease is due to multiple conditions that lead to abnormal leaflets and/or chordae that result and mitral regurgitation. The leaflets may prolapse or flail into the left atrium.		112000001277	ACC NCDR
Post Inflammatory			112000001441	ACC NCDR
Endocarditis			56819008	SNOMED CT
Other			100000351	ACC NCDR
None			100001231	ACC NCDR

Element: 13740 Functional Mitral Valve Regurgitation Type

Coding Instruction: Indicate the type of functional mitral regurgitation.

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

Supporting Definition: **Functional Mitral Valve Regurgitation**

Typically the valve structures (i.e.. leaflets and chord tendinae) are normal in functional mitral regurgitation, but a variety of diseases (such as a prior myocardial infarction or cardiomyopathy) compromises the leaflets ability to coapt (i.e. form a tight seal when closed) and results in mitral regurgitation.

Source:

Functional Mitral Valve Regurgitation - 1.3.6.1.4.1.19376.1.4.1.6.5.549

Selection	Definition	Source	Code	Code System
Ischemic Acute, Post Infarction	The patient has a new onset of mitral regurgitation that occurs within weeks of having of having a myocardial infarction.		112000001442	ACC NCDR
Ischemic Chronic			112000001443	ACC NCDR
Non-Ischemic Dilated Cardiomyopathy			195021004	SNOMED CT
Restrictive Cardiomyopathy			415295002	SNOMED CT
Hypertrophic Cardiomyopathy			233873004	SNOMED CT
Pure Annular Dilation with Normal Left Ventricular Systolic Function			112000001444	ACC NCDR

Element: 13741 Functional Mitral Valve Regurgitation Type Not Documented

Coding Instruction: Indicate whether the type of functional mitral regurgitation was not documented.

Target Value: N/A

Supporting Definition: **Functional Mitral Valve Regurgitation**

Typically the valve structures (i.e.. leaflets and chord tendinae) are normal in functional mitral regurgitation, but a variety of diseases (such as a prior myocardial infarction or cardiomyopathy) compromises the leaflets ability to coapt (i.e. form a tight seal when closed) and results in mitral regurgitation.

Source:

Element: 13742 Leaflet Prolapse

Coding Instruction: Indicate if there was leaflet prolapse.

Section: Mitral Valve Disease Etiology **Parent: Pre-Procedure Echocardiogram Findings**

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

Valve Leaflet Type - 1.3.6.1.4.1.19376.1.4.1.6.5.550

Selection	Definition	Source	Code	Code System
None			100001231	ACC NCDR
Anterior Leaflet			112000001449	ACC NCDR
Posterior Leaflet			112000001450	ACC NCDR
Bileaflet			112000001446	ACC NCDR

Element: 13745 Leaflet Prolapse Not Documented

Coding Instruction: Indicate if leaflet prolapse was not documented.

Target Value: N/A

Element: 13743 Leaflet Flail

Coding Instruction: Indicate if there was leaflet flail.

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

Valve Leaflet Type - 1.3.6.1.4.1.19376.1.4.1.6.5.550

Selection	Definition	Source	Code	Code System
None			100001231	ACC NCDR
Anterior Leaflet			112000001449	ACC NCDR
Posterior Leaflet			112000001450	ACC NCDR
Bileaflet			112000001446	ACC NCDR

Element: 13746 Leaflet Flail Not Documented

Coding Instruction: Indicate if leaflet flail was not documented.

Target Value: N/A

Element: 13748 Inflammatory Mitral Valve Disease Type

Coding Instruction: Indicate type of inflammatory mitral valve disease.

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

Inflammatory Mitral Valve Disease Type - 1.3.6.1.4.1.19376.1.4.1.6.5.551

Selection	Definition	Source	Code	Code System
Collagen Vascular Disease			398049005	SNOMED CT
Drug Induced			112000001454	ACC NCDR
Idiopathic			112000001453	ACC NCDR
Prior Radiation Therapy			112000001455	ACC NCDR
Rheumatic Fever			58718002	SNOMED CT

Element: 13753 Inflammatory Mitral Valve Disease Type Not Documented

Coding Instruction: Indicate if the type of inflammatory mitral valve disease was not documented.

Target Value: N/A

Element: 13744 Leaflet Tethering

Coding Instruction: Indicate if there was leaflet tethering.

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

Valve Leaflet Type - 1.3.6.1.4.1.19376.1.4.1.6.5.550

Selection	Definition	Source	Code	Code System
None			100001231	ACC NCDR
Anterior Leaflet			112000001449	ACC NCDR
Posterior Leaflet			112000001450	ACC NCDR
Bileaflet			112000001446	ACC NCDR

Element: 13747 Leaflet Tethering Not Documented

Coding Instruction: Indicate if leaflet tethering was not documented.

Target Value: N/A

Section: Mitral Valve Disease Etiology **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13749 Mitral Valve Annular Calcification

Coding Instruction: Indicate if there was mitral annular calcification.

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

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 13750 Mitral Valve Annular Calcification Not Documented

Coding Instruction: Indicate if mitral annular calcification was not documented.

Target Value: N/A

Element: 13751 Mitral Leaflet Calcification

Coding Instruction: Indicate if there was mitral leaflet calcification.

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

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 13752 Mitral Leaflet Calcification Not Documented

Coding Instruction: Indicate if mitral calcification was not documented.

Target Value: N/A

Section: Tricuspid Valve Disease Etiology **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13806 Tricuspid Valve Disease Etiology

Coding Instruction: Indicate the etiology of tricuspid valve disease.

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

Supporting Definition: **Tricuspid Valve**

A three-cusp valve of the heart that regulates the flow of blood between the right atrium and the right ventricle of the heart

Source:

Tricuspid Valve Disease Etiology - 1.3.6.1.4.1.19376.1.4.1.6.5.563

Selection	Definition	Source	Code	Code System
Primary	Valve structures are abnormal and the abnormalities cause the valve disease.		112000001509	ACC NCDR
Secondary	Valve structures are normal but other conditions (e.g. myocardial infarction or cardiomyopathy) compromise the valve's ability to function normally.		112000001510	ACC NCDR
Pacemaker Induced			112000001511	ACC NCDR
Other			100000351	ACC NCDR

Element: 13318 Tricuspid Valve Regurgitation

Coding Instruction: Indicate whether there is evidence of tricuspid valve regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

If there was no documentation of tricuspid valve disease, code none.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13807 Tricuspid Valve Diastolic Gradient

Coding Instruction: Indicate the tricuspid valve diastolic gradient in mm Hg. This can also be called the TV inflow gradient.

Target Value: The highest value between 12 months prior to the procedure and start of the procedure

Element: 13810 Tricuspid Valve Diastolic Gradient Not Documented

Coding Instruction: Indicate if the tricuspid valve diastolic gradient was not documented.

Target Value: N/A

Element: 13808 Tricuspid Valve Annulus Size

Coding Instruction: Indicate the tricuspid valve annulus size in mm. Document the size using end-diastolic, 4 chamber view is preferred (in mm).

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

Element: 13809 Tricuspid Valve Annulus Size Not Documented

Coding Instruction: Indicate if the tricuspid valve annulus size was not documented.

Target Value: N/A

Element: 13811 End Diastolic Mid Right Ventricle Diameter

Coding Instruction: Indicate the end-diastolic mid-RV diameter, using the 4 chamber view (in cm).

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

Element: 13812 End Diastolic Mid Right Ventricle Diameter Not Documented

Coding Instruction: Indicate if the end-diastolic mid-RV diameter was not documented.

Target Value: N/A

Section: Tricuspid Valve Disease Etiology **Parent: Pre-Procedure Echocardiogram Findings**

Element: 13813 End Diastolic Basal Right Ventricle Diameter

Coding Instruction: Indicate the end-diastolic basal RV diameter, using the 4 chamber view (in cm).

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

Element: 13814 End Diastolic Basal Right Ventricle Diameter Not Documented

Coding Instruction: Indicate if the basal diastolic mid-RV diameter was not documented.

Target Value: N/A

Section: Pre-Procedure Dobutamine Challenge **Parent: Presentation and Evaluation**

Element: 13319 Dobutamine Challenge Performed

Coding Instruction: Indicate if a dobutamine challenge was performed.

A dobutamine challenge is a type of stress echocardiography that can distinguish between true-severe versus pseudo-severe aortic stenosis.

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

Supporting Definition: **Dobutamine Stress Echocardiography**

A pharmacologic stress echocardiography technique to detect coronary artery disease and myocardial ischemia.

Source:

Element: 13320 Flow Reserve Present

Coding Instruction: Indicate if coronary flow reserve was documented on the dobutamine challenge.

Flow reserve on dobutamine echocardiogram is indicated by an increase in the stroke volume index by ≥20%.

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

Supporting Definition: **Dobutamine Stress Echocardiography Findings**

The results or findings of dobutamine stress echocardiogram.

Source:

Element: 13321 Aortic Stenosis Type

Coding Instruction: Indicate the type of aortic stenosis documented on dobutamine challenge. Physicians may use different criteria to differentiate, characterize and document truly severe aortic or pseudo-severe aortic stenosis.

The 2017 AUC for Severe Aortic Stenosis guideline differentiates "truly severe aortic stenosis" with an AVA <=1.0 cm2 and Vmax >4 m/sec at any flow rate.

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

Supporting Definition: **Dobutamine Stress Echocardiography Findings**

The results or findings of dobutamine stress echocardiogram.

Source:

Aortic Stenosis Type - 1.3.6.1.4.1.19376.1.4.1.6.5.462

Selection	Definition	Source	Code	Code System
Truly Severe Aortic Stenosis			112000001194	ACC NCDR
Pseudo-Severe Aortic Stenosis			112000001195	ACC NCDR

Element: 13325 Aortic Stenosis Type Not Documented

Coding Instruction: Indicate if the type of aortic stenosis is not documented on dobutamine challenge.

Target Value: N/A

Supporting Definition: **Dobutamine Stress Echocardiography Findings**

The results or findings of dobutamine stress echocardiogram.

Source:

Section: Procedure Information **Parent: Lab Visit**

Element: 7065 Concomitant Procedures Performed

Coding Instruction: Indicate if another procedure was performed concurrently.

Target Value: The value on current procedure

Element: 7066 Concomitant Procedures Performed Type

Coding Instruction: Indicate the type of procedure performed in conjunction with the TVT procedure.

Note(s):
The procedure(s) collected in your application is controlled by Procedure Master file. This file is maintained by the TVT Registry and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Concomitant Procedures Type - 2.16.840.1.113883.3.3478.6.4.10

Selection	Definition	Source	Code	Code System
Left Atrial Appendage Occlusion			233032004	SNOMED CT
Peripheral Intervention			100001272	ACC NCDR
Procedure Type Not Listed			10001424810	ACC NCDR
PCI			415070008	SNOMED CT
Permanent Pacemaker			449397007	SNOMED CT
Balloon Mitral Valvuloplasty			112000001951	ACC NCDR
BASILICA	Bioprosthetic Aortic Scallop Intentional Laceration to prevent Iatrogenic Coronary Artery obstruction (BASILICA) is a procedure that prevents coronary artery obstruction during transcatheter aortic valve replacement (TAVR).		112000001952	ACC NCDR
Alcohol Septal Ablation			437746009	SNOMED CT
LAMPOON	Laceration of the Anterior Mitral Valve Leaflet to Prevent Left Ventricular Outflow Tract Obstruction During Transcatheter Mitral Valve Replacement		112000001953	ACC NCDR

Element: 7025 Procedure Status

Coding Instruction: Indicate the status of the procedure.

Target Value: The value on current procedure

Vendor Instruction: When a Transcatheter Valve Therapy Procedure Type (14273) is selected Procedure Status (7025) cannot be Null

Procedure Status - 1.3.6.1.4.1.19376.1.4.1.6.5.226

Selection	Definition	Source	Code	Code System
Elective Procedure	The patient's cardiac function has been stable in the days or weeks prior to the procedure. The procedure could be deferred without increased risk of compromised cardiac outcome.	Society of Thoracic Surgeons (STS)	71388002:260870009=103390000	SNOMED CT
Urgent Procedure			71388002:260870009=103391001	SNOMED CT
Emergency Procedure	Patients requiring emergency operations will have ongoing, refractory (difficult, complicated, and/or unmanageable) unrelenting cardiac compromise, with or without hemodynamic instability, and not responsive to any form of therapy except cardiac surgery. An emergency operation is one in which there should be no delay in providing operative intervention.	Society of Thoracic Surgery (STS)	112000001278	ACC NCDR
Salvage Procedure			112000001279	ACC NCDR

Element: 13499 Heart Team Reason for Procedure

Coding Instruction: Indicate the heart team's reason for the transcatheter valve replacement procedure.

Note: If the heart team did not document a risk category, consider patients with a predicted risk of 30-day mortality based on the risk model developed by the Society of Thoracic Surgeons as noted below:
Low risk is considered <3%
Intermediate risk is considered 3-7%.
High risk is considered >=8%.
Extreme risk includes technically inoperable, co-morbid and debilitated patients.

Target Value: The value on current procedure

Transcatheter Valve Therapy Procedure Risk Types - 1.3.6.1.4.1.19376.1.4.1.6.5.505

Selection	Definition	Source	Code	Code System

Section: Procedure Information **Parent: Lab Visit**

Extreme Risk	112000001282	ACC NCDR
High Risk	112000001283	ACC NCDR
Intermediate Risk	112000001284	ACC NCDR
Low Risk	112000001285	ACC NCDR

Element: 13504 Heart Team Evaluation of Suitability for Surgical Replacement

Coding Instruction: Indicate if, as part of the Heart Team patient assessment, both an Interventional Cardiologist AND a Cardiothoracic Surgeon evaluated the patient face to face for the suitability for open heart valve replacement surgery and documented the evaluation in the medical record.

Target Value: The value on current procedure

Element: 12871 Procedure Location

Coding Instruction: Indicate the location where the procedure was performed.

Target Value: The value on current procedure

Supporting Definition: **Procedure Location**

The area of the healthcare facility where the procedure was performed.

Source:

Procedure Location - 1.3.6.1.4.1.19376.1.4.1.6.5.327

Selection	Definition	Source	Code	Code System
Cardiac Catheterization Laboratory			112000000616	ACC NCDR
Hybrid Catheterization Laboratory Suite			112000001266	ACC NCDR
Hybrid Operating Room Suite			112000001265	ACC NCDR
Other			100000351	ACC NCDR

Element: 13331 Anesthesia Type

Coding Instruction: Indicate the type of anesthesia used for the procedure.

Target Value: The highest value on current procedure

Supporting Definition: **Anesthesia**

Anesthesia is defined as the loss of sensation resulting from pharmacologic depression of nerve function. There are several types of anesthesia including neuraxial, general, or peripheral nerve block. Monitored Anesthesia Care is a specific type of anesthesia service that may be provided when neuraxial anesthesia, general anesthesia, or peripheral nerve block is not utilized.

Source: Anesthesia Quality Institute (2018). 2018 AQI NACOR data element conceptual definition. Retrieved from http://www.aqihq.org/files/AQI_NACOR_DATA_ELEMENT_DEFINITIONS_v3%202018_FINAL.pdf

Anesthesia Type - 1.3.6.1.4.1.19376.1.4.1.6.5.463

Selection	Definition	Source	Code	Code System
General Anesthesia	General Anesthesia is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.	Excerpted from Continuum of Depth of Sedation: Definition of General Anesthesia and Levels of Sedation/Analgesia approved on October 13, 1999 and last amended October 15, 2014 of the American Society of Anesthesiologists. A copy of the full text can be obtained from ASA, 1061 American Lane Schaumburg, IL 60173-4973 or online at www.asahq.org.	420653000	SNOMED CT
Deep sedation/Analgesia	Deep Sedation/Analgesia is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.		426155000	SNOMED CT
Moderate Sedation/Analgesia (Conscious Sedation)	Moderate Sedation/Analgesia ("Conscious Sedation") is a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. Reflex withdrawal from a painful stimulus is NOT considered a purposeful response.		314271007	SNOMED CT
Minimal Sedation/Anxiolysis	Minimal Sedation (Anxiolysis) is a drug-induced state		427255001	SNOMED CT

Section: Procedure Information **Parent: Lab Visit**

during which patients respond normally to verbal commands. Although cognitive function and physical coordination may be impaired, airway reflexes, and ventilatory and cardiovascular functions are unaffected.

Element: 13505 Procedure Aborted

Coding Instruction: Indicate whether the procedure was cancelled or aborted after the patient entered the procedure room. A procedure is aborted when the procedure is terminated before device deployment is attempted. Once device deployment is attempted, the procedure is considered failed. In this scenario, code device successfully deployed=no.

For mitral leaflet clip procedures, a procedure is considered aborted when the steerable guide cath was never introduced into the patient.

Target Value: The value on current procedure

Element: 13506 Reason for Aborting Procedure

Coding Instruction: Indicate the reason why the procedure was canceled or aborted.

Target Value: The value on current procedure

Transcatheter Valve Therapy Procedure Aborted Reasons - 1.3.6.1.4.1.19376.1.4.1.6.5.554

Selection	Definition	Source	Code	Code System
Access Related	The procedure was aborted because of difficulties at the procedure access site.		112000001460	ACC NCDR
Navigation Issue After Successful Access	The procedure was aborted because of navigation issues after successful access. Examples include inability to advance through ilio-femoral system due to vessel size/tortuousity/calcification/disease; inability to navigate aorta; and inability to cross aortic valve.		112000001461	ACC NCDR
New Clinical Findings	The procedure was aborted because of new clinical findings (that are not access or navigation related issues). Examples include (but are not limited to) an annulus too large or small, thrombus or vegetation on valve, valve not felt to be severely stenosed or diseased as suspected.		112000001462	ACC NCDR
Device or Delivery System Malfunction	The procedure was aborted because of a malfunction of either the device or delivery system prior to when the operator attempted to deploy the device.		112000001463	ACC NCDR
Patient Clinical Status	The procedure was aborted because of a change in the patient's clinical status. Examples include (but are not limited to) a patient becoming hemodynamically unstable during the procedure, a patient having an adverse medication or other reaction, or a patient experiencing another complication prior to completion of the procedure.		112000001464	ACC NCDR
Consent Issue	The procedure was aborted because the patient/family or physician changed their decision to perform the procedure after the start of the case.		112000001465	ACC NCDR
Transseptal Access Related	The procedure was aborted because of difficulties crossing the septum.		112000001466	ACC NCDR
System Issue	The procedure was aborted because of equipment (not device) malfunction (such as x-ray system equipment malfunction), or a situation where an emergency surgical case causes the transcatheter case to be aborted and rescheduled after the patient was in the room but prior to starting the case.		112000001467	ACC NCDR
Other			100000351	ACC NCDR

Element: 13757 Procedure Aborted Action

Coding Instruction: Indicate the reason or action taken as a result of the aborted TVT procedure.

Target Value: The value on current procedure

Transcatheter Valve Therapy Procedure Aborted Action - 1.3.6.1.4.1.19376.1.4.1.6.5.555

Selection	Definition	Source	Code	Code System
Conversion to Open Heart Surgery			112000001327	ACC NCDR
Scheduled Open Heart Surgery			112000001473	ACC NCDR
Rescheduled Transcatheter Procedure			112000001470	ACC NCDR

Section: Procedure Information **Parent: Lab Visit**

Converted to Clinical Trial	112000001472	ACC NCDR
Balloon Valvuloplasty	112000001469	ACC NCDR
Converted to Medical Therapy	112000001471	ACC NCDR
Other	100000351	ACC NCDR

Element: 13542 Conversion to Open Heart Surgery

Coding Instruction: Indicate if conversion to open heart surgical access was required.

Target Value: The value on current procedure

Element: 13543 Reason for Conversion to Open Heart Surgery

Coding Instruction: Indicate the reason for conversion to open heart surgical access.

Target Value: The value on current procedure

Reason for Conversion to Open Heart Surgery - 1.3.6.1.4.1.19376.1.4.1.6.5.513

Selection	Definition	Source	Code	Code System
Valve Dislodged to Aorta			112000001328	ACC NCDR
Valve Dislodged to Left Ventricle			112000001329	ACC NCDR
Annulus Rupture			112000001331	ACC NCDR
Ventricular Rupture			112000001330	ACC NCDR
Aortic Dissection			308546005	SNOMED CT
Coronary Occlusion			63739005	SNOMED CT
Access Related			112000001460	ACC NCDR
Cardiac Tamponade			35304003	SNOMED CT
Inability to Position Device			112000001479	ACC NCDR
Device Embolization			112000001324	ACC NCDR
Valve Injury			762610001	SNOMED CT
Other			100000351	ACC NCDR

Element: 7422 Mechanical Ventricular Support

Coding Instruction: Indicate if the patient required mechanical ventricular support.

Target Value: Any occurrence on current procedure

Element: 7423 Mechanical Ventricular Support Device

Coding Instruction: Indicate the mechanical ventricular support device used.

Note(s):
The device that should be collected in your application are controlled by a Mechanical Ventricular Support Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.
If more than one device is used, code the device with the highest level of support.

Target Value: Any occurrence on current procedure

Mechanical Ventricular Support Device - 2.16.840.1.113883.3.3478.6.1.24

Selection	Definition	Source	Code	Code System
Cardiopulmonary Support (CPS)			1000142428	ACC NCDR
Extracorporeal membrane oxygenation (ECMO)			233573008	SNOMED CT
Impella: Left Ventricular Support			100014011	ACC NCDR
Impella: Right Ventricular Support			112000000188	ACC NCDR
Intra-aortic balloon pump (IABP)			442807006	SNOMED CT
Isolated Right Ventricular Support			112000000546	ACC NCDR
Left ventricular assist device (LVAD)			232967006	SNOMED CT
Right Ventricular Assist Device (RVAD)			360065002	SNOMED CT
Percutaneous Heart Pump (PHP)			1000142429	ACC NCDR
TandemHeart			100014010	ACC NCDR
Other			100000351	ACC NCDR

Section: Procedure Information — Parent: Lab Visit

Element: 7424 — Mechanical Ventricular Support Timing

Coding Instruction: Indicate when the mechanical ventricular support device was placed.

Target Value: Any occurrence on current procedure

Mechanical Ventricular Support Timing - 1.3.6.1.4.1.19376.1.4.1.6.5.524

Selection	Definition	Source	Code	Code System
In place at start of procedure			100001280	ACC NCDR
Inserted during procedure and prior to intervention			100001281	ACC NCDR
Inserted after intervention has begun			100013042	ACC NCDR
Post Procedure			112000001347	ACC NCDR

Element: 13579 — Cardiopulmonary Bypass Used

Coding Instruction: Indicate if cardiopulmonary bypass or coronary perfusion was used during the procedure.

Target Value: Any occurrence on current procedure

Element: 13580 — Cardiopulmonary Bypass Status

Coding Instruction: Indicate if the use of cardiopulmonary bypass was elective or emergent.

Target Value: The value on current procedure

Cardiopulmonary Procedure Status - 1.3.6.1.4.1.19376.1.4.1.6.5.766

Selection	Definition	Source	Code	Code System
Elective Procedure			71388002:260870009=103390000	SNOMED CT
Emergency Procedure			112000001278	ACC NCDR

Element: 13581 — Cardiopulmonary Bypass Time

Coding Instruction: Indicate the total number of minutes that systemic return is diverted into the cardiopulmonary bypass (CPB) circuit and returned to the systemic system. This time period (Cardiopulmonary Bypass Time) includes all periods of cerebral perfusion and sucker bypass. This time period (Cardiopulmonary Bypass Time) excludes any circulatory arrest and modified ultrafiltration periods. If more than one period of CPB is required during the procedure, the sum of all the CPB periods will equal the total number of CPB minutes.

Target Value: The total between start of procedure and end of procedure

Element: 13525 — Delivery System Successfully Removed

Coding Instruction: Indicate if the delivery system was successful removed.

Target Value: The value on current procedure

Element: 13644 — Positive Inotropes Administered

Coding Instruction: Indicate if positive inotropes was administered.

For patients requiring IV inotropic support, indicate positive inotropes only.

Target Value: Any occurrence between start of procedure and end of procedure

Procedure Medications Administered - 1.3.6.1.4.1.19376.1.4.1.6.5.415

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Section: Operator Information **Parent: Procedure Information**

Element: 14476 TVT Operator First Name

Coding Instruction: Indicate the first name of operator.

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

Target Value: The value on current procedure

Vendor Instruction: A TVT Operator - combination First Name (14476), Last Name (14478) and NPI (14479) - may only be entered/selected once

Element: 14478 TVT Operator Last Name

Coding Instruction: Indicate the last name of operator.

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

Target Value: The value on current procedure

Element: 14477 TVT Operator Middle Name

Coding Instruction: Indicate the middle name of operator.

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

Element: 14479 TVT Operator NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the operator who is performing the procedure. NPI's, assigned by the Centers for Medicare and Medicaid Services (CMS), are used to uniquely identify physicians for Medicare billing purposes.

Target Value: The value on current procedure

Section: Radiation and Contrast **Parent: Procedure Information**

Element: 14278 Dose Area Product

Coding Instruction: Indicate the total fluoroscopy dose to the nearest integer. The value recorded should include the total dose for the lab visit.

Target Value: The total between start of current procedure and end of current procedure

Supporting Definition: **Dose Area Product**

Dose Area Product is the integral of air kerma (the energy extracted from an x-ray beam per unit mass of air in a small irradiated air volume; for diagnostic x-rays, the dose delivered to that volume of air) across the entire x-ray beam emitted from the x-ray tube. It is a surrogate measure of the amount of energy delivered to the patient.

Also known as KAP (Kerma Area Product).

Source: Miller DL, et al. Radiation doses in interventional radiology procedures. (J Vasc Interv Radiol 2003; 14:711-727.)

Element: 7210 Cumulative Air Kerma

Coding Instruction: Indicate the total radiation dose (Cumulative Air Kerma, or Reference Air Kerma) recorded to the nearest milligray (mGy) or gray (Gy). The value recorded should include the total dose for the lab visit. Cumulative air kerma is the total air kerma accrued from the beginning of an examination or procedure and includes all contributions from fluoroscopic and radiographic irradiation.

Target Value: The total between start of current procedure and end of current procedure

Supporting Definition: **Cumulative (Reference) Air kerma**

Cumulative air kerma (also known as reference, reference dose, cumulative dose, or cumulative dose at a reference point) is the air kerma accumulated at a specific point in space (the patient entrance reference point) relative to the gantry of the fluoroscopy system.

The quantity, kerma, originated from the acronym, KERMA, for Kinetic Energy Released per unit Mass (of air).

Source: Miller DL, et al. Radiation doses in interventional radiology procedures. (J Vasc Interv Radiol 2003;14:711-727.)

Element: 7214 Fluoroscopy Time

Coding Instruction: Indicate the total fluoroscopy time recorded to the nearest 0.1-minute. The time recorded should include the total time for the lab visit.

Target Value: The total between start of current procedure and end of current procedure

Element: 7215 Contrast Volume

Coding Instruction: Indicate the volume of contrast (ionic and non-ionic) used in milliliters (ml). The volume recorded should be the total volume for the lab visit.

Target Value: The total between start of current procedure and end of current procedure

Section: Post Implant Mitral Valve Data **Parent: Procedure Information**

Element: 14274 Mitral Regurgitation

Coding Instruction: Indicate the severity of regurgitation through the mitral valve.

Note(s):
Code the highest value or most severe regurgitation when a range is reported.

Target Value: The last value between the implant and the end of current procedure

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13762 Mitral Valve Mean Gradient

Coding Instruction: Indicate the mean gradient (in mm Hg) across the mitral valve.

Target Value: The last value between the implant and the end of current procedure

Supporting Definition: **Mitral Valve Mean Gradient**

The average gradient across the mitral valve occurring during the entire systole.

Source: Baumgartner, H. et. al (2009). Echocardiographic assessment of valve stenosis: EAE/ASE recommendations for clinical practice.

Section: TAVR **Parent: Procedure Information**

Element: 13498 Primary Transcatheter Aortic Valve Replacement Procedure Indication

Coding Instruction: Indicate the primary indication for the transcatheter aortic valve replacement. If more than one indication is present, choose the most significant.

Target Value: The highest value between 2 months prior to current procedure and current procedure

Vendor Instruction: When Transcatheter Valve Therapy Procedure Type (14273) is Equal to (TAVR) then Primary Transcatheter Aortic Valve Replacement Procedure Indication (13498) cannot be Null

Transcatheter Aortic Valve Replacement Primary Procedure Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.738

Selection	Definition	Source	Code	Code System
Aortic Regurgitation			60234000	SNOMED CT
Aortic Stenosis			60573004	SNOMED CT

Element: 13500 Valve In Valve Procedure

Coding Instruction: Indicate whether a "valve-in-valve" procedure was performed on previously implanted bioprosthetic valve.

Code no if the procedure is being performed in a native aortic valve.
Code yes if the procedure is being performed in a previously implanted bioprosthetic valve.

Target Value: The value on current procedure

Supporting Definition: **Valve in Valve Procedure**

A procedure where a prosthetic valve is placed in a prosthetic valve that was previously implanted.

Source:

Vendor Instruction: Valve In Valve Procedure (13500) must be (Yes) when Procedure History Name (12905) is (AV Replacement Surgery OR AV Replacement -Transcatheter) and Procedure History Occurrence (14268) is (Yes)

When Transcatheter Valve Therapy Procedure Type (14273) is Equal to (TAVR) then Valve In Valve Procedure (13500) cannot be Null

Element: 13501 Bioprosthetic Valve Fracture Attempted

Coding Instruction: Indicate if bioprosthetic valve fracture (BVF) with high pressure balloon dilation was attempted on the previously implanted bioprosthetic valve.

Note 1: If pre-implant valvuloplasty or post-implant post dilatation with lower pressure inflations (e.g. a hand inflation up to 4 atm), code no.

Note 2: If the previously implanted bioprosthetic valve was fractured during the procedure (even though BVF was not planned), code yes.

Target Value: The value on current procedure

Supporting Definition: **Bioprosthetic Valve Fracture**

Bioprosthetic Valve Fracture (BVF) is a technique that uses a high pressure dilatation with intent to purposefully fracture or crack the ring of the previously implanted bioprosthetic valve and allow the new implanted valve to more fully expand. This technique requires balloon pressures of up to 20 atm.

Source: STS/ACC TVT Registry

Element: 13502 Bioprosthetic Valve Fracture Timing

Coding Instruction: Indicate the timing of the bioprosthetic valve fracture.

Note: If BVF was attempted both pre and post valve implant, code both.

Target Value: The value on current procedure

Timing - 1.3.6.1.4.1.19376.1.4.1.6.5.729

Selection	Definition	Source	Code	Code System
Pre Implant			112000001912	ACC NCDR
Post Implant			112000001913	ACC NCDR

Element: 13503 Valve Observed to be Fractured

Coding Instruction: Indicate if the valve was observed to be fractured. Documentation can include any of the following:

(1) Fluoroscopically by either visualizing the waist of the balloon release and/or the fractured valve ring (if the valve ring is radiopaque);
(2) By an audible snap, or
(3) By a sudden drop in the balloon pressure in the absence of balloon rupture.

Target Value: The value on current procedure

Section: TAVR **Parent: Procedure Information**

Element: 13507 Valve Sheath Access Site

Coding Instruction: Indicate the access site for the valve sheath.

Target Value: The value on current procedure

Valve Sheath Access Site - 1.3.6.1.4.1.19376.1.4.1.6.5.506

Selection	Definition	Source	Code	Code System
Axillary Artery			67937003	SNOMED CT
Carotid			32062004	SNOMED CT
Direct Aortic			112000001957	ACC NCDR
Femoral Artery			7657000	SNOMED CT
Iliac			112000000893	ACC NCDR
Subclavian Artery			36765005	SNOMED CT
Transapical			112000001295	ACC NCDR
Transcaval			112000001299	ACC NCDR
Transseptal via Femoral Vein			112000001296	ACC NCDR
Other			100000351	ACC NCDR

Element: 13508 Valve Sheath Access Site Method

Coding Instruction: Indicate the access method used to deliver the valve sheath.

Target Value: The value on current procedure

Valve Sheath Access Site Method - 1.3.6.1.4.1.19376.1.4.1.6.5.507

Selection	Definition	Source	Code	Code System
Percutaneous Approach			103388001	SNOMED CT
Cutdown			112000001301	ACC NCDR
Mini Sternotomy			112000001303	ACC NCDR
Mini Thoracotomy			112000001302	ACC NCDR
Other			100000351	ACC NCDR

Element: 13509 Valve Sheath Delivery Size

Coding Instruction: Indicate the size, in french, of the valve sheath delivery system.

Target Value: The value on current procedure

Element: 13510 Embolic Protection Deployed

Coding Instruction: Indicate if embolic protection was used during the procedure.

Target Value: The value on current procedure

Element: 13511 Embolic Protection Device

Coding Instruction: Indicate the embolic protection device used during the procedure.

Target Value: The value on current procedure

Element: 14304 Aortic Valve Regurgitation

Coding Instruction: Indicate the severity of aortic valve regurgitation.

Target Value: The last value between the implant and the end of current procedure

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14303 Aortic Valve Mean Gradient

Coding Instruction: Indicate the highest documented mean gradient (in mm Hg) across the aortic valve.

Target Value: The last value between the implant and the end of current procedure

Section: TAVR Devices **Parent: TAVR**

Element: 13524 Transcatheter Aortic Valve Replacement Device Counter

Coding Instruction: This is a software-assigned value. The counter will start at one and be incremented by one for each device or system used.

Target Value: N/A

Element: 14485 Transcatheter Aortic Valve Replacement Device ID

Coding Instruction: Indicate the device ID of the aortic valve.

Target Value: The value on current procedure

Element: 14532 Transcatheter Aortic Valve Replacement Device Diameter

Coding Instruction: Indicate the transcatheter aortic valve replacement device diameter (in mm).

Target Value: The value on current procedure

Element: 13534 Device Capture and Repositioning Performed

Coding Instruction: Indicate if device capture and repositioning was performing during the procedure.

Target Value: The value on current procedure

Boolean w/Unknown - 1.3.6.1.4.1.19376.1.4.1.6.5.444

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR

Element: 13535 Device Capture and Repositioning Performed Not Applicable

Coding Instruction: Indicate if performing a device capture and repositioning was not applicable.

Target Value: N/A

Element: 13536 Transcatheter Aortic Valve Replacement Device Implanted Successfully

Coding Instruction: Indicate if there is correct positioning of a single prosthetic heart valve in the proper anatomical location.

Target Value: The value on current procedure

Element: 13539 Reason Transcatheter Aortic Valve Replacement Device Not Implanted Successfully

Coding Instruction: Indicate the reason the device was not implanted successfully.

Target Value: The value on current procedure

Transcatheter Valve Therapy Reason Device Not Implanted Successfully - 1.3.6.1.4.1.19376.1.4.1.6.5.512

Selection	Definition	Source	Code	Code System
Device Embolization			112000001324	ACC NCDR
Improper Device Positioning			112000001325	ACC NCDR
Improper Device Sizing			112000001326	ACC NCDR
Other			100000351	ACC NCDR

Element: 14286 Transcatheter Aortic Valve Replacement Device Serial Number

Coding Instruction: Indicate the device transcatheter aortic valve replacement device serial number.

Target Value: The value on current procedure

Element: 14572 Transcatheter Aortic Valve Unique Device ID

Coding Instruction: Indicate the full unique device identifier (UDI) for the implanted device.

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

Section: TMVr **Parent: Procedure Information**

Element: 13792 Mitral Leaflet Clip Procedure Indication

Coding Instruction: Indicate the indication(s) for the mitral leaflet clip procedure.

Target Value: The last value on current procedure

Vendor Instruction: When Transcatheter Valve Therapy Procedure Type (14273) is Equal to (TMVr) then Mitral Leaflet Clip Procedure Indication (13792) cannot be Null

Mitral Leaflet Clip Procedure Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.558

Selection	Definition	Source	Code	Code System
Refractory to Guideline Determined Optimal Medical Therapy			112000001944	ACC NCDR
Frailty			248279007	SNOMED CT
Hostile Chest			112000001489	ACC NCDR
Severe Pulmonary Hypertension			112000001490	ACC NCDR
Severe Liver Disease (Cirrhosis or MELD score >12)	The patient has a history of cirrhosis or a "Model For End-Stage Liver Disease" (MELD) score >12 points.		112000001482	ACC NCDR
Porcelain Aorta			112000001175	ACC NCDR
Predicted STS MV Repair ROM Greater than or Equal to 6 Percent	Predicted STS Mitral Valve Repair Operative Mortality Risk is >=6% for a patient deemed likely to undergo mitral valve repair surgery.		112000001483	ACC NCDR
Predicted STS MV Replacement ROM Greater than or Equal to 8 Percent	Predicted STS Mitral Valve Replacement Operative Mortality Risk is >=8% for a patient deemed likely to undergo mitral valve replacement surgery.		112000001484	ACC NCDR
RVD with Severe TR	Right Ventricular Dysfunction with Severe Tricuspid Regurgitation.		112000001486	ACC NCDR
Major Bleeding Diathesis			112000001487	ACC NCDR
Chemotherapy for Malignancy			112000001491	ACC NCDR
AIDS	Acquired Immune Deficiency Syndrome		62479008	SNOMED CT
Immobility			112000001492	ACC NCDR
High Risk of Aspiration			112000001488	ACC NCDR
Severe Dementia			112000001914	ACC NCDR
IMA at High Risk of Injury	Internal Mammary Artery at High Risk of Injury.		112000001494	ACC NCDR
Other			100000351	ACC NCDR

Element: 13794 Guiding Catheter Access Site

Coding Instruction: Indicate the leaflet clip guiding catheter access site.

Target Value: The value on current procedure

Guiding Catheter Access Site - 1.3.6.1.4.1.19376.1.4.1.6.5.560

Selection	Definition	Source	Code	Code System
Right Femoral Vein			767174009	SNOMED CT
Left Femoral Vein			767173003	SNOMED CT
Jugular Vein			63190004	SNOMED CT
Other Vein			100000351	ACC NCDR

Element: 13795 Steerable Guide Cath Device ID

Coding Instruction: Indicate the steerable guide cath device ID utilized.

Target Value: The value on current procedure

Element: 13796 Steerable Guide Catheter Serial Number

Coding Instruction: Indicate the manufacturer serial number for the steerable guide used during the procedure.

Target Value: The value on current procedure

Section: Mitral Leaflet Devices **Parent: TMVr**

Element: 13533 Mitral Repair Device Counter

Coding Instruction: This is a software-assigned value. The counter will start at one and be incremented by one for each device or system used.

Target Value: N/A

Element: 13797 Mitral Repair Device ID

Coding Instruction: Indicate all mitral repair device IDs utilized.

Target Value: The value on current procedure

Element: 13798 Mitral Repair Serial Number

Coding Instruction: Indicate the serial number of the mitral repair device.

Target Value: The value on current procedure

Element: 14574 Mitral Repair Unique Device ID

Coding Instruction: Indicate the full unique device identifier (UDI) for the implanted device.

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

Element: 13800 Mitral Valve Repair Location

Coding Instruction: Indicate the location on the mitral valve where the leaflet clip was attached.

Target Value: The value on current procedure

Mitral Leaflet Clip Procedure Location - 1.3.6.1.4.1.19376.1.4.1.6.5.709

Selection	Definition	Source	Code	Code System
A1/P1	The mitral leaflet clip was attached to the A1P1 position on the anterior and posterior mitral valve leaflets.		112000001847	ACC NCDR
A2/P2	The mitral leaflet clip was attached to the A2P2 position on the anterior and posterior mitral valve leaflets.		112000001848	ACC NCDR
A3/P3	The mitral leaflet clip was attached to the A3P3 position on the anterior and posterior mitral valve leaflets.		112000001849	ACC NCDR
Other Location	Mitral leaflet clip was attached to a location on the anterior and posterior mitral leaflets that is not otherwise specified.		112000001850	ACC NCDR

Element: 13799 Mitral Repair Device Implanted Successfully

Coding Instruction: Indicate if the mitral repair device was successfully deployed.

Target Value: The value on current procedure

Element: 13801 Reason Mitral Repair Device Not Implanted Successfully

Coding Instruction: Indicate the reason why the mitral repair device was not deployed.

Target Value: The value on current procedure

Mitral Leaflet Clip Reason Not Deployed - 1.3.6.1.4.1.19376.1.4.1.6.5.561

Selection	Definition	Source	Code	Code System
Adverse Event			112000001505	ACC NCDR
Device Malfunction			112000001504	ACC NCDR
Inability to Grasp Leaflets			112000001501	ACC NCDR
Inability to Reduce Mitral Regurgitation			112000001502	ACC NCDR
Mitral Valve Injury			112000001503	ACC NCDR
Mitral Valve Stenosis			79619009	SNOMED CT
Other			100000351	ACC NCDR

Element: 13802 Mitral Leaflet Clip Deployed then Removed

Coding Instruction: Indicate if the leaflet clip was removed after it was deployed.

Section: Mitral Leaflet Devices **Parent: TMVr**

Target Value: The value on current procedure

Section: TMVR **Parent: Procedure Information**

Element: 13754 Transcatheter Mitral Valve Replacement Type

Coding Instruction: Indicate the transcatheter mitral valve replacement procedure type.

Target Value: The value on current procedure

Vendor Instruction: When Transcatheter Valve Therapy Procedure Type (14273) is Equal to (TMVR) then Transcatheter Mitral Valve Replacement Type (13754) cannot be Null

Transcatheter Mitral Valve Replacement Type (13754) cannot be (Native Valve) When Procedure History Name (12905) is (Mitral Valve Replacement Surgery) with Procedure History Occurrence as (Yes)
AND
Mitral Valve Transcatheter Intervention Type (14261) is (Valve in Native Value Procedure OR Valve in Valve Procedure)

Transcatheter Mitral Valve Replacement Types - 1.3.6.1.4.1.19376.1.4.1.6.5.739

Selection	Definition	Source	Code	Code System
Native Valve			112000001456	ACC NCDR
Valve-in-Valve			112000001286	ACC NCDR
Valve-in-Ring			112000001938	ACC NCDR

Element: 13755 Mitral Valve Annular Calcification

Coding Instruction: Indicate if there was mitral annular calcification.

Target Value: The value on current procedure

Element: 14480 TMVR Bioprosthetic Valve Fracture Attempted

Coding Instruction: Indicate if bioprosthetic valve fracture (BVF) with high pressure balloon dilation was attempted on the previously implanted bioprosthetic valve.

Note 1: If pre-implant valvuloplasty or post-implant post dilatation with lower pressure inflations (e.g. a hand inflation up to 4 atm), code no.

Note 2: If the previously implanted bioprosthetic valve was fractured during the procedure (even though BVF was not planned), code yes.

Target Value: The value on current procedure

Supporting Definition: **Bioprosthetic Valve Fracture**

Bioprosthetic Valve Fracture (BVF) is a technique that uses a high pressure dilatation with intent to purposefully fracture or crack the ring of the previously implanted bioprosthetic valve and allow the new implanted valve to more fully expand. This technique requires balloon pressures of up to 20 atm.

Source: STS/ACC TVT Registry

Element: 14481 TMVR Bioprosthetic Valve Fracture Timing

Coding Instruction: Indicate the timing of the bioprosthetic valve fracture.

Note: If BVF was attempted both pre and post valve implant, code both.

Target Value: The value on current procedure

Timing - 1.3.6.1.4.1.19376.1.4.1.6.5.729

Selection	Definition	Source	Code	Code System
Pre Implant			112000001912	ACC NCDR
Post Implant			112000001913	ACC NCDR

Element: 14482 TMVR Valve Observed to be Fractured

Coding Instruction: Indicate if the valve was observed to be fractured. Documentation can include any of the following:

(1) Fluoroscopically by either visualizing the waist of the balloon release and/or the fractured valve ring (if the valve ring is radiopaque);
(2) By an audible snap, or
(3) By a sudden drop in the balloon pressure in the absence of balloon rupture.

Target Value: The value on current procedure

Element: 13756 Transcatheter Mitral Valve Replacement Primary Procedure Indication

Coding Instruction: Indicate the primary procedure indication for the TMVR procedure. If more than one indication is present, choose the most significant.

Section: TMVR **Parent: Procedure Information**

Target Value: The highest value between 2 months prior to current procedure and current procedure

Vendor Instruction: When Transcatheter Valve Therapy Procedure Type (14273) is Equal to (TMVR) then Transcatheter Mitral Valve Replacement Primary Procedure Indication (13756) cannot be Null

Transcatheter Mitral Valve Replacement Primary Procedure Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.553

Selection	Definition	Source	Code	Code System
Mitral Stenosis			112000001459	ACC NCDR
Mitral Regurgitation			48724000	SNOMED CT

Element: 13758 Mitral Valve Replacement - Procedure Access Site

Coding Instruction: Indicate the access site used to perform the mitral procedure.

Target Value: The last value on current procedure

Transcatheter Mitral Valve Replacement Procedure Access Site - 1.3.6.1.4.1.19376.1.4.1.6.5.556

Selection	Definition	Source	Code	Code System
Transseptal via Femoral Vein			112000001296	ACC NCDR
Transapical			112000001295	ACC NCDR
Direct Left Atrium			112000001475	ACC NCDR
Other			100000351	ACC NCDR

Element: 13759 Preimplant Balloon Inflation Performed

Coding Instruction: Indicate if pre-implant balloon inflation was performed.

Target Value: The value on current procedure

Element: 13760 Significant Hemodynamic Deterioration After Inflation

Coding Instruction: Indicate if significant hemodynamic deterioration occurred after inflation. The patient would experience hypotension and pulmonary congestion because balloon inflation of the stenotic valve can cause severe mitral regurgitation.

Target Value: The value on current procedure

Element: 13761 Post Implant Balloon Inflation Performed

Coding Instruction: Indicate if post-implant balloon inflation was performed.

Target Value: The value on current procedure

Section: TMVR Devices **Parent: TMVR**

Element: 13532 Mitral Valve Device Counter

Coding Instruction: This is a software-assigned value. The counter will start at one and be incremented by one for each device or system used.

Target Value: N/A

Element: 14484 Transcatheter Mitral Valve Replacement Device ID

Coding Instruction: Indicate the device ID of the mitral valve.

Target Value: The value on current procedure

Element: 14521 Transcatheter Mitral Valve Replacement Device Diameter

Coding Instruction: Indicate the transcatheter mitral valve replacement device diameter (in mm).

Target Value: The value on current procedure

Element: 14288 Transcatheter Mitral Valve Replacement Device Serial Number

Coding Instruction: Indicate the transcatheter mitral valve replacement device serial number.

Target Value: The value on current procedure

Element: 14573 Transcatheter Mitral Valve Unique Device ID

Coding Instruction: Indicate the full unique device identifier (UDI) for the implanted device

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

Element: 13538 Mitral Valve Device Implanted Successfully

Coding Instruction: Indicate if there is correct positioning of a single prosthetic heart valve in the proper anatomical location.

Target Value: The value on current procedure

Element: 13541 Reason Mitral Valve Device Not Implanted Successfully

Coding Instruction: Indicate the reason the device was not implanted successfully.

Target Value: The value on current procedure

Transcatheter Valve Therapy Reason Device Not Implanted Successfully - 1.3.6.1.4.1.19376.1.4.1.6.5.512

Selection	Definition	Source	Code	Code System
Device Embolization			112000001324	ACC NCDR
Improper Device Positioning			112000001325	ACC NCDR
Improper Device Sizing			112000001326	ACC NCDR
Other			100000351	ACC NCDR

Section: TTVP **Parent: Procedure Information**

Element: 13815 Tricuspid Valve Procedure Type

Coding Instruction: Indicate the type of transcatheter tricuspid valve intervention.

Target Value: The value on current procedure

Vendor Instruction: When Transcatheter Valve Therapy Procedure Type (14273) is Equal to (Tricuspid Valve Procedure) then Tricuspid Valve Procedure Type (13815) cannot be Null

Tricuspid Valve Procedure Type - 1.3.6.1.4.1.19376.1.4.1.6.5.564

Selection	Definition	Source	Code	Code System
Annular Reduction			112000001516	ACC NCDR
Direct Leaflet			112000001517	ACC NCDR
Tricuspid Valve Replacement			25236004	SNOMED CT

Element: 13816 Tricuspid Valve Replacement Location

Coding Instruction: Indicate the location of the tricuspid valve replacement.

Target Value: The value on current procedure

Vendor Instruction: Tricuspid Valve Replacement Location (13816) must not be Equal to (Native Valve) when Procedure History Name (12905) is (Tricuspid Valve Replacement OR Tricuspid Valve Replacement - Transcatheter) and the Procedure History Occurrence (14268) is (Yes)

Tricuspid Valve Replacement Location - 1.3.6.1.4.1.19376.1.4.1.6.5.565

Selection	Definition	Source	Code	Code System
Inferior and Superior Vena Cava			112000001522	ACC NCDR
Inferior Vena Cava			64131007	SNOMED CT
Native Valve			112000001519	ACC NCDR
Surgical Ring			112000001521	ACC NCDR
Surgical Valve			112000001520	ACC NCDR

Element: 13817 Tricuspid Valve Repair or Replacement Procedure Indication

Coding Instruction: Indicate the primary procedure indication for the tricuspid procedure.

Target Value: The value on current procedure

Vendor Instruction: When Transcatheter Valve Therapy Procedure Type (14273) is Equal to (Tricuspid Valve Procedure) then Tricuspid Valve Repair or Replacement Procedure Indication (13817) cannot be Null

Tricuspid Valve Repair or Replacement Procedure Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.566

Selection	Definition	Source	Code	Code System
Tricuspid Valve Regurgitation			111287006	SNOMED CT
Tricuspid Valve Stenosis			49915006	SNOMED CT
Both Tricuspid Stenosis and at least Moderate Tricuspid Regurgitation			112000001829	ACC NCDR

Element: 13838 Tricuspid Valve Procedure Access Site

Coding Instruction: Indicate the access site used to perform the procedure.

Target Value: The value on current procedure

Tricuspid Valve Replacement Procedure Access Site - 1.3.6.1.4.1.19376.1.4.1.6.5.567

Selection	Definition	Source	Code	Code System
Femoral Vein			83419000	SNOMED CT
Jugular Vein			63190004	SNOMED CT
Right Atrium			73829009	SNOMED CT
Other			100000351	ACC NCDR

Element: 13839 Transvenous Right Ventricular Lead Present

Coding Instruction: Indicate if a transvenous right ventricular lead is present.

Target Value: The value on current procedure

Element: 13840 Right Ventricular Lead Strategy

Coding Instruction: Indicate the strategy to manage the right ventricular lead.

Target Value: The value on current procedure

Right Ventricular Lead Strategy - 1.3.6.1.4.1.19376.1.4.1.6.5.568

Section: TTVP	Parent: Procedure Information

Selection	Definition	Source	Code	Code System
Jailed by Transcatheter Valve			112000001528	ACC NCDR
Lead Removed Prior to Valve Implant			112000001527	ACC NCDR

Element: 13841 Change in Lead Function

Coding Instruction: Indicate if jailing the right ventricular lead led to a change in lead function.

Target Value: The value on current procedure

Section: TTVP Pre-Implant **Parent: TTVP**

Element: 13819 Preimplant Superior Vena Cava Pressure

Coding Instruction: Indicate the pressure in the superior vena cava prior to the device implant.

Target Value: The value between start of procedure and prior to the intervention

Element: 13820 Preimplant Superior Vena Cava Pressure Not Documented

Coding Instruction: Indicate if the pressure in the superior vena cava pre-implant was not documented.

Target Value: N/A

Element: 13823 Preimplant Inferior Vena Cava Pressure

Coding Instruction: Indicate the pressure in the inferior vena cava prior to device implant.

Target Value: The value between start of procedure and prior to the intervention

Element: 13825 Preimplant Inferior Vena Cava Pressure Not Documented

Coding Instruction: Indicate if the pressure in the inferior vena cava, pre-implant was not documented.

Target Value: N/A

Element: 13827 Preimplant Right Atrial Pressure

Coding Instruction: Indicate the mean right atrial pressure, pre-implant.

Target Value: The value between start of procedure and prior to the intervention

Element: 14290 Preimplant Right Atrial Pressure Not Documented

Coding Instruction: Indicate if the mean right atrial pressure is not documented.

Target Value: N/A

Element: 14281 Preimplant Right Ventricular Systolic Pressure

Coding Instruction: Indicate the right ventricular systolic pressure, preimplant .

Target Value: The value between start of procedure and prior to the intervention

Supporting Definition: **RV Systolic Pressure**

The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart

Source: NCI EVS

Element: 13831 Preimplant Right Ventricular Systolic Pressure Not Documented

Coding Instruction: Indicate if the right ventricular systolic pressure, pre-implant was not documented.

Target Value: N/A

Supporting Definition: **RV Systolic Pressure**

The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart

Source: NCI EVS

Element: 13834 Preimplant Tricuspid Valve Diastolic Gradient

Coding Instruction: Indicate the tricuspid valve diastolic gradient, pre-implant.

Target Value: The value between start of procedure and prior to the intervention

Element: 13836 Preimplant Tricuspid Valve Diastolic Gradient Not Documented

Coding Instruction: Indicate if the tricuspid valve diastolic gradient was not documented pre implant.

Target Value: N/A

Section: TTVP Post-Implant **Parent: TTVP**

Element: 13821 Post Implant Superior Vena Cava Pressure

Coding Instruction: Indicate the pressure in the superior vena cava post-implant.

Target Value: The last value between the implant and the end of current procedure

Element: 13822 Post Implant Superior Vena Cava Pressure Not Documented

Coding Instruction: Indicate if the pressure in the superior vena cava post-implant was not documented.

Target Value: N/A

Element: 13824 Post Implant Inferior Vena Cava Pressure

Coding Instruction: Indicate the pressure in the inferior vena cava post-implant.

Target Value: The last value between the implant and the end of current procedure

Element: 13826 Post Implant Inferior Vena Cava Pressure Not Documented

Coding Instruction: Indicate the pressure in the inferior vena cava post-implant was not documented.

Target Value: N/A

Element: 13828 Post Implant Right Atrial Pressure

Coding Instruction: Indicate the mean right atrial pressure, post implant.

Target Value: The last value between the implant and the end of current procedure

Element: 13830 Post Implant Right Atrial Pressure Not Documented

Coding Instruction: Indicate if the mean right atrial pressure, post-implant, was not documented.

Target Value: N/A

Element: 13832 Post Implant Right Ventricular Systolic Pressure

Coding Instruction: Indicate the right ventricular systolic pressure, post-implant .

Target Value: The last value between the implant and the end of current procedure

Supporting Definition: **RV Systolic Pressure**
The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart
Source: NCI EVS

Element: 13833 Post Implant Right Ventricular Systolic Pressure Not Documented

Coding Instruction: Indicate if the right ventricular systolic pressure, post-implant was not documented.

Target Value: N/A

Supporting Definition: **RV Systolic Pressure**
The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart
Source: NCI EVS

Element: 13835 Post Implant Tricuspid Valve Diastolic Gradient

Coding Instruction: Indicate the tricuspid valve diastolic gradient, post-implant.

Target Value: The last value between the implant and the end of current procedure

Element: 13837 Post Implant Tricuspid Valve Diastolic Gradient Not Documented

Section: TTVP Post-Implant **Parent: TTVP**

Coding Instruction: Indicate if the tricuspid valve diastolic gradient was not documented post implant.

Target Value: N/A

Section: TTVP Devices **Parent: TTVP**

Element: 13531 Tricuspid Valve Device Counter

Coding Instruction: This is a software-assigned value. The counter will start at one and be incremented by one for each device or system used.

Target Value: N/A

Element: 14483 Transcatheter Tricuspid Valve Device ID

Coding Instruction: Indicate the device ID of the tricuspid valve.

Target Value: The value on current procedure

Element: 14520 Tricuspid Valve Device Diameter

Coding Instruction: Indicate the tricuspid valve device diameter (in mm).

Target Value: The value on current procedure

Element: 13842 Tricuspid Valve Device Serial Number

Coding Instruction: Indicate the serial number of the tricuspid valve device implanted during the procedure.

Target Value: The value on current procedure

Element: 14571 Transcatheter Tricuspid Valve Unique Device ID

Coding Instruction: Indicate the full unique device identifier (UDI) for the implanted device

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

Element: 13537 Tricuspid Valve Device Implanted Successfully

Coding Instruction: Indicate if the device was implanted successfully.

Target Value: The value on current procedure

Element: 13540 Reason Tricuspid Valve Device Not Implanted Successfully

Coding Instruction: Indicate the reason the device was not implanted successfully.

Target Value: The value on current procedure

Reason Tricupsid Valve Device Not Implanted Successfully - 1.3.6.1.4.1.19376.1.4.1.6.5.569

Selection	Definition	Source	Code	Code System
Adverse Event			112000001505	ACC NCDR
Anchor Pull Through			112000001530	ACC NCDR
Device Embolization			112000001324	ACC NCDR
Device Malfunction			112000001504	ACC NCDR
Improper Device Positioning			112000001325	ACC NCDR
Improper Device Sizing			112000001326	ACC NCDR
Inability to Deliver Device Anchor			112000001533	ACC NCDR
Inability to Deploy the Stent			112000001532	ACC NCDR
Inability to Deploy the Valve			112000001531	ACC NCDR
Inability to Grasp Leaflets			112000001501	ACC NCDR
Inability to Reduce Annular Dimension			112000001534	ACC NCDR
Inability to Reduce Tricuspid Regurgitation			112000001535	ACC NCDR
Inferior Vena Cava Too Large			112000001536	ACC NCDR
Leaflet Detachment			112000001537	ACC NCDR
Single Leaflet Device Attachment			112000001538	ACC NCDR
Tricuspid Valve Injury			112000001539	ACC NCDR
Tricuspid Valve Stenosis			49915006	SNOMED CT
Other			100000351	ACC NCDR

Section: Post-Procedure - Intra or Post-Procedure Events **Parent: Lab Visit**

Element: 12153 Intra or Post Procedure Events

Coding Instruction: Indicate if there were any Intra or Post Procedure Events.

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

Vendor Instruction: When an Intra or Post Procedure Events (12153) are selected then Intra/Post-Procedure Events Occurred (9002) must not be Null

An Intra or Post Procedure - combination Events (12153), Occurred (9002) and Event Date (14275) - may only be entered/selected once

Intra or Post Procedure Events - 1.3.6.1.4.1.19376.1.4.1.6.5.706

Selection	Definition	Source	Code	Code System
Annular Rupture	Annular rupture (or 'annulus rupture') is an umbrella term covering different procedural-related injuries of the aortic root and the left ventricular outflow tract (LVOT) during transcatheter aortic valve replacement. According to the anatomical location of the injury, it can be classified into 4 types: intra-annular, subannular, supra-annular, and combined rupture This can also be called an 'aortic root rupture' and 'rupture of the device landing zone.'	Pasic, M, Unbehaun, A, et al. Annular Rupture During Transcatheter Aortic Valve Replacement. JACC Cardiovascular Interventions, Vol 8 (2015), #1, 1-9.	112000001835	ACC NCDR
Aortic Dissection	Include only Stanford classification type A or B aortic dissections, requiring surgical or percutaneous intervention. The Stanford classification is divided into type A and B depending on whether the ascending aorta is involved. The Stanford classification is in close relationship to clinical practice, as type A dissections generally require primary surgical repair whereas type B dissections generally are treated medically as initial treatment with surgery reserved for any complications. Type A - Involves the ascending aorta and/or aortic arch, and possibly the descending aorta. The tear can originate in the ascending aorta, the aortic arch, or, more rarely, in the descending aorta. It includes DeBakey type I, II and retrograde type III (dissection originating in the descending aorta or aortic arch but extending into the ascending aorta). Type B - Involves the descending aorta (distal to left subclavian artery origin), without involvement of the ascending aorta or aortic arch. It includes DeBakey type III without retrograde extension into the ascending aorta.	Poonyagariyagorn H, Hook M, Bhatt DL. Cardiovascular emergencies. In: Cleveland Clinic: Current Clinical Medicine 2009. 1st ed. Philadelphia, Pa: Saunders Elsevier; 2008: chap 14; Ankel F. Aortic dissection. In: Marx JA, ed. Rosen's Emergency Medicine: Concepts and Clinical Practice. 7th ed. Philadelphia, Pa: Mosby Elsevier; 2009: chap 83.	308546005	SNOMED CT
ASD Defect Closure due to Transseptal Catheterization	A procedure was required to close an atrial-septal defect as a result of the transseptal catheterization procedure.		112000001885	ACC NCDR
Atrial Fibrillation	Atrial fibrillation or flutter requiring treatment or prolonged hospitalization. Treatment includes initiation of a NEW/DIFFERENT medication therapy to address the arrhythmia; or a procedure/intervention to address the arrhythmia (cardioversion, permanent pacemaker/defibrillator, ablation, etc.).		49436004	SNOMED CT
Bleeding - Access Site	Indicate if the patient experienced a confirmed bleeding event at the access site observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear, endoscopy with cautery of a GI bleed).		1000142440	ACC NCDR
Bleeding - Gastrointestinal	The patient experienced a confirmed gastrointestinal bleeding event observed and		74474003	SNOMED CT

Section: Post-Procedure - Intra or Post-Procedure Events **Parent: Lab Visit**

	documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear, endoscopy with cautery of a GI bleed).			
Bleeding - Genitourinary	Indicate if the patient experienced a confirmed genitourinary bleeding event observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding.		417941003	SNOMED CT
Bleeding - Hematoma at Access Site	Indicate if the patient experienced a confirmed hematoma at the access site observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear, endoscopy with cautery of a GI bleed).		385494008	SNOMED CT
Bleeding - Other	The patient experienced bleeding from a site not otherwise specified, such as pulmonary bleeding or a subdural hematoma (not a hemorrhagic stroke). To qualify, the bleeding should be associated with any of the following documented in the medical record: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site or balloon angioplasty to seal an arterial tear).		1000142371	ACC NCDR
Bleeding - Retroperitoneal	Indicate if the patient experienced a confirmed retroperitoneal bleeding event observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear).		95549001	SNOMED CT
Cardiac Arrest	Cardiac arrest is defined as acute cardiac event documented by one of the following: ventricular fibrillation, rapid ventricular tachycardia or bradycardia rhythms with hemodynamic compromise causing loss of consciousness, pulseless rhythms (PEA), or asystole requiring cardiopulmonary resuscitation (two or more chest compressions or open chest massage, emergency temporary pacing, pericardiocentesis, institution of ECMO, or defibrillation) and without these measures death would have almost certainly resulted.	Data Governance Subcommittee of the NCDR's SQOC	410429000	SNOMED CT
Cardiac Perforation	A perforation of the myocardium, aortic annulus or aorta, with or without tamponade associated with the perforation. If tamponade occurs there would be fluid in the pericardial space compromising cardiac filling, and requiring intervention such as pericardiocentesis or returning to the operating room. This should be documented by either: 1. Echo showing pericardial fluid and signs of tamponade such as right heart compromise, or 2. Systemic hypotension due to pericardial fluid		36191001:123005000=302509004	SNOMED CT

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	compromising cardiac function.			
Cardiac Surgery or Intervention - Other Unplanned	The patient subsequently underwent cardiac surgery or a cath lab intervention that was unplanned. This does not include an intervention or procedure already identified as an adverse event in the TVT Registry (e.g. AV reintervention, other vascular surgery or intervention, pacemaker or ICD implant).		112000001892	ACC NCDR
Complete Leaflet Clip Detachment	A complete detachment of the leaflet clip from the mitral valve leaflets occurred.		112000001840	ACC NCDR
Coronary Artery Compression	Angiographic or echocardiographic evidence of a new, partial or complete obstruction of a coronary ostium, either by the valve prosthesis itself, the native leaflets, calcifications, or dissection, occurring during or after the procedure.		112000001837	ACC NCDR
COVID-19 Positive	The patient had a diagnosis of COVID-19, confirmed with a laboratory performed polymerase chain reaction (PCR) test. Notes: It is acceptable to code the diagnosis of COVID-19 based on testing that was NOT performed at your facility if it is accompanied by appropriate documentation in the medical record by the provider. Code no if documentation ONLY included antibody testing (IgG).		112000001982	ACC NCDR
Delivery System Component Embolization	A component of the delivery system became detached and embolized into the heart or vascular system of the patient.		112000001841	ACC NCDR
Device Embolization	The device became displaced from its initial implantation site so that it is no longer in its original position.		112000001324	ACC NCDR
Device Migration	Device migration of the prosthetic valve is x-ray confirmed movement of the valve from its initial implantation site such that there is a change in valve orientation within the aortic outflow track resulting in a new echocardiographic confirmed flow disturbance (pre- and post- filmed documentation). Note: Code device embolization if the device is outside of the outflow tract.		370512004	SNOMED CT
Device Related Event - Other	Indicate if an otherwise unspecified device-related event requiring unanticipated treatment occurred. This includes any delivery system related event.		112000001828	ACC NCDR
Device Thrombosis	Any thrombus attached to or near the valve that was implanted during the procedure that occludes part of the blood flow path, interferes with valve function, or is sufficiently large to warrant treatment.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001839	ACC NCDR
Dialysis (New Requirement)	Acute or worsening renal failure necessitating a new requirement for renal dialysis (renal dialysis includes hemodialysis and peritoneal dialysis). If a patient is on receiving continuous veno-venous hemofiltration (CVVH) as a result of renal failure (and not as treatment to remove fluid for heart failure), code yes.		100014076	ACC NCDR
Endocarditis	Confirmed diagnosis of endocarditis by blood culture and/or vegetation on or around a heart valve. This may include native tissue, ring or prosthetic valve involvement.	Society of Thoracic Surgeons (STS)	56819008	SNOMED CT
ICD	The patient developed a new dysrhythmia requiring insertion of an implantable cardioverter/defibrillator.		ACC-NCDR-ICD	ACC NCDR
Left Ventricular Outflow Tract Obstruction	Left ventricular outflow tract obstruction (pressure gradient assessed by with echo-Doppler velocities or by catheter-based pressure measurement) was documented in the medical record.		253546004	SNOMED CT
Mitral Leaflet or Subvalvular Injury	A mitral leaflet or subvalvular injury was detected during surgery or ascertained by echocardiogram.		112000001886	ACC NCDR
Myocardial Infarction	A myocardial infarction (MI) is defined as an acute ischemic event that is associated with documented and clinically significant myocardial	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation Clinical Trials (JACC, 2012, vol 60, No 15)	22298006	SNOMED CT

Section: Post-Procedure - Intra or Post-Procedure Events **Parent: Lab Visit**

	necrosis. The MI can be periprocedural (<72 hours after the procedure) or spontaneous (>72 hours after the index procedure). 1. Peri-procedural MI (<72 h after the index procedure) (a) New ischemic symptoms (e.g. chest pain or shortness of breath), or new ischemic signs (e.g. ventricular arrhythmias, new or worsening heart failure, new ST-segment changes, hemodynamic instability, new pathological Q waves in at least two contiguous leads, imaging evidence of new loss of viable myocardium or new wall motion abnormality) AND (b) Elevated cardiac biomarkers (preferable CK-MB) within 72 h after the indexprocedure, consisting of at least one sample post-procedure with a peak value exceeding 15 x as the upper reference limit for troponin or 5 x forCK-MB.* If cardiac biomarkers are increased at baseline (>99th percentile), a further increase in at least 50% post-procedure is required AND the peak value must exceed the previously stated limit. 2. Spontaneous MI (_72 h after the index procedure) any one of the following criteria: (a) Detection of rise and/or fall of cardiac biomarkers (preferably troponin) with at least one value above the 99th percentile URL, together with the evidence of myocardial ischemia with at least one of the following: -Symptoms of ischemia -ECG changes indicative of new ischemia [new ST-T changes or new left bundle branch block (LBBB)] -New pathological Q-waves in at least two contiguous leads -Imaging evidence of a new loss of viable myocardium or new wall motion abnormality (b) Sudden, unexpected cardiac death, involving cardiac arrest, often with symptoms suggestive of myocardial ischemia, and accompanied by presumably new ST elevation, or new LBBB, and/or evidence of fresh thrombus by coronary angiography and/or at autopsy, but death occurring before blood samples could be obtained, or at a time before the appearance of cardiac biomarkers in the blood. (c) Pathological findings of an acute myocardial infarction.			
Pacemaker Lead Dislodgement or Dysfunction	Pacemaker lead dislodgement or pacemaker dysfunction was documented in the medical record..		112000001884	ACC NCDR
Percutaneous Coronary Intervention	A PCI is the placement of an angioplasty guide wire, balloon, or other device (e.g. stent, atherectomy, brachytherapy, or thrombectomy catheter) into a native coronary artery or coronary artery bypass graft for the purpose of mechanical coronary revascularization.	National Cardiovascular Data Registry (NCDR)	415070008	SNOMED CT
Permanent Pacemaker	The patient developed a new dysrhythmia requiring insertion of a permanent pacemaker.		449397007	SNOMED CT
Pulmonary Embolism	Intravascular migration of a venous thrombus to the pulmonary arterial circulation. A 'Proved Pulmonary Embolism' is proved by a positive pulmonary angiogram, an unequivocally positive helical CT scan, a high-probability ventilation-perfusion scan, or autopsy.	Banovac, F., et al. Reporting Standards for Endovascular Treatment of Pulmonary Embolism. Journal of Vascular Interventional Radiology 2010; 21:44–53	59282003	SNOMED CT
Reintervention - Aortic Valve	The patient returned to the operating room or cath lab for any aortic valve re-intervention. Note: Please complete adjudication worksheet for every documented aortic valve reintervention, regardless of type of reintervention.		112000001827	ACC NCDR

Section: Post-Procedure - Intra or Post-Procedure Events	Parent: Lab Visit			
Reintervention - Mitral Valve	The patient returned to the operating room or cath lab for any mitral valve re-intervention. Note: Please complete adjudication worksheet for every documented mitral valve reintervention, regardless of type of reintervention.		112000001893	ACC NCDR
Reintervention - Tricuspid Valve	The patient returned to the operating room or cath lab for any tricuspid valve re-intervention. Note: Please complete adjudication worksheet for every documented tricuspid valve reintervention, regardless of type of reintervention.		112000001820	ACC NCDR
Single Leaflet Device Attachment	Single leaflet device attachment was documented in the medical record.		112000001538	ACC NCDR
Stroke - Hemorrhagic	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.	Hicks, K., Tcheng, J. 2014 ACC/AHA Key Data Elements and Definitions for Cardiovascular Endpoint Events in Clinical Trials A Report of the ACC/AHA Task Force on Clinical Data Standards (Writing Committee to Develop Cardiovascular Endpoints Data Standards). JACC 2015, 66 (4), p 403-469	230706003	SNOMED CT
Stroke - Ischemic	An acute episode of focal cerebral, spinal, or retinal dysfunction caused by infarction of central nervous system tissue. Note: 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.	Hicks, K., Tcheng, J. 2014 ACC/AHA Key Data Elements and Definitions for Cardiovascular Endpoint Events in Clinical Trials A Report of the ACC/AHA Task Force on Clinical Data Standards (Writing Committee to Develop Cardiovascular Endpoints Data Standards). JACC 2015, 66 (4), p 403-469	422504002	SNOMED CT
Stroke - Undetermined	A stroke of undetermined origin is defined as an acute episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction but with insufficient information to allow categorization as ischemic or hemorrhagic.	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;66 (4):403-469. doi:10.1016/j.jacc.2014.12.018.	230713003	SNOMED CT
Transient Ischemic Attack (TIA)	A transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours.	Society for Thoracic Surgeons (STS)	266257000	SNOMED CT
Transseptal Complication	The patient experienced an adverse event as a result of the transseptal access.		112000001833	ACC NCDR
Vascular Complication - Major	Major vascular complications include any of the following: 1. Any aortic dissection, aortic rupture, annulus rupture, left ventricle perforation, or new apical aneurysm/pseudo-aneurysm; 2. Access site or access-related vascular injury (dissection, stenosis, perforation, rupture, arteriovenous fistula, pseudoaneurysm, hematoma, irreversible nerve injury, compartment syndrome, percutaneous closure device failure) leading to death, life threatening or major bleeding*, visceral ischemia or neurological impairment; 3. Distal embolization (non-cerebral) from a vascular source requiring surgery or resulting in amputation or irreversible end-organ damage; 4. The use of unplanned endovascular or surgical intervention associated with death, major bleeding, visceral ischemia or neurological impairment; 5. Any new ischemia documented by patient symptoms, physical exam, and/or decreased or absent blood flow on lower extremity angiogram; 6. Surgery for access site-related nerve injury; 7. Permanent access site-related nerve injury. *Refers to VARC bleeding definitions Note: "ipsilateral lower extremity" was removed from #5 to have the ability to account for ischemia from any access site.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000000460	ACC NCDR
Vascular Complication - Minor	Minor vascular complications include any of the following: 1. Access site or access-related vascular injury	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001823	ACC NCDR

Section: Post-Procedure - Intra or Post-Procedure Events **Parent: Lab Visit**

	(dissection, stenosis, perforation, rupture, arteriovenous fistula, pseudoaneuysms, hematomas, percutaneous closure device failure) not leading to death, life-threatening or major bleeding*, visceral ischemia or neurological impairment; 2. Distal embolization treated with embolectomy and/or thrombectomy and not resulting in amputation or irreversible end-organ damage; 3. Any unplanned endovascular stenting or unplanned surgical intervention not meeting the criteria for a major vascular complication; 4. Vascular repair or the need for vascular repair (via surgery, ultrasound-guided compression, transcatheter embolization, or stent-graft). *Refers to VARC bleeding definitions		
Vascular Surgery or Intervention - Unplanned	The patient required unplanned vascular surgery or intervention to correct a bleeding complication or vascular related complication. Note: If a balloon angioplasty of the access site or access related sites is performed as a routine procedure to ensure adequate hemostasis of the site, then this would not qualify as an Unplanned Vascular Surgery or Intervention. However, if a balloon angioplasty is performed in an attempt to treat a bleeding or vascular access complication (i.e. bleeding at access site, dissection, stenosis, narrowing of vessel, etc.), then Unplanned Vascular Surgery or Intervention should be captured.	112000000467	ACC NCDR

Element: 9002 Intra/Post-Procedure Events Occurred

Coding Instruction: Indicate if the specific intra or post procedure event(s) occurred.

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

Element: 14275 Intra and Post Procedure Event Date

Coding Instruction: Indicate the date the event occurred.

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

Vendor Instruction: Intra and Post Procedure Event Date (14275) must be Greater than or Equal to Procedure Start Date and Time (7000)

Section: In-Hospital Event Information **Parent: Lab Visit**

Element: 14312 Adjudication Event

Coding Instruction: Indicate the event being adjudicated.

Target Value: N/A

Vendor Instruction: When Adjudication Event (14312) is Equal to (Stroke - Hemorrhagic,Stroke - Ischemic,Stroke - Undetermined,Transient Ischemic Attack (TIA)) then Transcatheter Valve Therapy Procedure Type (14273) must be Equal to (TAVR,TMVr,TMVR)

An Adjudication - combination Event (14312) and Date (14313) - may only be entered/selected once

The Adjudication Event Date (14313) / Adjudication Event Code (14312) must match with Intra or Post-Procedure Event Date (14275) / Intra or Post Procedure Event Code (12153)

Intra or Post Procedure Events - 1.3.6.1.4.1.19376.1.4.1.6.5.706

Selection	Definition	Source	Code	Code System
Annular Rupture	Annular rupture (or 'annulus rupture') is an umbrella term covering different procedural-related injuries of the aortic root and the left ventricular outflow tract (LVOT) during transcatheter aortic valve replacement. According to the anatomical location of the injury, it can be classified into 4 types: intra-annular, subannular, supra-annular, and combined rupture This can also be called an 'aortic root rupture' and 'rupture of the device landing zone.'	Pasic, M, Unbehaun, A, et al. Annular Rupture During Transcatheter Aortic Valve Replacement. JACC Cardiovascular Interventions, Vol 8 (2015), #1, 1-9.	112000001835	ACC NCDR
Aortic Dissection	Include only Stanford classification type A or B aortic dissections, requiring surgical or percutaneous intervention. The Stanford classification is divided into type A and B depending on whether the ascending aorta is involved. The Stanford classification is in close relationship to clinical practice, as type A dissections generally require primary surgical repair whereas type B dissections generally are treated medically as initial treatment with surgery reserved for any complications. Type A - Involves the ascending aorta and/or aortic arch, and possibly the descending aorta. The tear can originate in the ascending aorta, the aortic arch, or, more rarely, in the descending aorta. It includes DeBakey type I, II and retrograde type III (dissection originating in the descending aorta or aortic arch but extending into the ascending aorta). Type B - Involves the descending aorta (distal to left subclavian artery origin), without involvement of the ascending aorta or aortic arch. It includes DeBakey type III without retrograde extension into the ascending aorta.	Poonyagariyagorn H, Hook M, Bhatt DL. Cardiovascular emergencies. In: Cleveland Clinic: Current Clinical Medicine 2009. 1st ed. Philadelphia, Pa: Saunders Elsevier; 2008: chap 14; Ankel F. Aortic dissection. In: Marx JA, ed. Rosen's Emergency Medicine: Concepts and Clinical Practice. 7th ed. Philadelphia, Pa: Mosby Elsevier; 2009: chap 83.	308546005	SNOMED CT
ASD Defect Closure due to Transseptal Catheterization	A procedure was required to close an atrial-septal defect as a result of the transseptal catheterization procedure.		112000001885	ACC NCDR
Atrial Fibrillation	Atrial fibrillation or flutter requiring treatment or prolonged hospitalization. Treatment includes initiation of a NEW/DIFFERENT medication therapy to address the arrhythmia; or a procedure/intervention to address the arrhythmia (cardioversion, permanent pacemaker/defibrillator, ablation, etc.).		49436004	SNOMED CT
Bleeding - Access Site	Indicate if the patient experienced a confirmed bleeding event at the access site observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy		1000142440	ACC NCDR

Section: In-Hospital Event Information		Parent: Lab Visit		
	site, balloon angioplasty to seal an arterial tear, endoscopy with cautery of a GI bleed).			
Bleeding - Gastrointestinal	The patient experienced a confirmed gastrointestinal bleeding event observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear, endoscopy with cautery of a GI bleed).		74474003	SNOMED CT
Bleeding - Genitourinary	Indicate if the patient experienced a confirmed genitourinary bleeding event observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding.		417941003	SNOMED CT
Bleeding - Hematoma at Access Site	Indicate if the patient experienced a confirmed hematoma at the access site observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear, endoscopy with cautery of a GI bleed).		385494008	SNOMED CT
Bleeding - Other	The patient experienced bleeding from a site not otherwise specified, such as pulmonary bleeding or a subdural hematoma (not a hemorrhagic stroke). To qualify, the bleeding should be associated with any of the following documented in the medical record: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site or balloon angioplasty to seal an arterial tear).		1000142371	ACC NCDR
Bleeding - Retroperitoneal	Indicate if the patient experienced a confirmed retroperitoneal bleeding event observed and documented in the medical record that was associated with any of the following: 1. Hemoglobin drop of >=3 g/dL; 2. Transfusion of whole blood or packed red blood cells; 3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear).		95549001	SNOMED CT
Cardiac Arrest	Cardiac arrest is defined as acute cardiac event documented by one of the following: ventricular fibrillation, rapid ventricular tachycardia or bradycardia rhythms with hemodynamic compromise causing loss of consciousness, pulseless rhythms (PEA), or asystole requiring cardiopulmonary resuscitation (two or more chest compressions or open chest massage, emergency temporary pacing, pericardiocentesis, institution of ECMO, or defibrillation) and without these measures death would have almost certainly resulted.	Data Governance Subcommittee of the NCDR's SQOC	410429000	SNOMED CT
Cardiac Perforation	A perforation of the myocardium, aortic annulus or aorta, with or without tamponade associated with the perforation. If tamponade occurs there would be fluid in the pericardial space compromising cardiac filling, and requiring intervention such as pericardiocentesis or returning to the operating		36191001:123005000=302509004	SNOMED CT

Section: In-Hospital Event Information		Parent: Lab Visit		
	room. This should be documented by either: 1. Echo showing pericardial fluid and signs of tamponade such as right heart compromise, or 2. Systemic hypotension due to pericardial fluid compromising cardiac function.			
Cardiac Surgery or Intervention - Other Unplanned	The patient subsequently underwent cardiac surgery or a cath lab intervention that was unplanned. This does not include an intervention or procedure already identified as an adverse event in the TVT Registry (e.g. AV reintervention, other vascular surgery or intervention, pacemaker or ICD implant).		112000001892	ACC NCDR
Complete Leaflet Clip Detachment	A complete detachment of the leaflet clip from the mitral valve leaflets occurred.		112000001840	ACC NCDR
Coronary Artery Compression	Angiographic or echocardiographic evidence of a new, partial or complete obstruction of a coronary ostium, either by the valve prosthesis itself, the native leaflets, calcifications, or dissection, occurring during or after the procedure.		112000001837	ACC NCDR
COVID-19 Positive	The patient had a diagnosis of COVID-19, confirmed with a laboratory performed polymerase chain reaction (PCR) test. Notes: It is acceptable to code the diagnosis of COVID-19 based on testing that was NOT performed at your facility if it is accompanied by appropriate documentation in the medical record by the provider. Code no if documentation ONLY included antibody testing (IgG).		112000001982	ACC NCDR
Delivery System Component Embolization	A component of the delivery system became detached and embolized into the heart or vascular system of the patient.		112000001841	ACC NCDR
Device Embolization	The device became displaced from its initial implantation site so that it is no longer in its original position.		112000001324	ACC NCDR
Device Migration	Device migration of the prosthetic valve is x-ray confirmed movement of the valve from its initial implantation site such that there is a change in valve orientation within the aortic outflow track resulting in a new echocardiographic confirmed flow disturbance (pre- and post- filmed documentation). Note: Code device embolization if the device is outside of the outflow tract.		370512004	SNOMED CT
Device Related Event - Other	Indicate if an otherwise unspecified device-related event requiring unanticipated treatment occurred. This includes any delivery system related event.		112000001828	ACC NCDR
Device Thrombosis	Any thrombus attached to or near the valve that was implanted during the procedure that occludes part of the blood flow path, interferes with valve function, or is sufficiently large to warrant treatment.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001839	ACC NCDR
Dialysis (New Requirement)	Acute or worsening renal failure necessitating a new requirement for renal dialysis (renal dialysis includes hemodialysis and peritoneal dialysis). If a patient is on receiving continuous veno-venous hemofiltration (CVVH) as a result of renal failure (and not as treatment to remove fluid for heart failure), code yes.		100014076	ACC NCDR
Endocarditis	Confirmed diagnosis of endocarditis by blood culture and/or vegetation on or around a heart valve. This may include native tissue, ring or prosthetic valve involvement.	Society of Thoracic Surgeons (STS)	56819008	SNOMED CT
ICD	The patient developed a new dysrhythmia requiring insertion of an implantable cardioverter/defibrillator.		ACC-NCDR-ICD	ACC NCDR
Left Ventricular Outflow Tract Obstruction	Left ventricular outflow tract obstruction (pressure gradient assessed by with echo-Doppler velocities or by catheter-based pressure measurement) was documented in the medical record.		253546004	SNOMED CT
Mitral Leaflet or	A mitral leaflet or subvalvular injury was detected		112000001886	ACC NCDR

Section: In-Hospital Event Information		Parent: Lab Visit		
Subvalvular Injury	during surgery or ascertained by echocardiogram.			
Myocardial Infarction	A myocardial infarction (MI) is defined as an acute ischemic event that is associated with documented and clinically significant myocardial necrosis. The MI can be periprocedural (<72 hours after the procedure) or spontaneous (>72 hours after the index procedure). 1. Peri-procedural MI (<72 h after the index procedure) (a) New ischemic symptoms (e.g. chest pain or shortness of breath), or new ischemic signs (e.g. ventricular arrhythmias, new or worsening heart failure, new ST-segment changes, hemodynamic instability, new pathological Q waves in at least two contiguous leads, imaging evidence of new loss of viable myocardium or new wall motion abnormality) AND (b) Elevated cardiac biomarkers (preferable CK-MB) within 72 h after the indexprocedure, consisting of at least one sample post-procedure with a peak value exceeding 15 x as the upper reference limit for troponin or 5 x forCK-MB.* If cardiac biomarkers are increased at baseline (>99th percentile), a further increase in at least 50% post-procedure is required AND the peak value must exceed the previously stated limit. 2. Spontaneous MI (_72 h after the index procedure) any one of the following criteria: (a) Detection of rise and/or fall of cardiac biomarkers (preferably troponin) with at least one value above the 99th percentile URL, together with the evidence of myocardial ischemia with at least one of the following: -Symptoms of ischemia -ECG changes indicative of new ischemia [new ST-T changes or new left bundle branch block (LBBB)] -New pathological Q-waves in at least two contiguous leads -Imaging evidence of a new loss of viable myocardium or new wall motion abnormality (b) Sudden, unexpected cardiac death, involving cardiac arrest, often with symptoms suggestive of myocardial ischemia, and accompanied by presumably new ST elevation, or new LBBB, and/or evidence of fresh thrombus by coronary angiography and/or at autopsy, but death occurring before blood samples could be obtained, or at a time before the appearance of cardiac biomarkers in the blood. (c) Pathological findings of an acute myocardial infarction.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation Clinical Trials (JACC, 2012, vol 60, No 15)	22298006	SNOMED CT
Pacemaker Lead Dislodgement or Dysfunction	Pacemaker lead dislodgement or pacemaker dysfunction was documented in the medical record..		112000001884	ACC NCDR
Percutaneous Coronary Intervention	A PCI is the placement of an angioplasty guide wire, balloon, or other device (e.g. stent, atherectomy, brachytherapy, or thrombectomy catheter) into a native coronary artery or coronary artery bypass graft for the purpose of mechanical coronary revascularization.	National Cardiovascular Data Registry (NCDR)	415070008	SNOMED CT
Permanent Pacemaker	The patient developed a new dysrhythmia requiring insertion of a permanent pacemaker.		449397007	SNOMED CT
Pulmonary Embolism	Intravascular migration of a venous thrombus to the pulmonary arterial circulation. A 'Proved Pulmonary Embolism' is proved by a positive pulmonary angiogram, an unequivocally positive helical CT scan, a high-probability ventilation-perfusion scan, or autopsy.	Banovac, F., et al. Reporting Standards for Endovascular Treatment of Pulmonary Embolism. Journal of Vascular Interventional Radiology 2010; 21:44–53	59282003	SNOMED CT
Reintervention - Aortic Valve	The patient returned to the operating room or cath lab for any aortic valve re-intervention.		112000001827	ACC NCDR

Section: In-Hospital Event Information **Parent: Lab Visit**

	Note: Please complete adjudication worksheet for every documented aortic valve reintervention, regardless of type of reintervention.			
Reintervention - Mitral Valve	The patient returned to the operating room or cath lab for any mitral valve re-intervention. Note: Please complete adjudication worksheet for every documented mitral valve reintervention, regardless of type of reintervention.		112000001893	ACC NCDR
Reintervention - Tricuspid Valve	The patient returned to the operating room or cath lab for any tricuspid valve re-intervention. Note: Please complete adjudication worksheet for every documented tricuspid valve reintervention, regardless of type of reintervention.		112000001820	ACC NCDR
Single Leaflet Device Attachment	Single leaflet device attachment was documented in the medical record.		112000001538	ACC NCDR
Stroke - Hemorrhagic	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.	Hicks, K., Tcheng, J. 2014 ACC/AHA Key Data Elements and Definitions for Cardiovascular Endpoint Events in Clinical Trials A Report of the ACC/AHA Task Force on Clinical Data Standards (Writing Committee to Develop Cardiovascular Endpoints Data Standards). JACC 2015, 66 (4), p 403-469	230706003	SNOMED CT
Stroke - Ischemic	An acute episode of focal cerebral, spinal, or retinal dysfunction caused by infarction of central nervous system tissue. Note: 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.	Hicks, K., Tcheng, J. 2014 ACC/AHA Key Data Elements and Definitions for Cardiovascular Endpoint Events in Clinical Trials A Report of the ACC/AHA Task Force on Clinical Data Standards (Writing Committee to Develop Cardiovascular Endpoints Data Standards). JACC 2015, 66 (4), p 403-469	422504002	SNOMED CT
Stroke - Undetermined	A stroke of undetermined origin is defined as an acute episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction but with insufficient information to allow categorization as ischemic or hemorrhagic.	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;66 (4):403-469. doi:10.1016/j.jacc.2014.12.018.	230713003	SNOMED CT
Transient Ischemic Attack (TIA)	A transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours.	Society for Thoracic Surgeons (STS)	266257000	SNOMED CT
Transseptal Complication	The patient experienced an adverse event as a result of the transseptal access.		112000001833	ACC NCDR
Vascular Complication - Major	Major vascular complications include any of the following: 1. Any aortic dissection, aortic rupture, annulus rupture, left ventricle perforation, or new apical aneurysm/pseudo-aneurysm; 2. Access site or access-related vascular injury (dissection, stenosis, perforation, rupture, arteriovenous fistula, pseudoaneurysm, hematoma, irreversible nerve injury, compartment syndrome, percutaneous closure device failure) leading to death, life threatening or major bleeding*, visceral ischemia or neurological impairment; 3. Distal embolization (non-cerebral) from a vascular source requiring surgery or resulting in amputation or irreversible end-organ damage; 4. The use of unplanned endovascular or surgical intervention associated with death, major bleeding, visceral ischemia or neurological impairment; 5. Any new ischemia documented by patient symptoms, physical exam, and/or decreased or absent blood flow on lower extremity angiogram; 6. Surgery for access site-related nerve injury; 7. Permanent access site-related nerve injury. *Refers to VARC bleeding definitions Note: "ipsilateral lower extremity" was removed from #5 to have the ability to account for ischemia from any access site.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000000460	ACC NCDR

Section: In-Hospital Event Information **Parent: Lab Visit**

Vascular Complication - Minor	Minor vascular complications include any of the following: 1. Access site or access-related vascular injury (dissection, stenosis, perforation, rupture, arteriovenous fistula, pseudoaneuysms, hematomas, percutaneous closure device failure) not leading to death, life-threatening or major bleeding*, visceral ischemia or neurological impairment; 2. Distal embolization treated with embolectomy and/or thrombectomy and not resulting in amputation or irreversible end-organ damage; 3. Any unplanned endovascular stenting or unplanned surgical intervention not meeting the criteria for a major vascular complication; 4. Vascular repair or the need for vascular repair (via surgery, ultrasound-guided compression, transcatheter embolization, or stent-graft). *Refers to VARC bleeding definitions	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001823	ACC NCDR
Vascular Surgery or Intervention - Unplanned	The patient required unplanned vascular surgery or intervention to correct a bleeding complication or vascular related complication. Note: If a balloon angioplasty of the access site or access related sites is performed as a routine procedure to ensure adequate hemostasis of the site, then this would not qualify as an Unplanned Vascular Surgery or Intervention. However, if a balloon angioplasty is performed in an attempt to treat a bleeding or vascular access complication (i.e. bleeding at access site, dissection, stenosis, narrowing of vessel, etc.), then Unplanned Vascular Surgery or Intervention should be captured.		112000000467	ACC NCDR

Element: 14313 Adjudication Event Date

Coding Instruction: Indicate the date the clinical event being adjudicated occurred.

Target Value: N/A

Vendor Instruction: The Adjudication Event Date (14313) / Adjudication Event Code (14312) must match with Intra or Post-Procedure Event Date (14275) / Intra or Post Procedure Event Code (12153)

Element: 14314 Adjudication Status

Coding Instruction: Indicate whether the patient was alive or deceased on the date the adjudication was performed.

Target Value: N/A

Vendor Instruction: Adjudication Status (14314) as 'Deceased' must be answered only once in the episode.

Adjudication Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.726

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

Element: 14315 Adjudication Date of Death

Coding Instruction: Indicate the date the patient was declared dead.

Target Value: N/A

Vendor Instruction: Adjudication Date of Death (14315) must be Greater than or Equal to Adjudication Event Date (14313)

Element: 14462 In Hospital Clinical Comments

Coding Instruction: Provide information and details that may assist in assessing the event(s) being adjudicated.

Target Value: N/A

Section: Stroke Or TIA **Parent: In-Hospital Event Information**

Element: 14316 Symptom Onset Date

Coding Instruction: Indicate the date of symptom onset of the neurologic deficit.

Target Value: N/A

Element: 14317 Neurologic Deficit with Rapid Onset

Coding Instruction: Indicate if the patient had a sudden onset of a focal or global neurologic deficit (regardless of the duration of symptoms) with at least one of the following present: change in level of consciousness, hemiplegia, hemiparesis, numbness or sensory loss affecting one side of the body, dysphasia or aphasia, hemianopia, amaurosis fugax, other neurological signs or symptoms consistent with a stroke.

Target Value: N/A

Element: 14318 Neurologic Deficit Clinical Presentation

Coding Instruction: Indicate the clinical presentation of the neurologic deficit.

Target Value: N/A

Neurologic Deficit Clinical Presentation - 1.3.6.1.4.1.19376.1.4.1.6.5.716

Selection	Definition	Source	Code	Code System
TIA or Stroke (CVA)			100014109	ACC NCDR
Non Stroke Neurologic Deficit			112000001860	ACC NCDR

Element: 14319 Neurologic Symptom Duration Greater Than or Equal to 24 hours

Coding Instruction: Indicate if the duration of the neurologic symptoms lasted >= 24 hours.

Target Value: N/A

Element: 14320 Brain Imaging Performed

Coding Instruction: Indicate if neuroimaging was performed.

Target Value: N/A

Element: 14349 Brain Imaging Type

Coding Instruction: Indicate the type of neuroimaging performed.

Target Value: N/A

Imaging Type - 1.3.6.1.4.1.19376.1.4.1.6.5.417

Selection	Definition	Source	Code	Code System
Computed Tomography			77477000	SNOMED CT
Computed Tomography with Contrast			112000001861	ACC NCDR
Magnetic Resonance Imaging			113091000	SNOMED CT
Magnetic Resonance Imaging with Contrast			51619007	SNOMED CT
Other Imaging			112000001862	ACC NCDR

Element: 14350 Brain Imaging Findings

Coding Instruction: Indicate the type of deficit found as a result of the neuroimaging study.

Target Value: N/A

Brain Imaging Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.717

Selection	Definition	Source	Code	Code System
Infarct	Neuroimaging evidence of CNS infarction in the corresponding vascular territory (brain, spinal cord, or retinal cell death), with or without hemorrhage.	Adapted from: Lansky, A.J., et al. Proposed Standardized Neurological Endpoints for Cardiovascular Clinical Trials (An Academic Research Consortium Initiative) JACC 2017, 69 (6): 679-690	55641003	SNOMED CT
Hemorrhage	Neuroimaging evidence of central nervous system (CNS) hemorrhage within the brain parenchyma, subarachnoid space, ventricular system, spinal cord, or retina that is not caused by trauma.	Adapted from: Lansky, A.J., et al. Proposed Standardized Neurological Endpoints for Cardiovascular Clinical Trials (An Academic Research Consortium Initiative) JACC 2017, 69 (6): 679-690	50960005	SNOMED CT
No Deficit			100001231	ACC NCDR

Element: 14351 Event Related Sequelae

Coding Instruction: Indicate the sequelae related to the stroke or TIA.

Section: Stroke Or TIA **Parent: In-Hospital Event Information**

Target Value: N/A

Event Related Sequelae - 1.3.6.1.4.1.19376.1.4.1.6.5.737

Selection	Definition	Source	Code	Code System
Death			419620001	SNOMED CT
Permanent Vegetative State			723151005	SNOMED CT
Altered Consciousness			3006004	SNOMED CT
Blindness			193699007	SNOMED CT
Aphasia			87486003	SNOMED CT
Loss of Motor Function			112000001936	ACC NCDR
Loss of Sensory Function			33653009	SNOMED CT
Facial Paralysis			280816001	SNOMED CT
Prolonged Length of Stay			112000001937	ACC NCDR
Other			100000351	ACC NCDR

Element: 14352 Discharge Location After Event

Coding Instruction: Indicate the discharge location after the stroke or TIA.

Target Value: N/A

Discharge Location - 1.3.6.1.4.1.19376.1.4.1.6.5.41

Selection	Definition	Source	Code	Code System
Home			01	HL7 Discharge disposition
Skilled Nursing Facility	Skilled nursing facilities (SNF) are typically sub-acute programs used for longer anticipated length of stay. Note: Sometimes SNFs may have acute rehabilitation beds within their facility. If the patient is discharged to a SNF for acute rehab (requiring a higher level of care), code "extended care/TCU/rehab".		03	HL7 Discharge disposition
Extended Care/TCU/Rehab	An extended care unit, transitional care unit or rehab unit typically provides a high level of intensive therapy as well as specialized nursing and physician care. This discharge setting may also be called subacute care or long term acute care (LTACH).		62	HL7 Discharge disposition
Other Acute Care Hospital			02	HL7 Discharge disposition
Left Against Medical Advice (AMA)	The patient was discharged or eloped against medical advice.		07	HL7 Discharge disposition
Other Discharge Location			100001249	ACC NCDR

Element: 14421 Patient Discharged to Prior Place of Living

Coding Instruction: Indicate if the patient was discharged to their prior place of living.

Target Value: N/A

Element: 14353 Stroke Diagnosed During Autopsy

Coding Instruction: Indicate if the stroke was diagnosed during autopsy.

Target Value: N/A

Boolean with Information Not Available - 1.3.6.1.4.1.19376.1.4.1.6.5.718

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Information Not Available			112000001866	ACC NCDR

Section: AV Re-Intervention **Parent: In-Hospital Event Information**

Element: 14354 Aortic Valve Reintervention Type

Coding Instruction: Indicate the type of aortic valve reintervention.

Target Value: N/A

Valve Reintervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.719

Selection	Definition	Source	Code	Code System
Surgical Replacement			112000001872	ACC NCDR
Surgical Repair			112000001871	ACC NCDR
Transcatheter Replacement			112000001875	ACC NCDR
Balloon Valvuloplasty			112000001469	ACC NCDR
Leaflet Clip Procedure			112000001778	ACC NCDR
Paravalvular Leak Closure			112000001916	ACC NCDR
Other Transcatheter Intervention			112000001873	ACC NCDR

Element: 14355 Aortic Valve Reintervention Primary Indication

Coding Instruction: Indicate the primary indication for the reintervention. If more than one indication is present, code the indication the operator feels has the highest significance.

Target Value: N/A

Valve Reintervention Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.720

Selection	Definition	Source	Code	Code System
Regurgitation			40445007	SNOMED CT
Stenosis			44241007	SNOMED CT
Device Embolization			112000001324	ACC NCDR
Device Fracture			112000001891	ACC NCDR
Device Migration			370512004	SNOMED CT
Endocarditis			56819008	SNOMED CT
Paravalvular Leak			234184000	SNOMED CT
Device Thrombosis			112000001839	ACC NCDR
Valve Injury			762610001	SNOMED CT
Other			100000351	ACC NCDR

Element: 14356 Aortic Valve Regurgitation

Coding Instruction: Indicate the highest level of aortic regurgitation prior to the aortic valve reintervention.

Target Value: N/A

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14357 Paravalvular Aortic Regurgitation

Coding Instruction: Indicate the highest severity of paravalvular regurgitation prior to the aortic valve reintervention.

Note: If trace/trivial is documented, code "none".

Target Value: N/A

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14358 Central Aortic Regurgitation

Coding Instruction: Indicate the highest severity of central regurgitation prior to the aortic valve reintervention.

Note: If trace/trivial is documented, code "none".

Target Value: N/A

Section: AV Re-Intervention **Parent: In-Hospital Event Information**

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14359 Aortic Valve Area

Coding Instruction: Indicate the smallest aortic valve area (in cm squared).

Target Value: N/A

Element: 14282 Aortic Valve Mean Gradient

Coding Instruction: Indicate the aortic valve mean gradient in mm Hg.

Target Value: N/A

Section: MV Re-Intervention **Parent: In-Hospital Event Information**

Element: 14360 Mitral Valve Reintervention Type

Coding Instruction: Indicate the type of mitral valve reintervention.

Target Value: N/A

Valve Reintervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.719

Selection	Definition	Source	Code	Code System
Surgical Replacement			112000001872	ACC NCDR
Surgical Repair			112000001871	ACC NCDR
Transcatheter Replacement			112000001875	ACC NCDR
Balloon Valvuloplasty			112000001469	ACC NCDR
Leaflet Clip Procedure			112000001778	ACC NCDR
Paravalvular Leak Closure			112000001916	ACC NCDR
Other Transcatheter Intervention			112000001873	ACC NCDR

Element: 14361 Mitral Valve Reintervention Indication

Coding Instruction: Indicate the primary indication for the reintervention. If more than one indication is present, code the indication the operator feels has the highest significance.

Target Value: N/A

Valve Reintervention Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.720

Selection	Definition	Source	Code	Code System
Regurgitation			40445007	SNOMED CT
Stenosis			44241007	SNOMED CT
Device Embolization			112000001324	ACC NCDR
Device Fracture			112000001891	ACC NCDR
Device Migration			370512004	SNOMED CT
Endocarditis			56819008	SNOMED CT
Paravalvular Leak			234184000	SNOMED CT
Device Thrombosis			112000001839	ACC NCDR
Valve Injury			762610001	SNOMED CT
Other			100000351	ACC NCDR

Section: Tricuspid Valve Re-Intervention **Parent: In-Hospital Event Information**

Element: 14322 Tricuspid Valve Reintervention Type

Coding Instruction: Indicate the type of tricuspid valve re-intervention.

Target Value: N/A

Valve Reintervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.719

Selection	Definition	Source	Code	Code System
Surgical Replacement			112000001872	ACC NCDR
Surgical Repair			112000001871	ACC NCDR
Transcatheter Replacement			112000001875	ACC NCDR
Balloon Valvuloplasty			112000001469	ACC NCDR
Leaflet Clip Procedure			112000001778	ACC NCDR
Paravalvular Leak Closure			112000001916	ACC NCDR
Other Transcatheter Intervention			112000001873	ACC NCDR

Element: 14347 Tricuspid Valve Reintervention Primary Indication

Coding Instruction: Indicate the primary indication for the tricuspid valve re-intervention.

Target Value: N/A

Valve Reintervention Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.720

Selection	Definition	Source	Code	Code System
Regurgitation			40445007	SNOMED CT
Stenosis			44241007	SNOMED CT
Device Embolization			112000001324	ACC NCDR
Device Fracture			112000001891	ACC NCDR
Device Migration			370512004	SNOMED CT
Endocarditis			56819008	SNOMED CT
Paravalvular Leak			234184000	SNOMED CT
Device Thrombosis			112000001839	ACC NCDR
Valve Injury			762610001	SNOMED CT
Other			100000351	ACC NCDR

Element: 14383 Tricuspid Valve Regurgitation

Coding Instruction: Indicate the severity of tricuspid valve regurgitation.

Target Value: N/A

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Section: Post-Procedure Hemoglobin **Parent: Post-Procedure Clinical Data**

Element: 13763 Hemoglobin

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

Target Value: The lowest value between end of current procedure and discharge

Supporting Definition: **Hemoglobin**

Hemoglobin (Hb or Hgb) is the iron-containing oxygen-transport metalloprotein in the red blood cells. It carries oxygen from the lungs to the rest of the body (i.e. the tissues) where it releases the oxygen to burn nutrients and provide energy. Hemoglobin concentration measurement is among the most commonly performed blood tests, usually as part of a complete blood count. If the concentration is below normal, this is called anemia. Anemias are classified by the size of red blood cells: "microcytic" if red cells are small, "macrocytic" if they are large, and "normocytic" if otherwise. Dehydration or hyperhydration can greatly influence measured hemoglobin levels.

Source: http://s.details.loinc.org/LOINC/718-7.html?sections=Simple

Element: 14243 Hemoglobin Not Drawn

Coding Instruction: Indicate if a post-procedure hemoglobin was not collected.

Target Value: N/A

Section: Post-Procedure 12 Lead **Parent: Post-Procedure Clinical Data**

Element: 13616 12 Lead Electrocardiogram Performed

Coding Instruction: Indicate if post procedure 12 lead ECG was performed.

Target Value: Any occurrence between end of current procedure and discharge

Element: 13765 12 Lead Electrocardiogram Findings

Coding Instruction: Indicate the post procedure 12 lead ECG findings. If more than one ECG is performed, document the findings from any ECG.

Target Value: Any occurrence between end of current procedure and discharge

Vendor Instruction: Cannot select option No Significant Changes with any other option: Pathological Q Wave, Cardiac Arrhythmia, New Left Bundle Branch Block, Pathological Q Wave, Cardiac Arrhythmia or New Left Bundle Branch Block

12 Lead Electrocardiogram Findings - 1.3.6.1.4.1.19376.1.4.1.6.5.535

Selection	Definition	Source	Code	Code System
Cardiac Arrhythmia	The patient has a new onset of an atrial or ventricular arrhythmia requiring medication or other therapy. This includes brady or tachy arrhythmias.		698247007	SNOMED CT
No Significant Changes			112000001391	ACC NCDR
Pathological Q Wave			164918000	SNOMED CT
New Left Bundle Branch Block			100014019	ACC NCDR

Section: Post-Procedure Creatinine **Parent: Post-Procedure Clinical Data**

Element: 10060 Creatinine

Coding Instruction: Indicate the creatinine (Cr) level mg/dL.

Target Value: The last value on discharge

Supporting Definition: **Creatinine**

Creatinine or creatine anhydride, is a breakdown product of creatine phosphate in muscle. The loss of water molecule from creatine results in the formation of creatinine. It is transferred to the kidneys by blood plasma, whereupon it is eliminated by glomerular filtration and partial tubular excretion. Creatinine is usually produced at a fairly constant rate and measuring its serum level is a simple test. A rise in blood creatinine levels is observed only with marked damage to functioning nephrons; therefore this test is not suitable for detecting early kidney disease. Creatine and creatinine are metabolized in the kidneys, muscle, liver and pancreas.

Source: http://s.details.loinc.org/LOINC/2160-0.html?sections=Simple

Element: 10061 Creatinine Not Drawn

Coding Instruction: Indicate if a discharge creatinine level was not drawn.

Target Value: The last value on discharge

Section: Post-Procedure Highest Creatinine **Parent: Post-Procedure Clinical Data**

Element: 13764 Creatinine

Coding Instruction: Indicate the post-procedure creatinine level in mg/dL. If more than one level is available, code the peak level.

Target Value: The highest value between end of current procedure and discharge

Supporting Definition: **Creatinine**

Creatinine or creatine anhydride, is a breakdown product of creatine phosphate in muscle. The loss of water molecule from creatine results in the formation of creatinine. It is transferred to the kidneys by blood plasma, whereupon it is eliminated by glomerular filtration and partial tubular excretion. Creatinine is usually produced at a fairly constant rate and measuring its serum level is a simple test. A rise in blood creatinine levels is observed only with marked damage to functioning nephrons; therefore this test is not suitable for detecting early kidney disease. Creatine and creatinine are metabolized in the kidneys, muscle, liver and pancreas.

Source: http://s.details.loinc.org/LOINC/2160-0.html?sections=Simple

Element: 14293 Highest Creatinine Not Drawn

Coding Instruction: Indicate if the highest creatinine level was not drawn.

Target Value: N/A

Section: Post-Procedure Echocardiogram Findings **Parent: Post-Procedure**

Element: 13592 Echocardiogram Performed

Coding Instruction: Indicate the type of echo performed prior to discharge.

Target Value: Any occurrence between end of current procedure and discharge

Echocardiogram Type - 1.3.6.1.4.1.19376.1.4.1.6.5.526

Selection	Definition	Source	Code	Code System
Transesophageal Echocardiogram (TEE)			105376000	SNOMED CT
Transthoracic Echo (TTE)			433236007	SNOMED CT

Element: 13645 Echocardiogram Not Performed

Coding Instruction: Indicate if an echocardiogram was not performed.

Target Value: N/A

Element: 13493 Echocardiogram Date

Coding Instruction: Indicate the date the echocardiogram was performed.

Target Value: Any occurrence between end of current procedure and discharge

Element: 13495 Aortic Valve Area

Coding Instruction: Indicate the smallest aortic valve area (in cm2).

Target Value: The lowest value between end of current procedure and discharge

Element: 13675 Aortic Valve Mean Gradient

Coding Instruction: Indicate the mean gradient (in mm Hg) across the aortic valve.

Target Value: The highest value between end of current procedure and discharge

Element: 13526 Aortic Valve Regurgitation

Coding Instruction: Indicate the severity of aortic valve regurgitation.

If mild-moderate is documented, code as mild.
If moderate-severe is documented, code as moderate.

Target Value: The last value between end of current procedure and next procedure or discharge

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13494 Mitral Regurgitation

Coding Instruction: Indicate the severity of mitral valve regurgitation.

If mild-moderate is documented, code as mild.

Target Value: The last value between end of current procedure and next procedure or discharge

Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.728

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Moderate-Severe			1000142345	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13677 Tricuspid Valve Regurgitation

Coding Instruction: Indicate the severity of tricuspid valve regurgitation.

Section: Post-Procedure Echocardiogram Findings **Parent: Post-Procedure**

If mild-moderate is documented, code as mild.
If moderate-severe is documented, code as moderate.

Target Value: The last value between end of current procedure and next procedure or discharge

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13779 Effective Regurgitant Orifice Area

Coding Instruction: Indicate the effective regurgitant orifice area (EROA), in cm2.

Target Value: The highest value between end of current procedure and next procedure or discharge

Element: 13769 Effective Regurgitant Orifice Area Method of Assessment

Coding Instruction: Indicate the method used to assess the effective regurgitant orifice area. If multiple methods are available, code the 3D planimetry method first, then PISA.

Target Value: Any occurrence between end of current procedure and discharge

Effective Regurgitant Orifice Area Method of Assessment - 1.3.6.1.4.1.19376.1.4.1.6.5.547

Selection	Definition	Source	Code	Code System
3D Planimetry			112000001438	ACC NCDR
Proximal Isovelocity Surface Area			112000001439	ACC NCDR
Quantitative Doppler			112000001440	ACC NCDR
Other			100000351	ACC NCDR

Element: 13770 Mitral Valve Mean Gradient

Coding Instruction: Indicate the mean gradient (in mm Hg) across the mitral valve.

Target Value: The highest value between end of current procedure and discharge

Supporting Definition: **Mitral Valve Mean Gradient**

The average gradient across the mitral valve occurring during the entire systole.

Source: Baumgartner, H. et. al (2009). Echocardiographic assessment of valve stenosis: EAE/ASE recommendations for clinical practice.

Element: 13771 Mitral Valve Area

Coding Instruction: Indicate the smallest mitral valve area in centimeters squared.

Target Value: The lowest value between end of current procedure and discharge

Supporting Definition: **Mitral Valve Area**

Measurement of mitral valve area.

Source:

Element: 13772 Left Ventricular Outflow Tract Peak Velocity

Coding Instruction: Indicate the left ventricular outflow tract peak velocity in m/sec.

Target Value: The highest value between end of current procedure and discharge

Element: 13774 Systolic Anterior Motion Present

Coding Instruction: Indicate if systolic anterior motion of the mitral valve was present.

Target Value: Any occurrence between end of current procedure and discharge

Element: 14507 Tricuspid Valve Diastolic Gradient

Coding Instruction: Indicate the post-procedure tricuspid valve diastolic gradient in mm Hg. This can also be called the TV inflow gradient.

Target Value: The highest value between end of current procedure and next procedure or discharge

Element: 14508 Tricuspid Valve Diastolic Gradient Not Documented

Section: Post-Procedure Echocardiogram Findings **Parent: Post-Procedure**

Coding Instruction: Indicate if the tricuspid valve diastolic gradient was not documented post-procedure.

Target Value: N/A

Element: 14294 Tricuspid Valve Annulus Size

Coding Instruction: Indicate the tricuspid valve annulus size in mm. Documentation using end-diastolic, 4 chamber view is preferred.

Target Value: The lowest value between end of current procedure and next procedure or discharge

Element: 14495 Tricuspid Valve Annulus Size Not Documented

Coding Instruction: Indicate if the tricuspid valve annulus size was not documented.

Target Value: N/A

Element: 14295 End Diastolic Mid Right Ventricle Diameter

Coding Instruction: Indicate the end-diastolic mid right ventricular (RV) diameter, using the 4 chamber view (in cm).

Target Value: Any occurrence between end of current procedure and discharge

Element: 14496 End Diastolic Mid Right Ventricle Diameter Not Documented

Coding Instruction: Indicate if the end-diastolic mid right ventricular (RV) diameter was not documented.

Target Value: N/A

Element: 14296 End Diastolic Basal Right Ventricle Diameter

Coding Instruction: Indicate the end-diastolic basal right ventricular (RV) diameter, using the 4 chamber view (in cm).

Target Value: Any occurrence between end of current procedure and discharge

Element: 14497 End Diastolic Basal Right Ventricle Diameter Not Documented

Coding Instruction: Indicate if the end diastolic basal right ventricular (RV) diameter was not documented.

Target Value: N/A

Element: 14297 Right Ventricular Systolic Pressure

Coding Instruction: Indicate the right ventricular systolic pressure in mm Hg recorded post procedure. Note: If more than one RVSP documented, code the highest value.

Target Value: The highest value between end of current procedure and next procedure or discharge

Supporting Definition: **RV Systolic Pressure**

The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart

Source: NCI EVS

Element: 14498 Right Ventricular Systolic Pressure Not Documented

Coding Instruction: Indicate if the right ventricular systolic pressure was not documented.

Target Value: N/A

Supporting Definition: **RV Systolic Pressure**

The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart

Source: NCI EVS

Section: Post-Procedure AV Regurgitation **Parent: Post-Procedure Echocardiogram Findings**

Element: 14503 Paravalvular Aortic Regurgitation

Coding Instruction: Indicate the severity of paravalvular aortic valve regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value between end of current procedure and discharge

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14524 Paravalvular Aortic Regurgitation Not Documented

Coding Instruction: Indicate if the severity of paravalvular aortic valve regurgitation was not documented post-procedure.

Target Value: N/A

Element: 14499 Central Aortic Regurgitation

Coding Instruction: Indicate the severity of central aortic valve regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value between end of current procedure and discharge

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14487 Central Aortic Regurgitation Not Documented

Coding Instruction: Indicate if central aortic valve regurgitation was not documented.

Target Value: N/A

Section: Post-Procedure MV Regurgitation **Parent: Post-Procedure Echocardiogram Findings**

Element: 13766 Paravalvular Mitral Regurgitation

Coding Instruction: Indicate the severity of paravalvular mitral valve regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value between end of current procedure and discharge

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14525 Paravalvular Mitral Regurgitation Not Documented

Coding Instruction: Indicate if the severity of paravalvular mitral regurgitation was not documented.

Target Value: N/A

Element: 13767 Central Mitral Regurgitation

Coding Instruction: Indicate the severity of central mitral valve regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value between end of current procedure and discharge

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14488 Central Mitral Regurgitation Not Documented

Coding Instruction: Indicate if central mitral regurgitation was not documented.

Target Value: N/A

Section: Post-Procedure TV Regurgitation **Parent: Post-Procedure Echocardiogram Findings**

Element: 14505 Paravalvular Tricupsid Regurgitation

Coding Instruction: Indicate the severity of paravalvular tricuspid valve regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value between end of current procedure and discharge

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14526 Paravalvular Tricupsid Regurgitation Not Documented

Coding Instruction: Indicate if the severity of paravalvular tricuspid regurgitation was not documented post-procedure

Target Value: N/A

Element: 14501 Central Tricupsid Regurgitation

Coding Instruction: Indicate the severity of central tricuspid valve regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value between end of current procedure and discharge

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14489 Central Tricupsid Regurgitation Not Documented

Coding Instruction: Indicate if central tricuspid valve regurgitation was not documented.

Target Value: N/A

Section: Discharge **Parent: Root**

Element: 10100 Discharge Date

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

Target Value: The value on discharge

Vendor Instruction: Discharge Date (10100) must be Greater than or Equal to 01/01/2021

Discharge Date (10100) and Arrival Date and Time (3001) must not overlap on multiple episodes

Element: 10070 Discharge Provider Last Name

Coding Instruction: Indicate the last name of the discharge provider.

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

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: The value on discharge

Element: 10071 Discharge Provider First Name

Coding Instruction: Indicate the first name of the discharge provider.

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

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: The value on discharge

Element: 10072 Discharge Provider Middle Name

Coding Instruction: Indicate the middle name of the discharge provider.

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.

The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: The value on discharge

Element: 10073 Discharge Provider NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the provider that discharged the patient. NPI's, assigned by the Centers for Medicare and Medicaid Services (CMS), are used to uniquely identify physicians for Medicare billing purposes.

Note(s):
The completion of this data element is voluntary and at the discretion of your facility. NCDR will use the data to provide reporting at the physician level, which may assist physicians with demonstrating value based care as well as support your facility's engagement in quality improvement efforts. If completed, NCDR will defer to your facility's determination of assigning Admitting, Attending, and Discharging Provider roles, as supported by the patient medical record.

Target Value: The value on discharge

Element: 10105 Discharge Status

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

Target Value: The value on discharge

Section: Discharge **Parent: Root**

Discharge Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.42

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

Element: 10116 Cardiac Rehabilitation Referral

Coding Instruction: Indicate if the patient has been referred to an outpatient cardiac rehab program prior to hospital discharge. The referral may be to a traditional outpatient cardiac rehab program with face-to-face interactions and training sessions or may include other novel delivery options.

Target Value: The value on discharge

Supporting Definition: **Cardiac Rehabilitation Referral**

1. Documented communication between the healthcare provider and the patient to recommend an outpatient CR program
AND
2A. Official referral order is sent to outpatient CR program
OR
2B. Documentation of patient refusal to justify why patient information was not sent to the CR program

Source: Source: Thomas, R.J., et al. 2018 ACC/AHA Clinical Performance and Quality Measures for Cardiac Rehabilitation: A Report of the American College of Cardiology/American Heart Association Task Force on Performance Measures. Journal of the American College of Cardiology, Vol 71, Issue 16, April 2018, pages 1814-1837

Cardiac Rehab - 1.3.6.1.4.1.19376.1.4.1.6.5.334

Selection	Definition	Source	Code	Code System
No - Reason Not Documented			100014064	ACC NCDR
No - Medical Reason Documented	Patient deemed by a medical provider to have a medically unstable, life-threatening condition or has other cognitive or physical impairments that preclude CR participation.	Thomas, R.J., et al. 2018 ACC/AHA Clinical Performance and Quality Measures for Cardiac Rehabilitation: A Report of the American College of Cardiology/American Heart Association Task Force on Performance Measures. Journal of the American College of Cardiology, Vol 71, Issue 16, April 2018, pages 1814-1837	100014066	ACC NCDR
No - Health Care System Reason Documented	Patient is discharged to a nursing care or long-term care facility, or patient lacks medical coverage for CR.	Thomas, R.J., et al. 2018 ACC/AHA Clinical Performance and Quality Measures for Cardiac Rehabilitation: A Report of the American College of Cardiology/American Heart Association Task Force on Performance Measures. Journal of the American College of Cardiology, Vol 71, Issue 16, April 2018, pages 1814-1837	100014065	ACC NCDR
No - Patient - Oriented Reason	No traditional CR program available to the patient, within 60 min [travel time] from the patient's home, or patient does not have access to an alternative model of CR delivery that meets all criteria for a CR program.	Thomas, R.J., et al. 2018 ACC/AHA Clinical Performance and Quality Measures for Cardiac Rehabilitation: A Report of the American College of Cardiology/American Heart Association Task Force on Performance Measures. Journal of the American College of Cardiology, Vol 71, Issue 16, April 2018, pages 1814-1837	112000000520	ACC NCDR
Yes			100013072	ACC NCDR

Element: 10110 Discharge Location

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

Target Value: The value on discharge

Discharge Location - 1.3.6.1.4.1.19376.1.4.1.6.5.41

Selection	Definition	Source	Code	Code System
Home			01	HL7 Discharge disposition
Skilled Nursing Facility	Skilled nursing facilities (SNF) are typically sub-acute programs used for longer anticipated length of stay. Note: Sometimes SNFs may have acute rehabilitation beds within their facility. If the patient is discharged to a SNF for acute rehab (requiring a higher level of care), code "extended care/TCU/rehab".		03	HL7 Discharge disposition
Extended Care/TCU/Rehab	An extended care unit, transitional care unit or rehab unit typically provides a high level of intensive therapy as well as specialized nursing and physician care. This discharge setting may also be called subacute care or long term acute care (LTACH).		62	HL7 Discharge disposition
Other Acute Care Hospital			02	HL7 Discharge disposition
Left Against Medical Advice (AMA)	The patient was discharged or eloped against medical advice.		07	HL7 Discharge disposition
Other Discharge Location			100001249	ACC NCDR

Section: Discharge **Parent: Root**

Element: 10115 Hospice Care

Coding Instruction: Indicate if the patient was discharged to hospice care.

Target Value: The value on discharge

Element: 10120 Death During the Procedure

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

Note(s): Make sure to only capture 'death during the procedure' in the procedure appropriate registry.

For example, if the patient had a CathPCI procedure and a TVT procedure in the same episode of care (hospitalization) but different cath lab visits and the death occurred during the TVT procedure, code 'Yes' only in the TVT Registry and not the CathPCI Registry. If the CathPCI procedure and TVT procedure occurred during the same cath lab visit then code 'Yes' in both registries.

Target Value: Any occurrence on 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

Cause of Death Clinical Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.88

Selection	Definition	Source	Code	Code System
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.		100000960	ACC NCDR
Sudden cardiac death	Death that occurs unexpectedly, and not within 30 days of an acute MI.		100000978	ACC NCDR
Heart failure	Death associated with clinically worsening symptoms and/or signs of heart failure.		100000964	ACC NCDR
Stroke	Death after a stroke that is either a direct consequence of the stroke or a complication of the stroke.		100000977	ACC NCDR
Cardiovascular procedure	Death caused by the immediate complication(s) of a cardiovascular procedure.		100000962	ACC NCDR
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.		100000961	ACC NCDR
Other cardiovascular reason	Cardiovascular death not included in the above categories but with a specific, known cause (e.g., pulmonary embolism, peripheral arterial disease).		100000972	ACC NCDR
Pulmonary	Non-cardiovascular death attributable to disease of the lungs (excludes malignancy).		100000975	ACC NCDR
Renal	Non-cardiovascular death attributable to renal failure.		100000976	ACC NCDR
Gastrointestinal	Non-cardiovascular death attributable to disease of the esophagus, stomach, or intestines (excludes malignancy).		100000963	ACC NCDR
Hepatobiliary	Non-cardiovascular death attributable to disease of the liver, gall bladder, or biliary ducts (exclude malignancy).		100000966	ACC NCDR
Pancreatic	Non-cardiovascular death attributable to disease of the pancreas (excludes malignancy).		100000974	ACC NCDR
Infection	Non-cardiovascular death attributable to an infectious disease.		100000967	ACC NCDR
Inflammatory/Immunologic	Non-cardiovascular death attributable to an inflammatory or immunologic disease process.		100000968	ACC NCDR
Hemorrhage	Non-cardiovascular death attributable to bleeding that is not considered cardiovascular hemorrhage or stroke per this classification.		100000965	ACC NCDR
Non-cardiovascular procedure or surgery	Death caused by the immediate complication(s) of a non-cardiovascular procedure or surgery.		100000971	ACC NCDR
Trauma	Non-cardiovascular death attributable to trauma.		100000980	ACC NCDR
Suicide	Non-cardiovascular death attributable to suicide.		100000979	ACC NCDR
Neurological	Non-cardiovascular death attributable to disease of the		100000970	ACC NCDR

Section: Discharge	Parent: Root		
	nervous system (excludes malignancy).		
Malignancy	Non-cardiovascular death attributable to malignancy.	100000969	ACC NCDR
Other non-cardiovascular reason	Non-cardiovascular death attributable to a cause other than those listed in this classification (specify organ system).	100000973	ACC NCDR

Element: 9275 Packed Red Blood Cell Transfusion

Coding Instruction: Indicate if there was a transfusion(s) of packed red blood cells.

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

Element: 13670 Packed Red Blood Cell Units Transfused

Coding Instruction: Indicate the total number of units transfused of packed red blood cells.

Target Value: The total value between start of first procedure until discharge

Section: Discharge Medications — Parent: 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 medication(s) collected in this field are controlled by the 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 to a value set. The value set 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: N/A

Discharge Medication - 1.3.6.1.4.1.19376.1.4.1.6.5.165

Selection	Definition	Source	Code	Code System
Angiotensin Converting Enzyme Inhibitor			41549009	SNOMED CT
Aldosterone Antagonist			372603003	SNOMED CT
Direct thrombin inhibitor			414010005	SNOMED CT
Warfarin			11289	RxNorm
Aspirin			1191	RxNorm
Angiotensin II Receptor Blocker			372913009	SNOMED CT
Beta Blocker			33252009	SNOMED CT
Diuretics Not Otherwise Specified			112000001417	ACC NCDR
Loop Diuretics			29051009	SNOMED CT
Thiazides			372747003	SNOMED CT
Direct Factor Xa Inhibitor			112000000696	ACC NCDR
P2Y12 Antagonist			112000001003	ACC NCDR

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.

Note(s):
Discharge medications do not need to be recorded for patients who were discharged to "Other acute care hospital", "Left against medical advice (AMA)" or are receiving Hospice Care is 'Yes'.

Target Value: The value on discharge

Vendor Instruction: When Discharge Medication Code (10200) is selected Discharge Medications Prescribed (10205) cannot be Null

Discharge Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.86

Selection	Definition	Source	Code	Code System
Yes - Prescribed			100001247	ACC NCDR
Not Prescribed - No Reason			100001048	ACC NCDR
Not Prescribed - Medical Reason			100001034	ACC NCDR
Not Prescribed - Patient Reason			100001071	ACC NCDR

Element: 14576 Loop Diuretic Dose

Coding Instruction: Specify the total daily dose of the loop diuretic that was prescribed to the patient at discharge.

Target Value: The value on discharge

Section: Follow Up **Parent: Root**

Element: 11000 Follow-Up Assessment Date

Coding Instruction: Indicate the date of the follow-up assessment was performed.

Target Value: The value on Follow-up

Vendor Instruction: Follow-Up Assessment Date (11000) must be Greater than or Equal to 01/01/2021

Follow-Up Assessment Date (11000) must be Greater than or Equal to Follow-Up Reference Episode Arrival Date and Time (11002)

A Follow-up Assessment Date may only be entered/selected once

Follow-Up Assessment Date (11000) must be Greater than Follow-Up Reference Procedure Start Date and Time (11001)

Element: 10999 Follow-Up Unique Key

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

Target Value: N/A

Element: 11001 Follow-Up Reference Procedure Start Date and Time

Coding Instruction: Indicate the reference procedure start date and time on the follow-up assessment date.

Target Value: The value on Follow-up

Element: 11002 Follow-Up Reference Episode Arrival Date and Time

Coding Instruction: Indicate the date and time of arrival for the episode of care that included the reference procedure.

Target Value: The value on Follow-up

Element: 13705 Transcatheter Valve Therapy Reference Procedure Type

Coding Instruction: Indicate the procedure type performed at the reference procedure start date/time.

Target Value: The value on Follow-up

Vendor Instruction: When Transcatheter Valve Therapy Reference Procedure Type (13705) is Equal to (TMVr,TMVR,Tricuspid Valve Procedure) then Follow -Up Medications Code (11990) must be Equal to (Aldosterone Antagonist,Angiotensin Converting Enzyme Inhibitor,Angiotensin II Receptor Blocker,Beta Blocker,Diuretics Not Otherwise Specified,Loop Diuretics,Thiazides)

Transcatheter Valve Therapy Procedure - 1.3.6.1.4.1.19376.1.4.1.6.5.695

Selection	Definition	Source	Code	Code System
TAVR	Transcatheter aortic valve replacement		41873006	SNOMED CT
TMVr	Transcatheter mitral repair procedure		112000001801	ACC NCDR
TMVR	Transcatheter mitral valve replacement		112000001458	ACC NCDR
Tricuspid Valve Procedure	Transcatheter tricuspid valve procedures include either a transcatheter tricuspid valve replacement or transcatheter tricuspid valve repair.		112000001977	ACC NCDR

Element: 11004 Follow-Up Status

Coding Instruction: Indicate whether the patient was alive or deceased at the date the follow-up was performed.

Target Value: The value on Follow-up

Follow-Up Status - 1.3.6.1.4.1.19376.1.4.1.6.5.372

Selection	Definition	Source	Code	Code System
Alive			438949009	SNOMED CT
Deceased			20	HL7 Discharge disposition
Lost to follow-up			399307001	SNOMED CT

Element: 14338 Follow-Up Reference Discharge Date

Coding Instruction: Indicate the date of discharge for the episode of care that included the reference procedure.

Target Value: The value on Follow-up

Vendor Instruction: Follow-Up Reference Discharge Date (14338) must not be Null

Element: 11006 Follow-Up Date of Death

Coding Instruction: Indicate the date the patient was declared dead.

Target Value: The value on Follow-up

Section: Follow Up **Parent: Root**

Vendor Instruction: Follow-Up Date of Death (11006) must be Greater than Follow-Up Reference Procedure Start Date and Time (11001)

Follow-Up Date of Death (11006) must be Greater than or Equal to Follow-Up Reference Discharge Date (14338)

Follow-Up Date of Death (11006) must be Less than or Equal to Follow-Up Assessment Date (11000)

Element: 11003 Method to Determine Follow-Up Status

Coding Instruction: Indicate the method to determine follow-up status.

Target Value: The value on Follow-up

Method to Determine Follow-up status - 1.3.6.1.4.1.19376.1.4.1.6.5.370

Selection	Definition	Source	Code	Code System
Office Visit			183654001	SNOMED CT
Medical Records			100014060	ACC NCDR
Letter from Medical Provider			100014061	ACC NCDR
Phone Call			100014062	ACC NCDR
Social Security Death Master File			1000142362	ACC NCDR
Hospitalized			1000142363	ACC NCDR
Obituary List			112000001406	ACC NCDR
Centers for Medicare and Medicaid Services Linked Data			112000001407	ACC NCDR
Other			100000351	ACC NCDR

Element: 11007 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 Follow-up

Cause of Death Clinical Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.88

Selection	Definition	Source	Code	Code System
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.		100000960	ACC NCDR
Sudden cardiac death	Death that occurs unexpectedly, and not within 30 days of an acute MI.		100000978	ACC NCDR
Heart failure	Death associated with clinically worsening symptoms and/or signs of heart failure.		100000964	ACC NCDR
Stroke	Death after a stroke that is either a direct consequence of the stroke or a complication of the stroke.		100000977	ACC NCDR
Cardiovascular procedure	Death caused by the immediate complication(s) of a cardiovascular procedure.		100000962	ACC NCDR
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.		100000961	ACC NCDR
Other cardiovascular reason	Cardiovascular death not included in the above categories but with a specific, known cause (e.g., pulmonary embolism, peripheral arterial disease).		100000972	ACC NCDR
Pulmonary	Non-cardiovascular death attributable to disease of the lungs (excludes malignancy).		100000975	ACC NCDR
Renal	Non-cardiovascular death attributable to renal failure.		100000976	ACC NCDR
Gastrointestinal	Non-cardiovascular death attributable to disease of the esophagus, stomach, or intestines (excludes malignancy).		100000963	ACC NCDR
Hepatobiliary	Non-cardiovascular death attributable to disease of the liver, gall bladder, or biliary ducts (exclude malignancy).		100000966	ACC NCDR
Pancreatic	Non-cardiovascular death attributable to disease of the pancreas (excludes malignancy).		100000974	ACC NCDR
Infection	Non-cardiovascular death attributable to an infectious disease.		100000967	ACC NCDR
Inflammatory/Immunologic	Non-cardiovascular death attributable to an		100000968	ACC NCDR

Section: Follow Up **Parent: Root**

	inflammatory or immunologic disease process.			
Hemorrhage	Non-cardiovascular death attributable to bleeding that is not considered cardiovascular hemorrhage or stroke per this classification.		100000965	ACC NCDR
Non-cardiovascular procedure or surgery	Death caused by the immediate complication(s) of a non-cardiovascular procedure or surgery.		100000971	ACC NCDR
Trauma	Non-cardiovascular death attributable to trauma.		100000980	ACC NCDR
Suicide	Non-cardiovascular death attributable to suicide.		100000979	ACC NCDR
Neurological	Non-cardiovascular death attributable to disease of the nervous system (excludes malignancy).		100000970	ACC NCDR
Malignancy	Non-cardiovascular death attributable to malignancy.		100000969	ACC NCDR
Other non-cardiovascular reason	Non-cardiovascular death attributable to a cause other than those listed in this classification (specify organ system).		100000973	ACC NCDR

Element: 13805 Residence

Coding Instruction: Indicate the primary residence of the patient at the time of follow-up.

Target Value: The value on Follow-up

Residence - 1.3.6.1.4.1.19376.1.4.1.6.5.562

Selection	Definition	Source	Code	Code System
Home with No Health Aid	The patient lives at home with no health-aid (this includes living in senior living facilities with no assistance).		112000001507	ACC NCDR
Home with Health Aid	The patient lives at home with health-aid (this includes living in senior living facilities with assistance).		112000001508	ACC NCDR
Long Term Care	The patient lives in a long-term care facility that provides the person's health or personal care needs during a short or long period of time.	National Institute of Aging at the National Institutes of Health	42665001	SNOMED CT
Other			100000351	ACC NCDR

Element: 14511 Residence Not Documented

Coding Instruction: Indicate if the primary residence of the patient was not documented during follow-up.

Target Value: N/A

Section: Follow-Up Clinical Assessment **Parent: Follow Up**

Element: 13775 Hemoglobin

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

Note(s):
This may include POC (Point of Care) testing results or results obtained prior to arrival at this facility.

Target Value: The last value between discharge (or previous follow-up) and current follow-up assessment

Supporting Definition: **Hemoglobin**

Hemoglobin (Hb or Hgb) is the iron-containing oxygen-transport metalloprotein in the red blood cells. It carries oxygen from the lungs to the rest of the body (i.e. the tissues) where it releases the oxygen to burn nutrients and provide energy. Hemoglobin concentration measurement is among the most commonly performed blood tests, usually as part of a complete blood count. If the concentration is below normal, this is called anemia. Anemias are classified by the size of red blood cells: "microcytic" if red cells are small, "macrocytic" if they are large, and "normocytic" if otherwise. Dehydration or hyperhydration can greatly influence measured hemoglobin levels.

Source: http://s.details.loinc.org/LOINC/718-7.html?sections=Simple

Element: 14326 Hemoglobin Not Drawn

Coding Instruction: Indicate if a follow-up hemoglobin was not collected.

Target Value: N/A

Element: 13310 Creatinine

Coding Instruction: Indicate the creatinine value.

Target Value: The last value between discharge (or previous follow-up) and current follow-up assessment

Supporting Definition: **Creatinine**

Creatinine or creatine anhydride, is a breakdown product of creatine phosphate in muscle. The loss of water molecule from creatine results in the formation of creatinine. It is transferred to the kidneys by blood plasma, whereupon it is eliminated by glomerular filtration and partial tubular excretion. Creatinine is usually produced at a fairly constant rate and measuring its serum level is a simple test. A rise in blood creatinine levels is observed only with marked damage to functioning nephrons; therefore this test is not suitable for detecting early kidney disease. Creatine and creatinine are metabolized in the kidneys, muscle, liver and pancreas.

Source: http://s.details.loinc.org/LOINC/2160-0.html?sections=Simple

Element: 13311 Creatinine Not Drawn

Coding Instruction: Indicate if a follow-up creatinine level was not collected.

Target Value: N/A

Element: 13688 New York Heart Association Classification

Coding Instruction: Indicate the patient's latest dyspnea or functional class, coded as the New York Heart Association (NYHA) classification.

Target Value: The value on Follow-up

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

NYHA Functional Classification - 1.3.6.1.4.1.19376.1.4.1.6.5.8

Selection	Definition	Source	Code	Code System
Class I	Patients with cardiac disease but without resulting limitations of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, or dyspnea.	The Criteria Committee of the New York Heart Association. Nomenclature and Criteria for Diagnosis of Diseases of the Heart and Great Vessels. 9th ed. Boston, Mass: Little, Brown & Co; 1994:253-256.	420300004	SNOMED CT
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.		421704003	SNOMED CT
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.		420913000	SNOMED CT
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.		422293003	SNOMED CT

Section: Follow-Up Clinical Assessment **Parent: Follow Up**

Element: 14333 New York Heart Association Classification Not Documented

Coding Instruction: Indicate if NYHA was not documented during the follow-up assessment period.

Target Value: The value on Follow-up

Element: 13689 12 Lead Electrocardiogram Performed

Coding Instruction: Indicate if a 12 lead ECG was performed in the follow-up assessment period.

Target Value: The value on Follow-up

Element: 13621 12 Lead Electrocardiogram Findings

Coding Instruction: Indicate the 12 lead ECG findings during follow-up. If more than one ECG is performed, document the findings from any ECG.

Target Value: The value on Follow-up

Vendor Instruction: Cannot select option No Significant Changes with any other option: Pathological Q Wave, Cardiac Arrhythmia, New Left Bundle Branch Block, Pathological Q Wave, Cardiac Arrhythmia or New Left Bundle Branch Block

12 Lead Electrocardiogram Findings - 1.3.6.1.4.1.19376.1.4.1.6.5.535

Selection	Definition	Source	Code	Code System
Cardiac Arrhythmia	The patient has a new onset of an atrial or ventricular arrhythmia requiring medication or other therapy. This includes brady or tachy arrhythmias.		698247007	SNOMED CT
No Significant Changes			112000001391	ACC NCDR
Pathological Q Wave			164918000	SNOMED CT
New Left Bundle Branch Block			100014019	ACC NCDR

Section: Follow-Up Imaging **Parent: Follow-Up Echocardiogram**

Element: 13492 Echocardiogram Performed

Coding Instruction: Indicate whether an echo (and the type of echo) was performed in the follow-up assessment period.

Target Value: Any occurrence on follow-up

Echocardiogram Type - 1.3.6.1.4.1.19376.1.4.1.6.5.526

Selection	Definition	Source	Code	Code System
Transesophageal Echocardiogram (TEE)			105376000	SNOMED CT
Transthoracic Echo (TTE)			433236007	SNOMED CT

Element: 14512 Echocardiogram Not Performed

Coding Instruction: Indicate if an echocardiogram was not performed during follow-up.

Target Value: N/A

Element: 13593 Echocardiogram Date

Coding Instruction: Indicate the date the echocardiogram was performed.

Target Value: Any occurrence on follow-up

Element: 13690 Left Ventricular Ejection Fraction

Coding Instruction: Indicate the left ventricular ejection fraction.

Target Value: The value on Follow-up

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)

Element: 13691 Left Ventricular Ejection Fraction Not Assessed

Coding Instruction: Indicate whether the left ventricular ejection fraction was not assessed.

Target Value: The value on Follow-up

Section: Follow-Up Aortic Valve **Parent: Follow-Up Echocardiogram**

Element: 13676 Aortic Valve Mean Gradient

Coding Instruction: Indicate the highest aortic valve mean gradient in mm Hg.

Target Value: The highest value on follow up

Element: 13669 Aortic Valve Area

Coding Instruction: Indicate the smallest aortic valve area, in cm2.

Target Value: The value on Follow-up

Section: Follow-Up AV Regurgitation **Parent: Follow-Up Echocardiogram**

Element: 13527 Aortic Valve Regurgitation

Coding Instruction: Indicate the severity of aortic valve regurgitation.

If mild-moderate is documented, code as mild.
If moderate-severe is documented, code as moderate.

Target Value: The value on Follow-up

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14504 Paravalvular Aortic Regurgitation

Coding Instruction: Indicate the severity of paravalvular aortic regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value on follow up

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14527 Paravalvular Aortic Regurgitation Not Documented

Coding Instruction: Indicate if the severity of paravalvular aortic regurgitation was not documented.

Target Value: N/A

Element: 14500 Central Aortic Regurgitation

Coding Instruction: Indicate the severity of central aortic regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value on follow up

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14490 Central Aortic Regurgitation Not Documented

Coding Instruction: Indicate if central aortic regurgitation was not documented.

Target Value: N/A

Section: Follow-Up MV Imaging **Parent: Follow-Up Echocardiogram**

Element: 13778 Mitral Valve Mean Gradient

Coding Instruction: Indicate the highest mitral valve mean gradient, in mm Hg.

Target Value: The highest value on follow up

Supporting Definition: **Mitral Valve Mean Gradient**

The average gradient across the mitral valve occurring during the entire systole.

Source: Baumgartner, H. et. al (2009). Echocardiographic assessment of valve stenosis: EAE/ASE recommendations for clinical practice.

Element: 13768 Effective Regurgitant Orifice Area

Coding Instruction: Indicate the effective regurgitant orifice area (EROA), in cm2.

Target Value: The highest value on follow up

Element: 13780 Effective Regurgitant Orifice Area Method of Assessment

Coding Instruction: Indicate the method used to assess the effective orifice area. If multiple methods are available, code the 3D planimetry method first, then PISA.

Target Value: The value on Follow-up

Effective Regurgitant Orifice Area Method of Assessment - 1.3.6.1.4.1.19376.1.4.1.6.5.547

Selection	Definition	Source	Code	Code System
3D Planimetry			112000001438	ACC NCDR
Proximal Isovelocity Surface Area			112000001439	ACC NCDR
Quantitative Doppler			112000001440	ACC NCDR
Other			100000351	ACC NCDR

Element: 13781 Mitral Valve Area

Coding Instruction: Indicate the smallest mitral valve area in centimeters squared.

Target Value: The value on Follow-up

Supporting Definition: **Mitral Valve Area**

Measurement of mitral valve area.

Source:

Element: 13773 Left Ventricular Outflow Tract Peak Velocity

Coding Instruction: Indicate the left ventricular outflow tract peak velocity in m/sec.

Target Value: The highest value on follow up

Element: 13782 Systolic Anterior Motion Present

Coding Instruction: Indicate if systolic anterior motion of the mitral valve was present.

Target Value: The value on Follow-up

Element: 13783 Left Ventricular Internal Systolic Dimension

Coding Instruction: Indicate the left ventricular internal systolic dimension in cm.

Target Value: The value on Follow-up

Element: 14536 Left Ventricular Internal Systolic Dimension Not Measured

Coding Instruction: Indicate if the left ventricular internal systolic dimension was not measured.

Target Value: N/A

Element: 13784 Left Ventricular Internal Diastolic Dimension

Coding Instruction: Indicate the left ventricular internal diastolic dimension in cm.

Target Value: The value on Follow-up

Element: 14537 Left Ventricular Internal Diastolic Dimension Not Measured

Section: Follow-Up MV Imaging **Parent: Follow-Up Echocardiogram**

Coding Instruction: Indicate if the left ventricular internal diastolic dimension was not measured.

Target Value: N/A

Element: 13786 Left Ventricular End Systolic Volume

Coding Instruction: Indicate the left ventricular end systolic volume in ml.

Target Value: The value on Follow-up

Element: 14539 Left Ventricular End Systolic Volume Not Measured

Coding Instruction: Indicate if the left ventricular end systolic volume was not measured.

Target Value: N/A

Element: 13785 Left Ventricular End Diastolic Volume

Coding Instruction: Indicate the left ventricular end diastolic volume in ml.

Target Value: The value on Follow-up

Element: 14538 Left Ventricular End Diastolic Volume Not Measured

Coding Instruction: Indicate if the left ventricular end diastolic volume was not measured.

Target Value: N/A

Element: 13787 Left Atrial Volume

Coding Instruction: Indicate the left atrial volume in ml.

Target Value: The value on Follow-up

Element: 14540 Left Atrial Volume Not Measured

Coding Instruction: Indicate if the left atrial volume was not measured.

Target Value: N/A

Element: 13788 Left Atrial Volume Index

Coding Instruction: Indicate the left atrial volume index in mL/m2.

Target Value: The value on Follow-up

Element: 14582 Left Atrial Volume Index Not Measured

Coding Instruction: Indicate if the left atrial volume index was not measured.

Target Value: N/A

Section: Follow-Up MV Regurgitation — Parent: Follow-Up Echocardiogram

Element: 13673 — Mitral Regurgitation

Coding Instruction: Indicate highest level of mitral regurgitation.

If mild-moderate is documented, code as mild.

Target Value: The value on Follow-up

Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.728

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Moderate-Severe			1000142345	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 13776 — Paravalvular Mitral Regurgitation

Coding Instruction: Indicate the severity of paravalvular mitral regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value on follow up

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14528 — Paravalvular Mitral Regurgitation Not Documented

Coding Instruction: Indicate if the severity of paravalvular mitral regurgitation was not documented.

Target Value: N/A

Element: 13777 — Central Mitral Regurgitation

Coding Instruction: Indicate the severity of central mitral regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value on follow up

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14491 — Central Mitral Regurgitation Not Documented

Coding Instruction: Indicate if central mitral regurgitation was not documented.

Target Value: N/A

Section: Follow-Up TV Imaging **Parent: Follow-Up Echocardiogram**

Element: 14545 Tricuspid Valve Diastolic Gradient

Coding Instruction: Indicate the tricuspid valve diastolic gradient in mm Hg. This can also be called the TV inflow gradient.

Target Value: The highest value on follow up

Element: 14546 Tricuspid Valve Diastolic Gradient Not Documented

Coding Instruction: Indicate if the tricuspid valve diastolic gradient was not documented.

Target Value: N/A

Element: 14547 Tricuspid Valve Annulus Size

Coding Instruction: Indicate the tricuspid valve annulus size in mm. Document the size using end-diastolic, 4 chamber view is preferred (in mm).

Target Value: The value on Follow-up

Element: 14548 Tricuspid Valve Annulus Size Not Documented

Coding Instruction: Indicate if the tricuspid valve annulus size was not documented.

Target Value: N/A

Element: 14549 End Diastolic Mid Right Ventricle Diameter

Coding Instruction: Indicate the end-diastolic mid right ventricular (RV) diameter, using the 4 chamber view (in cm).

Target Value: The value on Follow-up

Element: 14550 End Diastolic Mid Right Ventricle Diameter Not Documented

Coding Instruction: Indicate if the end-diastolic mid right ventricular diameter was not documented.

Target Value: N/A

Element: 14551 End Diastolic Basal Right Ventricle Diameter

Coding Instruction: Indicate the end-diastolic basal right ventricular (RV) diameter, using the 4 chamber view (in cm).

Target Value: The value on Follow-up

Element: 14552 End Diastolic Basal Right Ventricle Diameter Not Documented

Coding Instruction: Indicate if the basal diastolic mid right ventricular (RV) diameter was not documented.

Target Value: N/A

Element: 14553 Right Ventricular Systolic Pressure

Coding Instruction: Indicate the right ventricular systolic pressure in mm Hg.

Target Value: The highest value on follow up

Supporting Definition: **RV Systolic Pressure**
The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart
Source: NCI EVS

Element: 14554 Right Ventricular Systolic Pressure Not Documented

Coding Instruction: Indicate if the right ventricular systolic pressure was not documented.

Target Value: N/A

Supporting Definition: **RV Systolic Pressure**
The maximum pressure exerted into the systemic arterial circulation during the contraction of the right ventricle of the heart
Source: NCI EVS

Section: Follow-Up TV Regurgitation **Parent: Follow-Up Echocardiogram**

Element: 13678 Tricuspid Valve Regurgitation

Coding Instruction: Indicate the severity of tricuspid regurgitation.

If mild-moderate is documented, code as mild.
If moderate-severe is documented, code as moderate.

Target Value: The value on Follow-up

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14506 Paravalvular Tricuspid Regurgitation

Coding Instruction: Indicate the severity of paravalvular tricuspid regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value on follow up

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14529 Paravalvular Tricuspid Regurgitation Not Documented

Coding Instruction: Indicate if the severity of paravalvular tricuspid regurgitation was not documented.

Target Value: N/A

Element: 14502 Central Tricuspid Regurgitation

Coding Instruction: Indicate the severity of central tricuspid regurgitation.

Note: If trace/trivial is documented, code "none".

Target Value: The highest value on follow up

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14492 Central Tricuspid Regurgitation Not Documented

Coding Instruction: Indicate if central tricuspid regurgitation was not documented.

Target Value: N/A

Section: Follow-Up 4DCTA **Parent: Follow Up**

Element: 13692 4D Computed Tomography Performed

Coding Instruction: Indicate if a 4D CT was performed.

Target Value: The value on Follow-up

Element: 13693 4D Computed Tomography Date

Coding Instruction: Indicate the date the 4D CT was performed.

Target Value: The value on Follow-up

Element: 13694 Valve Thrombosis

Coding Instruction: Indicate if there was findings of thrombus on the prosthetic valve.

Target Value: The value on Follow-up

Element: 13695 Leaflet Dysfunction Noted

Coding Instruction: Indicate if leaflet dysfunction was noted. Leaflet dysfunction is evident when there is a finding of "stuck leaflets" on the prosthetic valve.

Target Value: The value on Follow-up

Section: Follow-Up Six Minute Walk Test **Parent: Follow Up**

Element: 13789 Six Minute Walk Test

Coding Instruction: Indicate whether a six minute walk test was performed.

Target Value: The value on Follow-up

Element: 14263 Six Minute Walk Test Reason Not Performed

Coding Instruction: Indicate the reason the six minute walk test was not performed.

Target Value: The value on Follow-up

Six Minute Walk Test Reason Not Performed - 1.3.6.1.4.1.19376.1.4.1.6.5.544

Selection	Definition	Source	Code	Code System
Non-Cardiac Reason			112000001418	ACC NCDR
Cardiac Reason			112000001419	ACC NCDR
Patient Not Willing to Walk			112000001420	ACC NCDR
Not Performed by Site			112000001421	ACC NCDR

Element: 13790 Six Minute Walk Test Date

Coding Instruction: Indicate the date the six minute walk test was performed.

Target Value: The value on Follow-up

Element: 14325 Six Minute Walk Test Total Distance

Coding Instruction: Indicate the total distance, in feet, the patient walked.

Target Value: The value on Follow-up

Section: Follow-Up KCCQ **Parent: Follow Up**

Element: 13845 Kansas City Cardiomyopathy Questionnaire 12 Performed

Coding Instruction: Indicate if the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) was performed.

Target Value: The value on Follow-up

Element: 13844 Kansas City Cardiomyopathy Questionnaire 12 Date

Coding Instruction: Indicate the date the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) was performed.

Target Value: The value on Follow-up

Element: 13847 Kansas City Cardiomyopathy Questionnaire 12 Question 1a

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 1a.

Heart Failure Limitation - Showering/bathing

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 1a thru 1c - 1.3.6.1.4.1.19376.1.4.1.6.5.570

Selection	Definition	Source	Code	Code System
1 - Extremely Limited			100001173	ACC NCDR
2 - Quite a Bit Limited			100001171	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Not at All Limited			100001167	ACC NCDR
6 - Limited for Other Reasons or Did Not Do These Activities			100014041	ACC NCDR

Element: 13869 Kansas City Cardiomyopathy Questionnaire 12 Question 1b

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 1b.

Heart Failure Limitation - Walking 1 block on level ground

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 1a thru 1c - 1.3.6.1.4.1.19376.1.4.1.6.5.570

Selection	Definition	Source	Code	Code System
1 - Extremely Limited			100001173	ACC NCDR
2 - Quite a Bit Limited			100001171	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Not at All Limited			100001167	ACC NCDR
6 - Limited for Other Reasons or Did Not Do These Activities			100014041	ACC NCDR

Element: 13850 Kansas City Cardiomyopathy Questionnaire 12 Question 1c

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 1c.

Heart Failure Limitation - Hurrying or jogging

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 1a thru 1c - 1.3.6.1.4.1.19376.1.4.1.6.5.570

Selection	Definition	Source	Code	Code System
1 - Extremely Limited			100001173	ACC NCDR
2 - Quite a Bit Limited			100001171	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Not at All Limited			100001167	ACC NCDR
6 - Limited for Other Reasons or Did Not Do These Activities			100014041	ACC NCDR

Element: 13852 Kansas City Cardiomyopathy Questionnaire 12 Question 2

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 2.

Section: Follow-Up KCCQ **Parent: Follow Up**

Symptom Frequency - swelling in legs

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 2 - 1.3.6.1.4.1.19376.1.4.1.6.5.571

Selection	Definition	Source	Code	Code System
1 - Every Morning			112000001553	ACC NCDR
2 - Three or More Times Per Week But Not Everyday			112000001554	ACC NCDR
3 - One to Two Times Per Week			112000001555	ACC NCDR
4 - Less Than Once a Week			112000001556	ACC NCDR
5 - Never Over the Past Two Weeks			112000001557	ACC NCDR

Element: 13854 Kansas City Cardiomyopathy Questionnaire 12 Question 3

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 3.

Symptom Frequency - fatigue

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 3 and 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.572

Selection	Definition	Source	Code	Code System
1 - All the Time			112000001818	ACC NCDR
2 - Several Times Per Day			112000001559	ACC NCDR
3 - At Least Once Per Day			112000001560	ACC NCDR
4 - Three or More Times Per Week But Not Everyday			112000001554	ACC NCDR
5 - One to Two Times Per Week			112000001555	ACC NCDR
6 - Less Than Once a Week			112000001556	ACC NCDR
7 - Never Over the Past Two Weeks			112000001557	ACC NCDR

Element: 13856 Kansas City Cardiomyopathy Questionnaire 12 Question 4

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 4.

Symptom Frequency - shortness of breath

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 3 and 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.572

Selection	Definition	Source	Code	Code System
1 - All the Time			112000001818	ACC NCDR
2 - Several Times Per Day			112000001559	ACC NCDR
3 - At Least Once Per Day			112000001560	ACC NCDR
4 - Three or More Times Per Week But Not Everyday			112000001554	ACC NCDR
5 - One to Two Times Per Week			112000001555	ACC NCDR
6 - Less Than Once a Week			112000001556	ACC NCDR
7 - Never Over the Past Two Weeks			112000001557	ACC NCDR

Element: 13858 Kansas City Cardiomyopathy Questionnaire 12 Question 5

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 5.

Symptom Frequency - sleep sitting up due to shortness of breath

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 5 - 1.3.6.1.4.1.19376.1.4.1.6.5.704

Selection	Definition	Source	Code	Code System
1 - Every Night			112000001819	ACC NCDR
2 - Three or More Times Per Week But Not Everyday			112000001554	ACC NCDR

Section: Follow-Up KCCQ **Parent: Follow Up**

3 - One to Two Times Per Week		112000001555	ACC NCDR
4 - Less Than Once a Week		112000001556	ACC NCDR
5 - Never Over the Past Two Weeks		112000001557	ACC NCDR

Element: 13860 Kansas City Cardiomyopathy Questionnaire 12 Question 6

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 6.

Quality of Life - effect on enjoyment of life due to heart failure

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 6 - 1.3.6.1.4.1.19376.1.4.1.6.5.573

Selection	Definition	Source	Code	Code System
1 - It Has Extremely Limited My Enjoyment of Life			100014049	ACC NCDR
2 - It Has Limited My Enjoyment of Life Quite a Bit			100014050	ACC NCDR
3 - It Has Moderately Limited My Enjoyment of Life			100014051	ACC NCDR
4 - It Has Slightly Limited My Enjoyment of Life			100014052	ACC NCDR
5 - It Has Not Limited My Enjoyment of Life at All			100014053	ACC NCDR

Element: 13862 Kansas City Cardiomyopathy Questionnaire 12 Question 7

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 7.

Quality of life - remaining life with heart failure

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 7 - 1.3.6.1.4.1.19376.1.4.1.6.5.574

Selection	Definition	Source	Code	Code System
1 - Not At All Satisfied			112000001561	ACC NCDR
2 - Mostly Dissatisfied			112000001562	ACC NCDR
3 - Somewhat Satisfied			112000001563	ACC NCDR
4 - Mostly Satisfied			112000001564	ACC NCDR
5 - Completely Satisfied			112000001565	ACC NCDR

Element: 13864 Kansas City Cardiomyopathy Questionnaire 12 Question 8a

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 8a.

Social limitation - hobbies, recreational activities

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 8 - 1.3.6.1.4.1.19376.1.4.1.6.5.575

Selection	Definition	Source	Code	Code System
1 - Severely Limited			112000001566	ACC NCDR
2 - Limited Quite a Bit			112000001567	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Did Not Limit at All			112000001569	ACC NCDR
6 - Does Not Apply or Did Not Do for Other Reasons			112000001570	ACC NCDR

Element: 13866 Kansas City Cardiomyopathy Questionnaire 12 Question 8b

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 8b.

Social limitation - working or doing household chores

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 8 - 1.3.6.1.4.1.19376.1.4.1.6.5.575

Selection	Definition	Source	Code	Code System

Section: Follow-Up KCCQ **Parent: Follow Up**

1 - Severely Limited	112000001566	ACC NCDR
2 - Limited Quite a Bit	112000001567	ACC NCDR
3 - Moderately Limited	100001170	ACC NCDR
4 - Slightly Limited	100014042	ACC NCDR
5 - Did Not Limit at All	112000001569	ACC NCDR
6 - Does Not Apply or Did Not Do for Other Reasons	112000001570	ACC NCDR

Element: 13868 Kansas City Cardiomyopathy Questionnaire 12 Question 8c

Coding Instruction: Indicate the patient's response to the Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Question 8c.

Social limitation - visiting family or friends

Target Value: The value on Follow-up

Kansas City Cardiomyopathy Questionnaire 12 Answer to Question 8 - 1.3.6.1.4.1.19376.1.4.1.6.5.575

Selection	Definition	Source	Code	Code System
1 - Severely Limited			112000001566	ACC NCDR
2 - Limited Quite a Bit			112000001567	ACC NCDR
3 - Moderately Limited			100001170	ACC NCDR
4 - Slightly Limited			100014042	ACC NCDR
5 - Did Not Limit at All			112000001569	ACC NCDR
6 - Does Not Apply or Did Not Do for Other Reasons			112000001570	ACC NCDR

Element: 14535 Follow-Up KCCQ Overall Summary Score

Coding Instruction: (Auto Calculated) This field is auto-populated by your application.
Kansas City Cardiomyopathy Questionnaire (KCCQ-12) Overall Summary Score.

Note(s): The 12 patient responses are reduced into four summary scores (Physical Limitation Score, Symptom Frequency Score, Quality of Life Score, Social Limitation Score). The four summary scores are used to calculate the Overall Summary Score.
For more information, please refer to the KCCQ-12 Scoring Instructions document
provided by the STS/ACC TVT Registry.

Target Value: The value on Follow-up

Section: Follow-Up Events **Parent: Follow Up**

Element: 12933 Follow-up Event Name

Coding Instruction: Select from the list all of the clinical conditions, procedures, or re-admissions that occurred in the follow-up period

Target Value: N/A

Vendor Instruction: A Follow-up - combination Name (12933), Occurred (14276) and Date (14277) - may only be entered/selected once

Follow Up Events - 1.3.6.1.4.1.19376.1.4.1.6.5.356

Selection	Definition	Source	Code	Code System
ASD Defect Closure due to Transseptal Catheterization	A procedure was required to close an atrial-septal defect as a result of the transseptal catheterization procedure.		112000001885	ACC NCDR
Atrial Fibrillation	Atrial fibrillation or flutter requiring treatment or prolonged hospitalization. Treatment includes initiation of a NEW/DIFFERENT medication therapy to address the arrhythmia; or a procedure/intervention to address the arrhythmia (cardioversion, permanent pacemaker/defibrillator, ablation, etc.).		49436004	SNOMED CT
Bleeding - Life Threatening	Life threatening or disabling bleeding is defined as: 1. Fatal bleeding OR 2. Bleeding in a critical area or organ, such as intracranial, intraspinal, intraocular, or pericardial necessitating pericardiocentesis, or intramuscular with compartment syndrome OR 3. Bleeding causing hypovolemic shock or severe hypotension requiring vasopressors or surgery OR 4. Overt source of bleeding with drop in hemoglobin of >=5 g/dl or whole blood or packed red blood cells (RBCs) transfusion >=4 U.	Source: Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation Clinical Trials (JACC, 2011, vol 57, No 3)	112000000459	ACC NCDR
Bleeding - Major	A major bleeding event, based on the 'Bleeding Academic Research Consortium' or BARC type 3a criteria is defined as : 1. Overt bleeding that is either associated with a drop in the hemoglobin level of at least 3.0 g/dL or requiring transfusion of 2 or 3 units of whole blood/RBC, or causing hospitalization or permanent injury, or requiring surgery AND 2. Does not meet VARC criteria of life-threatening or disabling bleeding.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001889	ACC NCDR
Cardiac Surgery or Intervention - Other Unplanned	The patient subsequently underwent cardiac surgery or a cath lab intervention that was unplanned. This does not include an intervention or procedure already identified as an adverse event in the TVT Registry (e.g. AV reintervention, other vascular surgery or intervention, pacemaker or ICD implant).		112000001892	ACC NCDR
COVID-19 Positive	The patient had a diagnosis of COVID-19, confirmed with a laboratory performed polymerase chain reaction (PCR) test. Notes: It is acceptable to code the diagnosis of COVID-19 based on testing that was NOT performed at your facility if it is accompanied by appropriate documentation in the medical record by the provider. Code no if documentation ONLY included antibody testing (IgG).		112000001982	ACC NCDR
Deep Vein Thrombosis	Deep vein thrombosis (DVT) refers to the formation of one or more blood clots (a blood clot is also known as a 'thrombus,' while multiple clots are called 'thrombi') in one of the body's large veins, most commonly in the lower limbs (e.g., lower leg or calf)	Office of the Surgeon General. (2008). The surgeon general's call to action to prevent deep vein thrombosis and pulmonary embolism. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK44184/	128053003	SNOMED CT
Device Embolization	The device became displaced from its initial implantation site so that it is no longer in its original position.		112000001324	ACC NCDR
Device Fracture	Partial or complete separation of any portion of the valve frame fractured into two or more parts. Do not code this event when there was a planned bioprosthetic valve fracture (BVF) on a previously implanted bioprosthetic valve during the lab visit.		112000001891	ACC NCDR
Device Migration	Device migration of the prosthetic valve is x-ray confirmed movement of the valve from its initial		370512004	SNOMED CT

Section: Follow-Up Events		Parent: Follow Up		
	implantation site such that there is a change in valve orientation within the aortic outflow track resulting in a new echocardiographic confirmed flow disturbance (pre- and post- filmed documentation). Note: Code device embolization if the device is outside of the outflow tract.			
Device Thrombosis	Any thrombus attached to or near the valve that was implanted during the procedure that occludes part of the blood flow path, interferes with valve function, or is sufficiently large to warrant treatment.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001839	ACC NCDR
Device Related Event - Other	Indicate if an otherwise unspecified device-related event requiring unanticipated treatment occurred. This includes any delivery system related event.		112000001828	ACC NCDR
Dialysis (New Requirement)	Acute or worsening renal failure necessitating a new requirement for renal dialysis (renal dialysis includes hemodialysis and peritoneal dialysis). If a patient is on receiving continuous veno-venous hemofiltration (CVVH) as a result of renal failure (and not as treatment to remove fluid for heart failure), code yes.		100014076	ACC NCDR
Endocarditis	Confirmed diagnosis of endocarditis by blood culture and/or vegetation on or around a heart valve. This may include native tissue, ring or prosthetic valve involvement.	Society of Thoracic Surgeons (STS)	56819008	SNOMED CT
ICD	The patient developed a new dysrhythmia requiring insertion of an implantable cardioverter/defibrillator.		ACC-NCDR-ICD	ACC NCDR
Myocardial Infarction	A myocardial infarction (MI) is defined as an acute ischemic event that is associated with documented and clinically significant myocardial necrosis. The MI can be periprocedural (<72 hours after the procedure) or spontaneous (>72 hours after the index procedure). 1. Peri-procedural MI (<72 h after the index procedure) (a) New ischemic symptoms (e.g. chest pain or shortness of breath), or new ischemic signs (e.g. ventricular arrhythmias, new or worsening heart failure, new ST-segment changes, hemodynamic instability, new pathological Q waves in at least two contiguous leads, imaging evidence of new loss of viable myocardium or new wall motion abnormality) AND (b) Elevated cardiac biomarkers (preferable CK-MB) within 72 h after the indexprocedure, consisting of at least one sample post-procedure with a peak value exceeding 15 x as the upper reference limit for troponin or 5 x forCK-MB.* If cardiac biomarkers are increased at baseline (>99th percentile), a further increase in at least 50% post-procedure is required AND the peak value must exceed the previously stated limit. 2. Spontaneous MI (_72 h after the index procedure) any one of the following criteria: (a) Detection of rise and/or fall of cardiac biomarkers (preferably troponin) with at least one value above the 99th percentile URL, together with the evidence of myocardial ischemia with at least one of the following: -Symptoms of ischemia -ECG changes indicative of new ischemia [new ST-T changes or new left bundle branch block (LBBB)] -New pathological Q-waves in at least two contiguous leads -Imaging evidence of a new loss of viable myocardium or new wall motion abnormality (b) Sudden, unexpected cardiac death, involving cardiac arrest, often with symptoms suggestive of myocardial ischemia, and accompanied by presumably new ST elevation, or new LBBB, and/or evidence of fresh thrombus by coronary angiography and/or at autopsy, but death occurring before blood samples could be obtained, or at a time before the appearance of cardiac biomarkers in the blood.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation Clinical Trials (JACC, 2012, vol 60, No 15)	22298006	SNOMED CT

Section: Follow-Up Events		Parent: Follow Up		
	(c) Pathological findings of an acute myocardial infarction.			
PCI	A PCI is the placement of an angioplasty guide wire, balloon, or other device (e.g. stent, atherectomy, brachytherapy, or thrombectomy catheter) into a native coronary artery or coronary artery bypass graft for the purpose of mechanical coronary revascularization.	National Cardiovascular Data Registry (NCDR)	415070008	SNOMED CT
Permanent Pacemaker	The patient developed a new dysrhythmia requiring insertion of a permanent pacemaker.		449397007	SNOMED CT
Pulmonary Embolism	Intravascular migration of a venous thrombus to the pulmonary arterial circulation. A 'Proved Pulmonary Embolism' is proved by a positive pulmonary angiogram, an unequivocally positive helical CT scan, a high-probability ventilation-perfusion scan, or autopsy.	Banovac, F., et al. Reporting Standards for Endovascular Treatment of Pulmonary Embolism. Journal of Vascular Interventional Radiology 2010; 21:44–53	59282003	SNOMED CT
Readmission - (Non-Valve Related)	The patient has been readmitted to an acute care facility after discharge for a non-valve related reason.		112000001895	ACC NCDR
Readmission (Valve Related)	The patient has been readmitted to an acute care facility after discharge for a valve-related reason.		112000001894	ACC NCDR
Readmission - Cardiac (Not Heart Failure)	The patient has been readmitted to an acute care facility after discharge with a cardiac diagnosis (where the primary diagnosis is NOT heart failure).		112000001897	ACC NCDR
Readmission - Heart Failure	The patient has been readmitted to an acute care facility after discharge for the procedure with a diagnosis of heart failure. The following criteria must be met for an event to be characterized as a heart failure readmission: 1. Hospitalization >=24 hours (including emergency room stay); 2. Clinical signs and/or symptoms of heart failure (including, but not limited to, new or worsening dyspnea, orthopnea, paroxysmal nocturnal dyspnea, increasing fatigue, worsening functional capacity or activity intolerance, or signs and/or symptoms of volume overload.); 3. Intravenous (e.g, diuretic or vasoactive therapy) or invasive (e.g., ultrafiltration, IABP, mechanical assistance) treatment for heart failure.		112000001896	ACC NCDR
Readmission - Non-Cardiac	The patient has been readmitted to an acute care facility after discharge for a non-cardiac related diagnosis or procedure.		112000001898	ACC NCDR
Reintervention - Aortic Valve	The patient returned to the operating room or cath lab for any aortic valve re-intervention. Note: Please complete adjudication worksheet for every documented aortic valve reintervention, regardless of type of reintervention.		112000001827	ACC NCDR
Reintervention - Mitral Valve	The patient returned to the operating room or cath lab for any mitral valve re-intervention. Note: Please complete adjudication worksheet for every documented mitral valve reintervention, regardless of type of reintervention.		112000001893	ACC NCDR
Reintervention - Tricuspid Valve	The patient returned to the operating room or cath lab for any tricuspid valve re-intervention. Note: Please complete adjudication worksheet for every documented tricuspid valve reintervention, regardless of type of reintervention.		112000001820	ACC NCDR
Single Leaflet Device Attachment	Single leaflet device attachment was documented in the medical record.		112000001538	ACC NCDR
Stroke - Ischemic	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.	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;66 (4):403-469. doi:10.1016/j.jacc.2014.12.018.	422504002	SNOMED CT
Stroke - Hemorrhagic			230706003	SNOMED CT
Stroke - Undetermined	A stroke of undetermined origin is defined as an acute episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction	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	230713003	SNOMED CT

Section: Follow-Up Events		Parent: Follow Up		
	but with insufficient information to allow categorization as ischemic or hemorrhagic.	Association Task Force on Clinical Data Standards (Writing Committee to Develop Cardiovascular Endpoints Data Standards). J Am Coll Cardiol. 2015;66 (4):403-469. doi:10.1016/j.jacc.2014.12.018.		
Transient Ischemic Attack (TIA)	A transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours.	Society for Thoracic Surgeons (STS)	266257000	SNOMED CT
Vascular Complication - Major	Major vascular complications include any of the following: 1. Any aortic dissection, aortic rupture, annulus rupture, left ventricle perforation, or new apical aneurysm/pseudo-aneurysm; 2. Access site or access-related vascular injury (dissection, stenosis, perforation, rupture, arteriovenous fistula, pseudoaneurysm, hematoma, irreversible nerve injury, compartment syndrome, percutaneous closure device failure) leading to death, life threatening or major bleeding*, visceral ischemia or neurological impairment; 3. Distal embolization (non-cerebral) from a vascular source requiring surgery or resulting in amputation or irreversible end-organ damage; 4. The use of unplanned endovascular or surgical intervention associated with death, major bleeding, visceral ischemia or neurological impairment; 5. Any new ischemia documented by patient symptoms, physical exam, and/or decreased or absent blood flow on lower extremity angiogram; 6. Surgery for access site-related nerve injury; 7. Permanent access site-related nerve injury. *Refers to VARC bleeding definitions Note: "ipsilateral lower extremity" was removed from #5 to have the ability to account for ischemia from any access site.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000000460	ACC NCDR
Vascular Complication - Minor	Minor vascular complications include any of the following: 1. Access site or access-related vascular injury (dissection, stenosis, perforation, rupture, arteriovenous fistula, pseudoaneuysms, hematomas, percutaneous closure device failure) not leading to death, life-threatening or major bleeding*, visceral ischemia or neurological impairment; 2. Distal embolization treated with embolectomy and/or thrombectomy and not resulting in amputation or irreversible end-organ damage; 3. Any unplanned endovascular stenting or unplanned surgical intervention not meeting the criteria for a major vascular complication; 4. Vascular repair or the need for vascular repair (via surgery, ultrasound-guided compression, transcatheter embolization, or stent-graft). *Refers to VARC bleeding definitions	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001823	ACC NCDR
Vascular Surgery or Intervention - Unplanned	The patient required unplanned vascular surgery or intervention to correct a bleeding complication or vascular related complication. Note: If a balloon angioplasty of the access site or access related sites is performed as a routine procedure to ensure adequate hemostasis of the site, then this would not qualify as an Unplanned Vascular Surgery or Intervention. However, if a balloon angioplasty is performed in an attempt to treat a bleeding or vascular access complication (i.e. bleeding at access site, dissection, stenosis, narrowing of vessel, etc.), then Unplanned Vascular Surgery or Intervention should be captured.		112000000467	ACC NCDR

Element: 14276 Follow-Up Events Occurred

Coding Instruction: Indicate if the event occurred.

Target Value: Any occurrence on follow-up

Element: 14277 Follow-Up Event Date

Coding Instruction: Indicate the date the event occurred.

Section: Follow-Up Events **Parent: Follow Up**

Target Value: Any occurrence on follow-up

Section: Follow-Up Event Information **Parent: Follow Up**

Element: 14385 Adjudication Event

Coding Instruction: Indicate the event being adjudicated.

Target Value: N/A

Vendor Instruction: An Adjudication - combination Event (14385) and Date (14386) - may only be entered/selected once

The Adjudication Event Date (14386) / Adjudication Event Code (14385) must match with Follow-Up Event Date (14277) / Follow-Up Event Code (12933)

Follow Up Events - 1.3.6.1.4.1.19376.1.4.1.6.5.356

Selection	Definition	Source	Code	Code System
ASD Defect Closure due to Transseptal Catheterization	A procedure was required to close an atrial-septal defect as a result of the transseptal catheterization procedure.		112000001885	ACC NCDR
Atrial Fibrillation	Atrial fibrillation or flutter requiring treatment or prolonged hospitalization. Treatment includes initiation of a NEW/DIFFERENT medication therapy to address the arrhythmia; or a procedure/intervention to address the arrhythmia (cardioversion, permanent pacemaker/defibrillator, ablation, etc.).		49436004	SNOMED CT
Bleeding - Life Threatening	Life threatening or disabling bleeding is defined as: 1. Fatal bleeding OR 2. Bleeding in a critical area or organ, such as intracranial, intraspinal, intraocular, or pericardial necessitating pericardiocentesis, or intramuscular with compartment syndrome OR 3. Bleeding causing hypovolemic shock or severe hypotension requiring vasopressors or surgery OR 4. Overt source of bleeding with drop in hemoglobin of >=5 g/dl or whole blood or packed red blood cells (RBCs) transfusion >=4 U.	Source: Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation Clinical Trials (JACC, 2011, vol 57, No 3)	112000000459	ACC NCDR
Bleeding - Major	A major bleeding event, based on the 'Bleeding Academic Research Consortium' or BARC type 3a criteria is defined as : 1. Overt bleeding that is either associated with a drop in the hemoglobin level of at least 3.0 g/dL or requiring transfusion of 2 or 3 units of whole blood/RBC, or causing hospitalization or permanent injury, or requiring surgery AND 2. Does not meet VARC criteria of life-threatening or disabling bleeding.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001889	ACC NCDR
Cardiac Surgery or Intervention - Other Unplanned	The patient subsequently underwent cardiac surgery or a cath lab intervention that was unplanned. This does not include an intervention or procedure already identified as an adverse event in the TVT Registry (e.g. AV reintervention, other vascular surgery or intervention, pacemaker or ICD implant).		112000001892	ACC NCDR
COVID-19 Positive	The patient had a diagnosis of COVID-19, confirmed with a laboratory performed polymerase chain reaction (PCR) test. Notes: It is acceptable to code the diagnosis of COVID-19 based on testing that was NOT performed at your facility if it is accompanied by appropriate documentation in the medical record by the provider. Code no if documentation ONLY included antibody testing (IgG).		112000001982	ACC NCDR
Deep Vein Thrombosis	Deep vein thrombosis (DVT) refers to the formation of one or more blood clots (a blood clot is also known as a 'thrombus,' while multiple clots are called 'thrombi') in one of the body's large veins, most commonly in the lower limbs (e.g., lower leg or calf)	Office of the Surgeon General. (2008). The surgeon general's call to action to prevent deep vein thrombosis and pulmonary embolism. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK44184/	128053003	SNOMED CT
Device Embolization	The device became displaced from its initial implantation site so that it is no longer in its original position.		112000001324	ACC NCDR
Device Fracture	Partial or complete separation of any portion of the valve frame fractured into two or more parts. Do not code this event when there was a planned bioprosthetic valve fracture (BVF) on a previously		112000001891	ACC NCDR

Section: Follow-Up Event Information		Parent: Follow Up		
	implanted bioprosthetic valve during the lab visit.			
Device Migration	Device migration of the prosthetic valve is x-ray confirmed movement of the valve from its initial implantation site such that there is a change in valve orientation within the aortic outflow track resulting in a new echocardiographic confirmed flow disturbance (pre- and post- filmed documentation). Note: Code device embolization if the device is outside of the outflow tract.		370512004	SNOMED CT
Device Thrombosis	Any thrombus attached to or near the valve that was implanted during the procedure that occludes part of the blood flow path, interferes with valve function, or is sufficiently large to warrant treatment.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001839	ACC NCDR
Device Related Event - Other	Indicate if an otherwise unspecified device-related event requiring unanticipated treatment occurred. This includes any delivery system related event.		112000001828	ACC NCDR
Dialysis (New Requirement)	Acute or worsening renal failure necessitating a new requirement for renal dialysis (renal dialysis includes hemodialysis and peritoneal dialysis). If a patient is on receiving continuous veno-venous hemofiltration (CVVH) as a result of renal failure (and not as treatment to remove fluid for heart failure), code yes.		100014076	ACC NCDR
Endocarditis	Confirmed diagnosis of endocarditis by blood culture and/or vegetation on or around a heart valve. This may include native tissue, ring or prosthetic valve involvement.	Society of Thoracic Surgeons (STS)	56819008	SNOMED CT
ICD	The patient developed a new dysrhythmia requiring insertion of an implantable cardioverter/defibrillator.		ACC-NCDR-ICD	ACC NCDR
Myocardial Infarction	A myocardial infarction (MI) is defined as an acute ischemic event that is associated with documented and clinically significant myocardial necrosis. The MI can be periprocedural (<72 hours after the procedure) or spontaneous (>72 hours after the index procedure). 1. Peri-procedural MI (<72 h after the index procedure) (a) New ischemic symptoms (e.g. chest pain or shortness of breath), or new ischemic signs (e.g. ventricular arrhythmias, new or worsening heart failure, new ST-segment changes, hemodynamic instability, new pathological Q waves in at least two contiguous leads, imaging evidence of new loss of viable myocardium or new wall motion abnormality) AND (b) Elevated cardiac biomarkers (preferable CK-MB) within 72 h after the indexprocedure, consisting of at least one sample post-procedure with a peak value exceeding 15 x as the upper reference limit for troponin or 5 x forCK-MB.* If cardiac biomarkers are increased at baseline (>99th percentile), a further increase in at least 50% post-procedure is required AND the peak value must exceed the previously stated limit. 2. Spontaneous MI (_72 h after the index procedure) any one of the following criteria: (a) Detection of rise and/or fall of cardiac biomarkers (preferably troponin) with at least one value above the 99th percentile URL, together with the evidence of myocardial ischemia with at least one of the following: -Symptoms of ischemia -ECG changes indicative of new ischemia [new ST-T changes or new left bundle branch block (LBBB)] -New pathological Q-waves in at least two contiguous leads -Imaging evidence of a new loss of viable myocardium or new wall motion abnormality (b) Sudden, unexpected cardiac death, involving cardiac arrest, often with symptoms suggestive of myocardial ischemia, and accompanied by presumably new ST elevation, or new LBBB, and/or evidence of fresh thrombus by coronary angiography and/or at	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation Clinical Trials (JACC, 2012, vol 60, No 15)	22298006	SNOMED CT

Section: Follow-Up Event Information		Parent: Follow Up		
	autopsy, but death occurring before blood samples could be obtained, or at a time before the appearance of cardiac biomarkers in the blood. (c) Pathological findings of an acute myocardial infarction.			
PCI	A PCI is the placement of an angioplasty guide wire, balloon, or other device (e.g. stent, atherectomy, brachytherapy, or thrombectomy catheter) into a native coronary artery or coronary artery bypass graft for the purpose of mechanical coronary revascularization.	National Cardiovascular Data Registry (NCDR)	415070008	SNOMED CT
Permanent Pacemaker	The patient developed a new dysrhythmia requiring insertion of a permanent pacemaker.		449397007	SNOMED CT
Pulmonary Embolism	Intravascular migration of a venous thrombus to the pulmonary arterial circulation. A 'Proved Pulmonary Embolism' is proved by a positive pulmonary angiogram, an unequivocally positive helical CT scan, a high-probability ventilation-perfusion scan, or autopsy.	Banovac, F., et al. Reporting Standards for Endovascular Treatment of Pulmonary Embolism. Journal of Vascular Interventional Radiology 2010; 21:44–53	59282003	SNOMED CT
Readmission - (Non-Valve Related)	The patient has been readmitted to an acute care facility after discharge for a non-valve related reason.		112000001895	ACC NCDR
Readmission (Valve Related)	The patient has been readmitted to an acute care facility after discharge for a valve-related reason.		112000001894	ACC NCDR
Readmission - Cardiac (Not Heart Failure)	The patient has been readmitted to an acute care facility after discharge with a cardiac diagnosis (where the primary diagnosis is NOT heart failure).		112000001897	ACC NCDR
Readmission - Heart Failure	The patient has been readmitted to an acute care facility after discharge for the procedure with a diagnosis of heart failure. The following criteria must be met for an event to be characterized as a heart failure readmission: 1. Hospitalization >=24 hours (including emergency room stay); 2. Clinical signs and/or symptoms of heart failure (including, but not limited to, new or worsening dyspnea, orthopnea, paroxysmal nocturnal dyspnea, increasing fatigue, worsening functional capacity or activity intolerance, or signs and/or symptoms of volume overload.); 3. Intravenous (e.g, diuretic or vasoactive therapy) or invasive (e.g., ultrafiltration, IABP, mechanical assistance) treatment for heart failure.		112000001896	ACC NCDR
Readmission - Non-Cardiac	The patient has been readmitted to an acute care facility after discharge for a non-cardiac related diagnosis or procedure.		112000001898	ACC NCDR
Reintervention - Aortic Valve	The patient returned to the operating room or cath lab for any aortic valve re-intervention. Note: Please complete adjudication worksheet for every documented aortic valve reintervention, regardless of type of reintervention.		112000001827	ACC NCDR
Reintervention - Mitral Valve	The patient returned to the operating room or cath lab for any mitral valve re-intervention. Note: Please complete adjudication worksheet for every documented mitral valve reintervention, regardless of type of reintervention.		112000001893	ACC NCDR
Reintervention - Tricuspid Valve	The patient returned to the operating room or cath lab for any tricuspid valve re-intervention. Note: Please complete adjudication worksheet for every documented tricuspid valve reintervention, regardless of type of reintervention.		112000001820	ACC NCDR
Single Leaflet Device Attachment	Single leaflet device attachment was documented in the medical record.		112000001538	ACC NCDR
Stroke - Ischemic	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.	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;66 (4):403-469. doi:10.1016/j.jacc.2014.12.018.	422504002	SNOMED CT
Stroke - Hemorrhagic			230706003	SNOMED CT
Stroke - Undetermined	A stroke of undetermined origin is defined as an acute	Hicks KA, Tcheng JE, Bozkurt B, et al. 2014 ACC/AHA	230713003	SNOMED CT

Section: Follow-Up Event Information		Parent: Follow Up		
	episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction but with insufficient information to allow categorization as ischemic or hemorrhagic.	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;66 (4):403-469. doi:10.1016/j.jacc.2014.12.018.		
Transient Ischemic Attack (TIA)	A transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours.	Society for Thoracic Surgeons (STS)	266257000	SNOMED CT
Vascular Complication - Major	Major vascular complications include any of the following: 1. Any aortic dissection, aortic rupture, annulus rupture, left ventricle perforation, or new apical aneurysm/pseudo-aneurysm; 2. Access site or access-related vascular injury (dissection, stenosis, perforation, rupture, arteriovenous fistula, pseudoaneurysm, hematoma, irreversible nerve injury, compartment syndrome, percutaneous closure device failure) leading to death, life threatening or major bleeding*, visceral ischemia or neurological impairment; 3. Distal embolization (non-cerebral) from a vascular source requiring surgery or resulting in amputation or irreversible end-organ damage; 4. The use of unplanned endovascular or surgical intervention associated with death, major bleeding, visceral ischemia or neurological impairment; 5. Any new ischemia documented by patient symptoms, physical exam, and/or decreased or absent blood flow on lower extremity angiogram; 6. Surgery for access site-related nerve injury; 7. Permanent access site-related nerve injury. *Refers to VARC bleeding definitions Note: "ipsilateral lower extremity" was removed from #5 to have the ability to account for ischemia from any access site.	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000000460	ACC NCDR
Vascular Complication - Minor	Minor vascular complications include any of the following: 1. Access site or access-related vascular injury (dissection, stenosis, perforation, rupture, arteriovenous fistula, pseudoaneuysms, hematomas, percutaneous closure device failure) not leading to death, life-threatening or major bleeding*, visceral ischemia or neurological impairment; 2. Distal embolization treated with embolectomy and/or thrombectomy and not resulting in amputation or irreversible end-organ damage; 3. Any unplanned endovascular stenting or unplanned surgical intervention not meeting the criteria for a major vascular complication; 4. Vascular repair or the need for vascular repair (via surgery, ultrasound-guided compression, transcatheter embolization, or stent-graft). *Refers to VARC bleeding definitions	Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation (JACC, 2012, Vol 60, No 15)	112000001823	ACC NCDR
Vascular Surgery or Intervention - Unplanned	The patient required unplanned vascular surgery or intervention to correct a bleeding complication or vascular related complication. Note: If a balloon angioplasty of the access site or access related sites is performed as a routine procedure to ensure adequate hemostasis of the site, then this would not qualify as an Unplanned Vascular Surgery or Intervention. However, if a balloon angioplasty is performed in an attempt to treat a bleeding or vascular access complication (i.e. bleeding at access site, dissection, stenosis, narrowing of vessel, etc.), then Unplanned Vascular Surgery or Intervention should be captured.		112000000467	ACC NCDR

Element: 14386 Adjudication Event Date

Coding Instruction: Indicate the date the clinical event being adjudicated occurred.

Target Value: N/A

Vendor Instruction: The Adjudication Event Date (14386) / Adjudication Event Code (14385) must match with Follow-Up Event Date (14277) / Follow-Up

Section: Follow-Up Event Information **Parent: Follow Up**

Event Code (12933)

Element: 14387 Adjudication Status

Coding Instruction: Indicate whether the patient was alive or deceased on the date the adjudication was performed.

Target Value: N/A

Vendor Instruction: Adjudication Status (14387) as 'Deceased' must be answered only once in follow-up episode.

Adjudication Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.726

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

Element: 14388 Adjudication Date of Death

Coding Instruction: Indicate the date the patient was declared dead.

Target Value: N/A

Vendor Instruction: Adjudication Date of Death (14388) must be Greater than or Equal to Adjudication Event Date (14386)

Element: 14463 Follow Up Clinical Comments

Coding Instruction: Provide information and details that may assist in assessing the event(s) being adjudicated.

Target Value: N/A

Section: Follow-Up Stroke or TIA **Parent: Follow-Up Event Information**

Element: 14389 Symptom Onset Date

Coding Instruction: Indicate the date of symptom onset of the neurologic deficit.

Target Value: N/A

Element: 14390 Neurologic Deficit with Rapid Onset

Coding Instruction: Indicate if the patient had a sudden onset of a focal or global neurologic deficit (regardless of the duration of symptoms) with at least one of the following present: change in level of consciousness, hemiplegia, hemiparesis, numbness or sensory loss affecting one side of the body, dysphasia or aphasia, hemianopia, amaurosis fugax, other neurological signs or symptoms consistent with a stroke.

Target Value: N/A

Element: 14391 Neurologic Deficit Clinical Presentation

Coding Instruction: Indicate the clinical presentation of the neurologic deficit.

Target Value: N/A

Neurologic Deficit Clinical Presentation - 1.3.6.1.4.1.19376.1.4.1.6.5.716

Selection	Definition	Source	Code	Code System
TIA or Stroke (CVA)			100014109	ACC NCDR
Non Stroke Neurologic Deficit			112000001860	ACC NCDR

Element: 14392 Neurologic Symptom Duration Greater Than or Equal to 24 hours

Coding Instruction: Indicate if the duration of the neurologic symptoms lasted >= 24 hours.

Target Value: N/A

Element: 14393 Brain Imaging Performed

Coding Instruction: Indicate if neuroimaging such as CT, MRI, cerebral angiography was performed.

Target Value: N/A

Element: 14394 Brain Imaging Type

Coding Instruction: Indicate the type of neuroimaging performed.

Target Value: N/A

Imaging Type - 1.3.6.1.4.1.19376.1.4.1.6.5.417

Selection	Definition	Source	Code	Code System
Computed Tomography			77477000	SNOMED CT
Computed Tomography with Contrast			112000001861	ACC NCDR
Magnetic Resonance Imaging			113091000	SNOMED CT
Magnetic Resonance Imaging with Contrast			51619007	SNOMED CT
Other Imaging			112000001862	ACC NCDR

Element: 14395 Brain Imaging Findings

Coding Instruction: Indicate the type of deficit found as a result of the neuroimaging study. Hemorrhage includes intraparenchymal, intraventricular and epidural hemorrhages.

Target Value: N/A

Brain Imaging Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.717

Selection	Definition	Source	Code	Code System
Infarct	Neuroimaging evidence of CNS infarction in the corresponding vascular territory (brain, spinal cord, or retinal cell death), with or without hemorrhage.	Adapted from: Lansky, A.J., et al. Proposed Standardized Neurological Endpoints for Cardiovascular Clinical Trials (An Academic Research Consortium Initiative) JACC 2017, 69 (6): 679-690	55641003	SNOMED CT
Hemorrhage	Neuroimaging evidence of central nervous system (CNS) hemorrhage within the brain parenchyma, subarachnoid space, ventricular system, spinal cord, or retina that is not caused by trauma.	Adapted from: Lansky, A.J., et al. Proposed Standardized Neurological Endpoints for Cardiovascular Clinical Trials (An Academic Research Consortium Initiative) JACC 2017, 69 (6): 679-690	50960005	SNOMED CT
No Deficit			100001231	ACC NCDR

Element: 14396 Event Related Sequelae

Section: Follow-Up Stroke or TIA **Parent: Follow-Up Event Information**

Coding Instruction: Indicate the sequelae related to the stroke or TIA.

Target Value: N/A

Event Related Sequelae - 1.3.6.1.4.1.19376.1.4.1.6.5.737

Selection	Definition	Source	Code	Code System
Death			419620001	SNOMED CT
Permanent Vegetative State			723151005	SNOMED CT
Altered Consciousness			3006004	SNOMED CT
Blindness			193699007	SNOMED CT
Aphasia			87486003	SNOMED CT
Loss of Motor Function			112000001936	ACC NCDR
Loss of Sensory Function			33653009	SNOMED CT
Facial Paralysis			280816001	SNOMED CT
Prolonged Length of Stay			112000001937	ACC NCDR
Other			100000351	ACC NCDR

Element: 14420 Discharge Location After Event

Coding Instruction: Indicate the discharge location after the stroke or TIA.

Target Value: N/A

Discharge Location - 1.3.6.1.4.1.19376.1.4.1.6.5.41

Selection	Definition	Source	Code	Code System
Home			01	HL7 Discharge disposition
Skilled Nursing Facility	Skilled nursing facilities (SNF) are typically sub-acute programs used for longer anticipated length of stay. Note: Sometimes SNFs may have acute rehabilitation beds within their facility. If the patient is discharged to a SNF for acute rehab (requiring a higher level of care), code "extended care/TCU/rehab".		03	HL7 Discharge disposition
Extended Care/TCU/Rehab	An extended care unit, transitional care unit or rehab unit typically provides a high level of intensive therapy as well as specialized nursing and physician care. This discharge setting may also be called subacute care or long term acute care (LTACH).		62	HL7 Discharge disposition
Other Acute Care Hospital			02	HL7 Discharge disposition
Left Against Medical Advice (AMA)	The patient was discharged or eloped against medical advice.		07	HL7 Discharge disposition
Other Discharge Location			100001249	ACC NCDR

Element: 14422 Patient Discharged to Prior Place of Living

Coding Instruction: Indicate if the patient was discharged to their prior place of living.

Target Value: N/A

Element: 14397 Stroke Diagnosed During Autopsy

Coding Instruction: Indicate if the stroke was diagnosed during autopsy.

Target Value: N/A

Boolean with Information Not Available - 1.3.6.1.4.1.19376.1.4.1.6.5.718

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Information Not Available			112000001866	ACC NCDR

Section: Follow-Up AV Re-Intervention **Parent: Follow-Up Event Information**

Element: 14398 Aortic Valve Reintervention Type

Coding Instruction: Indicate the type of aortic valve reintervention.

Target Value: N/A

Valve Reintervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.719

Selection	Definition	Source	Code	Code System
Surgical Replacement			112000001872	ACC NCDR
Surgical Repair			112000001871	ACC NCDR
Transcatheter Replacement			112000001875	ACC NCDR
Balloon Valvuloplasty			112000001469	ACC NCDR
Leaflet Clip Procedure			112000001778	ACC NCDR
Paravalvular Leak Closure			112000001916	ACC NCDR
Other Transcatheter Intervention			112000001873	ACC NCDR

Element: 14399 Aortic Valve Reintervention Primary Indication

Coding Instruction: Indicate the primary indication for the reintervention. If more than one indication is present, code the indication the operator feels has the highest significance.

Target Value: N/A

Valve Reintervention Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.720

Selection	Definition	Source	Code	Code System
Regurgitation			40445007	SNOMED CT
Stenosis			44241007	SNOMED CT
Device Embolization			112000001324	ACC NCDR
Device Fracture			112000001891	ACC NCDR
Device Migration			370512004	SNOMED CT
Endocarditis			56819008	SNOMED CT
Paravalvular Leak			234184000	SNOMED CT
Device Thrombosis			112000001839	ACC NCDR
Valve Injury			762610001	SNOMED CT
Other			100000351	ACC NCDR

Element: 14400 Aortic Valve Regurgitation

Coding Instruction: Indicate the highest level of aortic regurgitation prior to the aortic valve reintervention.

Target Value: N/A

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14403 Paravalvular Aortic Regurgitation

Coding Instruction: Indicate the highest severity of paravalvular aortic regurgitation prior to the aortic valve reintervention.

Note: If trace/trivial is documented, code "none".

Target Value: N/A

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14401 Central Aortic Regurgitation

Coding Instruction: Indicate the highest severity of central aortic regurgitation prior to the aortic valve reintervention.

Note: If trace/trivial is documented, code "none".

Target Value: N/A

Section: Follow-Up AV Re-Intervention **Parent: Follow-Up Event Information**

Valve Regurgitation Severity 4 - 1.3.6.1.4.1.19376.1.4.1.6.5.768

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Element: 14402 Aortic Valve Area

Coding Instruction: Indicate the smallest aortic valve area (in cm squared).

Target Value: N/A

Element: 14404 Aortic Valve Mean Gradient

Coding Instruction: Indicate the aortic valve mean gradient in mm Hg.

Target Value: N/A

Section: Follow-Up MV Re-Intervention **Parent: Follow-Up Event Information**

Element: 14405 Mitral Valve Reintervention Type

Coding Instruction: Indicate the type of mitral valve reintervention.

Target Value: N/A

Valve Reintervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.719

Selection	Definition	Source	Code	Code System
Surgical Replacement			112000001872	ACC NCDR
Surgical Repair			112000001871	ACC NCDR
Transcatheter Replacement			112000001875	ACC NCDR
Balloon Valvuloplasty			112000001469	ACC NCDR
Leaflet Clip Procedure			112000001778	ACC NCDR
Paravalvular Leak Closure			112000001916	ACC NCDR
Other Transcatheter Intervention			112000001873	ACC NCDR

Element: 14406 Mitral Valve Reintervention Indication

Coding Instruction: Indicate the primary indication for the reintervention. If more than one indication is present, code the indication the operator feels has the highest significance.

Target Value: N/A

Valve Reintervention Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.720

Selection	Definition	Source	Code	Code System
Regurgitation			40445007	SNOMED CT
Stenosis			44241007	SNOMED CT
Device Embolization			112000001324	ACC NCDR
Device Fracture			112000001891	ACC NCDR
Device Migration			370512004	SNOMED CT
Endocarditis			56819008	SNOMED CT
Paravalvular Leak			234184000	SNOMED CT
Device Thrombosis			112000001839	ACC NCDR
Valve Injury			762610001	SNOMED CT
Other			100000351	ACC NCDR

Section: Follow-up Readmission **Parent: Follow-Up Event Information**

Element: 14380 Hospitalization Greater Than or Equal to 24 Hours

Coding Instruction: Indicate if the heart failure readmission required the patient to be hospitalized with treatment in any inpatient unit for at least 24 hours, including emergency department or observation stay.

Target Value: N/A

Boolean with Information Not Available - 1.3.6.1.4.1.19376.1.4.1.6.5.718

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Information Not Available			112000001866	ACC NCDR

Element: 14381 Clinical Signs or Symptoms of Heart Failure

Coding Instruction: Indicate if the patient had clinical signs and/or symptoms of heart failure, including new or worsening dyspnea, orthopnea, paroxysmal nocturnal dyspnea, increasing fatigue, worsening functional capacity or activity intolerance, or signs and/or symptoms of volume overload.

Target Value: N/A

Boolean with Information Not Available - 1.3.6.1.4.1.19376.1.4.1.6.5.718

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Information Not Available			112000001866	ACC NCDR

Element: 14382 IV or Invasive Treatment Required

Coding Instruction: Indicate if the patient had signs and symptoms of heart failure that resulted in intravenous (e.g, diuretic or vasoactive therapy) or invasive (e.g., ultrafiltration, IABP, mechanical assistance) treatment for heart failure.

Target Value: N/A

Boolean with Information Not Available - 1.3.6.1.4.1.19376.1.4.1.6.5.718

Selection	Definition	Source	Code	Code System
No			100013073	ACC NCDR
Yes			100013072	ACC NCDR
Information Not Available			112000001866	ACC NCDR

Section: Follow-Up Tricuspid Valve Re-Intervention **Parent: Follow-Up Event Information**

Element: 14408 Tricuspid Valve Reintervention Type

Coding Instruction: Indicate the type of tricuspid valve re-intervention.

Target Value: N/A

Valve Reintervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.719

Selection	Definition	Source	Code	Code System
Surgical Replacement			112000001872	ACC NCDR
Surgical Repair			112000001871	ACC NCDR
Transcatheter Replacement			112000001875	ACC NCDR
Balloon Valvuloplasty			112000001469	ACC NCDR
Leaflet Clip Procedure			112000001778	ACC NCDR
Paravalvular Leak Closure			112000001916	ACC NCDR
Other Transcatheter Intervention			112000001873	ACC NCDR

Element: 14409 Tricuspid Valve Reintervention Primary Indication

Coding Instruction: Indicate the primary indication for the tricuspid valve re-intervention.

Target Value: N/A

Valve Reintervention Indication - 1.3.6.1.4.1.19376.1.4.1.6.5.720

Selection	Definition	Source	Code	Code System
Regurgitation			40445007	SNOMED CT
Stenosis			44241007	SNOMED CT
Device Embolization			112000001324	ACC NCDR
Device Fracture			112000001891	ACC NCDR
Device Migration			370512004	SNOMED CT
Endocarditis			56819008	SNOMED CT
Paravalvular Leak			234184000	SNOMED CT
Device Thrombosis			112000001839	ACC NCDR
Valve Injury			762610001	SNOMED CT
Other			100000351	ACC NCDR

Element: 14410 Tricuspid Valve Regurgitation

Coding Instruction: Indicate the severity of tricuspid valve regurgitation.

Target Value: N/A

Valve Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.767

Selection	Definition	Source	Code	Code System
None			112000001910	ACC NCDR
Trace/Trivial			112000001911	ACC NCDR
Mild			112000000380	ACC NCDR
Moderate			112000000381	ACC NCDR
Severe			112000000382	ACC NCDR

Section: Follow-Up Medications **Parent: Follow Up**

Element: 11990 Follow-Up Medications Code

Coding Instruction: Indicate the assigned identification number associated with the medications the patient was prescribed or received.

Note(s):
The medication(s) collected in this field are controlled by the 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 to a value set. The value set 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: N/A

Follow-up Medication - 2.16.840.1.113883.3.3478.6.5.203

Selection	Definition	Source	Code	Code System
Angiotensin Converting Enzyme Inhibitor			41549009	SNOMED CT
Aldosterone Antagonist			372603003	SNOMED CT
Direct thrombin inhibitor			414010005	SNOMED CT
Warfarin			11289	RxNorm
Aspirin			1191	RxNorm
Angiotensin II Receptor Blocker			372913009	SNOMED CT
Beta Blocker			33252009	SNOMED CT
Diuretics Not Otherwise Specified			112000001417	ACC NCDR
Loop Diuretics			29051009	SNOMED CT
Thiazides			372747003	SNOMED CT
Direct Factor Xa Inhibitor			112000000696	ACC NCDR
P2Y12 Antagonist			112000001003	ACC NCDR

Element: 13696 Medications Prescribed

Coding Instruction: Indicated if the medication is prescribed, not prescribed or is not prescribed for either a medical or patient reason

Target Value: The value on Follow-up

Follow-Up Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.371

Selection	Definition	Source	Code	Code System
Not Prescribed - Medical Reason			100001034	ACC NCDR
Not Prescribed - No Reason			100001048	ACC NCDR
Not Prescribed - Patient Reason			100001071	ACC NCDR
Yes - Prescribed			100001247	ACC NCDR

Element: 14577 Loop Diuretic Dose

Coding Instruction: Specify the total daily dose of the loop diuretic that was prescribed to the patient.

Target Value: The value on Follow-up

Section: Administration **Parent: Root**

Element: 1000 Participant ID

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

Target Value: N/A

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

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

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

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

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

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

Element: 1071 Registry Schema Version

Coding Instruction: Schema version describes the version number of the Registry Transmission Document (RTD) schema to which each record conforms. It is an attribute that includes a constant value indicating the version of schema file. This is entered into the schema automatically by software.

Target Value: N/A

Element: 1085 Submission Type

Coding Instruction: Indicate if the data contained in the harvest/data file contains either standard patient episode of care records (arrival date to discharge only) or if it contains patient follow-up records.

A transmission file with all episode of care records (from Arrival to Discharge only) is considered a 'Base Registry Record'.

A file with patient follow-up records (any follow-up assessments performed during the quarter selected) is considered a 'Follow-Up Record'.

Note(s):
Selecting 'Follow-Up Records Only' will transmit all patient records with Follow-up Assessment Dates (Element Ref# 11000) contained in the selected timeframe, regardless of the procedure or discharge date. For example, if a patient has a procedure on 3/30/2017, is discharged on 3/31/2017, and has a follow-up assessment on 5/6/2017, the patient's episode of care data will be transmitted in the 2017Q1 Base Registry Record file, but the Follow-up data will be transmitted in the 2017Q2 Follow-Up File.

Section: Administration — Parent: Root

Target Value: N/A

Submission Type

Selection	Definition	Source	Code	Code System
Episode of Care Records Only			1000142424	ACC NCDR
Follow-Up Records Only			1000142425	ACC NCDR