

Section: A. 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: 2030	SSN
	Coding Instruction: Indicate the patient's United States Social Security Number (SSN). Note(s): If the patient does not have a US Social Security Number (SSN), leave blank and check 'SSN NA'. Target Value: The value on arrival at this facility Vendor Instruction: SSN (2030) must be 9 numeric characters long
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: 2050	Birth Date
	Coding Instruction: Indicate the patient's date of birth. Target Value: The value on arrival at this facility
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

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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 Zip Code (2065) 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	Individuals with origins in any of the original peoples of Europe, including, for example, English, German, Irish, Italian, Polish, and Scottish.
	Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity
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 or African American	Individuals with origins in any of the Black racial groups of Africa, including, for example, African American, Jamaican, Haitian, Nigerian, Ethiopian, and Somali.
	Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity
Element: 2073	Race - American Indian/Alaskan Native
Coding Instruction:	Indicate if the patient is American Indian or Alaskan Native as determined by the patient/family.
Note(s):	If the patient has multiple race origins, specify them using the other race selections in addition to this one.
Target Value:	The value on arrival at this facility
Supporting Definition: American Indian or Alaska Native	Individuals with origins in any of the original peoples of North, Central, and South America, including, for example, Navajo Nation, Blackfeet Tribe of the Blackfeet Indian Reservation of Montana, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, Aztec, and Maya.
	Source: U.S. Office of Management and Budget. Classification of Federal Data on Race and Ethnicity
Element: 2072	Race - Asian
Coding Instruction:	Indicate if the patient is Asian as determined by the patient/family.
Note(s):	If the patient has multiple race origins, specify them using the other race selections in addition to this one.
Target Value:	The value on arrival at this facility
Supporting Definition: Asian	Individuals with origins in any of the original peoples of Central or East Asia, Southeast Asia, or South Asia, including, for example, Chinese, Asian Indian, Filipino, Vietnamese, Korean, and Japanese.

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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.

Target Value: The value on arrival at this facility

Supporting Definition: Native Hawaiian or Pacific Islander

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

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

Element: 2075 Race - Middle Eastern/North African

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

Target Value: The value on arrival at this facility

Supporting Definition: Middle Eastern

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

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

Element: 2076 Hispanic or Latino Ethnicity

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

Note(s):

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

Target Value: The value on arrival at this facility

Supporting Definition: Hispanic or Latino

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

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

Section: Episode Information

Parent: B. Episode of Care

Element: 2999 Episode Unique Key

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

Target Value: N/A

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: Patient must be at least 18 years old at time of Arrival Date and Time (3001)

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.

Section: Episode Information

Parent: B. Episode of Care

Target Value: The value on arrival at this facility

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 (Part A or B)	Medicare is a health insurance program for: people age 65 or older; people under age 65 with certain disabilities; and people of all ages with end-stage renal disease (permanent kidney failure requiring dialysis or a kidney transplant). Medicare Part A (Hospital Insurance) – Part A helps cover inpatient care in hospitals, including critical access hospitals, and skilled nursing facilities (not custodial or long-term care). It also helps cover hospice care and some home health care. Medicare Part B (Medical Insurance) – Part B helps cover doctors' services and outpatient care. It also covers some other medical services that Part A doesn't cover, such as some of the services of physical and occupational therapists, and some home health care. Part B helps pay for these covered services and supplies when they are medically necessary.	Medicare Program - General Information CMS	1	PHDSC
Medicare Advantage (Part C)	Medicare Part C (Medicare Advantage) – Part C is an alternative way to get Medicare coverage through private insurance companies instead of the federal government. Part C provides the same benefits as Medicare Part A and Part B, and may include additional benefits such as dental, vision, prescription drug and wellness programs coverage.	Medicare Advantage Plans (Part C) MedicareAdvantage.com	112000002025	ACC NCDR
Medicaid	Medicaid is a program administered at the state level, which provides medical assistance to the needy. Families with dependent children, the aged, blind, and disabled who are in financial need are eligible for Medicaid. It may be known by different names.		2	PHDSC
Military Health Care	Military Health care - Military health care includes TRICARE/CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) and CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs (VA).		31	PHDSC
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-IHS facilities.		33	PHDSC
Non-US Insurance	Non-US insurance refers to individuals with a payor		100000812	ACC NCDR

Section: Episode Information

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that does not originate in the United States.

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: 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>

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

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

Vendor Instruction: An Attending Provider's NPI (3058) must not be duplicated in an episode

Section: Research Study**Parent: B. 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:** The Research Study Name (3025) should not be duplicated in an episode**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: C. History and Risk Factors

Parent: Root

Element: 4615	Hypertension
Coding Instruction:	Indicate if the patient has a current diagnosis of hypertension.
Target Value:	Any occurrence between birth and arrival at this facility
Element: 4620	Dyslipidemia
Coding Instruction:	Indicate if the patient has a history of dyslipidemia diagnosed and/or treated by a physician.
Target Value:	Any occurrence between birth and arrival at this facility
Element: 4291	Prior Myocardial Infarction
Coding Instruction:	Indicate if the patient has had at least one documented previous myocardial infarction.
Note(s):	Code 'No' if the patient's only MI occurred at the transferring facility.
	Code 'Yes' if the patient's only MI occurred at the transferring facility but it was treated with PCI or CABG prior to arrival at this facility
Target Value:	Any occurrence between birth and arrival at this facility
Element: 4296	Most Recent MI Date
Coding Instruction:	Indicate the date of the most recent myocardial infarction.
Note(s):	If the month or day of the myocardial infarction is unknown, please code 01/01/YYYY. If the specific year is unknown in the current record, the year may be estimated based on timeframes found in prior medical record documentation (Example: If the patient had "most recent myocardial infarction" documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).
Target Value:	The last value between birth and arrival at this facility
Vendor Instruction:	Most Recent MI Date (4296) must be Less than or Equal to Arrival Date and Time (3001)
Element: 4495	Prior Percutaneous Coronary Intervention
Coding Instruction:	Indicate if the patient had a percutaneous coronary intervention (PCI), prior to this admission.
Target Value:	Any occurrence between birth and arrival at this facility
Element: 4503	Most Recent Percutaneous Coronary Intervention Date
Coding Instruction:	Indicate the date of the most recent percutaneous coronary intervention (PCI) that the patient received prior to this admission.
Note(s):	If the month or day of the PCI is unknown, please code 01/01/YYYY. If the specific year is unknown in the current record, the year may be estimated based on timeframes found in prior medical record documentation (Example: If the patient had "most recent PCI" documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).
Target Value:	The last value between birth and arrival at this facility
Vendor Instruction:	Most Recent Percutaneous Coronary Intervention Date (4503) must be Less than or Equal to Arrival Date and Time (3001)
Element: 4501	Percutaneous Coronary Intervention of the Left Main Coronary Artery
Coding Instruction:	Indicate if the patient's prior PCI included revascularization of the Left Main.
Target Value:	Any occurrence between birth and arrival at this facility
Element: 4502	Percutaneous Coronary Intervention of the Left Main Coronary Artery Unknown
Coding Instruction:	Indicate if it is unknown if the patient's prior PCI included revascularization of the Left Main.
Target Value:	Any occurrence between birth and arrival at this facility
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

Section: C. History and Risk Factors

Parent: Root

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

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

Element: 4287 Family History of Premature Coronary Artery Disease

Coding Instruction: Indicate if the patient has a family history of premature coronary artery disease.

Note(s):

If the patient is adopted, or the family history is unknown, code 'No'.

Family history includes any direct blood relatives (parents, siblings, children) who have had any of the following diagnosed at age less than 55 years for male relatives or less than 65 years for female relatives

1. Angina
2. Acute myocardial infarction
3. Sudden cardiac death without obvious cause
4. Coronary artery bypass graft surgery
5. Percutaneous coronary intervention

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

Element: 4551 Cerebrovascular Disease

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

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

Supporting Definition: Cerebrovascular Disease

Current or previous history of any of the following:

- Ischemic stroke: infarction of central nervous system tissue whether symptomatic or silent (asymptomatic).
- TIA: transient episode of neurological dysfunction caused by focal brain, spinal cord, or retinal ischemia without acute infarction. The symptoms typically last less than 24 hours.
- Noninvasive or invasive arterial imaging test demonstrating 50% stenosis of any of the major extracranial or intracranial vessels to the brain.
- Previous cervical or cerebral artery revascularization surgery or percutaneous intervention.

This does not include chronic (nonvascular) neurological diseases or other acute neurological insults such as metabolic and anoxic ischemic encephalopathy.

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

Element: 4610 Peripheral Arterial Disease

Coding Instruction: Indicate if the patient has a history of peripheral arterial disease (PAD).

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

Supporting Definition: 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 $\leq$ 0.9, ultrasound, MR or CT imaging of $>$ 50% diameter stenosis in any peripheral artery (i.e., subclavian, femoral, iliac) or angiographic imaging)

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

Element: 4576 Chronic Lung Disease

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

Note(s):

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

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

Section: C. History and Risk Factors

Parent: Root

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

Element: 4515

Prior Coronary Artery Bypass Graft

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

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

Supporting Definition: Coronary Artery Bypass Graft

Coronary artery bypass graft surgery is when the native vessels of the heart are bypassed with other vessels (internal mammary artery, radial artery or saphenous vein) to restore normal blood flow to the obstructed coronary arteries.

Source: Cannon CP, Brindis RG, Chaitman BR, 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. Circulation. 2013;127:1052-1089.

Element: 4521

Most Recent Coronary Artery Bypass Graft Date

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

Note(s):

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

Target Value: The last value between birth and arrival at this facility

Vendor Instruction: Most Recent Coronary Artery Bypass Graft Date (4521) must be Less than or Equal to Arrival Date and Time (3001)

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.	The Office of the National Coordinator for Health Information Technology 2014 Edition Test Procedure for §170.314.a.11.Smoking status	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.	The Office of the National Coordinator for Health Information Technology 2014 Edition Test Procedure for §170.314.a.11.Smoking status	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.	The Office of the National Coordinator for Health Information Technology 2014 Edition Test Procedure for §170.314.a.11.Smoking status	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.	The Office of the National Coordinator for Health Information Technology 2014 Edition Test Procedure for §170.314.a.11.Smoking status	77176002	SNOMED CT
Unknown if ever smoked	An individual whose current and prior smoking status is not known.	The Office of the National Coordinator for Health Information Technology 2014 Edition Test Procedure for §170.314.a.11.Smoking status	266927001	SNOMED CT

Element: 4626

Tobacco Type

Coding Instruction: Indicate the type of tobacco product the patient uses.

Target Value: The value on arrival at this facility

Section: C. History and Risk Factors

Parent: Root

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

Element: 4630 Cardiac Arrest Out of Healthcare Facility

Coding Instruction: Indicate if a cardiac arrest event occurred outside of any healthcare facility.

Target Value: The value on arrival at this facility

Supporting Definition: Sudden Cardiac Arrest

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

Source: 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.

Element: 4631 Cardiac Arrest Witnessed

Coding Instruction: Indicate if the out-of-hospital cardiac arrest was witnessed by another person.

Target Value: The value on arrival at this facility

Supporting Definition: Cardiac Arrest Witnessed

A witnessed arrest is one that is seen or heard by another person.

Source: Cardiac Arrest Registry to Enhance Survival - CARES Complete Data Set for EMS, Hospital and CAD participants and Instruction for Abstracting and Coding Data Elements

Element: 4632 Cardiac Arrest After Arrival of Emergency Medical Services

Coding Instruction: Indicate if the out-of-hospital cardiac arrest occurred after arrival of Emergency Medical Services (EMS).

Target Value: The value on arrival at this facility

Supporting Definition: Cardiac Arrest After Arrival of EMS

Patients who experience a cardiac arrest after the arrival of EMS personnel are in the best circumstances to be resuscitated by trained personnel with the equipment to provide immediate defibrillation.

Source: Cardiac Arrest Registry to Enhance Survival - CARES Complete Data Set for EMS, Hospital and CAD participants and Instruction for Abstracting and Coding Data Elements

Vendor Instruction: When Cardiac Arrest After Arrival of Emergency Medical Services (4632) is [Yes] then Cardiac Arrest Witnessed (4631) cannot be [No]

Element: 4633 First Cardiac Arrest Rhythm

Coding Instruction: Indicate if the initial out-of-hospital cardiac arrest rhythm was a shockable rhythm.

Target Value: The value on arrival at this facility

First Cardiac Arrest Rhythm

Selection	Definition	Source	Code	Code System
Shockable	Pulseless ventricular arrhythmias		100013034	ACC NCDR
Not Shockable			100013035	ACC NCDR

Element: 4634 First Cardiac Arrest Rhythm Unknown

Coding Instruction: Indicate if the initial out-of-hospital cardiac arrest rhythm was unknown.

Target Value: The value on arrival at this facility

Section: C. History and Risk Factors

Parent: Root

Element: 4635 Cardiac Arrest at Transferring Healthcare Facility

Coding Instruction: Indicate if the patient had cardiac arrest at the transferring healthcare facility prior to arrival at the current facility.

Target Value: The value on arrival at this facility

Supporting Definition: Cardiac Arrest

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

Source: 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.

Element: 4555 Diabetes Mellitus

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

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

Element: 4560 Currently on Dialysis

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

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

Element: 4561 Canadian Study of Health and Aging (CSHA) Clinical Frailty Scale

Coding Instruction: Indicate the Canadian Study of Health and Aging (CSHA) Clinical Frailty Scale of the patient.

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

CSHA Clinical Frailty Score - 1.3.6.1.4.1.19376.1.4.1.6.5.338

Selection	Definition	Source	Code	Code System
1: Very Fit	CSHA Clinical Frailty Scale 1: Very Fit - People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.		1000142382	ACC NCDR
2: Well	CSHA Clinical Frailty Scale 2: Well - People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.		1000142383	ACC NCDR
3: Managing Well	CSHA Clinical Frailty Scale 3: Managing Well - People whose medical problems are well controlled, but are not regularly active beyond routine walking.		1000142384	ACC NCDR
4: Vulnerable	CSHA Clinical Frailty Scale 4: Vulnerable - While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.		1000142385	ACC NCDR
5: Mildly Frail	CSHA Clinical Frailty Scale 5: Mildly Frail - These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.		1000142386	ACC NCDR
6: Moderately Frail	CSHA Clinical Frailty Scale 6: Moderately Frail - People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.		1000142387	ACC NCDR
7: Severely Frail	CSHA Clinical Frailty Scale 7: Severely Frail - Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).		1000142388	ACC NCDR
8: Very Severely Frail	CSHA Clinical Frailty Scale 8: Very Severely Frail - Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.		1000142389	ACC NCDR
9: Terminally Ill	CSHA Clinical Frailty Scale 9: Terminally Ill - Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not		1000142390	ACC NCDR

Section: C. History and Risk Factors

Parent: Root

otherwise evidently frail.

Section: E. Procedure Information
Parent: Root

Element: 7000	Procedure Start Date and Time
Coding Instruction: Indicate the date and time the procedure started. Note(s): Indicate the date/time (mm/dd/yyyy hours:minutes) using the military 24-hour clock, beginning at midnight (0000 hours). The time the procedure started is defined as the time at which local anesthetic was first administered for vascular access, or the time of the first attempt at vascular access for the cardiac catheterization (use whichever is earlier). Target Value: Any occurrence on current procedure Vendor Instruction: Procedure Start Date and Time (7000) must be Greater than Arrival Date and Time (3001) Procedure Start Date and Time (7000) must happen within (<=) 7 Days following Acute Coronary Syndrome Symptom Date (7826) A Procedure Start Date and Time (7000) must not be duplicated	
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 Less than or Equal to Discharge Date and Time (10101) Procedure End Date and Time (7005) must be Greater than Procedure Start Date and Time (7000) Procedure End Date and Time (7005) and Procedure Start Date and Time (7000) must not overlap on multiple procedures	
Element: 7045	Diagnostic Coronary Angiography Procedure
Coding Instruction: Indicate if the patient had diagnostic coronary angiography. Note(s): In order to code as 'Yes' when PCI is performed during the same cath lab visit, coronary angiography is understood to reflect the patient's initial evaluation within the last 30 days. Diagnostic coronary angiography is defined as the passage of a catheter into the aortic root or other great vessels for the purpose of angiography of the native coronary arteries or bypass grafts supplying native coronary arteries. Code 'No' if the patient presents for a staged PCI. Target Value: The value on current procedure Vendor Instruction: When Diagnostic Coronary Angiography Procedure (7045) is [Null, No] then Percutaneous Coronary Intervention (PCI) (7050) must be [Yes]	
Element: 7046	Diagnostic Catheterization Operator Last Name
Coding Instruction: Indicate the last name of the operator who is performing the diagnostic catheterization. Note(s): If the name exceeds 50 characters, enter the first 50 letters only. Target Value: The value on current procedure	
Element: 7047	Diagnostic Catheterization Operator First Name
Coding Instruction: Indicate the first name of the operator who is performing the diagnostic catheterization. Note(s): If the name exceeds 50 characters, enter the first 50 letters only. Target Value: The value on current procedure	
Element: 7048	Diagnostic Catheterization Operator Middle Name
Coding Instruction: Indicate the middle name of the operator who is performing the diagnostic catheterization. Note(s): It is acceptable to specify the middle initial. If there is no middle name given, leave field blank.	

Section: E. Procedure Information
Parent: Root

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: 7049
Diagnostic Catheterization Operator NPI

Coding Instruction: Indicate the National Provider Identifier (NPI) of the operator who is performing the diagnostic catheterization. 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 current procedure

Element: 7050
Percutaneous Coronary Intervention (PCI)

Coding Instruction: Indicate if the patient had a percutaneous coronary intervention (PCI) attempted and/or performed during this cath lab visit.

Note(s):

Code 'Yes' when a guidewire is introduced for the purpose of PCI.

A percutaneous coronary intervention (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.

Target Value: The value on current procedure

Element: 7051
PCI Operator Last Name

Coding Instruction: Indicate the last name of the operator who is performing the percutaneous coronary intervention.

Note(s):

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

Target Value: The value on current procedure

Element: 7052
PCI Operator First Name

Coding Instruction: Indicate the first name of the operator who is performing the percutaneous coronary intervention.

Note(s):

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

Target Value: The value on current procedure

Element: 7053
PCI Operator Middle Name

Coding Instruction: Indicate the middle name of the operator who is performing the percutaneous coronary intervention.

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: 7054
PCI Operator NPI

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

Section: E. Procedure Information		Parent: Root
		Discharging Provider roles, as supported by the patient medical record.
	Target Value:	The value on current procedure
Element: 15433	Fellow Last Name	
	Coding Instruction:	Indicate the last name of the Fellow who is involved with the percutaneous coronary intervention.
	Note(s):	If the name exceeds 50 characters, enter the first 50 letters only.
	Target Value:	The value on current procedure
Element: 15434	Fellow First Name	
	Coding Instruction:	Indicate the first name of the Fellow who is involved in the percutaneous coronary intervention.
	Note(s):	If the name exceeds 50 characters, enter the first 50 letters only.
	Target Value:	The value on current procedure
Element: 15435	Fellow Middle Name	
	Coding Instruction:	Indicate the middle name of the Fellow who is involved with the percutaneous coronary intervention.
	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: 15436	Fellow NPI	
	Coding Instruction:	Indicate the National Provider Identifier (NPI) of the Fellow involved with the PCI procedure.
		National Provider Identifier (NPI) numbers, assigned by the Centers for Medicare and Medicaid Services (CMS), are used to uniquely identify professionals for Medicare billing purposes.
	Target Value:	The value on current procedure
Element: 15431	Fellowship Program Identification Number	
	Coding Instruction:	Indicate the institution's Accreditation Council for Graduate Medical Education (ACGME) number for the program in which the Fellow is participating.
	Target Value:	The value on current procedure
	Supporting Definition:	Fellowship Program Identification Number The institution's Accreditation Council for Graduate Medical Education (ACGME) number for the program in which the Fellow is participating. ACGME oversees the accreditation of fellowship programs in the US. Each accredited training program is assigned a program ID. Source: A list of programs by specialty can be found here: ACGME - Accreditation Data System (ADS): https://apps.acgme.org/ads/Public/Reports/Report/1 .
	Vendor Instruction:	Fellowship Program Identification Number (15431) must be a valid ACGME ID
Element: 7060	Diagnostic Left Heart Cath	
	Coding Instruction:	Indicate if the patient had a left heart cath procedure, defined as the passage of a catheter into the left ventricle for the purposes of angiography or measurement of ventricular pressures and/or oxygen saturation.
	Note(s):	Code 'No' if the left ventricle was only assessed post-intervention (PCI).
	Target Value:	The value between start of procedure and prior to the intervention
Element: 7061	LVEF % (Diagnostic Left Heart Cath)	
	Coding Instruction:	Indicate the best estimate of the current left ventricular ejection fraction.

Section: E. Procedure Information

Parent: Root

Note(s):

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

If only a descriptive value is reported (i.e.normal), enter the corresponding percentage value from the list below:

Normal = 60%

Good function = 50%

Mildly reduced = 45%

Fair function = 40%

Moderately reduced = 30%

Poor function = 25%

Severely reduced = 20%

Target Value: The value between start of procedure and prior to the intervention

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: 7065

Concomitant Procedures Performed

Coding Instruction: Indicate if another procedure was performed in conjunction with a diagnostic coronary angiography and/or PCI procedure.

Target Value: The value on current procedure

Element: 7066

Concomitant Procedures Performed Type

Coding Instruction: Indicate the type of procedure performed in conjunction with a diagnostic coronary angiography and/or PCI procedure.

Note(s):

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

Target Value: The value on current procedure

Concomitant Procedures Type - 2.16.840.1.113883.3.3478.6.4.10

Selection	Definition	Source	Code	Code System
Biopsy of heart	A procedure where a small sample of heart muscle is removed for analysis.		197042001	SNOMED CT
Structural Repair	Correction of a defect or abnormality of the heart that is non- coronary, meaning that it does not affect the blood vessels in the heart, but rather involves the valves, walls or chambers.		100001273	ACC NCDR
Left Atrial Appendage Occlusion	The left atrial appendage (LAA) is a small, ear shaped sac in the muscle wall of the left atrium. Left Atrial Appendage Occlusion (LAAO) reduces the risk of left atrial appendage blood clots from entering the bloodstream and causing a stroke in patients with non-valvular atrial fibrillation by sealing off the LAA.		233032004	SNOMED CT
Parachute Device Placement	A structural heart medical implantable device commonly used after a myocardial infarction to treat enlargement of the left ventricle (left sided heart failure). The Parachute implant is designed to partition the damaged muscle, isolating the non-functional muscle segment from the functional segment, which decreases the overall volume and restores a more normal geometry and function in the left ventricle.		1000142393	ACC NCDR
Mitral Clip Procedure	A transcatheter procedure using a small clip to repair the heart's mitral valve, typically to treat mitral regurgitation.		112000000208	ACC NCDR
TAVR	A percutaneous intervention for the purpose of implanting a mechanical aortic valve.		441873006	SNOMED CT
Right Heart Cath	A diagnostic catheterization procedure that includes direct insertion of a catheter into the right atrium.		40403005	SNOMED CT
EP Study	A cardiac electrophysiology study (EP) is a minimally invasive procedure that tests the electrical conduction system of the heart to assess the electrical activity and conduction pathways of the heart. The study is indicated to investigate the cause, location of origin, and best treatment for various abnormal heart rhythms. This type of study is performed by an electrophysiologist and using a single or multiple catheters situated within the heart through a vein or artery. If at any step during the EP study the electrophysiologist finds the source of the abnormal		252425004	SNOMED CT

Section: E. Procedure Information

Parent: Root

	electrical activity, he/she may try to ablate the cells that are misfiring. This is done using high-energy radio frequencies (similar to microwaves) to effectively "cook" the abnormal cells.		
Temporary Pacemaker Placement	Temporary pacemaker placement, also called transvenous cardiac pacing or endocardial pacing, is a life-saving procedure to correct symptomatic bradycardia unhelped by medication and transcutaneous pacing. The placement of the pacing electrode, or lead, is advanced through the vein under fluoroscopy to the desired location in the right ventricle.	281556002	SNOMED CT
Permanent Pacemaker Placement	A permanent pacemaker insertion is the implantation of a small electronic device that is usually placed in the chest, just below the collarbone, to help regulate slow electrical problems with the heart. The pacemaker senses intrinsic heart rhythms and provides electrical stimulation when indicated.	33331003	SNOMED CT
Aortogram	An aortogram involves placement of a catheter in the aorta and injection of contrast material while taking x-rays of the aorta.	241230009	SNOMED CT
Renal Angiogram	Angiogram of the renal (kidney) vasculature.	420013002	SNOMED CT
Peripheral Intervention	Peripheral vascular intervention of any anatomical structure or system in the body except the heart to remove plaque and restore the flow of blood through the artery. These interventions are medical specialties that treat peripheral artery diseases without surgically opening the leg or arm. The interventionalist uses a catheter that is inserted into a blood vessel through a small cut, usually in the leg or arm, and threaded to the site of disease. Once in place, it acts as a tunnel, enabling the doctor to efficiently guide the tools to where they are needed.	100001272	ACC NCDR
Peripheral Angiogram	Angiogram of any anatomical structure or system in the body with exception of the heart.	1000142392	ACC NCDR
Procedure Type Not Listed	The procedure performed is not available for selection within the registry.	10001424810	ACC NCDR
Cardioversion	The conversion of one cardiac rhythm or electrical pattern to another, almost always from an abnormal to a normal one, by pharmacologic means using medications or by electrical cardioversion using a defibrillator.	NCImetathesaurus NCIm Version: 201706 Version 2.8 CUI CL449343	250980009 SNOMED CT
IMA (Native Position) Angiogram	Angiogram of the left or right internal mammary artery (IMA).	84311009	SNOMED CT

Element: 7320

Arterial Access Site

Coding Instruction: Indicate the location of percutaneous entry for the procedure.

Target Value: The last value on current procedure

Arterial Access Site - 1.3.6.1.4.1.19376.1.4.1.6.5.310

Selection	Definition	Source	Code	Code System
Femoral			7657000	SNOMED CT
Brachial			17137000	SNOMED CT
Radial			45631007	SNOMED CT
Other	Specific artery not available for selection in registry.		100013029	ACC NCDR

Element: 7325

Arterial Cross Over

Coding Instruction: Indicate if the procedure involved a crossover to a different access site.

Note(s):

Code 'Yes' when the final procedure access site is subsequent to where arterial access for the procedure was first attempted.

Target Value: The value on current procedure

Element: 7332

Closure Method Not Documented

Coding Instruction: Indicate if the method to close the arterial access site was not documented.

Target Value: All values between start of procedure and next procedure or discharge

Element: 7335

Venous Access

Coding Instruction: Indicate if a venous access was obtained for the purpose of the diagnostic or PCI procedure.

Section: E. Procedure Information
Parent: Root

Target Value: The value on current procedure

Element: 6016 Systolic Blood Pressure

Coding Instruction: Indicate the systolic blood pressure in mmHg.

Note(s):

Code the first systolic blood pressure obtained in the cath lab procedure room.

Target Value: The first value on current procedure

Element: 7340 Cardiac Arrest at this Facility

Coding Instruction: Indicate if a cardiac arrest event occurred at this facility PRIOR to the cath lab visit.

Target Value: Any occurrence between arrival at this facility and current procedure

Supporting Definition: Cardiac Arrest

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

Source: 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.

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

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: 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.)

Section: D. Pre-Procedure Information

Parent: E. Procedure Information

Element: 4001 Heart Failure

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

Target Value: Any occurrence between birth 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: 4011 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 last value between birth 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.	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.	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.	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.	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.	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.	422293003	SNOMED CT

Element: 4012 Heart Failure Newly Diagnosed

Coding Instruction: Indicate if the heart failure was newly diagnosed.

Note: Code 'Yes' (newly diagnosed) if there is no documentation of a prior diagnosis of heart failure.

Target Value: The last value between birth and current procedure

Element: 4013 Heart Failure Type

Coding Instruction: Indicate if the patient has systolic or diastolic heart failure.

Target Value: The last value between birth and current procedure

Heart Failure Type - 1.3.6.1.4.1.19376.1.4.1.6.5.942

Selection	Definition	Source	Code	Code System
Diastolic	Diastolic Heart Failure or Heart Failure with a normal Ejection Fraction (HF _n EF), also known as Heart Failure with a Preserved Ejection Fraction (HF _p EF), is when the amount of blood pumped from the heart's left ventricle with each beat (ejection fraction) remains >= 50%.		418304008	SNOMED CT
Systolic	Systolic Heart Failure or Heart Failure with a reduced Ejection Fraction (HF _r EF) is when the amount of blood pumped from the heart's left ventricle with each beat (ejection fraction) is <50%.		417996009	SNOMED CT

Element: 4014 Heart Failure Type Unknown

Section: D. Pre-Procedure Information

Parent: E. Procedure Information

Coding Instruction: Indicate if it is unknown if the patient has systolic or diastolic heart failure.

Target Value: The last value between birth and current procedure

Section: Diagnostic Test

Parent: D. Pre-Procedure Information

Element: 5037 Electrocardiac Assessment Method

Coding Instruction: Indicate the method used for electrocardiac assessment.

Target Value: Last value between 30 days prior to 1st procedure (or previous procedure) and current procedure

Electrocardiac Assessment Type

Selection	Definition	Source	Code	Code System
ECG			164847006	SNOMED CT
Telemetry Monitor			10001424802	ACC NCDR
Holter Monitor			86184003	SNOMED CT
Other Electrocardiac Assessment			10001424803	ACC NCDR
None	No Electrocardiac Assessment Performed		10001424804	ACC NCDR

Element: 5032 Electrocardiac Assessment Results

Coding Instruction: Indicate the results of the electrocardiac assessment.

Note(s):

Select all abnormal electrocardiac findings supported by physician diagnosis as documented in the medical record.

Target Value: Last value between 30 days prior to 1st procedure (or previous procedure) and current procedure

ECG Results - 1.3.6.1.4.1.19376.1.4.1.6.5.941

Selection	Definition	Source	Code	Code System
Normal	No evidence that the patient has a clinically relevant electrical dysfunction of the heart (rate, rhythm).	253352002:116676008=442021009,17621005		SNOMED CT
Abnormal	Evidence that the patient has a clinically relevant electrical dysfunction of the heart (rate, rhythm).		263654008	SNOMED CT
Uninterpretable	A determination cannot be made if the patient has a clinically relevant electrical dysfunction of the heart (rate, rhythm).		1000142468	ACC NCDR

Element: 5033 New Antiarrhythmic Therapy Initiated Prior to Cath Lab

Coding Instruction: Indicate if the patient received a NEW antiarrhythmic therapy PRIOR to evaluation within the cath lab.

Note(s):

New Antiarrhythmic therapy is defined as initiation of a new drug to the patient for the purpose of controlling an abnormal rhythm.

Target Value: Last value between 30 days prior to 1st procedure (or previous procedure) and current procedure

Element: 5034 Electrocardiac Abnormality Type

Coding Instruction: Indicate the findings of the electrocardiac assessment.

Note(s): Select all abnormal electrocardiac findings that meet the definition and/or are supported by physician diagnosis.

Target Value: All values between 30 days prior to 1st procedure (or previous procedure) and current procedure

ECG Findings

Selection	Definition	Source	Code	Code System
Ventricular fibrillation (VF)	Fibrillation is an uncontrolled twitching or quivering of muscle fibers occurring in the lower chambers of the heart (ventricles).	JACC Vol. 48, No. 11, 2006 ACC/AHA/HRS Clinical Data Standards December 5, 2006:2360-96	71908006	SNOMED CT
Sustained VT	Ventricular tachycardia (VT) that is >30 seconds in duration and/or requires termination due to hemodynamic compromise in <30 seconds.		426525004	SNOMED CT
Non Sustained VT	Three or more consecutive beats of VT that self-terminate in <30 seconds.		444658006	SNOMED CT
Exercise Induced VT			1000142470	ACC NCDR
T Wave Inversions	T wave inversion is defined as secondary to depolarization abnormalities and is selected as an abnormal electrocardiac finding when there is specific physician documentation indicating this is an abnormal finding for the patient.		59931005	SNOMED CT
New Left Bundle Branch Block	New = Not previously documented		100014019	ACC NCDR
New Onset Atrial Fib	New = Not previously documented		1000142476	ACC NCDR
New Onset Atrial Flutter	New = Not previously documented		1000142477	ACC NCDR
PVC - Frequent	More than 30 premature ventricular contractions (PVCs) per hour.		1000142471	ACC NCDR

Section: Diagnostic Test		Parent: D. Pre-Procedure Information	
PVC - Infrequent	Less than or equal to 30 premature ventricular contractions (PVCs) per hour.	1000142472	ACC NCDR
2nd Degree AV Heart Block Type I	Second-degree atrioventricular block Type 1 also known as Wenckebach (Type I Mobitz) is a disease of the of the electrical conduction system of the heart (AV node) characterized by progressive prolongation of the PR interval.	54016002	SNOMED CT
2nd Degree AV Heart Block Type II	Second-degree Atrioventricular block Type 2, also known as "Mobitz II," is usually a disease of the distal conduction system (His-Purkinje System) characterized on a surface ECG by intermittently non-conducted P waves not preceded by PR prolongation and not followed by PR shortening.	28189009	SNOMED CT
3rd Degree AV Heart Block	Third-degree atrioventricular block (AV block), also known as complete heart block, is when the electrical impulse generated in the sinoatrial node (SA node) in the atrium of the heart does stimulate the ventricles to contract.	27885002	SNOMED CT
Symptomatic Bradyarrhythmia	Heart rate under 60 beats per minute that is associated with symptoms of fatigue, weakness, dizziness, sweating and/or syncope	1000142473	ACC NCDR
ST deviation >= 0.5 mm		10001424809	ACC NCDR
Other Electrocardiac Abnormality	Electrocardiac abnormality noted but the specific type is not available for selection within the registry.	1000142474	ACC NCDR

Element: 6011
Heart Rate

Coding Instruction: Indicate the patient's heart rate (beats per minute).

Note(s): During atrial fibrillation code the ventricular rate.

Target Value: Last value between 30 days prior to 1st procedure (or previous procedure) and current procedure

Element: 5036
Non-Sustained Ventricular Tachycardia Type

Coding Instruction: Indicate the non-sustained ventricular tachycardia type.

Target Value: Last value between 30 days prior to 1st procedure (or previous procedure) and current procedure

Non-Sustained VT Type

Selection	Definition	Source	Code	Code System
Symptomatic	The patient experiences symptoms indicative of non-sustained ventricular tachycardia. This may include: palpitations, dizziness or lightheadedness, shortness of breath, chest pain, or angina, near-fainting or fainting (syncope), weak pulse or no pulse.		1000142351	ACC NCDR
Newly Diagnosed	The patient does not have a documented prior diagnosis of non-sustained ventricular tachycardia.		10001424781	ACC NCDR
Other	The patient has been diagnosed with non-sustained ventricular tachycardia but the type is not consistent with selections available.		100000351	ACC NCDR

Element: 5200
Stress Test Performed

Coding Instruction: Indicate if a non-invasive stress test was performed.

Target Value: Last value between birth (or previous procedure) and current procedure

Element: 5220
Cardiac CTA Performed

Coding Instruction: Indicate if a cardiac computerized tomographic angiography (CTA) was performed.

Target Value: Any occurrence between birth (or previous procedure) and current procedure

Element: 5226
Cardiac CTA Date

Coding Instruction: Indicate the most recent date a cardiac computerized tomographic angiography (CTA) was performed.

Target Value: Last value between birth (or previous procedure) and current procedure

Vendor Instruction: Cardiac CTA Date (5226) must be Less than or Equal to Procedure Start Date and Time (7000)

Element: 5227
Cardiac CTA Results

Coding Instruction: Indicate the results of the cardiac CTA.

Section: Diagnostic Test

Parent: D. Pre-Procedure Information

Target Value: Last value between birth (or previous procedure) and current procedure

Prior Dx P Angiography Results

Selection	Definition	Source	Code	Code System
Obstructive CAD	Greater than or equal to 50% luminal diameter narrowing of an epicardial or left main stenosis.		10001424786	ACC NCDR
Non-Obstructive CAD	Less than 50% luminal diameter narrowing of an epicardial or left main stenosis.		10001424787	ACC NCDR
Unclear Severity	Coronary artery disease severity is unclear or conflicting.		100001262	ACC NCDR
No CAD	No evidence of coronary artery disease.		10001424789	ACC NCDR
Structural Disease	An abnormality of the heart that is non- coronary, meaning that it does not affect the blood vessels in the heart, but rather involves the valves, walls or chambers.		128599005	SNOMED CT

Element: 5228 Cardiac CTA Results Unknown

Coding Instruction: Indicate if the results of the cardiac CTA are unknown.

Target Value: Last value between birth (or previous procedure) and current procedure

Element: 5256 Agatston Calcium Score Assessed

Coding Instruction: Indicate if the agatston coronary calcium score was assessed.

Target Value: Any occurrence between birth (or previous procedure) and current procedure

Element: 5255 Agatston Calcium Score

Coding Instruction: Indicate the total agatston coronary calcium score.

Target Value: Last value between birth (or previous procedure) and current procedure

Supporting Definition: Agatston Calcium Score

After a coronary calcium scan, a calcium score called an Agatston score is provided. The score is based on the amount of calcium found in the coronary (heart) arteries. The test may get an Agatston score for each major artery and a total score.

Source: <https://www.nhlbi.nih.gov/health/health-topics/topics/cscan/show>

Element: 5257 Agatston Calcium Score Date

Coding Instruction: Indicate the most recent date of the agatston calcium score.

Target Value: Last value between birth (or previous procedure) and current procedure

Vendor Instruction: Agatston Calcium Score Date (5257) must be Less than or Equal to Procedure Start Date and Time (7000)

Element: 5111 LVEF Assessed (Pre-Procedure)

Coding Instruction: Indicate if the left ventricle was assessed prior to the cath lab visit.

Target Value: Any occurrence between 6 months prior to procedure and the start of the current procedure

Element: 5116 LVEF % (Pre-Procedure)

Coding Instruction: Indicate the best estimate of the most recent left ventricular ejection fraction.

Note(s):

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

If only a descriptive value is reported (i.e. Normal), enter the corresponding percentage value from the list below:

Normal = 60%

Good function = 50%

Mildly reduced = 45%

Fair function = 40%

Moderately reduced = 30%

Poor function = 25%

Severely reduced = 20%

The Left Ventricular Ejection Fraction can be assessed via invasive (i.e. LV gram) or non-invasive (i.e. Echo, MR, CT or Nuclear) testing.

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

Section: Diagnostic Test

Parent: D. Pre-Procedure Information

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

Element: 5263 Prior Diagnostic Coronary Angiography Procedure without intervention

Coding Instruction: Indicate if the patient had a prior diagnostic coronary angiography procedure without a subsequent intervention.

Note(s):

Code "No" if the patient's previous diagnostic coronary angiogram occurred at the transferring facility and the patient presents for PCI.

Code "No" if the most recent cath lab visit involved PCI.

Target Value: Any occurrence between birth (or previous procedure) and current procedure

Element: 5264 Prior Diagnostic Coronary Angiography Procedure Date

Coding Instruction: Indicate the date of the prior diagnostic coronary angiography.

Target Value: Last value between birth (or previous procedure) and current procedure

Vendor Instruction: Prior Diagnostic Coronary Angiography Procedure Date (5264) must be Less than or Equal to Procedure Start Date and Time (7000)

Element: 5265 Prior Diagnostic Coronary Angiography Procedure Results

Coding Instruction: Indicate the results of the prior diagnostic coronary angiography.

Target Value: Last value between birth (or previous procedure) and current procedure

Prior Dx P Angiography Results

Selection	Definition	Source	Code	Code System
Obstructive CAD	Greater than or equal to 50% luminal diameter narrowing of an epicardial or left main stenosis.		10001424786	ACC NCDR
Non-Obstructive CAD	Less than 50% luminal diameter narrowing of an epicardial or left main stenosis.		10001424787	ACC NCDR
Unclear Severity	Coronary artery disease severity is unclear or conflicting.		100001262	ACC NCDR
No CAD	No evidence of coronary artery disease.		10001424789	ACC NCDR
Structural Disease	An abnormality of the heart that is non- coronary, meaning that it does not affect the blood vessels in the heart, but rather involves the valves, walls or chambers.		128599005	SNOMED CT

Element: 5266 Prior Diagnostic Coronary Angiography Procedure Results Unknown

Coding Instruction: Indicate if the prior diagnostic coronary angiography results are unknown.

Target Value: Last value between birth (or previous procedure) and current procedure

Section: Stress Test

Parent: Diagnostic Test

Element: 5201 Stress Test Performed Type

Coding Instruction: Indicate the type of non-invasive stress test performed.

Target Value: Last value between birth (or previous procedure) and current procedure

Stress Test - 2.16.840.1.113883.3.3478.6.6.10

Selection	Definition	Source	Code	Code System
Stress Echocardiogram	Cardiac ultrasound procedure obtained at rest and during exercise or pharmacologic stress.		18107-3	LOINC
Exercise Stress Test (w/o imaging)	Continuous ECG recording/monitoring test (without additional imaging) performed initially at rest and then during exercise, or pharmacologic stress to detect the presence of coronary artery disease, abnormal heart rhythms, abnormal blood pressure response to exercise, or evaluate exercise tolerance and exercise-related symptoms.		18752-6	LOINC
Stress Nuclear	A nuclear stress test measures blood flow to the heart at rest, and during exercise or pharmacologic stress, by comparing the distribution throughout the heart of a radioactive dye injected into the bloodstream.		49569-7	LOINC
Stress Imaging with CMR	Magnetic resonance imaging of the heart at rest and during exercise or pharmacologic stress		58750-1	LOINC

Element: 5204 Stress Test Date

Coding Instruction: Indicate the most recent date of the stress test.

Target Value: Last value between birth (or previous procedure) and current procedure

Vendor Instruction: Most Recent Stress Test Date (5204) must be Less than or Equal to Procedure Start Date and Time (7000)

Element: 5202 Stress Test Results

Coding Instruction: Indicate the result of the non-invasive stress test.

Target Value: Last value between birth (or previous procedure) and current procedure

Stress Test Result - 1.3.6.1.4.1.19376.1.4.1.6.5.714

Selection	Definition	Source	Code	Code System
Negative	Stress Test: Exercise Stress Test (w/o imaging) - A stress test is negative when the electrocardiogram (ECG) is normal or not suggestive of ischemia. ECGs are not suggestive of ischemia when < 1 mm of horizontal or downsloping ST-segment depression or elevation for >= 60-80 milliseconds after the end of the QRS complex, either during or after exercise. Stress Test: Stress Echocardiogram - The imaging study was normal. There was no change in wall motion during the procedure. Stress Test: Stress Nuclear - The results of the imaging study revealed no myocardial perfusion defects. Stress Test: Stress Imaging with CMR - The results of the imaging study revealed no myocardial perfusion defects.		100013083	ACC NCDR
Positive	Stress Test: Exercise Stress Test (w/o imaging) - A stress test is positive when the electrocardiogram (ECG) suggests ischemia. ECGs suggestive of ischemia can be described as having >= 1 mm of horizontal or downsloping ST-segment depression or elevation for >= 60-80 milliseconds after the end of the QRS complex, either during or after exercise. It is also be suggestive of ischemia if the patient had symptoms of ischemia (i.e. chest pain), arrhythmias, and/or a fall in blood pressure during or immediately after the procedure. Stress Test: Stress Echocardiogram - The imaging study was abnormal. There were changes that reflected wall motion abnormalities during the procedure.		100013093	ACC NCDR

Section: Stress Test

Parent: Diagnostic Test

Stress Test: Stress Nuclear

- The result of the imaging study revealed one or more stress-induced myocardial perfusion defects.

Stress Test: Stress Imaging with CMR

- The result of the imaging study revealed one or more stress-induced myocardial perfusion defects.

Indeterminate	The results of the study were uninterpretable. They cannot be considered to be positive or negative.	100013094	ACC NCDR
Unavailable	The results of the study were not available.	100000646	ACC NCDR

Element: 5203

Stress Test Risk/Extent of Ischemia

Coding Instruction: Indicate the risk or extent of ischemia for the non-invasive stress test.

Target Value: Last value between birth (or previous procedure) and current procedure

Risk/Extent of Ischemia - 1.3.6.1.4.1.19376.1.4.1.6.5.901

Selection	Definition	Source	Code	Code System
Low	Low risk (<1% annual death or MI) - Low-risk treadmill score (score ≥ 5) or no new ST segment changes or exercise-induced chest pain symptoms; when achieving maximal levels of exercise - Normal or small myocardial perfusion defect at rest or with stress encumbering <5% of the myocardium* - Normal stress or no change of limited resting wall motion abnormalities during stress *Although the published data are limited; patients with these findings will probably not be at low risk in the presence of either a high-risk treadmill score or severe resting LV dysfunction (LVEF <35%).		100013097	ACC NCDR
Intermediate	Intermediate risk (1% to 3% annual death or MI) - Mild/moderate resting LV dysfunction (LVEF 35% to 49%) not readily explained by noncoronary causes - Resting perfusion abnormalities in 5% to 9.9% of the myocardium in patients without a history or prior evidence of MI ≥ 1 mm of ST-segment depression occurring with exertional symptoms - Stress-induced perfusion abnormalities encumbering 5% to 9.9% of the myocardium or stress segmental scores (in multiple segments) indicating 1 vascular territory with abnormalities but without LV dilation - Small wall motion abnormality involving 1 to 2 segments and only 1 coronary bed		100013098	ACC NCDR
High	High risk (>3% annual death or MI) - Severe resting LV dysfunction (LVEF <35%) not readily explained by noncoronary causes - Resting perfusion abnormalities $\geq 10\%$ of the myocardium in patients without prior history or evidence of MI - Stress ECG findings including ≥ 2 mm of ST-segment depression at low workload or persisting into recovery, exercise-induced ST-segment elevation, or exercise-induced VT/VF - Severe stress-induced LV dysfunction (peak exercise LVEF <45% or drop in LVEF with stress $\geq 10\%$) - Stress-induced perfusion abnormalities encumbering $\geq 10\%$ myocardium or stress segmental scores indicating multiple vascular territories with abnormalities - Stress-induced LV dilation - Inducible wall motion abnormality (involving >2 segments or 2 coronary beds) - Wall motion abnormality developing at low dose of dobutamine (≤ 10 mg/kg/min) or at a low heart rate (< 120 beats/min)		100000584	ACC NCDR
Unavailable	The results of the study were not available.		100000646	ACC NCDR

Section: Pre-Procedure Medications

Parent: D. Pre-Procedure Information

Element: 6986

PreProcedure Medication Code

Coding Instruction: Indicate the assigned identification number associated with the medications the patient was prescribed or received.

Note: The medications that should be collected in your application are controlled by a Medication Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application. Each medication in the Medication Master file is assigned a timing indicator. This indicator is used to separate procedural medications from medications prescribed at discharge. The separation of these medications is depicted on the data collection form.

Target Value: N/A

Vendor Instruction: PreProcedure Medication Code (6986) should not be duplicated in a procedure

Pre-Procedure Medication - 1.3.6.1.4.1.19376.1.4.1.6.5.216

Selection	Definition	Source	Code	Code System
Aspirin			1191	RxNorm
Beta Blocker			33252009	SNOMED CT
Calcium Channel Blocking Agent			48698004	SNOMED CT
Antiarrhythmic Agent Other			100014162	ACC NCDR
Long Acting Nitrate			31970009	SNOMED CT
Ranolazine			35829	RxNorm
Statin			96302009	SNOMED CT
Non-Statin			100014161	ACC NCDR
Proprotein Convertase Subtilisin Kexin Type 9 Inhibitor			112000000694	ACC NCDR
Angiotensin Converting Enzyme Inhibitor			41549009	SNOMED CT
Angiotensin II Receptor Blocker			372913009	SNOMED CT
Sacubitril and Valsartan			1656341	RxNorm

Element: 6991

PreProcedure Medication Administered

Coding Instruction: Indicate if the patient was prescribed or received the medication.

Note(s):

Code 'No' if a patient was given a sublingual, IV, or short acting formula of one of these medications.

Code 'Yes' if the patient received an oral (long-acting formula) of the medication after admission but prior to this cath lab visit.

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

Pre-Procedure Y/N/C Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.1004

Selection	Definition	Source	Code	Code System
Yes			100001247	ACC NCDR
No			112000000168	ACC NCDR
Contraindicated	A contraindication is a specific situation in which a drug should not be used because a clinician deems it may be harmful to the patient. Examples include allergy, adverse drug interaction, comorbid condition, pregnancy.		100013074	ACC NCDR

Section: SA Questionnaire

Parent: D. Pre-Procedure Information

Element: 5301 Q1a: Difficulty walking indoors on level ground

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 1a "Over the past four weeks, as a result of your angina, how much difficulty have you had in: walking indoors on level ground?"

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

SAQ Response Question 1

Selection	Definition	Source	Code	Code System
Extremely limited			100001173	ACC NCDR
Quite a bit limited			100001171	ACC NCDR
Moderately limited			100001170	ACC NCDR
Slightly limited			100014042	ACC NCDR
Not at all limited			100001167	ACC NCDR
Limited for other reasons or did not do these activities			100014041	ACC NCDR

Element: 5302 Q1b: Difficulty gardening, vacuuming or carrying groceries

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 1b "Over the past four weeks, as a result of your angina, how much difficulty have you had in: gardening, vacuuming, or carrying groceries?"

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

SAQ Response Question 1

Selection	Definition	Source	Code	Code System
Extremely limited			100001173	ACC NCDR
Quite a bit limited			100001171	ACC NCDR
Moderately limited			100001170	ACC NCDR
Slightly limited			100014042	ACC NCDR
Not at all limited			100001167	ACC NCDR
Limited for other reasons or did not do these activities			100014041	ACC NCDR

Element: 5303 Q1c: Difficulty lifting or moving heavy objects (e.g. furniture, children)

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 1c "Over the past four weeks, as a result of your angina, how much difficulty have you had in: lifting or moving heavy objects (e.g. furniture, children)?"

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

SAQ Response Question 1

Selection	Definition	Source	Code	Code System
Extremely limited			100001173	ACC NCDR
Quite a bit limited			100001171	ACC NCDR
Moderately limited			100001170	ACC NCDR
Slightly limited			100014042	ACC NCDR
Not at all limited			100001167	ACC NCDR
Limited for other reasons or did not do these activities			100014041	ACC NCDR

Element: 5305 Q2: Had chest pain, chest tightness, or angina

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 2 "Over the past four weeks, on average, how many times have you: Had chest pain, chest tightness, or angina?"

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

SAQ Response Question 2 and 3

Selection	Definition	Source	Code	Code System
4 or more times per day			100014043	ACC NCDR
1 - 3 times per day			100014044	ACC NCDR
3 or more times per week but not every day			100014045	ACC NCDR
1 - 2 times per week			100014046	ACC NCDR
Less than once a week			100014047	ACC NCDR
None over the past 4 weeks			100014048	ACC NCDR

Element: 5310 Q3: Had to take nitroglycerin (Tablets or spray) for your chest pain, chest tightness or angina

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 3 "Over the past four weeks, on average, how many times have you: Had to take nitroglycerin (Tablets or spray) for your chest pain, chest tightness or angina?"

Section: SA Questionnaire

Parent: D. Pre-Procedure Information

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

SAQ Response Question 2 and 3

Selection	Definition	Source	Code	Code System
4 or more times per day			100014043	ACC NCDR
1 - 3 times per day			100014044	ACC NCDR
3 or more times per week but not every day			100014045	ACC NCDR
1 - 2 times per week			100014046	ACC NCDR
Less than once a week			100014047	ACC NCDR
None over the past 4 weeks			100014048	ACC NCDR

Element: 5315

Q4: Chest pain, chest tightness or angina limited your enjoyment of life

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 4 "Over the past four weeks, on average, how many times have you: Chest pain, chest tightness or angina limited your enjoyment of life?"

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

SAQ Response Question 4

Selection	Definition	Source	Code	Code System
It has extremely limited my enjoyment of life			100014049	ACC NCDR
It has limited my enjoyment of life quite a bit			100014050	ACC NCDR
It has moderately limited my enjoyment of life			100014051	ACC NCDR
It has slightly limited my enjoyment of life			100014052	ACC NCDR
It has not limited my enjoyment of life at all			100014053	ACC NCDR

Element: 5320

Q5: How would you feel about this

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 5 "If you had to spend the rest of your life with your chest pain, chest tightness or angina the way it is right now how would you feel about that?"

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

SAQ Response Question 5

Selection	Definition	Source	Code	Code System
Not satisfied at all			100014054	ACC NCDR
Mostly dissatisfied			100014055	ACC NCDR
Somewhat satisfied			100001197	ACC NCDR
Mostly satisfied			100014057	ACC NCDR
Completely satisfied			100014058	ACC NCDR

Section: Rose Dyspnea Scale

Parent: D. Pre-Procedure Information

Element: 5330	Rose Dyspnea Scale Question 1
Coding Instruction:	Indicate the patient's response to the Rose Dyspnea Scale Questionnaire Question 1 "Do you get short of breath when hurrying on level ground or walking up a slight hill?"
Target Value:	The last value between 6 months prior to current procedure and current procedure
Element: 5335	Rose Dyspnea Scale Question 2
Coding Instruction:	Indicate the patient's response to the Rose Dyspnea Scale Questionnaire Question 2 "Do you get short of breath when walking with other people your own age on level ground?"
Target Value:	The last value between 6 months prior to current procedure and current procedure
Element: 5340	Rose Dyspnea Scale Question 3
Coding Instruction:	Indicate the patient's response to the Rose Dyspnea Scale Questionnaire Question 3 "Do you get short of breath when walking at your own pace on level ground?"
Target Value:	The last value between 6 months prior to current procedure and current procedure
Element: 5345	Rose Dyspnea Scale Question 4
Coding Instruction:	Indicate the patient's response to the Rose Dyspnea Scale Questionnaire Question 4 "Do you get short of breath when washing or dressing?"
Target Value:	The last value between 6 months prior to current procedure and current procedure

Section: Closure Methods
Parent: E. Procedure Information
Element: 7330 Closure Device Counter

Coding Instruction: The software assigned closure device counter should start at 1 and be incremented by one for each closure device used during or after the cath lab visit.

Note(s):
 The closure device counter number should be assigned sequentially in ascending order. Do not skip numbers.

The closure device counter is reset back to 1 for each new cath lab visit.

Target Value: N/A

Element: 7331 Arterial Access Closure Method

Coding Instruction: Indicate the arterial closure methods used in chronological order regardless of whether or not they provided hemostasis. The same closure method may be repeated.

Note(s):
 If multiple access sites were utilized during the procedure, only provide those closure methods used for the site identified in Element Ref# 7320 (Arterial Access Site).

The closure method devices that should be collected in your application are controlled by a Closure Method Device Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: All values between start of procedure and next procedure or discharge

Element: 7333 Closure Method Unique Device Identifier

Coding Instruction: Indicate the direct identifier portion of the Unique Device Identifier (UDI) associated with the closure method utilized. This ID is provided by the device manufacturer, and is either a GTIN or HIBC number.

Target Value: The value on current procedure

Supporting Definition: **Unique Device Identifier (UDI)**

An identifier that is the main (primary) lookup for a medical device product and meets the requirements to uniquely identify a device through its distribution and use. This value is supplied to the FDA by the manufacturer.

Source: US FDA

Vendor Instruction: Reserved for Future use. NCDR will provide additional information once FDA has established a timeline for implementation. The application must create these fields (as placeholders) during initial development and vendor certification of the registry; and demonstrate that they can be transmitted in the export file.

Section: Pre-Procedure Labs

Parent: F. Labs

Element: 6090	PreProcedure Troponin I
Coding Instruction:	Indicate the Troponin I result in ng/mL.
Note(s):	This may include POC (Point of Care) testing results.
Target Value:	The last value between date of arrival and current procedure
Supporting Definition:	Troponin I The troponin test is used to help diagnose a heart attack, to detect and evaluate mild to severe heart injury, and to distinguish chest pain that may be due to other causes. Troponin values can remain high for 1-2 weeks after a heart attack. The test is not affected by damage to other muscles, so injections, accidents, and drugs that can damage muscle do not affect troponin levels. Troponin may rise following strenuous exercise, although in the absence of signs and symptoms of heart disease, it is usually of no medical significance. Source: http://s.details.loinc.org/LOINC/42757-5.html?sections=Simple
Element: 6091	PreProcedure Troponin I Not Drawn
Coding Instruction:	Indicate if the Troponin I was not obtained at your facility.
Target Value:	The last value between date of arrival and current procedure
Element: 6095	Troponin T (Pre-Procedure)
Coding Instruction:	Indicate the Troponin T result in ng/mL.
Note(s):	This may include POC (Point of Care) testing results.
Target Value:	The last value between date of arrival and current procedure
Supporting Definition:	Troponin T The troponin test is used to help diagnose a heart attack, to detect and evaluate mild to severe heart injury, and to distinguish chest pain that may be due to other causes. Troponin values can remain high for 1-2 weeks after a heart attack. The test is not affected by damage to other muscles, so injections, accidents, and drugs that can damage muscle do not affect troponin levels. Troponin may rise following strenuous exercise, although in the absence of signs and symptoms of heart disease, it is usually of no medical significance. Source: http://s.details.loinc.org/LOINC/48425-3.html?sections=Simple
Element: 6096	Troponin T Not Drawn (Pre-Procedure)
Coding Instruction:	Indicate if the Troponin T was not obtained at your facility.
Target Value:	The last value between date of arrival and current procedure
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: 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

Section: Pre-Procedure Labs

Parent: F. Labs

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: 6100 Total Cholesterol

Coding Instruction: Indicate the cholesterol level mg/dL.

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

Supporting Definition: Cholesterol

Cholesterol is a lipidic, waxy alcohol found in the cell membranes and transported in the blood plasma of all animals. It is an essential component of mammalian cell membranes where it establishes proper membrane permeability and fluidity. Cholesterol is the principal sterol synthesized by animals, but small quantities are synthesized in other eukaryotes, such as plants and fungi. It is almost completely absent among prokaryotes, which include bacteria. Cholesterol is classified as a sterol.

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Element: 6101 Total Cholesterol Not Drawn

Coding Instruction: Indicate if the total cholesterol was not collected.

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

Element: 6105 High-density Lipoprotein

Coding Instruction: Indicate the high-density lipoprotein (HDL) level mg/dL.

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

Supporting Definition: High-density lipoprotein

High-density lipoprotein (HDL) is one of the five major groups of lipoproteins (chylomicrons, VLDL, IDL, LDL, HDL) which enable lipids like cholesterol and triglycerides to be transported within the water based blood stream. In healthy individuals, about thirty percent of blood cholesterol is carried by HDL. High levels of cholesterol in the blood have been linked to damage to arteries and cardiovascular disease.

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Element: 6106 High-density Lipoprotein Not Drawn

Coding Instruction: Indicate if the high density lipoprotein (HDL) cholesterol value was not drawn.

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

Section: Post-Procedure Labs

Parent: F. Labs

Element: 8515	PostProcedure Troponin I
Coding Instruction:	Indicate the Troponin I result in ng/mL.
Note(s):	This may include POC (Point of Care) testing results.
Target Value:	The highest value between 6 hours after current procedure and 24 hours after current procedure
Supporting Definition:	Troponin I The troponin test is used to help diagnose a heart attack, to detect and evaluate mild to severe heart injury, and to distinguish chest pain that may be due to other causes. Troponin values can remain high for 1-2 weeks after a heart attack. The test is not affected by damage to other muscles, so injections, accidents, and drugs that can damage muscle do not affect troponin levels. Troponin may rise following strenuous exercise, although in the absence of signs and symptoms of heart disease, it is usually of no medical significance. Source: http://s.details.loinc.org/LOINC/42757-5.html?sections=Simple
Element: 8516	PostProcedure Troponin I Not Drawn
Coding Instruction:	Indicate if the Troponin I was not obtained at your facility.
Target Value:	The highest value between 6 hours after current procedure and 24 hours after current procedure
Element: 8520	Troponin T (Post-Procedure)
Coding Instruction:	Indicate the Troponin T result in ng/mL.
Note(s):	This may include POC (Point of Care) testing results.
Target Value:	The highest value between 6 hours after current procedure and 24 hours after current procedure
Supporting Definition:	Troponin T The troponin test is used to help diagnose a heart attack, to detect and evaluate mild to severe heart injury, and to distinguish chest pain that may be due to other causes. Troponin values can remain high for 1-2 weeks after a heart attack. The test is not affected by damage to other muscles, so injections, accidents, and drugs that can damage muscle do not affect troponin levels. Troponin may rise following strenuous exercise, although in the absence of signs and symptoms of heart disease, it is usually of no medical significance. Source: http://s.details.loinc.org/LOINC/48425-3.html?sections=Simple
Element: 8521	Troponin T Not Drawn (Post-Procedure)
Coding Instruction:	Indicate if the Troponin T was not obtained at your facility.
Target Value:	The highest value between 6 hours after current procedure and 24 hours after current procedure
Element: 8510	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 current procedure and 5 days after current procedure or until next procedure or 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: 8511	Creatinine Not Drawn
Coding Instruction:	Indicate if a post-procedure creatinine level was not drawn.
Target Value:	The highest value between current procedure and 5 days after current procedure or until next procedure or discharge
Element: 8505	Hemoglobin
Coding Instruction:	Indicate the hemoglobin (Hgb) value in g/dL.
Target Value:	The lowest value between current procedure and 72 hours after current procedure
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"

Section: Post-Procedure Labs

Parent: F. Labs

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: 8506

Hemoglobin Not Drawn

Coding Instruction: Indicate if the hemoglobin was not drawn.

Target Value: The lowest value between current procedure and 72 hours after current procedure

Section: G. Cath Lab Visit
Parent: E. Procedure Information
Element: 7400

Cath Lab Visit Indication(s)

Coding Instruction: Indicate the patient symptoms or condition prompting the cath lab visit.

Note(s):

The Cath Lab Indications collected in this field by your application are controlled by Cath Lab Indication Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The value on current procedure

Vendor Instruction: When Cath Lab Visit Indication(s) (7400) is [Resuscitated Cardiac Arrest] then Cardiac Arrest Out of Hospital (4630) must be [Yes] *or* Cardiac Arrest at Transferring Facility (4635) must be [Yes] *or* Cardiac Arrest at this Facility (7340) must be [Yes]

When Cath Lab Visit Indication(s) (7400) is [ACS > 24 hrs] then Percutaneous Coronary Intervention Indication (7825) cannot be in [Stable angina, CAD (without ischemic Sx), Other PCI Indication]

When Cath Lab Visit Indication(s) (7400) is [ACS <= 24 hrs] then Percutaneous Coronary Intervention Indication (7825) cannot be in [Stable angina, Other PCI Indication]

For Multi-Select: Cannot select the option [ACS <= 24 hrs] with option(s): [ACS > 24 hrs]

For Multi-Select: Cannot select the option [New Onset Angina <= 2 months] with option(s): [Worsening Angina]

For Multi-Select: Cannot select the option [Stable Known CAD] with option(s): [ACS <= 24 hrs, ACS > 24 hrs, New Onset Angina <= 2 months, Worsening Angina, Suspected CAD, Resuscitated Cardiac Arrest]

When Cath Lab Visit Indication(s) (7400) is [Stable Known CAD] *then* Prior Coronary Artery Bypass Graft (4515) must be [Yes] *or* Prior Myocardial Infarction (4291) must be [Yes] *or* Prior Diagnostic Coronary Angiography Procedure without intervention (5263) must be [Yes] *or* Prior Percutaneous Coronary Intervention (4495) must be [Yes], *or* Cardiac CTA Results (5227) must be [Obstructive CAD] *or* at least one Percutaneous Coronary Intervention (PCI) (7050) is [Yes] in the episode

When Cath Lab Visit Indication(s) (7400) is [Stable Known CAD], Percutaneous Coronary Intervention Indication (7825) cannot be in [STEMI - Immediate PCI for Acute STEMI, STEMI - Stable (<= 12 hrs from Sx), STEMI - Stable (> 12 hrs from Sx), STEMI (after successful lytics), STEMI - Rescue (After unsuccessful lytics), New Onset Angina <= 2 months, NSTE-ACS, Other PCI Indication]

Indications for Cath Lab Visit - 2.16.840.1.113883.3.3478.6.7.1

Selection	Definition	Source	Code	Code System
ACS <= 24 hrs	Acute Coronary Syndrome (unstable angina, NSTEMI or STEMI) is <= 24 hours prior to cath lab presentation. Note: For patients presenting with ACS choose the most applicable selection between 'ACS <=24hrs' and 'ACS >24hrs' these options may not be selected together.		1000142358	ACC NCDR
ACS > 24 hrs	Acute Coronary Syndrome (unstable angina, NSTEMI or STEMI) is >24 hours prior to cath lab presentation (STEMI/NSTEMI <=7 days from symptoms). Note: For patients presenting with ACS choose the most applicable selection between 'ACS <=24hrs' and 'ACS >24hrs' these options may not be selected together.		1000142359	ACC NCDR
New Onset Angina <= 2 months	New onset angina (typical or atypical angina), within two months of cath lab presentation.		233821000	SNOMED CT
Worsening Angina	The patient has a history of angina that has increased in severity or frequency within the last 2 months.		10001424790	ACC NCDR
Resuscitated Cardiac Arrest	The patient presents status post cardiac arrest.		233927002	SNOMED CT
Stable Known CAD	The patient is stable (without signs or symptoms of acute coronary syndrome, new onset or worsening angina or hemodynamic instability) and has known coronary artery disease >=50% in at least one vessel.		100014001	ACC NCDR
Suspected CAD	Suspected Coronary Artery Disease, no prior documentation of CAD >= 50 % in a vessel.		100014003	ACC NCDR
Valvular Disease	There is disease of at least one heart valve.		368009	SNOMED CT
Pericardial Disease	Pericardial disease is inflammation of the pericardial sac.		55855009	SNOMED CT
Cardiac arrhythmia	Cardiac arrhythmia is also known as cardiac dysrhythmia or irregular heartbeat, a group of conditions in which the heartbeat is irregular, too fast, or too slow.		698247007	SNOMED CT
Cardiomyopathy	Cardiomyopathy, is a disease of the heart muscle. Types of cardiomyopathy include; hypertrophic cardiomyopathy, dilated cardiomyopathy, restrictive cardiomyopathy, arrhythmogenic right ventricular dysplasia and Takotsubo cardiomyopathy.		85898001	SNOMED CT

Section: G. Cath Lab Visit		Parent: E. Procedure Information		
LV Dysfunction	LV dysfunction: in left-sided or left ventricular heart failure, the left side of the heart must work harder to pump the same amount of blood. The two types of LV dysfunction are systolic and diastolic heart failure.		134401001	SNOMED CT
Syncope	Syncope presents with an abrupt, transient, complete loss of consciousness, associated with inability to maintain postural tone, with rapid and spontaneous recovery.	2017 ACC/AHA/HRS Guideline for the Evaluation and Management of Patients With Syncope: A Report of the ACC/AHA Task Force on Clinical Practice Guidelines and the HRS. Win-Kuang Shen, Robert S. Sheldon, David G. Benditt, Mitchell I. Cohen, Daniel E. Forman, Zachary D. Goldberger, Blair P. Grubb, Mohamed H. Hamdan, Andrew D. Krahn, Mark S. Link, Brian Olshansky, Satish R. Raj, Roopinder Kaur Sandhu, Dan Sorajja, Benjamin C. Sun, and Clyde W. Yancy	271594007	SNOMED CT
Post Cardiac Transplant	A cardiac transplant is a heart transplanted from a donor.		100014002	ACC NCDR
Pre-operative Evaluation	Cardiac evaluation of the coronary arteries and/or LV function.		1000142360	ACC NCDR
Evaluation for Exercise Clearance	The patient presents for clearance to participate in an exercise program or cardiac rehab.		10001424791	ACC NCDR
Other	Not otherwise specified.		100000351	ACC NCDR

Element: 7405 Chest Pain Symptom Assessment

Coding Instruction: Indicate the chest pain symptom assessment as diagnosed by the physician or described by the patient.

Target Value: The value on current procedure

Supporting Definition: Source

Patel M, Calhoon J, Dehmer G, et al. ACC/AATS/AHA/ASE/ASNC/SCAI/SCCT/STS 2017 Appropriate Use Criteria for Coronary Revascularization in Patients with Stable Ischemic Heart Disease. J Am Coll Cardiol. 2017 May, 69 (17) 2212–2241. <https://doi.org/10.1016/j.jacc.2017.02.001>

Carr J, Hendel R, White R, et al. 2013 Appropriate Utilization of Cardiovascular Imaging. J Am Coll Cardiol. 2013 May, 61 (21) 2199–2206. <https://doi.org/10.1016/j.jacc.2013.02.010>

Source:

Vendor Instruction: When Chest Pain Symptom Assessment (7405) is [Non-anginal Chest Pain] then Cath Lab Visit Indication(s) (7400) cannot be in [New Onset Angina <= 2 months, Worsening Angina]

When Chest Pain Symptom Assessment (7405) is [Asymptomatic] then Cath Lab Visit Indication(s) (7400) cannot be in [New Onset Angina <= 2 months, Worsening Angina]

Chest Pain Symptom Type - 1.3.6.1.4.1.19376.1.4.1.6.5.771

Selection	Definition	Source	Code	Code System
Typical Angina	Symptoms meet all three of the characteristics of angina (also known as definite): 1. Substernal chest discomfort with a characteristic quality and duration that is 2. provoked by exertion or emotional stress and 3. relieved by rest or nitroglycerin.		429559004	SNOMED CT
Atypical angina	Symptoms meet two of the three characteristics of typical angina (also known as probable).		371807002	SNOMED CT
Non-anginal Chest Pain	The patient meets one, or none of the typical characteristics of angina.		100001275	ACC NCDR
Asymptomatic	No typical or atypical symptoms or non-anginal chest pain.		100000932	ACC NCDR

Element: 7410 Cardiovascular Instability

Coding Instruction: Indicate if the patient has cardiovascular instability. Cardiovascular instability includes, but is not limited to, persistent ischemic symptoms (such as chest pain or ST elevation), cardiogenic shock, ventricular arrhythmias, symptoms of acute heart failure, or hemodynamic instability (not cardiogenic shock).

Target Value: The value on current procedure

Supporting Definition: Cardiac Instability

Cardiac Instability is defined as persistent ischemic symptoms, decompensating heart failure, ventricular arrhythmias, cardiogenic shock and hemodynamic instability (not cardiogenic shock).

Source: ACC/AATS/AHA/ASE/ASNC/SCAI/SCCT/STS 2016 Appropriate Use Criteria for Coronary Revascularization in Patients with Acute Coronary Syndromes: A Report of the American College of Cardiology Appropriate Use Criteria Task Force, American Association for Thoracic Surgery, American Heart Association, American Society of Echocardiography, American Society of Nuclear Cardiology, Society for Cardiovascular Angiography and Interventions, Society of Cardiovascular Computed Tomography, and the Society of Thoracic Surgeons. www.onlinejacc.org/lookup/doi/10.1016/j.jacc.2016.10.034

Element: 7415 Cardiovascular Instability Type

Section: G. Cath Lab Visit

Parent: E. Procedure Information

Coding Instruction: Indicate the cardiovascular instability type.

Target Value: The value on current procedure

Vendor Instruction: For Multi-Select: Cannot select the option [Hemodynamic Instability (not cardiogenic shock)] with option(s): [Cardiogenic Shock, Refractory Cardiogenic Shock]

Cardiovascular Instability Type

Selection	Definition	Source	Code	Code System
Persistent Ischemic Symptoms (chest pain, STE)	Persistent ischemic symptoms as demonstrated by chest pain, angina and/or ST segment elevation.		100014006	ACC NCDR
Hemodynamic Instability (not cardiogenic shock)	Hemodynamic instability can include periods of reduced, unstable or abnormal blood pressure, and/or hypo-perfusion that does not support normal organ perfusion or function. The hemodynamic compromise (with or without extraordinary supportive therapy) must persist for at least 30 min. Does NOT include cardiogenic shock.		422773005	SNOMED CT
Ventricular arrhythmias	Ventricular arrhythmias are abnormal rapid heart rhythms that originate in the ventricles. Ventricular arrhythmias include ventricular tachycardia and ventricular fibrillation.		44103008	SNOMED CT
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.		89138009	SNOMED CT
Acute Heart Failure Symptoms	Acute heart failure typically have symptoms such as difficulty breathing, leg or feet swelling, pulmonary edema on chest x-ray or jugular venous distension. A low ejection fraction alone, without clinical evidence of heart failure does not qualify.		100014007	ACC NCDR
Refractory Cardiogenic Shock	Refractory cardiogenic shock is defined as acute hypotension with systolic blood pressure <90mmHg (or cardiac index <2.0l/min/m2) for more than 10 minutes despite mechanical support or pharmacologic support with at least two vasopressor agents.		276227005	SNOMED CT

Element: 7420

Ventricular Support

Coding Instruction: Indicate if the patient required any type of ventricular support (i.e. IV vasopressors or mechanical).

Target Value: Any occurrence on current procedure

Vendor Instruction: When Ventricular Support (7420) is [Yes] then both Pharmacologic Vasopressor Support (7421) *and* Mechanical Ventricular Support (7422) cannot be [No]

Element: 7421

Pharmacologic Vasopressor Support

Coding Instruction: Indicate if the patient required pharmacologic vasopressor support.

Target Value: Any occurrence on current procedure

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.

Section: G. Cath Lab Visit

Parent: E. Procedure Information

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
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
Biventricular Axial Flow Impella Catheters (BiPella)			112000001980	ACC NCDR
Combined Extracorporeal Membrane Oxygenation and Percutaneous Left Ventricular Assist Device (ECPELLA)			112000002051	ACC NCDR
Blinded - Device Unknown			1000142352	ACC NCDR

Element: 7424 Mechanical Ventricular Support Timing

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

Target Value: Any occurrence on current procedure

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

Element: 7465 Evaluation for Surgery Type

Coding Instruction: Indicate the type of surgery for which the diagnostic coronary angiography is being performed.

Target Value: The value on current procedure

Pre-Operative Evaluation

Selection	Definition	Source	Code	Code System
Cardiac Surgery	Any surgery involving the coronary arteries, valves, or a structural repair of the heart.		64915003	SNOMED CT
Non-Cardiac Surgery	Any surgery involving the aortic arch or other body system.		100014022	ACC NCDR

Element: 7466 Functional Capacity

Coding Instruction: Indicate the functional capacity of the patient as documented by the physician in the medical record.

Note(s):

There should be explicit documentation as part of the pre-op evaluation indicating functional capacity to determine whether the patient should proceed to planned surgery.

Metabolic equivalent of task (MET) is a metabolic unit used to quantify the estimated energy requirements of various activities.

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

Supporting Definition: Functional Capacity

Functional capacity (measured in METS) measures the ability (or limitation) of a patient to perform various activities.

Source: Fleisher LA, Beckman JA, Brown KA, et al. 2009 ACCF/AHA Focused Update on Perioperative Beta Blockade Incorporated into the ACC/AHA 2007 Guidelines on Perioperative Cardiovascular Evaluation and Care for Noncardiac Surgery. J Am Coll Cardiol 2009;54:e13-118.

Section: G. Cath Lab Visit
Parent: E. Procedure Information
Functional Capacity

Selection	Definition	Source	Code	Code System
< 4 METS	1 MET is the equivalent of energy required at rest.		100014023	ACC NCDR
>= 4 METS without Symptoms	>= 4 METS without symptoms of chest pain or anginal equivalent. 4 METS is the equivalent of energy required to walk slowly for two blocks and/or perform light work around the house.		100014025	ACC NCDR
>= 4 METS with Symptoms	>= 4 METS with symptoms of chest pain or anginal equivalent. 4 METS is the equivalent of energy required to walk slowly for two blocks and/or perform light work around the house.		100014024	ACC NCDR

Element: 7467 Functional Capacity Unknown

Coding Instruction: Indicate if the functional capacity of the patient is unknown.

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

Element: 7468 Surgical Risk

Coding Instruction: Indicate the surgical risk category as documented by the physician in the medical record.

Note(s):

There should be explicit documentation by the physician indicating surgical risk to support the risk profile documented. When surgical risk is not documented, select low risk.

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

Supporting Definition: Surgical Risk

Surgical risk is assessed based on the patient's history of cardiac and co-morbid diseases, functional capacity, as well as the urgency and magnitude of the surgical procedure. Evaluation of surgical risk is determined by the physician, and outlined according to the ACC/AHA Guidelines on Perioperative Cardiovascular Evaluation and Care for Noncardiac Surgery.

Source: Fleisher LA, Beckman JA, Brown KA, et al. 2009 ACCF/AHA Focused Update on Perioperative Beta Blockade Incorporated into the ACC/AHA 2007 Guidelines on Perioperative Cardiovascular Evaluation and Care for Noncardiac Surgery. J Am Coll Cardiol 2009;54:e13-118

Surgical Risk

Selection	Definition	Source	Code	Code System
Low			112000000375	ACC NCDR
Intermediate			112000000376	ACC NCDR
High Risk: Vascular	High risk vascular surgery includes aortic and other major vascular surgery, and peripheral vascular surgery. This does not include non-surgical vascular procedures that are interventions.		100014029	ACC NCDR
High Risk: Non-Vascular	None		100014030	ACC NCDR

Element: 7469 Solid Organ Transplant Surgery

Coding Instruction: Indicate if the pending surgery involves a solid organ transplant.

Target Value: The value on current procedure

Element: 7470 Solid Organ Transplant Donor

Coding Instruction: Indicate if the patient is the organ donor.

Target Value: The value on current procedure

Element: 7471 Solid Organ Transplant Type

Coding Instruction: Indicate the type of organ transplant surgery planned.

Target Value: The value on current procedure

Transplanted Organ Type

Selection	Definition	Source	Code	Code System
Heart			32413006	SNOMED CT
Kidney			70536003	SNOMED CT
Liver			18027006	SNOMED CT
Lung			88039007	SNOMED CT
Pancreas			100014027	ACC NCDR

Section: G. Cath Lab Visit

Parent: E. Procedure Information

Other Organ

1000142347

ACC NCDR

Section: Valvular Disease Stenosis

Parent: G. Cath Lab Visit

Element: 7450 Valvular Disease Stenosis Type

Coding Instruction: Indicate the cardiac valve(s) with stenosis as diagnosed by the physician.

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

Vendor Instruction: A Valvular Disease Stenosis Type (7450) must not be duplicated in a procedure

Valvular Disease Stenosis Type

Selection	Definition	Source	Code	Code System
Aortic Stenosis			60573004	SNOMED CT
Mitral Stenosis			79619009	SNOMED CT
Pulmonic Stenosis			56786000	SNOMED CT
Tricuspid Stenosis			49915006	SNOMED CT

Element: 7451 Valvular Disease Stenosis Severity

Coding Instruction: Indicate the cardiac valve stenosis severity.

Note(s): When a range is provided, code the highest value.

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

Stenosis Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.724

Selection	Definition	Source	Code	Code System
Mild			112000000377	ACC NCDR
Moderate			112000000378	ACC NCDR
Severe			112000000379	ACC NCDR

Section: Valvular Disease Regurgitation

Parent: G. Cath Lab Visit

Element: 7455 Valvular Disease Regurgitation Type

Coding Instruction: Indicate the cardiac valve(s) with regurgitation as diagnosed by the physician.

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

Vendor Instruction: A Valvular Disease Regurgitation Type (7455) must not be duplicated in a procedure

Valvular Disease Regurgitation Type

Selection	Definition	Source	Code	Code System
Aortic Regurgitation	A condition that occurs when the heart's aortic valve doesn't close tightly, leading to the backward flow of blood from the aorta into the left ventricle. Also called aortic insufficiency.		60234000	SNOMED CT
Mitral Regurgitation	A condition that occurs when the heart's mitral valve doesn't close tightly, causing blood to leak backward, through the mitral valve, each time the left ventricle contracts. Also called mitral valve regurgitation, mitral insufficiency or mitral incompetence.		48724000	SNOMED CT
Pulmonic Regurgitation	A condition that occurs when an incompetent pulmonary valve allows blood to flow backward from the pulmonary artery into the right ventricle during diastole. Also called pulmonic regurgitation, pulmonary insufficiency or pulmonic incompetence.		91434003	SNOMED CT
Tricuspid Regurgitation	A condition that occurs when the tricuspid valve fails to close properly during systole, allowing blood to flow backward into the right atria. Also called tricuspid insufficiency.		111287006	SNOMED CT

Element: 7456 Valvular Disease Regurgitation Severity

Coding Instruction: Indicate the cardiac valve regurgitation severity.

Note(s): When a range is provided, code the highest value

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

Regurgitation Severity - 1.3.6.1.4.1.19376.1.4.1.6.5.728

Selection	Definition	Source	Code	Code System
Mild (1+)			112000000380	ACC NCDR
Moderate (2+)			112000000381	ACC NCDR
Moderately Severe (3+)			1000142345	ACC NCDR
Severe (4+)			112000000382	ACC NCDR

Section: H. Coronary Anatomy

Parent: E. Procedure Information

Element: 7500 Coronary Circulation Dominance

Coding Instruction: Indicate the dominance of the coronary anatomy (whether the posterior descending artery comes from the right or left vessel system).

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

Dominance

Selection	Definition	Source	Code	Code System
Left	The posterior descending artery (PDA) and posterolateral artery (PLA) arises from the left circumflex artery.		253729004	SNOMED CT
Right	The posterior descending artery (PDA) and posterolateral artery (PLA) arises from the right coronary artery.		253728007	SNOMED CT
Co-dominant	The right coronary artery supplies the posterior descending artery (PDA) and the circumflex supplies the posterolateral artery (PLA). Thus, there is approximately equal contribution to the inferior surface of the left ventricle from both the left circumflex and right coronary arteries.		253730009	SNOMED CT

Element: 7505 Native Vessel with Stenosis >= 50%

Coding Instruction: Indicate if any native vessel had a lesion >= 50%.

Note(s):

Identify the disease found in vessels >=2mm.

Identify disease found in vessels <2mm when PCI is intended for the lesion and/or the patients anatomy is <2mm.

It is acceptable to use prior cath lab visit information, as long as there have been no changes in coronary anatomy. This includes stenosis determined via cardiac catheterization at another facility. This does not include collaterals.

Stenosis represents the percentage diameter reduction, ranging from 0 to 100, associated with the identified vessels. Percent stenosis at its maximal point is estimated to be the amount of reduction in the diameter of the "normal" reference vessel proximal to the lesion. In instances where multiple lesions are present, enter the single highest percent stenosis noted.

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

Element: 7525 Graft Vessel with Stenosis >= 50%

Coding Instruction: Indicate if any graft vessel had a lesion >= 50%.

Note(s):

Identify the disease found in vessels >=2mm.

Identify disease found in vessels <2mm when PCI is intended for the lesion and/or the patients anatomy is <2m.

It is acceptable to use prior cath lab visit information, as long as there have been no changes in coronary anatomy. This includes stenosis determined via cardiac catheterization at another facility. This does not include collaterals.

Stenosis represents the percentage diameter reduction, ranging from 0 to 100, associated with the identified vessels. Percent stenosis at its maximal point is estimated to be the amount of reduction in the diameter of the "normal" reference vessel proximal to the lesion. In instances where multiple lesions are present, enter the single highest percent stenosis noted.

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

Vendor Instruction: When Graft Vessel with Stenosis >= 50% (7525) is set to "Yes" a CABG must be indicated in Prior Coronary Artery Bypass Graft (4515) -or- in Interventions this Hospitalization (10030/10031) with the Coronary Artery Bypass Graft Date and Time (10011) prior to the Procedure Start Date and Time (7000)

Section: Native Vessel

Parent: H. Coronary Anatomy

Element: 7507

Native Lesion Segment Number

Coding Instruction: Indicate the lesion location using the coronary artery segment diagram of the native lesion.

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

Vendor Instruction: A Native Lesion Segment Number (7507) must not be duplicated in a procedure

Coronary Vessels - 1.3.6.1.4.1.19376.1.4.1.6.5.939

Selection	Definition	Source	Code	Code System
1 - pRCA	Proximal right coronary artery conduit segment - pRCA		91083009	SNOMED CT
2 - mRCA	Mid-right coronary artery conduit segment - mRCA		450960006	SNOMED CT
3 - dRCA	Distal right coronary artery conduit segment - dRCA		41879009	SNOMED CT
4 - rPDA	Right posterior descending artery segment - rPDA		53655008	SNOMED CT
5 - rPAV	Right posterior atrioventricular segment - rPAV		12800002	SNOMED CT
6 - 1st RPL	First right posterolateral segment - 1st RPL		91761002	SNOMED CT
7 - 2nd RPL	Second right posterolateral segment - 2nd RPL		91762009	SNOMED CT
8 - 3rd RPL	Third right posterolateral segment - 3rd RPL		91763004	SNOMED CT
9 - pDSP	Posterior descending septal perforators segment - pDSP		194142006	SNOMED CT
10 - aMarg	Acute marginal segment(s) - aMarg		244258000	SNOMED CT
11a - Ostial LM	Ostial Left Main Segment - Ostial LM		76862008	SNOMED CT
11b - Mid-LM	Mid-Left Main Segment - Mid-LM		1000142402	ACC NCDR
11c - Distal LM	Distal Left Main Segment - Distal LM		1000142403	ACC NCDR
12 - pLAD	Proximal LAD artery segment - pLAD		68787002	SNOMED CT
13 - mLAD	Mid-LAD artery segment - mLAD		91748002	SNOMED CT
14 - dLAD	Distal LAD artery segment - dLAD		36672000	SNOMED CT
15 - 1st Diag	First diagonal branch segment - 1st Diag		91750005	SNOMED CT
15a - Lat 1st Diag	Lateral first diagonal branch segment - Lat 1st Diag		1000142404	ACC NCDR
16 - 2nd Diag	Second diagonal branch segment - 2nd Diag		91751009	SNOMED CT
16a - Lat 2nd Diag	Lateral second diagonal branch segment		1000142405	ACC NCDR
17 - LAD SP	LAD septal perforator segments - LAD SP		244251006	SNOMED CT
18 - pCIRC	Proximal circumflex artery segment - pCIRC		52433000	SNOMED CT
19 - mCIRC	Mid-circumflex artery segment - mCIRC		91753007	SNOMED CT
19a - dCIRC	Distal circumflex artery segment - dCIRC		6511003	SNOMED CT
20 - 1st OM	First obtuse marginal branch segment - 1st OM		91754001	SNOMED CT
20a - Lat 1st OM	Lateral first obtuse marginal branch segment - Lat 1st OM		1000142406	ACC NCDR
21 - 2nd OM	Second obtuse marginal branch segment - 2nd OM		91755000	SNOMED CT
21a - Lat 2nd OM	Lateral second obtuse marginal branch segment - Lat 2nd OM		1000142407	ACC NCDR
22 - 3rd OM	Third obtuse marginal branch segment - 3rd OM		91756004	SNOMED CT
22a - Lat 3rd OM	Lateral third obtuse marginal branch segment - Lat 3rd OM		1000142408	ACC NCDR
23 - CIRC AV	Circumflex artery AV groove continuation segment - CIRC AV		75902001	SNOMED CT
24 - 1st LPL	First left posterolateral branch segment - 1st LPL		91757008	SNOMED CT
25 - 2nd LPL	Second left posterolateral branch segment - 2nd LPL		91758003	SNOMED CT
26 - 3rd LPL	Third posterolateral descending artery segment - 3rd LPL		91759006	SNOMED CT
27 - LPDA	Left posterolateral descending artery segment - LPDA		56322004	SNOMED CT
28 - Ramus	Ramus intermedius segment - Ramus		244252004	SNOMED CT
28a - Lat Ramus	Lateral ramus intermedius segment - Lat Ramus		1000142409	ACC NCDR
29 - 3rd Diag	Third diagonal branch segment - 3rd Diag		91752002	SNOMED CT
29a - Lat 3rd Diag	Lateral third diagonal branch segment - Lat 3rd Diag		1000142410	ACC NCDR

Element: 7508

Native Coronary Vessel Stenosis

Coding Instruction: Indicate the best estimate of the most severe percent stenosis in the segment of the native coronary vessel identified.

Note(s):

It is acceptable to use prior cath lab visit information, as long as there have been no changes in coronary anatomy. This includes stenosis determined via cardiac catheterization at another facility. This does not include collaterals.

Stenosis represents the percentage diameter reduction, ranging from 0 to 100, associated with the identified vessels. Percent stenosis at its maximal point is estimated to be the amount of reduction in the diameter of the "normal" reference vessel proximal to the lesion. In instances where multiple lesions are present, enter the single highest percent stenosis noted

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

Section: Native Vessel
Parent: H. Coronary Anatomy

Vendor Instruction: When Native Coronary Vessel Stenosis (7508) is [< 50] then Native Vessel with Stenosis $\geq 50\%$ (7505) cannot be [Yes]

Element: 7511 Native Vessel Adjunctive Measurements Obtained

Coding Instruction: Indicate if an invasive diagnostic measurement was obtained of the native vessel segment.

Target Value: Any occurrence between start of procedure and prior to intervention

Element: 7512 Native Vessel Fractional Flow Reserve Ratio

Coding Instruction: Indicate the fractional flow reserve of the native vessel segment.

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

Element: 7513 Native Vessel Instantaneous Wave-Free Ratio

Coding Instruction: Indicate the instantaneous wave-free ratio (iFR ratio) of the native vessel segment.

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

Element: 7514 Native Vessel Intravascular Ultrasonography

Coding Instruction: Indicate the minimal luminal area (MLA) measured via IVUS of the native vessel segment.

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

Element: 7515 Native Vessel Optical Coherence Tomography

Coding Instruction: Indicate the minimal luminal area (MLA) measured via OCT of the native vessel segment.

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

Section: Graft Vessel

Parent: H. Coronary Anatomy

Element: 7527

Graft Lesion Segment Number

Coding Instruction: Indicate the lesion location using the coronary artery segment diagram of the graft lesion.

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

Vendor Instruction: A Graft Lesion Segment Number (7527) must not be duplicated in a procedure

Coronary Vessels - 1.3.6.1.4.1.19376.1.4.1.6.5.939

Selection	Definition	Source	Code	Code System
1 - pRCA	Proximal right coronary artery conduit segment - pRCA		91083009	SNOMED CT
2 - mRCA	Mid-right coronary artery conduit segment - mRCA		450960006	SNOMED CT
3 - dRCA	Distal right coronary artery conduit segment - dRCA		41879009	SNOMED CT
4 - rPDA	Right posterior descending artery segment - rPDA		53655008	SNOMED CT
5 - rPAV	Right posterior atrioventricular segment - rPAV		12800002	SNOMED CT
6 - 1st RPL	First right posterolateral segment - 1st RPL		91761002	SNOMED CT
7 - 2nd RPL	Second right posterolateral segment - 2nd RPL		91762009	SNOMED CT
8 - 3rd RPL	Third right posterolateral segment - 3rd RPL		91763004	SNOMED CT
9 - pDSP	Posterior descending septal perforators segment - pDSP		194142006	SNOMED CT
10 - aMarg	Acute marginal segment(s) - aMarg		244258000	SNOMED CT
11a - Ostial LM	Ostial Left Main Segment - Ostial LM		76862008	SNOMED CT
11b - Mid-LM	Mid-Left Main Segment - Mid-LM		1000142402	ACC NCDR
11c - Distal LM	Distal Left Main Segment - Distal LM		1000142403	ACC NCDR
12 - pLAD	Proximal LAD artery segment - pLAD		68787002	SNOMED CT
13 - mLAD	Mid-LAD artery segment - mLAD		91748002	SNOMED CT
14 - dLAD	Distal LAD artery segment - dLAD		36672000	SNOMED CT
15 - 1st Diag	First diagonal branch segment - 1st Diag		91750005	SNOMED CT
15a - Lat 1st Diag	Lateral first diagonal branch segment - Lat 1st Diag		1000142404	ACC NCDR
16 - 2nd Diag	Second diagonal branch segment - 2nd Diag		91751009	SNOMED CT
16a - Lat 2nd Diag	Lateral second diagonal branch segment		1000142405	ACC NCDR
17 - LAD SP	LAD septal perforator segments - LAD SP		244251006	SNOMED CT
18 - pCIRC	Proximal circumflex artery segment - pCIRC		52433000	SNOMED CT
19 - mCIRC	Mid-circumflex artery segment - mCIRC		91753007	SNOMED CT
19a - dCIRC	Distal circumflex artery segment - dCIRC		6511003	SNOMED CT
20 - 1st OM	First obtuse marginal branch segment - 1st OM		91754001	SNOMED CT
20a - Lat 1st OM	Lateral first obtuse marginal branch segment - Lat 1st OM		1000142406	ACC NCDR
21 - 2nd OM	Second obtuse marginal branch segment - 2nd OM		91755000	SNOMED CT
21a - Lat 2nd OM	Lateral second obtuse marginal branch segment - Lat 2nd OM		1000142407	ACC NCDR
22 - 3rd OM	Third obtuse marginal branch segment - 3rd OM		91756004	SNOMED CT
22a - Lat 3rd OM	Lateral third obtuse marginal branch segment - Lat 3rd OM		1000142408	ACC NCDR
23 - CIRC AV	Circumflex artery AV groove continuation segment - CIRC AV		75902001	SNOMED CT
24 - 1st LPL	First left posterolateral branch segment - 1st LPL		91757008	SNOMED CT
25 - 2nd LPL	Second left posterolateral branch segment - 2nd LPL		91758003	SNOMED CT
26 - 3rd LPL	Third posterolateral descending artery segment - 3rd LPL		91759006	SNOMED CT
27 - LPDA	Left posterolateral descending artery segment - LPDA		56322004	SNOMED CT
28 - Ramus	Ramus intermedius segment - Ramus		244252004	SNOMED CT
28a - Lat Ramus	Lateral ramus intermedius segment - Lat Ramus		1000142409	ACC NCDR
29 - 3rd Diag	Third diagonal branch segment - 3rd Diag		91752002	SNOMED CT
29a - Lat 3rd Diag	Lateral third diagonal branch segment - Lat 3rd Diag		1000142410	ACC NCDR

Element: 7528

Graft Coronary Vessel Stenosis

Coding Instruction: Indicate the best estimate of the most severe percent stenosis in the segment of the graft vessel identified.

Note(s):

It is acceptable to use prior cath lab visit information, as long as there have been no changes in coronary anatomy. This includes stenosis determined via cardiac catheterization at another facility. This does not include collaterals.

Stenosis represents the percentage diameter reduction, ranging from 0 to 100, associated with the identified vessels. Percent stenosis at its maximal point is estimated to be the amount of reduction in the diameter of the "normal" reference vessel proximal to the lesion. In instances where multiple lesions are present, enter the single highest percent stenosis noted.

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

Section: Graft Vessel
Parent: H. Coronary Anatomy

Vendor Instruction: When Graft Coronary Vessel Stenosis (7528) is [< 50] then Graft Vessel with Stenosis $\geq 50\%$ (7525) cannot be [Yes]

Element: 7529 CABG Graft Vessel

Coding Instruction: Indicate the vessel that was used for the coronary artery bypass graft.

Target Value: The value on current procedure

CABG Graft Vessel

Selection	Definition	Source	Code	Code System
LIMA	Left Internal Mammary Artery		261402001	SNOMED CT
RIMA	Right Internal Mammary Artery		261403006	SNOMED CT
SVG	Saphenous Vein Graft		362072009	SNOMED CT
Radial	Radial Artery		181332001	SNOMED CT

Element: 7530 CABG Graft Vessel Unknown

Coding Instruction: Indicate if the vessel that was used for the coronary artery bypass graft was unknown.

Target Value: The value on current procedure

Element: 7531 Graft Vessel Adjunctive Measurements Obtained

Coding Instruction: Indicate if an invasive diagnostic measurement was obtained of the graft vessel intra-procedure.

Target Value: Any occurrence between start of procedure and prior to intervention

Element: 7532 Graft Vessel Fractional Flow Reserve Ratio

Coding Instruction: Indicate the fractional flow reserve of the graft vessel segment.

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

Element: 7533 Graft Vessel Instantaneous Wave-Free Ratio

Coding Instruction: Indicate the instantaneous wave-free ratio (IFR ratio) of the graft vessel segment.

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

Element: 7534 Graft Vessel Intravascular Ultrasonography

Coding Instruction: Indicate the minimal luminal area (MLA) measured via IVUS of the graft vessel segment.

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

Element: 7535 Graft Vessel Optical Coherence Tomography

Coding Instruction: Indicate the minimal luminal area (MLA) measured via OCT of the graft vessel segment.

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

Section: I. PCI Procedure

Parent: E. Procedure Information

Element: 7800

PCI Status

Coding Instruction: Indicate the status of the PCI. The status is determined at the time the operator decides to perform a PCI.

Target Value: The highest value at start of current procedure

Vendor Instruction: When PCI Status (7800) is [Salvage] then Cardiovascular Instability Type (7415) must be in [Cardiogenic Shock, Refractory Cardiogenic Shock]

PCI Status - 1.3.6.1.4.1.19376.1.4.1.6.5.1135

Selection	Definition	Source	Code	Code System
Elective	Symptoms of cardiac ischemia have been stable. In the days/weeks prior to cath lab presentation the patient has had: No angina/ is asymptomatic (i.e., no typical, atypical, nor anginal equivalent symptoms or non-anginal chest pain) OR; Stable angina – symptoms of angina are consistent for the patient (i.e., without a change in frequency or pattern), and are controlled with rest and/or medication (s) AND; ECG is normal or unchanged and without new ischemic findings for the patient		100012987	ACC NCDR
Urgent	Symptoms of cardiac ischemia have not been stable. In the days/weeks prior to cath lab presentation the patient has had: New angina diagnosis (i.e., typical, atypical or anginal equivalent pain) OR; Worsening angina (i.e., increase in severity or frequency, more or new medications required) OR; Related cardiac symptoms (i.e., new diagnosis or heart failure or increasing sx requiring medication adjustment, hypo/hypertension requiring tx).		100012988	ACC NCDR
Emergency	Symptoms of cardiac ischemia are acute. On Cath Lab presentation the patient has: Ongoing cardiac ischemia (i.e., typical, atypical angina or anginal equivalent) OR; Cardiovascular instability (i.e., refractory angina, ST-elevation w/without hemodynamic instability, acute heart failure, hypo/hypertension, or ventricular arrhythmias) OR; Symptoms of cardiac ischemia/instability are being controlled with ongoing medical management *The procedure should be performed asap/without delay (would warrant activating the on-call team if off-hours or bumping a scheduled case to accommodate) due to concerns for ongoing ischemia and/or infarction and/or risk of death.		100012989	ACC NCDR
Salvage	Symptoms of cardiac ischemia are acute, and the patient is decompensated. On Cath Lab presentation the patient is in: Cardiogenic shock (i.e., at procedure start as coded in Seq#7000) AND has; Received chest compressions (within 10min before procedure start or during the diagnostic portion of the case) OR; Been placed on unanticipated LV support (e.g., ECMO, CPS, etc.) intraprocedure and prior to PCI guidewire insertion.		100001290	ACC NCDR

Section: I. PCI Procedure

Parent: E. Procedure Information

Element: 7806 Hypothermia Induced

Coding Instruction: Indicate if hypothermia was induced.

Note(s):

Hypothermia Induced is also known as Targeted Temperature Management (TTM).

Target Value: Any occurrence between arrival (or previous procedure) and current procedure

Element: 7807 Hypothermia Induced Timing

Coding Instruction: Indicate when hypothermia was initiated.

Note(s): Hypothermia Induced is also known as Targeted Temperature Management (TTM).

Target Value: The value on current procedure

Timing of Hypothermia

Selection	Definition	Source	Code	Code System
Initiated Pre-PCI, <= 6 hrs post cardiac arrest	Hypothermia was induced less than or equal to 6 hours after the cardiac arrest event and prior to engaging in PCI (guidewire introduced).		100013036	ACC NCDR
Initiated Pre-PCI, > 6 hrs post cardiac arrest	Hypothermia was induced greater than 6 hours after the cardiac arrest event and prior to engaging in PCI (guidewire introduced).		100013037	ACC NCDR
Post PCI	Hypothermia was induced after guidewire introduction for PCI.		100013038	ACC NCDR

Element: 7810 Level of Consciousness (PCI Procedure)

Coding Instruction: Indicate the level of consciousness after resuscitation as measured by the AVPU scale.

Target Value: The value at the start of the PCI

Supporting Definition: Level of Consciousness

The presence of consciousness on admission to hospital and the speed at which consciousness returns following cardiac arrest has been shown to be an indicator of neurological survival following out of hospital cardiac arrest (OHCA).

Source: Deakin, Charles D., Fothergill, Rachael, Moore, Fionna, Watson, Lynne, Whitbread, Mark, Level of consciousness on admission to a Heart Attack Centre is a predictor of survival from out-of-hospital cardiac arrest, Resuscitation (2014) doi: 10.1016/j.resuscitation.2014.02.020.

Level of Consciousness

Selection	Definition	Source	Code	Code System
(A) Alert	Spontaneously open eyes, responding to voice (although may be confused) and motor function.		248234008	SNOMED CT
(V) Verbal	Responding to verbal stimuli.		284592002	SNOMED CT
(P) Pain	Responding to painful stimuli.		100013043	ACC NCDR
(U) Unresponsive	No eye, voice or motor response to voice or pain.		422768004	SNOMED CT
Unable to Assess	Unable to assess level of consciousness. (Example: Patient Sedated)		100014234	ACC NCDR

Element: 7815 Decision for PCI with Surgical Consult

Coding Instruction: Indicate if a cardiac surgical consult was obtained prior to engaging in PCI.

Target Value: The value on current procedure

Element: 7816 Cardiovascular Treatment Decision

Coding Instruction: Indicate the cardiovascular surgery recommendation and/or patient/family decision.

Target Value: The value on current procedure

Cardiovascular Treatment Decision - 1.3.6.1.4.1.19376.1.4.1.6.5.1167

Selection	Definition	Source	Code	Code System
Surgery not Recommended			1000142368	ACC NCDR
Surgery Recommended, Patient/Family Declined			1000142369	ACC NCDR
Surgery Recommended, Patient/Family Accepted			1000142370	ACC NCDR

Element: 7820 PCI for MultiVessel Disease

Coding Instruction: Indicate if the PCI procedure was performed in the presence of multi-vessel disease.

Note(s):

Section: I. PCI Procedure

Parent: E. Procedure Information

Code 'Yes' if this is the initial (first) PCI procedure for the cath lab indication and the patient has obstructive disease $\geq 70\%$ stenosis in ≥ 2 coronary vessels and/or disease 50%-70% stenosis in ≥ 2 coronary vessels with non-invasive or FFR/IFR evidence of ischemia in that territory and/or left main disease $\geq 50\%$ stenosis.

(A coronary vessel is defined as: LAD and any of its branches, LCX and any of its branches, RCA and any of its branches, a true RAMUS branch > 2 mm)

Code 'Yes' if this is a subsequent, planned staged PCI procedure of a vessel not treated during the initial PCI procedure. The first PCI could have been during a prior admission, or during this admission but must occur within 90 days of the initial PCI procedure.

Target Value: The value on current procedure

Element: 7821 Multi-vessel Procedure Type

Coding Instruction: Indicate the type of multi-vessel PCI procedure that was performed during this lab visit.

Target Value: The value on current procedure

Vendor Instruction: When Multi-vessel Procedure Type (7821) is [Staged PCI] then Percutaneous Coronary Intervention Indication (7825) cannot be in [STEMI - Primary PCI for Acute STEMI, STEMI - Stable (≤ 12 hrs from Sx), STEMI - Stable (> 12 hrs from Sx), STEMI - Unstable (> 12 hrs from Sx), STEMI (after successful lytics), STEMI - Rescue (After unsuccessful lytics), New Onset Angina ≤ 2 months, NSTEMI - ACS]

When Multi-vessel Procedure Type (7821) is [Staged PCI] then Cath Lab Visit Indication(s) (7400) cannot be in [ACS ≤ 24 hrs, New Onset Angina ≤ 2 months, Worsening Angina, Resuscitated Cardiac Arrest, Suspected CAD]

PCI Revascularization Treatment

Selection	Definition	Source	Code	Code System
Initial PCI	This PCI procedure is the initial (first) for the cath lab indication		10001424793	ACC NCDR
Staged PCI	This PCI procedure is the subsequent, planned staged PCI procedure for a vessel NOT treated during the initial PCI procedure. The first PCI could have been during a prior admission, or during this admission but must occur within 90 days of the initial PCI procedure.		10001424794	ACC NCDR

Element: 7825 Percutaneous Coronary Intervention Indication

Coding Instruction: Indicate the reason the percutaneous coronary intervention PCI is being performed.

Note(s):

The PCI Indications collected in this field by your application are controlled by PCI Indication Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.

Target Value: The highest value at start of current procedure

Vendor Instruction: When Percutaneous Coronary Intervention Indication (7825) is [Stable angina] then Cath Lab Visit Indication(s) (7400) cannot be in [New Onset Angina ≤ 2 months, Resuscitated Cardiac Arrest, Worsening Angina]

When Percutaneous Coronary Intervention Indication (7825) is [Stable angina] then Cardiovascular Instability (7410) cannot be [Yes]

When Percutaneous Coronary Intervention Indication (7825) is [CAD (without ischemic Sx)] then Cath Lab Visit Indication(s) (7400) cannot be in [Resuscitated Cardiac Arrest, Worsening Angina, New Onset Angina ≤ 2 months]

PCI Indication - 2.16.840.1.113883.3.3478.6.7.2

Selection	Definition	Source	Code	Code System
STEMI - Immediate PCI for Acute STEMI	Immediate PCI for STEMI (or STEMI equivalent) PCI is performed emergently and without delay after diagnosis. This includes Unstable ≤ 12 hours in selection definition.		100000570	ACC NCDR
STEMI - Stable (≤ 12 hrs from Sx)	PCI for STEMI (or STEMI equivalent) occurs ≤ 12 hours from symptom. There are no symptoms of recurrent or persistent ischemia, symptoms of heart failure or electrical instability.		100012991	ACC NCDR
STEMI - Stable (> 12 hrs from Sx)	PCI for STEMI (or STEMI equivalent) occurs > 12 hours from symptom. There are no symptoms of recurrent or persistent ischemia, symptoms of heart failure or electrical instability.		100000572	ACC NCDR
STEMI - Unstable (> 12 hrs from Sx)	PCI for STEMI (or STEMI equivalent) > 12 hours from symptom with recurrent or persistent symptoms, symptoms of heart failure or ventricular arrhythmia.		100000571	ACC NCDR
STEMI (after successful lytics)	PCI for STEMI (or STEMI equivalent) after receiving full-dose thrombolysis. There are no symptoms of recurrent or persistent ischemia, symptoms of heart failure or electrical instability.		100000573	ACC NCDR
STEMI - Rescue (After unsuccessful lytics)	Rescue PCI for STEMI (or STEMI equivalent) after failed full-dose thrombolysis for symptoms of recurrent or persistent ischemia, symptoms of heart failure or electrical instability.		100000574	ACC NCDR

Section: I. PCI Procedure		Parent: E. Procedure Information	
New Onset Angina <= 2 months	PCI is performed for the patient's new onset angina (typical or atypical angina) that developed within the previous two months.	233821000	SNOMED CT
NSTE - ACS	PCI for NSTEMI (<= 7 days from symptoms) or acute coronary syndrome.	100012990	ACC NCDR
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
CAD (without ischemic Sx)	PCI is performed for known coronary artery disease there are no symptoms of ischemia (typical angina and/or ST segment elevation).	100012992	ACC NCDR
Other PCI Indication	PCI Indication not listed.	10001424795	ACC NCDR
Element: 7826	Acute Coronary Syndrome Symptom Date		
	Coding Instruction: Indicate the date and time the patient noted ischemic symptoms lasting greater than or equal to 10 minutes.		
	Note(s): Symptoms may include jaw pain, arm pain, shortness of breath, nausea, vomiting, fatigue/malaise, or other equivalent discomfort suggestive of a myocardial infarction.		
	Target Value: The last value between 1 week prior to current procedure and current procedure		
	Vendor Instruction: Acute Coronary Syndrome Symptom Date (7826) must be Less than or Equal to Procedure Start Date and Time (7000)		
Element: 7827	Acute Coronary Syndrome Symptom Time		
	Coding Instruction: Indicate the time the patient first noted ischemic symptoms lasting greater than or equal to 10 minutes.		
	Note(s): Indicate the time (hours:minutes) using the military 24-hour clock, beginning at midnight (00:00 hours).		
	If the symptom time is not specified in the medical record, it may be recorded as 0700 for morning; 1200 for lunchtime; 1500 for afternoon; 1800 for dinnertime; 2200 for evening and 0300 if awakened from sleep.		
	Target Value: The last value between 1 week prior to current procedure and current procedure		
Element: 7828	Acute Coronary Syndrome Symptom Time Unknown		
	Coding Instruction: Indicate if the symptom time was not available.		
	Target Value: N/A		
Element: 7829	Thrombolytics		
	Coding Instruction: Indicate if the patient received thrombolytic therapy as an urgent treatment for STEMI.		
	Note(s): Code 'Yes' only if full dose (not partial dose) thrombolytics were administered.		
	Target Value: Any occurrence between 1 week prior to arrival at this facility and current procedure		
	Vendor Instruction: When Thrombolytics (7829) is [No] then Percutaneous Coronary Intervention Indication (7825) cannot be in [STEMI - Rescue (After unsuccessful lytics), STEMI (after successful lytics)]		
Element: 7830	Thrombolytic Therapy Date and Time		
	Coding Instruction: Indicate the date and time of either the first bolus or the beginning of the infusion.		
	Note(s): If your facility receives a patient transfer with infusion ongoing, record the date that infusion was started at the transferring facility.		
	Indicate the time (hours:minutes) using the military 24-hour clock, beginning at midnight (00:00 hours).		
	Target Value: Any occurrence between 1 week prior to arrival at this facility and current procedure		
	Vendor Instruction: Thrombolytic Therapy Date and Time (7830) must be Less than Procedure Start Date and Time (7000)		
	Thrombolytic Therapy Date and Time (7830) must happen in the 7 days prior to Procedure Start Date and Time (7000)		
Element: 7831	Syntax Score		
	Coding Instruction: Indicate the Syntax Score for the PCI procedure.		
	Target Value: The highest value at start of current procedure		

Section: I. PCI Procedure

Parent: E. Procedure Information

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	Syntax score <=22		10001424799	ACC NCDR
Intermediate Syntax Score	Syntax score >22 and <=27		10001424798	ACC NCDR
High Syntax Score	Syntax score >27		10001424797	ACC NCDR

Element: 7832 Syntax Score Unknown

Coding Instruction: Indicate if the Syntax Score for the PCI procedure is unknown.

Target Value: The highest value at start of current procedure

Element: 7835 STEMI or STEMI Equivalent First Noted

Coding Instruction: Indicate if a STEMI or STEMI equivalent was noted on either the first ECG or a subsequent ECG.

Note(s):

Code "Subsequent ECG" if STEMI is noted after the ECG on arrival does not indicate STEMI or STEMI equivalent.

Code "Subsequent ECG" if STEMI is noted on an ECG subsequent to the patients non-cardiac presentation.

Code "Subsequent ECG" if STEMI is noted on an inpatient ECG.

Target Value: The first value between 1 day prior to current procedure and current procedure

Vendor Instruction: STEMI or STEMI Equivalent First Noted (7835) cannot be [First ECG] on more than one lab visit

ECG timing

Selection	Definition	Source	Code	Code System
First ECG			100000578	ACC NCDR
Subsequent ECG			100000579	ACC NCDR

Element: 7836 Subsequent ECG with STEMI or STEMI Equivalent Date and Time

Coding Instruction: Indicate the Subsequent ECG date and time.

Note(s):

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

Target Value: The first value between 1 day prior to current procedure and current procedure

Vendor Instruction: When Subsequent ECG with STEMI or STEMI Equivalent Date and Time (7836) is Greater than or Equal to Arrival Date and Time (3001) then Patient Transferred In for Immediate PCI for STEMI (7841) cannot be [Yes]

Subsequent ECG with STEMI or STEMI Equivalent Date and Time (7836) must be Less than Procedure Start Date and Time (7000)

When Subsequent ECG with STEMI or STEMI Equivalent Date and Time (7836) is less than Arrival Date and Time (3001) *then* Patient Transferred In for Immediate PCI for STEMI (7841) cannot be [No]

Element: 7840 Subsequent ECG obtained in Emergency Department

Coding Instruction: Indicate if the subsequent ECG was obtained in the Emergency Department at this facility.

Target Value: The value on current procedure

Element: 7841 Patient Transferred In for Immediate PCI for STEMI

Coding Instruction: Indicate if the patient was transferred from another facility to have a primary PCI for STEMI at this facility.

Target Value: Any occurrence between ACS symptom date/time and current procedure

Element: 7842 Emergency Department Presentation at Referring Facility Date and Time

Coding Instruction: Code the date and time of arrival to the original, transferring facility as documented in the medical record.

Note(s):

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

Target Value: The first value on arrival at referring facility

Vendor Instruction: Emergency Department Presentation at Referring Facility Date and Time (7842) must be Less than Procedure Start Date and Time (7000)

Emergency Department Presentation at Referring Facility Date and Time (7842) must be Less than Arrival Date and Time (3001)

Emergency Department Presentation at Referring Facility Date and Time (7842) must be Less than Subsequent ECG with STEMI or STEMI Equivalent Date and Time (7836)

Section: I. PCI Procedure
Parent: E. Procedure Information
Element: 7845
First Device Activation Date and Time

Coding Instruction: Indicate the date and time the first device was activated regardless of type of device used.

Note(s):

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

Use the earliest time from the following:

1. Time of the first balloon inflation.
2. Time of the first stent deployment.
3. Time of the first treatment of lesion (AngioJet or other thrombectomy/aspiration device, laser, rotational atherectomy).
4. If the lesion cannot be crossed with a guidewire or device (and thus none of the above apply), use the time of guidewire introduction.

This is a process measure about the timeliness of treatment. It is NOT a clinical outcomes measure based on TIMI flow or clinical reperfusion. It does not matter whether the baseline angiogram showed TIMI 3 flow or if the final post-PCI angiogram showed TIMI 0 flow. What is being measured is the time of the first mechanical treatment of the culprit lesion, not the time when TIMI 3 flow was (or was not) restored.

Target Value: The first value on current procedure

Vendor Instruction: First Device Activation Date and Time (7845) must be Greater than Procedure Start Date and Time (7000)

First Device Activation Date and Time (7845) must be Less than Discharge Date and Time (10101)

First Device Activation Date and Time (7845) must be Greater than Subsequent ECG with STEMI or STEMI Equivalent Date and Time (7836)

First Device Activation Date and Time (7845) must be Less than Procedure End Date and Time (7005)

Element: 7850
Patient Centered Reason for Delay in PCI

Coding Instruction: Indicate if there was a patient-centered reason for delay in performing the percutaneous coronary intervention (PCI).

Note(s):

A patient-centered reason for delay is an issue/condition understood and documented to originate with the patient. It is not associated with the health care system (i.e. facility, staff or processes, etc.).

To warrant coding 'Yes' the patient-centered reason(s) must be identified in the first 90min after arrival at this facility or in the first 90min after an in-house diagnosis of STEMI and be responsible for affecting the time to PCI.

If the issue is documented in the medical record and the effect on timing self-evident, it can be coded. If the effect on timing/delay to PCI is unclear, then there must be specific documentation by a physician/APN/PA that establishes the linkage between the patient issue/condition and the timing/delay in PCI.

Target Value: The first value on current procedure

Element: 7851
Patient Centered Reason for Delay in PCI Reason

Coding Instruction: Indicate the patient-centered reason for delay in performing the percutaneous coronary intervention (PCI).

Target Value: The first value on current procedure

Patient Reason for Delay in PCI - 1.3.6.1.4.1.19376.1.4.1.6.5.509

Selection	Definition	Source	Code	Code System
Difficult Vascular Access	The patient's anatomy is torturous, obstructive or otherwise prohibitive to the vascular access device. Do not select if the operator is unable to gain access due to inexperience or device selection, etc.		100000881	ACC NCDR
Difficulty crossing the culprit lesion	The patient's anatomy is torturous, obstructive or otherwise prohibitive to guidewire or device access. Do not select if the operator is unable to cross the culprit lesion due to inexperience or device selection, etc.		100000350	ACC NCDR
Cardiac Arrest and/or need for intubation before PCI			100013001	ACC NCDR
Patient delays in providing consent for PCI			100000349	ACC NCDR
Emergent placement of LV support device before PCI			1000142391	ACC NCDR
Other	The patient and/or their condition is obstructive to the timing of PCI.		100000351	ACC NCDR

Section: Procedure Medications

Parent: I. PCI Procedure

Element: 7990

PCI Procedure Medication Code

Coding Instruction: Indicate the assigned identification number associated with the medications the patient 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: The value on current procedure

Vendor Instruction: When PCI Procedure Medication Code (7990) is answered then Procedure Medications Administered (7995) cannot be [Null]

PCI Procedure Medication Code (7990) should not be duplicated in a procedure

Procedure Medication - 1.3.6.1.4.1.19376.1.4.1.6.5.214

Selection	Definition	Source	Code	Code System
Argatroban			15202	RxNorm
Bivalirudin			400610005	SNOMED CT
Fondaparinux			321208	RxNorm
Heparin Derivative			100000921	ACC NCDR
Low Molecular Weight Heparin			373294004	SNOMED CT
Unfractionated Heparin			96382006	SNOMED CT
Warfarin			11289	RxNorm
Vorapaxar			1537034	RxNorm
Glycoprotein IIb IIIa Inhibitors			1000142427	ACC NCDR
Apixaban			1364430	RxNorm
Dabigatran			1546356	RxNorm
Edoxaban			1599538	RxNorm
Rivaroxaban			1114195	RxNorm
Cangrelor			1656052	RxNorm
Clopidogrel			32968	RxNorm
Prasugrel			613391	RxNorm
Ticagrelor			1116632	RxNorm

Element: 7995

Procedure Medications Administered

Coding Instruction: Indicate which medications were administered.

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

Procedure Medications Administered - 1.3.6.1.4.1.19376.1.4.1.6.5.415

Selection	Definition	Source	Code	Code System
Yes			432102000	SNOMED CT
No			100014173	ACC NCDR

Section: J. Lesions and Devices

Parent: I. PCI Procedure

Element: 8000

Lesion Counter

Coding Instruction: The lesion counter is used to distinguish between multiple lesions on which a PCI is attempted or performed.

When specifying intracoronary devices, list all treated lesions in which the device was utilized.

Note(s):

The software-assigned lesion counter should start at one and be incremented by one for each lesion. The lesion counter is reset back to one for each new PCI lab visit.

At least one lesion must be specified for each PCI procedure.

Target Value: N/A

Element: 8001

Native Lesion Segment Number

Coding Instruction: Indicate the segment(s) that the current lesion spans (a lesion can span one or more segments).

Target Value: N/A

Vendor Instruction: A Native Lesion Segment Number (8001) can only be repeated across Lesion Counter (8000) when Lesion In Graft (8015) is [Yes]

Coronary Vessels - 1.3.6.1.4.1.19376.1.4.1.6.5.939

Selection	Definition	Source	Code	Code System
1 - pRCA	Proximal right coronary artery conduit segment - pRCA		91083009	SNOMED CT
2 - mRCA	Mid-right coronary artery conduit segment - mRCA		450960006	SNOMED CT
3 - dRCA	Distal right coronary artery conduit segment - dRCA		41879009	SNOMED CT
4 - rPDA	Right posterior descending artery segment - rPDA		53655008	SNOMED CT
5 - rPAV	Right posterior atrioventricular segment - rPAV		12800002	SNOMED CT
6 - 1st RPL	First right posterolateral segment - 1st RPL		91761002	SNOMED CT
7 - 2nd RPL	Second right posterolateral segment - 2nd RPL		91762009	SNOMED CT
8 - 3rd RPL	Third right posterolateral segment - 3rd RPL		91763004	SNOMED CT
9 - pDSP	Posterior descending septal perforators segment - pDSP		194142006	SNOMED CT
10 - aMarg	Acute marginal segment(s) - aMarg		244258000	SNOMED CT
11a - Ostial LM	Ostial Left Main Segment - Ostial LM		76862008	SNOMED CT
11b - Mid-LM	Mid-Left Main Segment - Mid-LM		1000142402	ACC NCDR
11c - Distal LM	Distal Left Main Segment - Distal LM		1000142403	ACC NCDR
12 - pLAD	Proximal LAD artery segment - pLAD		68787002	SNOMED CT
13 - mLAD	Mid-LAD artery segment - mLAD		91748002	SNOMED CT
14 - dLAD	Distal LAD artery segment - dLAD		36672000	SNOMED CT
15 - 1st Diag	First diagonal branch segment - 1st Diag		91750005	SNOMED CT
15a - Lat 1st Diag	Lateral first diagonal branch segment - Lat 1st Diag		1000142404	ACC NCDR
16 - 2nd Diag	Second diagonal branch segment - 2nd Diag		91751009	SNOMED CT
16a - Lat 2nd Diag	Lateral second diagonal branch segment		1000142405	ACC NCDR
17 - LAD SP	LAD septal perforator segments - LAD SP		244251006	SNOMED CT
18 - pCIRC	Proximal circumflex artery segment - pCIRC		52433000	SNOMED CT
19 - mCIRC	Mid-circumflex artery segment - mCIRC		91753007	SNOMED CT
19a - dCIRC	Distal circumflex artery segment - dCIRC		6511003	SNOMED CT
20 - 1st OM	First obtuse marginal branch segment - 1st OM		91754001	SNOMED CT
20a - Lat 1st OM	Lateral first obtuse marginal branch segment - Lat 1st OM		1000142406	ACC NCDR
21 - 2nd OM	Second obtuse marginal branch segment - 2nd OM		91755000	SNOMED CT
21a - Lat 2nd OM	Lateral second obtuse marginal branch segment - Lat 2nd OM		1000142407	ACC NCDR
22 - 3rd OM	Third obtuse marginal branch segment - 3rd OM		91756004	SNOMED CT
22a - Lat 3rd OM	Lateral third obtuse marginal branch segment - Lat 3rd OM		1000142408	ACC NCDR
23 - CIRC AV	Circumflex artery AV groove continuation segment - CIRC AV		75902001	SNOMED CT
24 - 1st LPL	First left posterolateral branch segment - 1st LPL		91757008	SNOMED CT
25 - 2nd LPL	Second left posterolateral branch segment - 2nd LPL		91758003	SNOMED CT
26 - 3rd LPL	Third posterolateral descending artery segment - 3rd LPL		91759006	SNOMED CT
27 - LPDA	Left posterolateral descending artery segment - LPDA		56322004	SNOMED CT
28 - Ramus	Ramus intermedius segment - Ramus		244252004	SNOMED CT
28a - Lat Ramus	Lateral ramus intermedius segment - Lat Ramus		1000142409	ACC NCDR
29 - 3rd Diag	Third diagonal branch segment - 3rd Diag		91752002	SNOMED CT
29a - Lat 3rd Diag	Lateral third diagonal branch segment - Lat 3rd Diag		1000142410	ACC NCDR

Section: J. Lesions and Devices

Parent: I. PCI Procedure

Element: 8002	Culprit Stenosis			
Coding Instruction:	Indicate if the stenosis is considered to be responsible for the acute coronary syndrome.			
	Note(s): Code 'No' if the stenosis is not considered to be responsible for the evidence of ischemia.			
Target Value:	Any occurrence on current procedure			
Element: 8003	Culprit Stenosis Unknown			
Coding Instruction:	Indicate if the stenosis considered to be responsible for the acute coronary syndrome is unknown.			
Target Value:	Any occurrence on current procedure			
Element: 8004	Stenosis Immediately Prior to Treatment			
Coding Instruction:	Indicate the percent diameter stenosis immediately prior to the treatment of this lesion.			
Target Value:	The highest value on current procedure			
Element: 8005	Chronic Total Occlusion			
Coding Instruction:	Indicate if the segment with 100% pre-procedure stenosis was presumed to be 100% occluded for at least 3 months previous to this procedure AND not related to a clinical event prompting (or leading to) this procedure.			
Target Value:	Any occurrence on current procedure			
Element: 8006	Chronic Total Occlusion Unknown			
Coding Instruction:	Indicate if the segment with 100% pre-procedure stenosis was presumed to be 100% occluded for at least 3 months previous to this procedure AND not related to a clinical event prompting (or leading to) this procedure was unknown.			
Target Value:	Any occurrence on current procedure			
Element: 8007	TIMI Flow (Pre-Intervention)			
Coding Instruction:	Indicate the pre-intervention TIMI flow.			
	Note(s): If a lesion spans multiple segments with different TIMI flow, code the lowest TIMI flow within the entire lesion.			
Target Value:	The lowest value on current procedure			
TIMI Flow				
Selection	Definition	Source	Code	Code System
TIMI-0	No flow/no perfusion		371867000	SNOMED CT
TIMI-1	Slow penetration without perfusion		371866009	SNOMED CT
TIMI-2	Partial flow/partial perfusion (greater than TIMI-1 but less than TIMI-3).		371864007	SNOMED CT
TIMI-3	Complete and brisk flow/complete perfusion.		371865008	SNOMED CT
Element: 8008	Previously Treated Lesion			
Coding Instruction:	Indicate if the lesion has been treated before in the current or a prior episode of care.			
	Note(s): Code 'No' if the only prior treatment was CABG.			
	Code 'No' if the only treatment of this lesion occurred during THIS PCI procedure.			
Target Value:	Any occurrence between birth and the procedure			
Element: 8009	Previously Treated Lesion Date			
Coding Instruction:	Indicate the date the lesion was previously treated.			
Target Value:	The last value between birth and current procedure			
Vendor Instruction:	Previously Treated Lesion Date (8009) must be Less than or Equal to Procedure Start Date and Time (7000)			
Element: 8010	Treated with Stent			
Coding Instruction:	Indicate if the previously treated lesion was treated with any type of stent in the current or prior episode of care.			
Target Value:	Any occurrence between birth and start of the current procedure			

Section: J. Lesions and Devices

Parent: I. PCI Procedure

Element: 8011 In-stent Restenosis

Coding Instruction: Indicate if the previously treated and stented lesion is being treated for in-stent restenosis.

Note(s): In-stent restenosis is defined as a previously stented lesion that has 50% or greater stenosis.

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

Element: 8012 In-stent Thrombosis

Coding Instruction: Indicate if the previously treated and stented lesion is being treated because of the presence of a thrombus in the stent.

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

Supporting Definition: Thrombosis in stented Lesion

The formation of a blood clot inside a previously treated and stented lesion.

Source:

Element: 8013 Stent Type

Coding Instruction: Indicate the type of stent used in the previously treated lesion.

Note(s): If a patient has multiple stents in the lesion code 'bioabsorbable' over either of the other two options when it is present.

If a DES and BMS are present in the lesion, code 'DES'.

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

Stent Device Type - 1.3.6.1.4.1.19376.1.4.1.6.5.307

Selection	Definition	Source	Code	Code System
BMS	A bare metal stent (BMS) is a coronary stent without eluting drugs.		464052002	SNOMED CT
DES	A drug-eluting stent is a coronary stent placed into narrowed, diseased coronary arteries that slowly releases a drug to prevent cell proliferation, thereby preventing fibrosis, that together with clots, could block the stented artery (restenosis).		411191007	SNOMED CT
Bioabsorbable	A bioabsorbable stent is a coronary stent placed into narrowed or diseased coronary arteries that is manufactured from a material that may dissolve or be absorbed by the body.		705632009	SNOMED CT

Element: 8014 Stent Type Unknown

Coding Instruction: Indicate if the type of stent used in the previously treated lesion is unknown.

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

Element: 8015 Lesion In Graft

Coding Instruction: Indicated if the lesion is in a coronary artery bypass graft.

Target Value: Any occurrence on current procedure

Vendor Instruction: When Lesion In Graft (8015) is [Yes] then Prior Coronary Artery Bypass Graft (4515) must be [Yes] *or* Intervention Type this Hospitalization (10031) must be [CABG]

Element: 8016 Type of CABG Graft

Coding Instruction: Indicate in which type of bypass graft the lesion is located.

Target Value: Any occurrence on current procedure

Type of CABG Graft

Selection	Definition	Source	Code	Code System
LIMA	Left Internal Mammary Artery		261402001	SNOMED CT
Vein			181367001	SNOMED CT
Other Artery	Specific artery not available for selection in registry.		100013029	ACC NCDR

Element: 8017 Location in Graft

Coding Instruction: Indicate the location of the most severe stenosis, if the lesion is in the graft.

Target Value: Any occurrence on current procedure

Section: J. Lesions and Devices

Parent: I. PCI Procedure

Location in CABG Graft

Selection	Definition	Source	Code	Code System
Aortic	At the aortic anastomosis of the graft (≤ 3 mm from insertion point).		1000142355	ACC NCDR
Body	In the body of the graft.		1000142354	ACC NCDR
Distal	At the distal anastomosis of the graft (≤ 3 mm from insertion point).		1000142353	ACC NCDR

Element: 8018 Navigate through Graft to Native Lesion

Coding Instruction: Indicate if treatment of the native artery lesion required navigating through a graft (to reach the lesion).

Target Value: The value on current procedure

Element: 8019 Lesion Complexity

Coding Instruction: Indicate the complexity of the lesion as defined in the selections below.

Target Value: Any occurrence on current procedure

Lesion Complexity

Selection	Definition	Source	Code	Code System
Non-High/Non-C	Non-high/non-C lesions are considered Type A or B lesions. They can be characterized as follows: Low Risk or Type A lesions: - Discrete (<10 mm length) - Concentric - Readily accessible - Non-angulated segment <45 degrees - Smooth contour - Little or no calcification - Less than totally occlusive - Not ostial in location - No major branch involvement - Absence of thrombus Medium Risk (Type B1) lesions: - Tubular (10-20 mm length) - Eccentric - Moderate tortuosity of proximal segment - Moderately angulated segment, 45-90 degrees - Irregular contour - Moderate to heavy calcification - Ostial in location - Bifurcation lesions requiring double guidewires - Some thrombus present - Total occlusion <3 months old Medium Risk (Type B2 lesions): Two or more "B" characteristics.		100000583	ACC NCDR
High/C	Descriptions of a High Lesion Risk (C Lesion): - Diffuse (length > 2cm) - Excessive tortuosity of proximal segment - Extremely angulated segments > 90 degrees - Total occlusions > 3 months old and/or bridging collaterals - Inability to protect major side branches - Degenerated vein grafts with friable lesions		100000584	ACC NCDR

Element: 8020 Lesion Length

Coding Instruction: Indicate the length of the treated lesion in millimeters.

Note(s):

If the lesion length is not available it is acceptable to code the length of the device used to treat the lesion.

If multiple devices are used sequentially, total the individual device lengths.

Information obtained after the baseline angiogram can be used to help determine lesion length (e.g. for total occlusions where the distal vessel can not be visualized).

Target Value: Any occurrence on current procedure

Vendor Instruction: When Lesion Length (8020) is >20 then Lesion Complexity (8019) cannot be [Non-High/Non-C]

Element: 8021 Severe Calcification

Section: J. Lesions and Devices

Parent: I. PCI Procedure

Coding Instruction: Indicate if there was severe calcification of the lesion.

Note(s): To support coding there must documentation of 'severe calcification' specific to the lesion treated during the PCI procedure, by the interventionalist.

Target Value: The value on current procedure

Supporting Definition: **Severe calcification**

Severe calcification is most commonly defined as radiopacities seen without cardiac motion before contrast injection, usually affecting both sides of the arterial lumen.

Source: Madhavan MV, Tarigopula M, Mintz GS, Maehara A, Stone GW, Généreux P. Coronary Artery Calcification: Pathogenesis and Prognostic Implications. J Am Coll Cardiol. 2014;63(17):1703-1714. doi:10.1016/j.jacc.2014.01.017.

Element: 12088 **Thrombus Present**

Coding Instruction: Indicate if there was a thrombus present.

Target Value: The value on current procedure

Element: 8022 **Bifurcation Lesion**

Coding Instruction: Indicate if the treated lesion is at a significant bifurcation, trifurcation or more complex branch point.

Note(s):

A significant bifurcation or branch point is a division of a vessel into at least two branches, each of which is >1.5 mm or greater in diameter. In a bifurcation or branch lesion, the plaque extends from at least one of the limbs to the branch point; it need not progress down all the proximal and distal branches. Bifurcations or branch point lesions should be considered one lesion, no matter how many limbs are treated.

Target Value: Any occurrence on current procedure

Element: 8023 **Guidewire Across Lesion**

Coding Instruction: Indicate if a guidewire successfully crossed the lesion.

Target Value: Any occurrence on current procedure

Element: 8024 **Device Deployed**

Coding Instruction: Indicate if a device was deployed during the procedure.

Note(s):

Code 'Yes' if an intracoronary device was used as designed (e.g. a balloon was inflated, a stent was placed, aspiration was attempted with a thrombectomy device, etc.) The success of the device used is not relevant.

If 'Yes' is selected for any lesion, at least one intracoronary device must be specified.

Target Value: The value on current procedure

Element: 8025 **Stenosis (Post-Intervention)**

Coding Instruction: Indicate the post-intervention percent stenosis for the treated lesion.

Target Value: The highest value on current procedure

Element: 8026 **TIMI Flow (Post-Intervention)**

Coding Instruction: Indicate the post-intervention TIMI flow.

Note(s):

If a lesion spans multiple segments with different TIMI flows, coded the lowest TIMI flow within the entire lesion.

Target Value: The lowest value on current procedure

TIMI Flow

Selection	Definition	Source	Code	Code System
TIMI-0	No flow/no perfusion		371867000	SNOMED CT
TIMI-1	Slow penetration without perfusion		371866009	SNOMED CT
TIMI-2	Partial flow/partial perfusion (greater than TIMI-1 but less than TIMI-3).		371864007	SNOMED CT
TIMI-3	Complete and brisk flow/complete perfusion.		371865008	SNOMED CT

Section: Devices

Parent: I. PCI Procedure

Element: 8027	Intracoronary Device Counter
Coding Instruction:	The software-assigned intracoronary device counter should start at one and be incremented by one for each intracoronary device used.
	Note(s): The intracoronary device counter numbers should be assigned sequentially in ascending order. Do not skip numbers.
	The intracoronary device counter is reset back to one for each procedure.
Target Value:	N/A
Element: 8028	Intracoronary Device(s) Used
Coding Instruction:	Indicate all devices utilized during the current procedure. If a device was utilized on multiple lesions, specify it only once (e.g., if a balloon was used to dilate two separate lesions, list it only once). Every treatment and support device utilized during the procedure should be specified.
	Note(s): Each intracoronary device must be associated with at least one lesion via the Lesion Counter (Element Ref# 8000) if Device Deployed (8024) is 'Yes'. An intracoronary device may be associated with more than one lesion.
	The device(s) collected in this field are controlled by the Intracoronary Device Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.
Target Value:	Any occurrence on current procedure
Element: 8029	Intracoronary Unique Device Identifier
Coding Instruction:	Indicate the direct identifier portion of the Unique Device Identifier (UDI) associated with the intracoronary device. This ID is provided by the device manufacturer, and is either a GTIN or HIBC number.
Target Value:	The value on current procedure
Supporting Definition:	Unique Device Identifier (UDI) An identifier that is the main (primary) lookup for a medical device product and meets the requirements to uniquely identify a device through its distribution and use. This value is supplied to the FDA by the manufacturer. Source: US FDA
Vendor Instruction:	Reserved for Future use. NCDR will provide additional information once FDA has established a timeline for implementation. The application must create these fields (as placeholders) during initial development and vendor certification of the registry; and demonstrate that they can be transmitted in the export file.
Element: 8030	Intracoronary Device Associated Lesion
Coding Instruction:	Indicate all Lesion Counter Numbers (Element Ref# 8000) corresponding to the lesion(s) on which this device was used.
	The lesion counter is used to distinguish between multiple lesions on which a PCI procedure is attempted or performed.
Target Value:	The value on current procedure
Vendor Instruction:	When Intracoronary Device Associated Lesion (8030) is [Null] then Device Deployed (8024) cannot be [Yes]
Element: 8031	Intracoronary Device Diameter
Coding Instruction:	Indicate the diameter of the intracoronary device in millimeters.
Target Value:	The value on current procedure
Vendor Instruction:	Parent/Child Validation Notes: See Intracoronary Devices dynamic list. Enable the element when the element reference number is listed under the enableElements column applicable to the Intracoronary Device(s) Used (8028) under the dynamic list.
Element: 8032	Intracoronary Device Length
Coding Instruction:	Indicate the length of the device in millimeters.
Target Value:	The value on current procedure
Vendor Instruction:	Parent/Child Validation Notes: See Intracoronary Devices dynamic list. Enable the element when the element reference number is listed under the enableElements column applicable to the Intracoronary Device(s) Used (8028) under the dynamic list.

Section: K. Intra and Post-Procedure Events
Parent: E. Procedure Information

Element: 9145	Coronary Artery Perforation
Coding Instruction: Indicate if angiographic or clinical evidence of perforation was observed. Target Value: Any occurrence on current procedure Supporting Definition: Perforation A coronary artery perforation occurs when there is angiographic or clinical evidence of a dissection or intimal tear that extends through the full thickness of the arterial wall. Source: NCDR	
Element: 9146	Significant Coronary Artery Dissection
Coding Instruction: Indicate if a significant coronary artery dissection was observed. Note(s): Typically, dissections described as type A or B are not considered significant dissections because there is no impairment of flow. Significant dissections are grade C dissections in the presence of ischemia, or grade D-F dissections, all of which are further described as: type C: persisting contrast medium extravasations; type D: spiral filling defect with delayed but complete distal flow; type E: persistent filling defect with delayed antegrade flow; type F: filling defect with impaired flow and total occlusion Target Value: Any occurrence on current procedure Supporting Definition: Dissection Dissection is defined as the appearance of contrast materials outside of the expected luminal dimensions of the target vessel and extending longitudinally beyond the length of the lesion. Source: 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: 9276	Number of units of PRBCs transfused
Coding Instruction: Indicate the number of transfusion(s) of packed red blood cells. Target Value: Any occurrence between start of procedure and until next procedure or discharge	
Element: 9277	Transfusion PCI
Coding Instruction: Indicate if the transfusion occurred during or after PCI. Target Value: Any occurrence between start of procedure and 72 hours after current procedure	
Element: 9278	Transfusion Surgery
Coding Instruction: Indicate if the transfusion occurred during or after surgery. Target Value: Any occurrence between start of procedure and 72 hours after current procedure	

Section: Intra and Post-Procedure Events

Parent: K. Intra and Post-Procedure Events

Element: 9001

Intra/Post-Procedure Events

Coding Instruction: Indicate the event that occurred between the procedure and the next procedure or discharge.

Note(s): Multiple instances of the same event may be identified if the event occurred more than once during the target timeframe.

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

Vendor Instruction: When Intra/Post-Procedure Events (9001) are provided then Intra/Post-Procedure Events Occurred (9002) cannot be [Null]

An Intra/Post-Procedure Event - combination Events (9001), Occurred (9002) and Date (9003) - must not be duplicated in a procedure

Intra/Post-Procedure Event (9001) cannot be [New Requirement for Dialysis] with Intra/Post-Procedure Event Occurred (9002) as [Yes] on multiple lab visits

When an Intra/Post-Procedure Event (9001) is provided more than once in a single Lab Visit then Intra/Post-Procedure Events Occurred (9002) cannot have conflicting responses

Post-Procedure Events - 2.16.840.1.113883.3.3478.6.3.10

Selection	Definition	Source	Code	Code System
Bleeding - Access Site	Indicate whether the patient experienced external bleeding at the access (percutaneous) site that was observed and documented in the medical record: To qualify there must be evidence of 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	Indicate if 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 (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear, endoscopy with cautery of a GI bleed).		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	Indicate if the patient experienced a confirmed bleeding event not available for selection within the registry that was 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;		1000142371	ACC NCDR

Section: Intra and Post-Procedure Events		Parent: K. Intra and Post-Procedure Events		
	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 cauterization of a GI bleed).			
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, endoscopy with cauterization of a GI bleed).	95549001	SNOMED CT	
Cardiac arrest	Indicate whether the patient experienced 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) • Asystole • Requiring cardiopulmonary resuscitation (two or more chest compressions or open chest massage, emergency temporary pacing, pericardiocentesis, institution of ECMO, or defibrillation) and without these measures death would have almost certainly resulted. Note: If an event occurs that meets the above definition of cardiac arrest, code "yes" regardless of resuscitation status of DNR/hospice/comfort care.	Data Governance Subcommittee of the NCDR's Clinical Science and Quality Committee	410429000	SNOMED CT
Cardiac tamponade	Indicate whether the patient experienced fluid in the pericardial space compromising cardiac filling and requiring intervention. Tamponade must be documented by either: 1. Echocardiogram showing pericardial fluid and signs of tamponade such as right heart compromise, or 2. Systemic hypotension due to pericardial fluid compromising cardiac function.		35304003	SNOMED CT
Cardiogenic Shock	Indicate if the patient had a new onset or acute recurrence of 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.		89138009	SNOMED CT
Heart Failure	Indicate whether the patient experienced new onset or acute recurrence of heart failure which necessitated new or increased pharmacologic therapy.		84114007	SNOMED CT
Myocardial infarction	Indicate whether the patient experienced a NEW occurrence of biomarker positive myocardial infarction (at least one determination of biomarkers obtained no sooner than 6 hours after the procedure, preferably within the interval of 6-24 hours post-procedure should be used).		22298006	SNOMED CT
	Notes: Code 'Yes' when new Q waves are present with			

Section: Intra and Post-Procedure Events

Parent: K. Intra and Post-Procedure Events

absent, incomplete or inconclusive biomarkers.
Code 'Yes' when biomarkers are not obtained in the setting of post-PCI acute MI.

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

Symptoms of ischemia.

New or presumed new significant ST-segment-T wave (ST-T) changes or new left bundle branch block (LBBB). Development of pathological Q waves in the ECG.

Imaging evidence of new loss of viable myocardium or new regional wall motion abnormality. Identification of an intracoronary thrombus by angiography or autopsy.

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

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

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

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

New Requirement for Dialysis	Indicate if the patient experienced acute or worsening renal failure necessitating renal dialysis.	100014076	ACC NCDR
	Note: 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".		
Other Vascular Complications Requiring Treatment	Indicate if the patient experienced any other vascular complications (excluding external bleeding or hematomas) at the percutaneous entry site that required treatment or intervention.	1000142419	ACC NCDR
	Note(s): Code 'Yes' for patients treated with IV therapy for loss of distal pulse.		
Stroke - Hemorrhagic	Indicate whether the patient experienced a hemorrhagic stroke.	230706003	SNOMED CT
	Hemorrhagic stroke is identified as an acute episode of focal or global cerebral or spinal dysfunction caused by intraparenchymal, intraventricular, or subarachnoid hemorrhage.		

Section: Intra and Post-Procedure Events

Parent: K. Intra and Post-Procedure Events

	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.		
	Note: Subdural hematomas are intracranial hemorrhagic events and not strokes.		
Stroke - Ischemic	Indicate whether the patient experienced an ischemic stroke.	422504002	SNOMED CT
	An ischemic stroke is an acute episode of focal or global neurological dysfunction cause by brain, spinal cord, or retinal vascular injury as a result of infarction of central nervous system tissue.		
Stroke - Undetermined	Indicate whether the patient experienced a stroke of unknown origin.	230713003	SNOMED CT
	A stroke with insufficient information to allow categorization as either ischemic or hemorrhagic. A stroke is defined as an acute episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury.		

Element: 9002

Intra/Post-Procedure Events Occurred

Coding Instruction: Indicate if the post procedure event did or did not occur.

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

Vendor Instruction: When Intra/Post-Procedure Events Occurred (9002) is [Yes] and Intra/Post-Procedure Events (9001) is [New Requirement for Dialysis] then Currently on Dialysis (4560) cannot be [Yes]

Element: 9003

Intra/Post-Procedure Event Date and Time

Coding Instruction: Indicate the date and time the event occurred.

Note(s):

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

If an event occurred more than once on the same date, record the event multiple times with the same date.

If an event occurred more than once in the target timeframe but on different dates, record the event multiple times but with unique dates.

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

Vendor Instruction: Intra/Post-Procedure Event Date and Time (9003) must be Greater than Arrival Date and Time (3001)

Intra/Post-Procedure Event Date and Time (9003) must be Less than or Equal to Discharge Date and Time (10101)

Intra/Post-Procedure Event Date and Time (9003) must be Greater than or Equal to Procedure Start Date and Time (7000)

Section: Intra Procedure Events During IVL Device Utilization

Parent: E. Procedure Information

Element: 16505	Intravascular Lithotripsy (IVL) Device Utilization
Coding Instruction:	Indicate if an intravascular lithotripsy (IVL) device was utilized for treatment during the procedure.
	Note(s): Current applicable device includes the Shockwave C2 Aero Fly Coronary IVL catheter. Additional IVL devices may be incorporated in future dataset updates.
Target Value:	Any occurrence between start of procedure and end of procedure
Element: 16501	Balloon Loss of Pressure/Rupture During IVL
Coding Instruction:	Indicate whether there is documentation of balloon loss of pressure or rupture during IVL pulse delivery (e.g., loss of inflation, device failure, or balloon rupture noted by the operator).
Target Value:	Any occurrence between start of procedure and end of procedure
Element: 14820	Serious Coronary Dissection
Coding Instruction:	Indicate if the intravascular lithotripsy (IVL) balloon lost pressure or ruptured during the delivery of IVL pulses resulting in a serious coronary dissection.
	Note(s): A serious coronary dissection is defined as a Type D, E, or F coronary dissection (Grade D or higher). Type A and B dissections are not considered serious dissections because they do not impair coronary flow. Type C dissections should not be captured as serious coronary dissections.
Target Value:	Any occurrence between start of procedure and end of procedure
Supporting Definition:	Serious Coronary Dissection (Grade D or higher) Dissection types are defined as: • Type A: Small intimal flap/double lumen, no dye persistence, minimal severity • Type B: Linear dissection with brief contrast staining, clears quickly, no flow limitation • Type C: Persisting contrast medium extravasation • Type D: Spiral dissection with delayed but complete distal flow • Type E: Persistent filling defect with delayed antegrade flow • Type F: Dissection causing total occlusion with absent distal flow Source: NCDR Science & Implementation
Element: 16498	Coronary Perforation
Coding Instruction:	Indicate if the intravascular lithotripsy (IVL) balloon lost pressure or ruptured during the delivery of the IVL pulses that resulted in a coronary perforation.
Target Value:	Any occurrence between start of procedure and end of procedure
Element: 16504	Reduction in Systolic Blood Pressure (Treated W/ Vasopressors or MCS)
Coding Instruction:	Indicate if the patient had a reduction in systolic blood pressure during the delivery of intravascular lithotripsy (IVL) pulses that required treatment with vasopressor(s) or mechanical circulatory support (MCS).
Target Value:	Any occurrence between start of procedure and end of procedure
Element: 16500	Sustained Ventricular Arrhythmia
Coding Instruction:	Indicate if the patient had a sustained ventricular arrhythmia during the delivery of intravascular lithotripsy (IVL) pulses.
Target Value:	Any occurrence between start of procedure and end of procedure
Supporting Definition:	Sustained Ventricular Arrhythmia Sustained ventricular tachycardia: Ventricular tachycardia that lasts greater than 30 seconds or requires termination due to hemodynamic compromise in less than 30 seconds. Ventricular fibrillation: Rapid, grossly irregular electrical activity with marked variability in electrocardiographic waveform, ventricular rate usually greater than 300 beats per minute. Source: NCDR Science & Implementation
Element: 14819	Cardiac Arrest
Coding Instruction:	Indicate if the patient experienced a sustained ventricular arrhythmia during the delivery of the intravascular lithotripsy (IVL) pulses that resulted in cardiac arrest.
Target Value:	Any occurrence between start of procedure and end of procedure
Supporting Definition:	Cardiac Arrest

Section: Intra Procedure Events During IVL Device Utilization

Parent: E. Procedure Information

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)
- 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: NCDR Science & Implementation

Element: 16497 Cardiac Implantable Electronic Device (CIED)

Coding Instruction: Indicate if the patient had a cardiac implantable electronic device (e.g. ICD, PPM) in place at the start of the procedure.

Target Value: The value on start of current procedure

Cardiac Implantable Electronic Device - 1.3.6.1.4.1.19376.1.4.1.6.5.1181

Selection	Definition	Source	Code	Code System
None			100001231	ACC NCDR
Defibrillator (ICD)	Implantable Cardioverter-Defibrillator device is described as a cardioverter defibrillator (ICD only), cardiac resynchronization therapy defibrillator (CRT-D) or subcutaneous cardioverter defibrillator (S-ICD).		72506001	SNOMED CT
Pacemaker	Pacemaker device is described as a single or dual chambered permanent pacemaker, cardiac resynchronization therapy (CRT-P), leadless single chamber pacemaker or a HIS/Left bundle pacemaker.		14106009	SNOMED CT
Other CIED	Select "Other" for devices that do not meet the definition of a Defibrillator or Pacemaker, such as contractility modulation (CCM). CCM is an implantable device that uses electrical impulses to improve contractility and pumping function and used primarily to treat heart failure. This device is neither a defibrillator nor a pacemaker.		112000004511	ACC NCDR

Element: 16503 Inappropriate Inhibition of Pacing

Coding Instruction: Indicate if the patient experienced inappropriate inhibition of pacing during the delivery of intravascular lithotripsy (IVL) pulses.

Note(s):
Code "Yes" when an interruption or pause in pacing during IVL pulses resulted in bradycardia, asystole/pause, hemodynamic instability, symptoms (e.g., dizziness, hypotension), or a need for intervention (e.g., backup pacing).

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

Element: 16502 Inappropriate ICD Shocks Delivered

Coding Instruction: Indicate if the patient had inappropriate ICD shocks delivered during the delivery of intravascular lithotripsy (IVL) pulses.

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

Supporting Definition: Inappropriate ICD Shocks Delivered (ICD)

An inappropriate ICD shock is defined as a device-delivered shock that is not associated with a sustained ventricular arrhythmia or a hemodynamically unstable rhythm and instead results from non-arrhythmic causes such as signal artifact, oversensing, or external energy interference (e.g., intravascular lithotripsy pulses).

Source: NCDR Science & Implementation

Element: 16499 Cardiac Implantable Electronic Device Reprogramming Required (Due to IVL)

Coding Instruction: Indicate if the cardiac implantable electronic device (CIED) required interrogation and/or reprogramming due to effects associated with intravascular lithotripsy (IVL) therapy.

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

Section: L. Discharge

Parent: Root

Element: 10030 Interventions this Hospitalization

Coding Instruction: Indicate other interventions (percutaneous or surgical) that occurred during this hospitalization.

Note(s):

This does not include interventions that occurred during the same cath lab visit as a Diagnostic Cath or PCI procedure.

Target Value: Any occurrence between arrival and discharge

Element: 10031 Intervention Type this Hospitalization

Coding Instruction: Indicate the type of intervention or surgery that occurred.

Target Value: Any occurrence between arrival and discharge

Interventions this Hosp Type

Selection	Definition	Source	Code	Code System
CABG	Coronary artery bypass graft.		232717009	SNOMED CT
Valvular Intervention	A transcatheter valvular intervention.		100014071	ACC NCDR
Cardiac Surgery (non CABG)	A surgical correction of a defect or abnormality of the heart that is non- coronary, meaning that it does not affect the blood vessels in the heart, but rather involves the valves, walls or chambers.		100014068	ACC NCDR
Structural Heart Intervention (non-valvular)	A transcatheter correction of a defect or abnormality of the heart that is non-coronary and non-valvular, meaning that it does not affect the blood vessels or the valves but is limited to the walls or chambers.		100014072	ACC NCDR
Surgery (Non Cardiac)	A surgical intervention not involving the heart.		100014022	ACC NCDR
EP Study	A cardiac electrophysiology study (EP) is a minimally invasive procedure that tests the electrical conduction system of the heart to assess the electrical activity and conduction pathways of the heart. The study is indicated to investigate the cause, location of origin, and best treatment for various abnormal heart rhythms. This type of study is performed by an electrophysiologist and using a single or multiple catheters situated within the heart through a vein or artery. If at any step during the EP study the electrophysiologist finds the source of the abnormal electrical activity, he/she may try to ablate the cells that are misfiring. This is done using high-energy radio frequencies (similar to microwaves) to effectively "cook" the abnormal cells.		252425004	SNOMED CT
Other	The intervention performed is not available for selection within the registry.		10001424811	ACC NCDR

Element: 10035 CABG Status

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

Target Value: Any occurrence between arrival and discharge

CABG Procedure Status

Selection	Definition	Source	Code	Code System
Elective	The patient's cardiac function has been stable in the days or weeks prior to the operation. The procedure could be deferred without increased risk of compromised cardiac outcome.		100001285	ACC NCDR
Urgent	Procedure required during same hospitalization in order to minimize chance of further clinical deterioration. Examples include but are not limited to: worsening sudden chest pain, CHF, acute myocardial infarction (AMI), anatomy, IABP, unstable angina (USA) with intravenous (IV) nitroglycerin (NTG) or rest angina		100001286	ACC NCDR
Emergency	Patients requiring emergency operation will have ongoing refractory (difficulty, complicated, and 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. The patient's clinical status includes any of the following: a. Ischemic dysfunction (any of the following): 1. Ongoing ischemia including rest angina despite maximal medical therapy (medical or IABP).		100001287	ACC NCDR

Section: L. Discharge

Parent: Root

2. Acute Evolving Myocardial Infarction with 24hours before surgery.
3. Pulmonary edema requiring intubation.

- b. Mechanical dysfunction (either of the following):
1. Shock with circulatory support
 2. Shock without circulatory support.

Salvage	The patient is undergoing CPR in route to the operating room or prior to anesthesia induction.	100001288	ACC NCDR
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Element: 10036

CABG Indication

Coding Instruction: Indicate the reason coronary artery bypass graft (CABG) surgery is being performed.

Target Value: Any occurrence between arrival and discharge

CABG Procedure Indication - 2.16.840.1.113883.3.3478.6.7.1

Selection	Definition	Source	Code	Code System
PCI/CABG Hybrid Procedure	Hybrid therapy occurs when both surgical and percutaneous coronary revascularization are planned, with different lesions treated with the different techniques. Examples include LIMA-LAD followed by PCI of the circumflex or RCA; or primary PCI of the infarct culprit RCA followed by CABG for the severe LMCA stenosis. Unplanned revascularization as a result of a complication (e.g., CABG for PCI-related dissection, PCI for acute graft closure) are NOT considered hybrid procedures because these sequential interventions were not part of a considered treatment strategy.		100000712	ACC NCDR
Recommendation from Dx Cath (instead of PCI)	CABG was recommended after diagnostic coronary angiography		100001291	ACC NCDR
PCI Failure	PCI failed to successfully treat the patient and CABG is required, the patient is stable without clinical deterioration.		100001292	ACC NCDR
PCI complication	PCI failed to successfully treat the patient and/or there was a complication, CABG is required and the patient is unstable.		100000709	ACC NCDR

Element: 10011

Coronary Artery Bypass Graft Date and Time

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

Note(s):

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

Code the time of skin incision, vascular access or its equivalent made in order to start the surgery.

Target Value: The first value between arrival and discharge

Supporting Definition: Coronary Artery Bypass Graft

Coronary artery bypass graft surgery is when the native vessels of the heart are bypassed with other vessels (internal mammary artery, radial artery or saphenous vein) to restore normal blood flow to the obstructed coronary arteries.

Source: Cannon CP, Brindis RG, Chaitman BR, et al. 2013 ACCF>AHA Key Date Elements and Definitions for Measuring the Clinical Management and Outcomes of Patients with Acute Coronary Syndromes and Coronary Artery Disease. Circulation. 2013;127;1052-1089.

Vendor Instruction: Coronary Artery Bypass Graft Date and Time (10011) must be Less than Discharge Date and Time (10101)

Coronary Artery Bypass Graft Date and Time (10011) must be Greater than Arrival Date and Time (3001)

Element: 10060

Creatinine

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

A discharge creatinine is coded when there are multiple post-procedure specimens (to support coding both the post-procedure & discharge data elements) or when the (single) specimen obtained does not meet the post-procedure target value.

*Do not code the results from a single specimen in both post-procedure and discharge data element fields

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>

Section: L. Discharge

Parent: Root

Element: 10061	Creatinine Not Drawn
Coding Instruction:	Indicate if a discharge creatinine level was not drawn.
Target Value:	The last value on discharge
Element: 10065	Hemoglobin
Coding Instruction:	Indicate the hemoglobin level in g/dL.
	Note(s): A discharge hemoglobin value is coded when there are multiple post-procedure specimens (to support coding both the post-procedure & discharge data elements) or when the (single) specimen obtained does not meet the post-procedure target value.
	*Do not code the results from a single specimen in both post-procedure and discharge data element fields
Target Value:	The last value on 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: 10066	Hemoglobin Not Drawn
Coding Instruction:	Indicate if the hemoglobin was not drawn.
Target Value:	The last value on discharge
Element: 10101	Discharge Date and Time
Coding Instruction:	Indicate the date and time the patient was discharged from your facility as identified in the medical record.
	Note(s):
	Indicate the time (hours:minutes) using the military 24-hour clock, beginning at midnight (00:00 hours).
	If the exact discharge time is not specified in the medical record, then code the appropriate time as below.
	0000 - 0559 (midnight to before 6AM) code 0300
	0600 - 1159 (6AM - before noon) code 0900
	1200 - 1759 (noon before 6PM) code 1500
	1800 - 2359 (6PM to before midnight) code 2100
Target Value:	The value on discharge
Vendor Instruction:	Discharge Date and Time (10101) must be Greater than Arrival Date and Time (3001)
	Discharge Date (10101) 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

Section: L. Discharge

Parent: Root

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: 10075 Comfort Measures Only

Coding Instruction: Indicate if there was physician/nurse practitioner/physician assistant documentation that the patient was receiving comfort measures.

Note(s):

Comfort Measures are not equivalent to the following: Do Not Resuscitate (DNR), living will, no code, no heroic measures.

Comfort measures are commonly referred to as palliative care in the medical community and comfort care by the general public. Palliative care includes attention to the psychological and spiritual needs of the patient and support for the dying patient and the patient's family. Usual interventions are not received because a medical decision was made to limit care to comfort measures only.

Target Value: The value on discharge

Supporting Definition: Comfort Measures Only

Comfort Measures Only refers to medical treatment of a dying person where the natural dying process is permitted to occur while assuring maximum comfort. It includes attention to the psychological and spiritual needs of the patient and support for both the dying patient and the patient's family. Comfort Measures Only is commonly referred to as "comfort care" by the general public. It is not equivalent to a physician order to withhold emergency resuscitative measures such as Do Not Resuscitate (DNR).

Source: Specifications Manual for Joint Commission National Quality Measures (v2015A)

Element: 10105 Discharge Status

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

Target Value: The value on discharge

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: 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
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Section: L. Discharge		Parent: Root	
Home		01	HL7 Discharge disposition
Discharged/transferred to an Extended care/TCU/rehab	An Extended Care/transitional care/rehab unit (selection 2) 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
Skilled Nursing facility	Skilled nursing facilities are typically for longer anticipated length of stay, as there are fewer requirements placed on subacute programs. An acute rehabilitation unit may be part of a skilled nursing facility (SNF), however, it is the higher level of care (acute rehab).	64	HL7 Discharge disposition
Other Discharge Location		100001249	ACC NCDR
Left against medical advice (AMA)	The patient was discharged or eloped against medical advice.	07	HL7 Discharge disposition
Element: 10111	Transferred for CABG		
	Coding Instruction: Indicate if the patient was transferred for the purpose of performing a coronary artery bypass graft.		
	Target Value: The value on discharge		
Element: 10112	CABG Planned after Discharge		
	Coding Instruction: Indicate if the patient has a CABG planned after discharge.		
	Note: A planned CABG could include a documented plan for the patient to receive a CABG, a patient referral for a CABG or a CABG date scheduled.		
	Target Value: The value on discharge		
Element: 10115	Hospice Care		
	Coding Instruction: Indicate if the patient was discharged to hospice care.		
	Target Value: The value on discharge		
Element: 10116	Cardiac Rehabilitation Referral		
	Coding Instruction: Indicate if there was written documentation of a referral for the patient (by the physician, nurse, or other personnel) to an outpatient cardiac rehabilitation program, or a documented medical or patient-centered reason why such a referral was not made.		
	The program may include a traditional cardiac rehabilitation program based on face-to-face interactions and training sessions or may include other options such as home-based approaches.		
	Target Value: The value on discharge		
	Supporting Definition: Cardiac Rehabilitation Referral		
	A referral is defined as an official communication between the health care provider and the patient to recommend and carry out a referral order to an early outpatient cardiac rehab (CR) program. This includes the provision of all necessary information to the patient that will allow the patient to enroll in an early outpatient CR program. This also includes a communication between the health care provider or health care system and the CR program that includes the patient's referral information for the program. A hospital discharge summary or office note may potentially be formatted to include the necessary patient information to communicate to the CR program [the patient's cardiovascular history, testing, and treatments, for instance]. All communications must maintain appropriate confidentiality as outlined by the 1996 Health Insurance Portability and Accountability Act [HIPPA].		
	Source: Thomas RJ, King M, Lui K, Oldridge N, Piña IL, Spertus J. AACVPR/ACCF/AHA 2010 Update: Performance Measures on Cardiac Rehabilitation for Referral to Cardiac Rehabilitation/Secondary Prevention Services: Endorsed by the American College of Chest Physicians, the American College of Sports Medicine, the American Physical Therapy Association, the Canadian Association of Cardiac Rehabilitation, the Clinical Exercise Physiology Association, the European Association for Cardiovascular Prevention and Rehabilitation, the Inter-American Heart Foundation, the National Association of Clinical Nurse Specialists, the Preventive Cardiovascular Nurses Association, and the Society of Thoracic Surgeons. J Am Coll Cardiol. 2010;56(14):1159-1167. doi:10.1016/j.jacc.2010.06.006.		
Cardiac Rehab - 1.3.6.1.4.1.19376.1.4.1.6.5.334			
Selection	Definition	Source	Code System
Yes	1. Documented communication between the healthcare provider and the patient to recommend an outpatient cardiac rehabilitation (CR) program AND 2A. Official referral order is sent to outpatient cardiac rehabilitation program OR 2B. Documentation of patient refusal to justify why patient information was not sent to the cardiac rehabilitation program.	100013072	ACC NCDR

Section: L. Discharge

Parent: Root

Note: Code 'yes' when step 1 AND either 2A or 2B are completed and documented.

The program may include a traditional cardiac rehabilitation program based on face-to-face interactions and training sessions or may include other options such as home-based approaches.

No - Reason Not Documented		100014064	ACC NCDR
No - Medical Reason Documented	Patient deemed by a medical professional to have a medically unstable, life-threatening condition or has other cognitive or physical impairments that preclude cardiac rehabilitation participation.	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

Element: 10117 Level of Consciousness (Discharge)

Coding Instruction: Indicate the level of consciousness after resuscitation as measured by the AVPU scale.

Target Value: The highest value from start of procedure to death

Supporting Definition: Level of Consciousness

The presence of consciousness on admission to hospital and the speed at which consciousness returns following cardiac arrest has been shown to be an indicator of neurological survival following out of hospital cardiac arrest (OHCA).

Source: Deakin, Charles D., Fothergill, Rachael, Moore, Fionna, Watson, Lynne, Whitbread, Mark, Level of consciousness on admission to a Heart Attack Centre is a predictor of survival from out-of-hospital cardiac arrest, Resuscitation (2014) doi: 10.1016/j.resuscitation.2014.02.020.

Vendor Instruction: When Level of Consciousness (Discharge) (10117) is answered then Cardiac Arrest Out of Hospital (4630) must be [Yes] *or* Cardiac Arrest at Transferring Facility (4635) must be [Yes] *or* Cardiac Arrest at this Facility (7340) must be [Yes]

When Level of Consciousness (Discharge) (10117) is [(P) Pain] then Level of Consciousness (PCI Procedure) (7810) cannot be in [(A) Alert, (V) Verbal]

When Level of Consciousness (Discharge) (10117) is [(U) Unresponsive] then Level of Consciousness (PCI Procedure) (7810) cannot be [(A) Alert, (V) Verbal, (P) Pain]

When Level of Consciousness (Discharge) (10117) is [Unable to Assess] then Level of Consciousness (PCI Procedure) (7810) cannot be [(A) Alert, (U) Unresponsive, (V) Verbal, (P) Pain]

Level of Consciousness

Selection	Definition	Source	Code	Code System
(A) Alert	Spontaneously open eyes, responding to voice (although may be confused) and motor function.		248234008	SNOMED CT
(V) Verbal	Responding to verbal stimuli.		284592002	SNOMED CT
(P) Pain	Responding to painful stimuli.		100013043	ACC NCDR
(U) Unresponsive	No eye, voice or motor response to voice or pain.		422768004	SNOMED CT
Unable to Assess	Unable to assess level of consciousness. (Example: Patient Sedated)		100014234	ACC NCDR

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

Supporting Definition: Cause of Death

Underlying cause of death is defined as "the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury".

Source: <http://www.who.int/topics/mortality/en/>

Section: L. Discharge

Parent: Root

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 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

Section: Discharge Medications

Parent: L. 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

Vendor Instruction: Discharge Medication Code (10200) should not be duplicated in an episode

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
Warfarin			11289	RxNorm
Aspirin			1191	RxNorm
Vorapaxar			1537034	RxNorm
Angiotensin II Receptor Blocker			372913009	SNOMED CT
Beta Blocker			33252009	SNOMED CT
Apixaban			1364430	RxNorm
Dabigatran			1546356	RxNorm
Edoxaban			1599538	RxNorm
Rivaroxaban			1114195	RxNorm
Clopidogrel			32968	RxNorm
Prasugrel			613391	RxNorm
Ticagrelor			1116632	RxNorm
Ticlopidine			10594	RxNorm
Statin			96302009	SNOMED CT
Non-Statin			100014161	ACC NCDR
Alirocumab			1659152	RxNorm
Evolocumab			1665684	RxNorm

Element: 10205

Discharge Medication Prescribed

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

Target Value: The value on discharge

Discharge Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.86

Selection	Definition	Source	Code	Code System
Yes - Prescribed	The medication was prescribed at discharge		100001247	ACC NCDR
Not Prescribed - No Reason	The medication was not prescribed at discharge and there is no documented reason why.		100001048	ACC NCDR
Not Prescribed - Medical Reason	The medication was not prescribed at discharge because of a (documented) medical issue/reason.		100001034	ACC NCDR
Not Prescribed - Patient Reason	The medication was not prescribed at discharge because of a (documented) patient reason or preference.		100001071	ACC NCDR

Element: 10207

Discharge Medication Dose

Coding Instruction: Indicate the category of the medication dose prescribed.

Target Value: The value on discharge

Vendor Instruction: Parent/Child Validation Notes: See Medications Master dynamic list. Enable the element when Discharge Medication Prescribed (10205) is Yes and the element reference number is listed under the enableElements column applicable to the Discharge Medication Code (10200) under the dynamic list.

Medication Dose - 1.3.6.1.4.1.19376.1.4.1.6.5.321

Selection	Definition	Source	Code	Code System
Low Intensity Dose	Daily dose lowers LDL-C, on average, by <30%	Grundy SM, Stone NJ, Bailey AL., et al. 2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APha/ASPC/NLA/PCNA guideline on the management of blood cholesterol: a report of the ACC/AHA Task Force on Clinical Practice Guidelines. J Am Coll Cardiol 2019;73:e285–350	100014036	ACC NCDR
	Fluvastatin 20-40 mg			
	Lovastatin 20 mg			
	Pitavastatin 1 mg			
	Pravastatin 10-20 mg			

Section: Discharge Medications		Parent: L. Discharge		
	Simvastatin 10 mg			
Moderate Intensity Dose	Daily dose lowers LDL-C, on average, by approximately 30% to <50%	Grundy et al., 2019.	100014035	ACC NCDR
	Atorvastatin 10-20 mg			
	Fluvastatin 40 mg twice daily			
	Fluvastatin XL 80 mg			
	Lovastatin 40 mg			
	Pitavastatin 2-4 mg			
	Pravastatin 40-80 mg			
	Rosuvastatin 5-10 mg			
	Simvastatin 20-40 mg			
High Intensity Dose	Daily dose lowers LDL-C, on average, by approximately >=50%	Grundy et al., 2019.	100014034	ACC NCDR
	Atorvastatin 40-80 mg			
	Rosuvastatin 20-40 mg			

Element: 10206 Patient Rationale for not taking medication

Coding Instruction: Indicate the patient rationale for requesting a medication not be prescribed.

Target Value: The value on discharge

Patient Rationale for Not Taking Drug - 1.3.6.1.4.1.19376.1.4.1.6.5.362

Selection	Definition	Source	Code	Code System
Cost			100013081	ACC NCDR
Alternative Therapy Preferred			100013082	ACC NCDR
Negative Side Effect			100013083	ACC NCDR

Section: Discharge Medication Details

Parent: L. Discharge

Element: 15546

Patient or Medical Reason for Not Prescribing High-Dose Statin

Coding Instruction: Indicate if there was either a patient or medical reason that a high-dose statin was not prescribed if a moderate or low-dose statin was prescribed.

Target Value: The last value on discharge

Section: M. Follow-Up

Parent: Root

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: 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 Follow-Up Reference Episode Discharge Date and Time (11015)

Follow-Up Assessment Date (11000) must be Greater than or Equal to Follow-Up Reference Procedure Start Date and Time (11001)

Follow-Up Assessment Date (11000) must be Greater than or Equal to Follow-Up Reference Episode Arrival Date and Time (11002)

A Follow Up - combination of Follow-Up Assessment Date (11000) and Follow-Up Reference Procedure Start Date and Time (11001) - may only be entered/selected once

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: 11015 Follow-Up Reference Episode Discharge Date and Time

Coding Instruction: Indicate the date and time of discharge for the episode of care that included the reference 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: The value on Follow-up

Element: 11003 Method to Determine Follow-Up Status

Coding Instruction: Indicate the method(s) used to determine the patient's vital status for follow up.

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
Hospitalization			1000142363	ACC NCDR
Other			100000351	ACC NCDR

Element: 11004 Follow-Up Status

Coding Instruction: Indicate whether the patient is alive or deceased.

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: 11005 Chest Pain Symptom Assessment

Coding Instruction: Indicate the chest pain symptom assessment as diagnosed by the physician or described by the patient.

Section: M. Follow-Up

Parent: Root

Target Value: The value on Follow-up

Chest Pain Symptom Type - 1.3.6.1.4.1.19376.1.4.1.6.5.771

Selection	Definition	Source	Code	Code System
Typical Angina	Symptoms meet all three of the characteristics of angina (also known as definite): 1. Substernal chest discomfort with a characteristic quality and duration that is 2. provoked by exertion or emotional stress and 3. relieved by rest or nitroglycerin.		429559004	SNOMED CT
Atypical angina	Symptoms meet two of the three characteristics of typical angina (also known as probable).		371807002	SNOMED CT
Non-anginal Chest Pain	The patient meets one, or none of the typical characteristics of angina.		100001275	ACC NCDR
Asymptomatic	No typical or atypical symptoms or non-anginal chest pain.		100000932	ACC NCDR

Element: 11006 Follow-Up Date of Death

Coding Instruction: Indicate the date of death.

Target Value: The value on Follow-up

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

Supporting Definition: Cause of Death

Underlying cause of death is defined as "the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury".

Source: <http://www.who.int/topics/mortality/en/>

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: M. 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: 11008 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: The value on Follow-up

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>

Section: Follow-Up Research Study

Parent: M. Follow-Up

Element: 11009

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: The value on Follow-up

Element: 11010

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: The value on Follow-up

Section: Follow-Up Events

Parent: M. Follow-Up

Element: 11011 Follow-Up Events

Coding Instruction: Indicate the event(s) assessed for the patient.

Note: Multiple instances of the same event may be identified if the event occurred more than once during the target timeframe.

Target Value: Any occurrence between discharge (or previous follow-up) and current follow-up assessment

Vendor Instruction: When Follow-Up Events (11011) are provided then Follow-Up Events Occurred (11012) cannot be [Null]

A Follow-up - combination Events (11011), Event Occurred (11012), Devices (11013) and Dates (11014) - must not be duplicated

Follow-up Events - 2.16.840.1.113883.3.3478.6.3.20

Selection	Definition	Source	Code	Code System
Bleeding Event	Indicate whether the patient experienced a bleeding event. A bleeding event must include evidence of 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 cauterization of a GI bleed).		131148009	SNOMED CT
CABG: Bypass of stented Lesion	Indicate whether the patient had a stented lesion bypassed by a graft during coronary artery bypass graft surgery. Coronary artery bypass graft surgery of a stented lesion is when a previously stented native vessel of the heart is bypassed with another vessel (internal mammary artery, radial artery or saphenous vein) to restore normal blood flow to the obstructed coronary arteries.		1000142411	ACC NCDR
CABG: Bypass of non-stented Lesion	Indicate whether the patient had a non-stented lesion bypassed by a graft during coronary artery bypass graft surgery. Coronary artery bypass graft surgery of a NON-stented lesion is when a previously NON-stented native vessel of the heart is bypassed with another vessel (internal mammary artery, radial artery or saphenous vein) to restore normal blood flow to the obstructed coronary arteries.		1000142412	ACC NCDR
Myocardial Infarction: NSTEMI	Indicate whether the patient experienced a Non-ST elevation myocardial infarction. A Non-ST-elevation myocardial infarction is defined as a development of heart muscle necrosis without the ECG change of ST-segment elevation.		401314000	SNOMED CT
Myocardial Infarction: Q Wave	Indicate whether the patient experienced a Q-wave myocardial infarction. A myocardial infarction characterized by Q waves that are abnormal either in character or number or both.		304914007	SNOMED CT
Myocardial Infarction: STEMI	Indicate whether the patient experienced an ST elevation myocardial infarction. A type of heart attack that can be defined as development of full thickness cardiac muscle damage resulting from an acute interruption of blood supply to a part of the heart and is diagnosed by ECG change of ST-segment elevation.		401303003	SNOMED CT
Myocardial Infarction: Type Unknown	Indicate whether the patient experienced a myocardial infarction of unknown origin. A heart attack with insufficient information to allow categorization as STEMI, NSTEMI or Q-wave. Myocardial Infarction or heart attack is an acute interruption of blood supply to a part of the heart and can be demonstrated by an elevation of cardiac markers (CK-MB or troponin) in the blood.		1000142430	ACC NCDR
PCI of non-stented Lesion	Indicate whether the patient received mechanical		1000142414	ACC NCDR

Section: Follow-Up Events

Parent: M. Follow-Up

revascularization to a NON-stented lesion during percutaneous coronary intervention.

Percutaneous coronary intervention (PCI) of a NON-stented lesion is a non-surgical procedure used to treat narrowing of the coronary arteries of the heart found in coronary artery disease in a previously non-stented lesion.

PCI is defined as any procedure that is performed to widen the lumen of an obstructed coronary artery and involves passing a catheter through the skin and into a blood vessel (as of the groin) to the site of obstruction so the blockage can be compressed (as by use of a balloon catheter often followed by placement of a stent) or removed (as by atherectomy).

PCI of Stented Lesion	Indicate whether the patient received mechanical revascularization to a stented lesion during percutaneous coronary intervention. Percutaneous coronary intervention (PCI) of a stented lesion is a non-surgical procedure used to treat narrowing (stenosis) of the coronary arteries of the heart found in coronary artery disease in a previously treated and stented lesion. PCI is defined as any procedure that is performed to widen the lumen of an obstructed coronary artery and involves passing a catheter through the skin and into a blood vessel (as of the groin) to the site of obstruction so the blockage can be compressed (as by use of a balloon catheter often followed by placement of a stent) or removed (as by atherectomy).	1000142413	ACC NCDR
Readmission: Non-PCI Related	Indicate whether the patient was readmitted to the hospital for a condition unrelated to the percutaneous coronary intervention. Readmission with a condition, unrelated to the percutaneous coronary intervention, and admission to a hospital ward, hospital room or intensive care unit. Visits to the emergency department or observation units do not qualify. A planned readmission for a staged PCI procedure does not qualify.	1000142380	ACC NCDR
Stroke - Hemorrhagic	Indicate whether the patient experienced a hemorrhagic stroke. Hemorrhagic stroke is identified as an acute episode of focal or global cerebral or spinal dysfunction caused by intraparenchymal, intraventricular, or subarachnoid hemorrhage. Hemorrhage may be a consequence of ischemic stroke. In this situation, the stroke is an ischemic stroke with hemorrhagic transformation and NOT a hemorrhagic stroke. Note: Subdural hematomas are intracranial hemorrhagic events and not strokes.	230706003	SNOMED CT
Stroke - Ischemic	Indicate whether the patient experienced an ischemic stroke. An ischemic stroke is an acute episode of focal or global neurological dysfunction cause by brain, spinal cord, or retinal vascular injury as a result of infarction of central nervous system tissue.	422504002	SNOMED CT
Stroke - Undetermined	Indicate whether the patient experienced a stroke of unknown origin. A stroke with insufficient information to allow categorization as either ischemic or hemorrhagic. A stroke is defined as an acute episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury.	230713003	SNOMED CT

Section: Follow-Up Events		Parent: M. Follow-Up	
Thrombosis in stented Lesion	Indicate whether the patient experienced a thrombosis in a stented lesion. The formation of a blood clot inside a previously treated and stented lesion.	1000142415	ACC NCDR
Thrombosis in non-stented Lesion	Indicate whether the patient experienced a thrombosis in a NON-stented lesion. The formation of a blood clot inside a non-stented coronary artery lesion.	1000142416	ACC NCDR
Element: 11012	Follow-Up Events Occurred		
	Coding Instruction: Indicate if the event(s) occurred.		
	Target Value: Any occurrence between discharge (or previous follow-up) and current follow-up assessment		
Element: 11013	Follow-Up Devices Event Occurred In		
	Coding Instruction: Indicate the device that the event occurred in.		
	Note(s): The device(s) collected in this field are controlled by the Intracoronary Device Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application.		
	Target Value: All values between discharge (or previous follow-up) and current follow-up assessment		
	Vendor Instruction: Parent/Child Validation Notes: See Events Master dynamic list. Enable the element when Follow-Up Events Occurred (11012) is Yes and the element reference number is listed under the enableElements column applicable to the Follow-Up Events (11011) under the dynamic list.		
Element: 11014	Follow-Up Event Dates		
	Coding Instruction: Identify each date when the specified event occurred.		
	If an event occurred more than once on the same date, record the event multiple times with the same date.		
	If an event occurred more than once in the target timeframe but on different dates, record the event multiple times but with unique dates.		
	Target Value: All values between discharge (or previous follow-up) and current follow-up assessment		
	Vendor Instruction: Follow-Up Event Dates (11014) must be Greater than or Equal to Follow-Up Reference Episode Arrival Date and Time (11002)		
	Follow-Up Event Dates (11014) must be Greater than or Equal to Follow-Up Reference Procedure Start Date and Time (11001)		
	Follow-Up Event Dates (11014) must be Greater than or Equal to Follow-Up Reference Episode Discharge Date and Time (11015)		
	Follow-Up Event Dates (11014) must be Less than or Equal to Follow-Up Date of Death (11006)		

Section: Follow-Up Medications
Parent: M. 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

Vendor Instruction: Follow-Up Medications Code (11990) should not be duplicated in a follow-up

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
Warfarin			11289	RxNorm
Aspirin			1191	RxNorm
Vorapaxar			1537034	RxNorm
Angiotensin II Receptor Blocker			372913009	SNOMED CT
Apixaban			1364430	RxNorm
Dabigatran			1546356	RxNorm
Edoxaban			1599538	RxNorm
Rivaroxaban			1114195	RxNorm
Clopidogrel			32968	RxNorm
Prasugrel			613391	RxNorm
Ticagrelor			1116632	RxNorm
Ticlopidine			10594	RxNorm
Statin			96302009	SNOMED CT
Non-Statin			100014161	ACC NCDR
Alirocumab			1659152	RxNorm
Evolocumab			1665684	RxNorm

Element: 11995

Follow-Up 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 last value between discharge (or previous follow-up) and current follow-up assessment

Follow-Up Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.371

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

Element: 11996

Follow-Up Medication Dose

Coding Instruction: Indicate the category of the dose of statin prescribed at follow-up.

Target Value: The last value between discharge (or previous follow-up) and current follow-up assessment

Vendor Instruction: Parent/Child Validation Notes: See Medications Master dynamic list. Enable the element when Follow-Up Medications Prescribed (11995) is Yes and the element reference number is listed under the enableElements column applicable to the Follow-Up Medications Code (11990) under the dynamic list.

Medication Dose - 1.3.6.1.4.1.19376.1.4.1.6.5.321

Selection	Definition	Source	Code	Code System
Low Intensity Dose	Daily dose lowers LDL-C, on average, by <30%	Grundy SM, Stone NJ, Bailey AL., et al. 2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA guideline on the management of blood cholesterol: a report of the	100014036	ACC NCDR
	Fluvastatin 20-40 mg			

Section: Follow-Up Medications		Parent: M. Follow-Up		
	Lovastatin 20 mg Pitavastatin 1 mg Pravastatin 10-20 mg Simvastatin 10 mg	ACC/AHA Task Force on Clinical Practice Guidelines. J Am Coll Cardiol 2019;73:e285–350		
Moderate Intensity Dose	Daily dose lowers LDL-C, on average, by approximately 30% to <50%	Grundy et al., 2019.	100014035	ACC NCDR
	Atorvastatin 10-20 mg Fluvastatin 40 mg twice daily Fluvastatin XL 80 mg Lovastatin 40 mg Pitavastatin 2-4 mg Pravastatin 40-80 mg Rosuvastatin 5-10 mg Simvastatin 20-40 mg			
High Intensity Dose	Daily dose lowers LDL-C, on average, by approximately ≥50%	Grundy et al., 2019.	100014034	ACC NCDR
	Atorvastatin 40-80 mg Rosuvastatin 20-40 mg			

Section: Follow-Up SA Questionnaire

Parent: M. Follow-Up

Element: 11301 Q1a: Difficulty walking indoors on level ground

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 1a "Over the past four weeks, as a result of your angina, how much difficulty have you had in: walking indoors on level ground?"

Target Value: The value on Follow-up

SAQ Response Question 1

Selection	Definition	Source	Code	Code System
Extremely limited			100001173	ACC NCDR
Quite a bit limited			100001171	ACC NCDR
Moderately limited			100001170	ACC NCDR
Slightly limited			100014042	ACC NCDR
Not at all limited			100001167	ACC NCDR
Limited for other reasons or did not do these activities			100014041	ACC NCDR

Element: 11302 Q1b: Difficulty gardening, vacuuming or carrying groceries

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 1b "Over the past four weeks, as a result of your angina, how much difficulty have you had in: gardening, vacuuming, or carrying groceries?"

Target Value: The value on Follow-up

SAQ Response Question 1

Selection	Definition	Source	Code	Code System
Extremely limited			100001173	ACC NCDR
Quite a bit limited			100001171	ACC NCDR
Moderately limited			100001170	ACC NCDR
Slightly limited			100014042	ACC NCDR
Not at all limited			100001167	ACC NCDR
Limited for other reasons or did not do these activities			100014041	ACC NCDR

Element: 11303 Q1c: Difficulty lifting or moving heavy objects (e.g. furniture, children)

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 1c "Over the past four weeks, as a result of your angina, how much difficulty have you had in: lifting or moving heavy objects (e.g. furniture, children)?"

Target Value: The value on Follow-up

SAQ Response Question 1

Selection	Definition	Source	Code	Code System
Extremely limited			100001173	ACC NCDR
Quite a bit limited			100001171	ACC NCDR
Moderately limited			100001170	ACC NCDR
Slightly limited			100014042	ACC NCDR
Not at all limited			100001167	ACC NCDR
Limited for other reasons or did not do these activities			100014041	ACC NCDR

Element: 11305 Q2: Had chest pain, chest tightness, or angina

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 2 "Over the past four weeks, on average, how many times have you: Had chest pain, chest tightness, or angina?"

Target Value: The value on Follow-up

SAQ Response Question 2 and 3

Selection	Definition	Source	Code	Code System
4 or more times per day			100014043	ACC NCDR
1 - 3 times per day			100014044	ACC NCDR
3 or more times per week but not every day			100014045	ACC NCDR
1 - 2 times per week			100014046	ACC NCDR
Less than once a week			100014047	ACC NCDR
None over the past 4 weeks			100014048	ACC NCDR

Element: 11310 Q3: Had to take nitroglycerin (Tablets or spray) for your chest pain, chest tightness or angina

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 3 "Over the past four weeks, on average, how many times have you: Had to take nitroglycerin (Tablets or spray) for your chest pain, chest tightness or angina?"

Section: Follow-Up SA Questionnaire

Parent: M. Follow-Up

Target Value: The value on Follow-up

SAQ Response Question 2 and 3

Selection	Definition	Source	Code	Code System
4 or more times per day			100014043	ACC NCDR
1 - 3 times per day			100014044	ACC NCDR
3 or more times per week but not every day			100014045	ACC NCDR
1 - 2 times per week			100014046	ACC NCDR
Less than once a week			100014047	ACC NCDR
None over the past 4 weeks			100014048	ACC NCDR

Element: 11315 Q4: Chest pain, chest tightness or angina limited your enjoyment of life

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 4 "Over the past four weeks, on average, how many times have you: Chest pain, chest tightness or angina limited your enjoyment of life?"

Target Value: The value on Follow-up

SAQ Response Question 4

Selection	Definition	Source	Code	Code System
It has extremely limited my enjoyment of life			100014049	ACC NCDR
It has limited my enjoyment of life quite a bit			100014050	ACC NCDR
It has moderately limited my enjoyment of life			100014051	ACC NCDR
It has slightly limited my enjoyment of life			100014052	ACC NCDR
It has not limited my enjoyment of life at all			100014053	ACC NCDR

Element: 11320 Q5: How would you feel about this

Coding Instruction: Indicate the patient's response to the Seattle Angina Questionnaire (SAQ) Question 5 "If you had to spend the rest of your life with your chest pain, chest tightness or angina the way it is right now how would you feel about that?"

Target Value: The value on Follow-up

SAQ Response Question 5

Selection	Definition	Source	Code	Code System
Not satisfied at all			100014054	ACC NCDR
Mostly dissatisfied			100014055	ACC NCDR
Somewhat satisfied			100001197	ACC NCDR
Mostly satisfied			100014057	ACC NCDR
Completely satisfied			100014058	ACC NCDR

Section: Follow-Up Rose Dyspnea Scale

Parent: M. Follow-Up

Element: 11330	Rose Dyspnea Scale Question 1
Coding Instruction:	Indicate the patient's response to the Rose Dyspnea Scale Questionnaire Question 1 "Do you get short of breath when hurrying on level ground or walking up a slight hill?"
Target Value:	The value on Follow-up
Element: 11335	Rose Dyspnea Scale Question 2
Coding Instruction:	Indicate the patient's response to the Rose Dyspnea Scale Questionnaire Question 2 "Do you get short of breath when walking with other people your own age on level ground?"
Target Value:	The value on Follow-up
Element: 11340	Rose Dyspnea Scale Question 3
Coding Instruction:	Indicate the patient's response to the Rose Dyspnea Scale Questionnaire Question 3 "Do you get short of breath when walking at your own pace on level ground?"
Target Value:	The value on Follow-up
Element: 11345	Rose Dyspnea Scale Question 4
Coding Instruction:	Indicate the patient's response to the Rose Dyspnea Scale Questionnaire Question 4 "Do you get short of breath when washing or dressing?"
Target Value:	The value on Follow-up

Section: Z. Administration
Parent: Root

Element: 1000	Participant ID
Coding Instruction:	Indicate the participant ID of the submitting facility.
Target Value:	N/A
Supporting Definition:	Participant ID Participant ID is a unique number assigned to each database participant by NCDR. A database participant is defined as one entity that signs a Participation Agreement with the NCDR, submits one data submission file to the harvest, and receives one report on their data. Each participant's data if submitted to harvest must be in one data submission file for a quarter. If one participant keeps their data in more than one file (e.g. at two sites), then the data must be combined into a single data submission to the system to file for the harvest. If two or more participants share a single purchased software, and enter cases into one database, then the data must be exported into different data submission files, one for each participant ID. Source: NCDR
Element: 1010	Participant Name
Coding Instruction:	Indicate the full name of the facility where the procedure was performed.
	Note(s): Values should be full, official hospital names with no abbreviations or variations in spelling.
Target Value:	N/A
Supporting Definition:	Participant Name Indicate the full name of the facility where the procedure was performed. Values should be full, official hospital names with no abbreviations or variations in spelling. Source: NCDR
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

Section: Z. Administration

Parent: Root

Element: 1085

Submission Type

Coding Instruction: Indicate if the data contained in the harvest/data file contains either standard patient episode of care records (arrival date to discharge only) or if it contains patient follow-up records.

A transmission file with all episode of care records (from Arrival to Discharge only) is considered a 'Base Registry Record'.

A file with patient follow-up records (any follow-up assessments performed during the quarter selected) is considered a 'Follow-Up Record'.

Note(s):

Selecting 'Follow-Up Records Only' will transmit all patient records with Follow-up Assessment Dates (Element Ref# 11000) contained in the selected timeframe, regardless of the procedure or discharge date. For example, if a patient has a procedure on 3/30/2017, is discharged on 3/31/2017, and has a follow-up assessment on 5/6/2017, the patient's episode of care data will be transmitted in the 2017Q1 Base Registry Record file, but the Follow-up data will be transmitted in the 2017Q2 Follow-Up File.

Target Value: N/A

Submission Type

Selection	Definition	Source	Code	Code System
Episode of Care Records Only			1000142424	ACC NCDR
Follow-Up Records Only			1000142425	ACC NCDR