Section: Demographics **Parent: Root**

Element: 2000 Last Name

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

Target Value: The value on arrival at this facility

Element: 2010 First Name

Coding Instruction: Indicate the patient's first name.

Target Value: The value on arrival at this facility

Element: 2020 Middle Name

Coding Instruction: Indicate the patient's middle name.

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

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

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

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

Target Value: The value on arrival at this facility

Element: 2050 Birth Date

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

Target Value: The value on arrival at this facility

Element: 2030 SSN

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

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

Target Value: The value on arrival at this facility

Element: 2031 SSN N/A

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

Target Value: The value on arrival at this facility

Element: 2040 Patient ID

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

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

Target Value: The value on arrival at this facility

Element: 2045 Other ID

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

Target Value: N/A

Element: 2060 Sex

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

Target Value: The value on arrival at this facility

Person Sex - 1.3.6.1.4.1.19376.1.4.1.6.5.19

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

Section: Demographics **Parent: Root**

Element: 2065 Patient Zip Code

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

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

Target Value: The value on arrival at this facility

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.

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

Section: Demographics **Parent: Root**

Element: 2074 Race - Native Hawaiian/Pacific Islander

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

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

Target Value: The value on arrival at this facility

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

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

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

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

Element: 14780 Original Patient ID

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

Target Value: N/A

Element: 14781 Original NCDR Vendor

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

Target Value: N/A

Section: Episode Information — Parent: Episode of Care

Element: 2999 Episode Unique Key

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

Target Value: N/A

Element: 3000 Arrival Date

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

Target Value: N/A

Vendor Instruction: Patient must be at least 18 years old at the time of Arrival Date (3000)

Arrival Date (3000) must be Less than or Equal to Discharge Date (10100)

Element: 3005 Health Insurance

Coding Instruction: Indicate if the patient has health insurance.

Target Value: The value on arrival at this facility

Element: 3010 Health Insurance Payment Source

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

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

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

Target Value: The value on arrival at this facility

Payor Category - 1.3.6.1.4.1.19376.1.4.1.6.5.5

Selection	Definition	Source	Code	Code System
Private Health Insurance	Private health insurance is coverage by a health plan provided through an employer or union or purchased by an individual from a private health insurance company. A health maintenance organization (HMO) is considered private health insurance.		5	PHDSC
Medicare	Medicare is the Federal program which helps pay health care costs for people 65 and older and for certain people under 65 with long-term disabilities.		1	PHDSC
Medicare Advantage	A Medicare program that gives you more choices among health plans. Everyone who has Medicare Parts A and B is eligible, except those who have End-Stage Renal Disease (unless certain exceptions apply). Medicare Advantage Plans used to be called Medicare + Choice Plans.	https://www.cms.gov/apps/glossary/	112000002025	ACC NCDR
Medicaid	Medicaid is a program administered at the state level, which provides medical assistance to the needy. Families with dependent children, the aged, blind, and disabled who are in financial need are eligible for Medicaid. It may be known by different names.		2	PHDSC
Military Health Care	Military Health care - Military health care includes TRICARE/CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) and CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs (VA).		31	PHDSC
State-Specific Plan (non-Medicaid)	State Specific Plans - Some states have their own health insurance programs for low-income uninsured individuals. These health plans may be known by different names in different states.		36	PHDSC
Indian Health Service	Indian Health Service (IHS) is a health care program through which the Department of Health and Human Services provides medical assistance to eligible American Indians at IHS facilities. In addition, the IHS helps pay the cost of selected health care services provided at non-HIS facilities.		33	PHDSC
Non-US Insurance	Non-US insurance refers to individuals with a payor that does not originate in the United States.		100000812	ACC NCDR

Section: Episode Information | **Parent: Episode of Care**

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. Intended for future use.

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

Element: 3025 Research Study Name

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

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

Target Value: N/A

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

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

Element: 3030 Research Study Patient ID

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

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

Target Value: N/A

Section: LAAO Intervention **Parent: Episode of Care**

Element: 14791 Admission for Left Atrial Appendage Occlusion Intervention

Coding Instruction: Indicate if the patient was admitted to the hospital specifically for an Left Atrial Appendage (LAA) Occlusion Intervention.

Target Value: The value on arrival at this facility

Section: CHA2DS2-VASc Risk Scores **Parent: History and Risk Factors**

Element: 4005 CHA2DS2-VASc Congestive Heart Failure

Coding Instruction: Indicate if the patient has been diagnosed with heart failure according to the CHA2DS2-VASc definition.

Note(s): A diagnosis of heart failure must be specifically documented in the medical record and not coded by the abstractor based upon patient symptoms.

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

Supporting Definition: **CHA2DS2-VASc Congestive Heart Failure**

The presence of signs and symptoms of either right (elevated central venous pressure, hepatomegaly, dependent edema) or left ventricular failure (exertionaldyspnea, cough, fatigue, orthopnea, paroxysmal nocturnal dyspnea, cardiac enlargement, rales, gallop rhythm, pulmonary venous congestion) or both, confirmed by non-invasive or invasive measurements demonstrating objective evidence of cardiac dysfunction.

Source: Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation Lip GH, Nieuwlaat R, Pisters R, Lane DA, Crijns HM. Chest.2010;137(2):263-272.

Element: 4010 NYHA Functional Classification

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

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

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

Supporting Definition: **NYHA**

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

Source: 2013 ACCF/AHA Guideline for the Management of Heart Failure; J Am Coll Cardiol. 2013;62(16):e147-e239. doi:10.1016/j.jacc.2013.05.019

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	Patient has cardiac disease resulting in slight limitation of ordinary physical activity. Patient is comfortable at rest. Ordinary physical activity such as walking more than two blocks or climbing more than one flight of stairs results in limiting symptoms (e.g., fatigue, palpitation, dyspnea, or anginal pain).	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	Patient has cardiac disease resulting in marked limitation of physical activity. Patient is comfortable at rest. Less than ordinary physical activity (e.g., walking one to two level blocks or climbing one flight of stairs) causes fatigue, palpitation, dyspnea, or anginal pain.	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.		422293003	SNOMED CT

Element: 4015 CHA2DS2-VASc LV Dysfunction

Coding Instruction: Indicate if the patient has been diagnosed with Left Ventricular (LV) Dysfunction according to the CHA2DS2-VASc definition.

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

Supporting Definition: **CHA2DS2 -VASc LV Dysfunction**

Left Ventricular Ejection Fraction < 40%.

Source: Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation Lip GH, Nieuwlaat R, Pisters R, Lane DA, Crijns HM. Chest.2010;137(2):263-272.

Element: 4020 CHA2DS2-VASc Hypertension

Coding Instruction: Indicate if the patient has been diagnosed with hypertension according to the CHA2DS2-VASc definition.

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

Supporting Definition: **CHA2DS2-VASc Hypertension**

Section: CHA2DS2-VASc Risk Scores **Parent: History and Risk Factors**

A resting blood pressure >140mmHg systolic and/or >90mmHg diastolic on at least 2 occasions or current antihypertensive pharmacologic treatment.

Source: Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation Lip GH, Nieuwlaat R, Pisters R, Lane DA, Crijns HM. Chest.2010;137(2):263-272.

Element: 4025 CHA2DS2-VASc Diabetes Mellitus

Coding Instruction: Indicate if the patient has been diagnosed with diabetes mellitus according to the CHA2DS2-VASc definition.

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

Supporting Definition: **CHA2DS2-VASc Diabetes Mellitus**

Fasting plasma glucose level ≥7.0 mmol/L (126 mg/dL) or treatment with oral hypoglycemic agent and/or insulin.

Source: Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation Lip GH, Nieuwlaat R, Pisters R, Lane DA, Crijns HM. Chest.2010;137(2):263-272.

Element: 4030 CHA2DS2-VASc Stroke

Coding Instruction: Indicate if the patient has been diagnosed with an ischemic stroke according to the CHA2DS2-VASc definition.

Note(s):
Patients with a history of stroke documented as undetermined in origin may be coded, but patients with a history of stroke documented as hemorrhagic in origin should not be coded.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **CHA2DS2-VASc Stroke**

Ischemic stroke is defined as a focal neurologic deficit of sudden onset as diagnosed by a neurologist, lasting > 24 h and caused by ischemia.

Source: Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation Lip GH, Nieuwlaat R, Pisters R, Lane DA, Crijns HM. Chest.2010;137(2):263-272.

Element: 4035 CHA2DS2-VASc TIA

Coding Instruction: Indicate if the patient has been diagnosed with a transient ischemic attack (TIA) according to the CHA2DS2-VASc definition.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **CHA2DS2-VASc TIA**

Transient ischemic attack (TIA) is defined as a focal neurologic deficit of sudden onset as diagnosed by a neurologist, lasting < 24 hr.

Source: Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation. Lip GH, Nieuwlaat R, Pisters R, Lane DA, Crijns HM. Chest. 2010;137(2):263-272.

Element: 4040 CHA2DS2-VASc Thromboembolic Event

Coding Instruction: Indicate if the patient has been diagnosed with a thromboembolic event (TE) according to the CHA2DS2-VASc definition.

Note(s):
A thromboembolic event is defined as a thrombus formed in a blood vessel that breaks loose and travels to occlude another vessel.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Thromboembolic Events (peripheral)**

Peripheral embolism is defined as a thromboembolic event (TE) outside the brain, heart, eyes, and lungs. Pulmonary embolism is defined by the responsible physician.

TE is defined as either an ischemic stroke, peripheral embolism, or pulmonary embolism.

Source: Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation. Lip GH, Nieuwlaat R, Pisters R, Lane DA, Crijns HM. Chest. 2010;137(2):263-272.

Element: 4045 CHA2DS2-VASc Vascular Disease

Coding Instruction: Indicate if the patient has been diagnosed with vascular disease according to the CHA2DS2-VASc definition.

Note(s):
CHA2DS2-VASc Score Vascular disease (defined as prior MI, PAD, or aortic plaque) if Yes = + 1; If the clinician has utilized the presence of CAD, PCI, CABG, or carotid disease in the patient's history as determining factors for selecting the CHA2DS2-VASc Vascular Disease element when considering the patient's risk score, please note CAD, PCI, CABG, and carotid disease were not part of the original validated vascular disease criterion for the CHA2DS2-VASc score.

Target Value: Any occurrence between birth and the procedure

Element: 4050 Vascular Disease Type

Section: CHA2DS2-VASc Risk Scores — Parent: History and Risk Factors

Coding Instruction: Indicate if the patient has a history of a prior myocardial infarction (MI), peripheral artery disease (PAD) or a known aortic plaque. If the patient has multiple vascular diseases, select all relevant disease types.

Note(s):
The following conditions are not part of the original definition of CHA2DS2-VASc Vascular Disease type: CAD, PCI, CABG, Carotid Disease, Carotid Stent, or Carotid Endarterectomy. Any finding of these conditions in the patient's medical history does not automatically allow coding of yes. Please code only if the physician utilized any of these conditions as part of the assessment when documenting or determining the patient's CHA2DS2-VASc risk score.

Target Value: Any occurrence between birth and the procedure

Vascular Disease Type - 1.3.6.1.4.1.19376.1.4.1.6.5.221

Selection	Definition	Source	Code	Code System
Prior Myocardial Infarction (MI)			399211009	SNOMED CT
Peripheral Arterial Occlusive Disease (PAD)	Current or previous history of peripheral arterial disease (includes subclavian, iliac, femoral, and upper - and lower-extremity vessels; excludes renal, coronary, cerebral, and mesenteric vessels and aneurysms). This can include: * Claudication on exertion * Amputation for arterial vascular insufficiency * Vascular reconstruction, bypass surgery, or percutaneous revascularization in the arteries of the extremities * Positive noninvasive test (e.g., ankle brachial index <= 0.9, ultrasound, MR or CT imaging of >50% diameter stenosis in any peripheral artery (i.e., subclavian, femoral, iliac) or angiographic imaging)	ACCF/AHA 2011 Key Data Elements and Definitions of a Base Cardiovascular Vocabulary for Electronic Health Records (JACC 2011;58;202-222)	399957001	SNOMED CT
Known Aortic Plaque	Discovery of a complex aortic plaque (> 4 mm thick, or mobile, ulcerated, or pedunculated) may occur when TEE is performed as part of the evaluation for an acute stroke or peripheral embolism. Imaging techniques used for detection of aortic plaques have included transesophageal echocardiogram (TEE), computed tomography (CT), magnetic resonance imaging (MRI), and transthoracic echocardiogram (TTE).	Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the Euro Heart Survey on atrial fibrillation. Lip GY, Nieuwlaat R, Pisters R, et al. Chest. 2010;137:263-72.	1522000|15825003	SNOMED CT
Coronary Artery Disease (CAD)*	Current or previous history of any of the following: * Coronary artery stenosis >=50% (by cardiac catheterization or other modality or of direct imaging of the coronary arteries) * Previous CABG surgery * Previous PCI * Previous MI	ACCF/AHA 2011 Key Data Elements and Definitions of a Base Cardiovascular Vocabulary for Electronic Health Records (JACC 2011;58;202-222)	53741008	SNOMED CT
Percutaneous Coronary Intervention (PCI)*	Current or previous history of percutaneous coronary artery, coronary valvular or coronary structural intervention.		415070008	SNOMED CT
Coronary Artery Bypass Graft (CABG)*	Current or previous history of coronary artery bypass graft.		232717009	SNOMED CT
Carotid Artery Disease*	Current or previous history of carotid disease.		371160000	SNOMED CT

Section: HAS-BLED Risk Scores **Parent: History and Risk Factors**

Element: 4055 HAS-BLED Hypertension (Uncontrolled)

Coding Instruction: Indicate if the patient has been diagnosed with uncontrolled hypertension as defined HAS- BLED Risk Model.

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

Supporting Definition: **HAS-BLED Hypertension (Uncontrolled)**

Uncontrolled Hypertension is defined as a systolic blood pressure >160 mmHg despite medical therapy to lower the patient's blood pressure. This may also be documented as Hypertension resistant to medical therapy within the medical record.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100

Element: 4060 HAS-BLED Abnormal Renal Function

Coding Instruction: Indicate if the patient has been diagnosed with abnormal renal function as defined by the HAS-BLED Risk Model.

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

Supporting Definition: **HAS-BLED Abnormal Renal Function**

Abnormal Renal Function is defined by the HAS-BLED Risk Model by any one of the following variables: a history of being the recipient of at least one kidney transplant or chronic dialysis in the past or a dialysis treatment in the week prior to admission or serum creatinine ≥ 200 micromole/L (≥2.6 mg/dL).
Chronic is defined as three months or greater.

Dialysis treatment includes hemodialysis and peritoneal dialysis.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100

Element: 4065 HAS-BLED Abnormal Liver Function

Coding Instruction: Indicate if the patient has been diagnosed with abnormal liver function as defined by the HAS-BLED Risk Model.

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

Supporting Definition: **HAS-BLED Abnormal Liver Function**

Abnormal liver function is defined by the HAS-BLED Risk Model as chronic hepatic disease (eg, cirrhosis) or biochemical evidence of significant hepatic derangement (eg, bilirubin more than two times the upper limit of normal, in association with aspartate transaminase/alanine transaminase/alkaline phosphatase more than three times the upper limit normal).

Chronic is defined as three months or greater.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100

Element: 4070 HAS-BLED Stroke

Coding Instruction: Indicate if the patient has experienced a stroke in the past as defined by the HAS-BLED Risk Model.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **HAS-BLED Stroke**

A stroke is defined by the HASBLED Risk Model as an acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100Lip GY. Implications of the CHA(2)DS(2)-VASc and HAS-BLED Scores for thromboprophylaxis in atrial fibrillation. Am J Med. 2011 Feb;124(2):111-4.

Element: 14792 HAS-BLED Stroke Type

Coding Instruction: Indicate what type of stroke the patient has experienced in the past as defined by the HAS-BLED Risk Model.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **HAS-BLED Stroke**

A stroke is defined by the HASBLED Risk Model as an acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100Lip GY. Implications of the CHA(2)DS(2)-VASc and HAS-BLED Scores for thromboprophylaxis in atrial fibrillation. Am J Med. 2011 Feb;124(2):111-4.

HAS-BLED Stroke Type - 1.3.6.1.4.1.19376.1.4.1.6.5.773

Selection	Definition	Source	Code	Code System
Hemorrhagic Stroke	Hemorrhage may be a consequence of ischemic stroke. In this situation, the stroke is an ischemic stroke with hemorrhagic transformation and not a hemorrhagic		230706003	SNOMED CT

Section: HAS-BLED Risk Scores **Parent: History and Risk Factors**

	stroke. Hemorrhagic stroke is defined as an acute episode of focal or global cerebral or spinal dysfunction caused by intraparenchymal, intraventricular, or subarachnoid hemorrhage. Note: Subdural hematomas are intracranial hemorrhagic events and not strokes.		
Ischemic Stroke	An ischemic stroke is an acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of infarction of central nervous system tissue.	422504002	SNOMED CT
Undetermined Stroke	A stroke of undetermined origin is defined as an acute episode of focal or global neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction but with insufficient information to allow categorization as ischemic or hemorrhagic.	230713003	SNOMED CT

Element: 4095 HAS-BLED Bleeding

Coding Instruction: Indicate if the patient has a history of a major bleeding event or predisposition to bleeding (eg, bleeding diathesis, anemia) as defined by the HAS-BLED Risk Model.

Note(s): Major bleeding defined as any bleeding requiring hospitalization, and/or causing a decrease in hemoglobin level > 2 g/dL, and/or requiring blood transfusion that was not hemorrhagic stroke.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **HAS-BLED Bleeding**

Bleeding is defined by the HAS-BLED Risk Model as a history of a major bleeding event or predisposition to bleeding (eg, bleeding diathesis, anemia).

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100

Element: 4100 HAS-BLED Labile INR

Coding Instruction: Indicate if the patient has experienced a labile international normalized ratios (INR) while on Warfarin therapy as defined by the HAS-BLED Risk Model.

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

Supporting Definition: **HAS-BLED Labile INR**

Labile INR is defined by the HAS-BLED Risk Model as unstable/high international normalized ratios (INR) or <60 percent of INR values in therapeutic range. Therapeutic range is defined as 2 - 3 inclusive.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100

Element: 4105 HAS-BLED Alcohol

Coding Instruction: Indicate if the patient uses alcohol in excess as defined by the HAS-BLED Risk Score.

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

Supporting Definition: **HAS-BLED Alcohol**

Alcohol excess is defined by the HAS-BLED Risk Model as consuming >=8 units/week.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100

Element: 4110 HAS-BLED Drugs - Antiplatelet

Coding Instruction: Indicate if the patient is taking antiplatelet medications.

Note(s): If the patient is taking any dosage of aspirin code as "Yes".

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

Supporting Definition: **HAS-BLED Drugs - Antiplatelets**

Concomitant use of ASA/NSAIDS or antiplatelet medication with alcohol may predisposed the patient to bleeding per the HAS-BLED Risk Model.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100

Element: 4115 HAS-BLED Drugs - NSAIDS

Section: HAS-BLED Risk Scores **Parent: History and Risk Factors**

Coding Instruction: Indicate if the patient is taking a non-steroidal anti-inflammatory drug (NSAID).

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

Supporting Definition: **HAS-BLED Drugs - NSAIDS**

Concomitant use of ASA/NSAIDS or antiplatelet medication with alcohol may predisposed the patient to bleeding per the HAS-BLED Risk Model.

Source: A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Pisters R, Lane DA, Nieuwlaat R, et al. Chest. 2010;138(5):1093-1100

Section: Additional Stroke and Bleeding Risk Factors **Parent: History and Risk Factors**

Element: 14793 Increased Fall Risk

Coding Instruction: Indicate if the patient has an increased susceptibility to falling that may cause physical harm as defined by the American Geriatrics Society.

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

Supporting Definition: **Increased Fall Risk**

A patient is at increased risk for falls if they have experienced any of the following: two or more falls in the prior 12 months; presents with an acute fall for this episode of care; or experiences difficultly walking or balancing.

Source: American Geriatrics Society/British Geriatrics Society Clinical Practice Guideline for Prevention of Falls in Older Persons. J Am Geriatr Soc. 2010.

Element: 14794 Clinically Relevant Bleeding Event

Coding Instruction: Indicate if the patient had any of the following associated with a Clinically Relevant Bleeding Event.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Clinically Relevant Bleeding Event**

A clinically relevant bleeding event is defined as any one of the following:
1. Hemoglobin drop of >=3 g/dL;
2. Transfusion of packed red blood cells;
3. Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding
4. Hospital admission with primary discharge diagnosis related to a bleeding event.

Source: NCDR

Element: 14796 Bleeding Event Type

Coding Instruction:

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Bleeding Event**

A bleeding event observed and documented in the medical record that was associated with a hematocrit drop of ≥10% and/or a hemoglobin drop of ≥3 g/dL or that required transfusion or surgical intervention.

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.

Bleeding Event Type - 1.3.6.1.4.1.19376.1.4.1.6.5.774

Selection	Definition	Source	Code	Code System
Intracranial Bleed			1386000	SNOMED CT
Epistaxis			249366005	SNOMED CT
Gastrointestinal Bleed			74474003	SNOMED CT
Other			1000142371	ACC NCDR

Element: 14797 Genetic Coagulopathy

Coding Instruction: Indicate if the patient has been diagnosed with a genetic coagulopathy.

Target Value: Any occurrence between birth and the procedure

Element: 14798 Concurrent Anticoagulant Therapy

Coding Instruction: Indicate if the patient was using any anticoagulant medication at the time of the clinically relevant bleeding event.

Target Value: Any occurrence between birth and the procedure

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

Element: 13709 Atrial Fibrillation

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

Target Value: Any occurrence between birth and current procedure

Element: 4400 Atrial Fibrillation Classification

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

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

Supporting Definition: **Atrial Fibrillation Classification**

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

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

Atrial Fibrillation can be further characterized as:

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

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

Atrial Fibrillation Classification - 1.3.6.1.4.1.19376.1.4.1.6.5.17

Selection	Definition	Source	Code	Code System
Paroxysmal (terminating spontaneously within 7 days)	AF that terminates spontaneously or with intervention within 7 days of onset. Episodes may recur with variable frequency.		26593000	SNOMED CT
Persistent (greater than 7 days)	Continuous AF that is sustained >7 days or with electrical or pharmacological termination.		62459000	SNOMED CT
Long-standing persistent (greater than 1 year)	Continuous AF of >12 months duration.		100001029	ACC NCDR
Permanent	The term “permanent AF” is used when the patient and clinician make a joint decision to stop further attempts to restore and/or maintain sinus rhythm. - Acceptance of AF represents a therapeutic attitude on the part of the patient and clinician rather than an inherent pathophysiological attribute of the AF. - Acceptance of AF may change as symptoms, the efficacy of therapeutic interventions, and patient and clinician preferences evolve.		6934004	SNOMED CT

Element: 4380 Valvular Atrial Fibrillation

Coding Instruction: Indicate if the patient has atrial fibrillation occurring in the setting of valvular heart disease and believed to be, at least in part, directly attributable to valvular heart disease (especially mitral valvular disease).

Target Value: Any occurrence between birth and the procedure

Element: 14799 History of Rheumatic Valve Disease

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

Target Value: Any occurrence between birth and the procedure

Element: 4385 History of Mitral Valve Replacement

Coding Instruction: Indicate if the patient has a history of mitral valve replacement either via open surgical or a percutaneous transcatheter intervention.

Target Value: Any occurrence between birth and the procedure

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

Element: 4390 Mechanical Valve in Mitral Position

Coding Instruction: Indicate if the patient has a mechanical valve placed in the mitral position.

Target Value: Any occurrence between birth and the procedure

Element: 4395 History of Mitral Valve Repair

Coding Instruction: Indicate if the patient has a history of mitral valve repair, specifically via the surgical route. Either a surgical repair of a mitral valve leaflet or mitral annuloplasty qualifies as repair.

Target Value: Any occurrence between birth and the procedure

Element: 4410 Attempt at Atrial Fibrillation Termination

Coding Instruction: Indicate if the patient has had previous attempts to terminate the atrial fibrillation.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Previous Attempt at Atrial Fibrillation Termination**

Therapeutic options for conversion of AF to sinus rhythm includes: antiarrhythmic drugs, direct current cardioversion, catheter ablation and surgical ablation.

Source: McNamara RL, Brass LM, Drozda JP, Jr, et al. ACC/AHA key data elements and definitions for measuring the clinical management and outcomes of patients with atrial fibrillation: A report of the American College of Cardiology/American Heart Association Task Force on clinical data standards (writing committee to develop data standards on atrial fibrillation). J Am Coll Cardiol. 2004;44(2):475-495

Element: 4415 Atrial Fibrillation Termination - Pharmacologic Cardioversion

Coding Instruction: Indicate if the patient has a history of pharmacological cardioversion.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Pharmacologic Cardioversion**

Antiarrhythmic drugs can be administered for attempted conversion of AF to sinus rhythm or to facilitate electrical cardioversion.

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

Element: 4420 Atrial Fibrillation Termination - DC Cardioversion

Coding Instruction: Indicate if the patient has a history of direct current (DC) cardioversion.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **DC Cardioversion**

Direct-current cardioversion involves the delivery of an electrical shock synchronized with the QRS complex to avoid inducing ventricular fibrillation as can occur by a shock applied during ventricular repolarization on the T wave.

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

Element: 4425 Atrial Fibrillation Termination - Catheter Ablation

Coding Instruction: Indicate if the patient has a history of catheter ablation for termination of atrial fibrillation.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Catheter Ablation**

Various methods of catheter ablation are used. Currently most techniques focus on isolating the triggers in the pulmonary veins (PVs) from the vulnerable substrate in the left atrium. The majority of ablations performed use radiofrequency energy or cryothermy (cryoballoon ablation).

Source: January CT, Wann L, Alpert JS, et al. 2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. J Am Coll Cardiol. 2014;64(21):e1-e76.

Element: 4430 Atrial Fibrillation Most Recent Catheter Ablation Date

Coding Instruction: Indicate the date of the most recent attempt to terminate the atrial fibrillation via catheter ablation.

Note(s):
If the month or day 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 ablation"

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

documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: Any occurrence between birth and the procedure

Vendor Instruction: Atrial Fibrillation Most Recent Catheter Ablation Date

Element: 4435 Prior Catheter Ablation Strategy

Coding Instruction: Indicate the previously attempted catheter ablation strategy/strategies used to treat the atrial fibrillation.

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

Target Value: Any occurrence between birth and the procedure

Ablation Strategy - 1.3.6.1.4.1.19376.1.4.1.6.5.211

Selection	Definition	Source	Code	Code System
Complex Fractionated Atrial Electrogram	An ablation strategy targeting areas of continuous high -frequency (complex fractionated) atrial electrograms.		100000910	ACC NCDR
Convergent Procedure	The convergent procedure consists of epicardial (Epi) followed by endocardial (Endo) radio-frequency ablation in patients (pts) with atrial fibrillation (AF), deemed at high risk of recurrence with endo ablation only.		100000911	ACC NCDR
Cryoablation	Cryoablation, or freezing technology, involves a coolant being released into the catheter's balloon to freeze and ablate the tissue.		233161001	SNOMED CT
Empiric LA Linear Lesions	An ablation strategy that can include adjunctive linear lesions (such as a roof line or mitral annular line) that may accompany WACA, PVI, or other approaches, with a goal of preventing development of subsequent left atrial flutter.		100000912	ACC NCDR
Focal Ablation	An ablation strategy targeting one or more foci of putative triggers of atrial fibrillation. Ablation may be of a trigger of AF or just of a focal atrial tachycardia that accompanies AF or emerges following previous AF therapies (i.e. is a stand-alone rhythm).		100000913	ACC NCDR
Ganglion Plexus Ablation	An ablation strategy targeting one or more regions of autonomic nerve plexi around the left atrium.		100000914	ACC NCDR
Pulmonary Vein Isolation	An ablation strategy defined as electrical disconnection of atrial myocardium extending into the pulmonary veins from the body of the left atrium.		100000915	ACC NCDR
Segmental PV Ablation	An ablation strategy with the goal of electrical isolation of pulmonary venous atrial tachycardia triggers from the body of the left atrium by ablating segmentally and/or circumferentially within a vein or near the venous ostium.		100000916	ACC NCDR
Rotor Based Mapping	An ablation strategy guided by mapping software technology employed to identify specific atrial fibrillation rotors.		100000917	ACC NCDR
Wide Area Circumferential Ablation	An ablation strategy that includes placement of large circumferential ablation lesion sets encircling the right and left venous antra with the goal of either substrate modification, isolation of the pulmonary veins, or both. This approach generally implies that formal testing for entrance block and/or exit block is NOT performed.		100000918	ACC NCDR

Element: 4440 Atrial Fibrillation Termination - Surgical Ablation

Coding Instruction: Indicate if the patient has a history of surgical ablation.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Surgical Ablation**

The Maze operation is one surgical ablation option treat patients with both paroxysmal and chronic AF refractory to antiarrhythmic therapy.

Source: The surgical treatment of atrial fibrillation. IV. Surgical technique. Cox JL . J Thorac Cardiovasc Surg. 1991;101(4):584.

Element: 4445 Atrial Fibrillation, Most Recent Surgical Ablation Date

Coding Instruction: Indicate the date of the most recent attempt to terminate the atrial fibrillation via surgical ablation.

Note(s):
If the month or day 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 surgical ablation"

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

documented in a record from 2011, then the year 2011 can be utilized and coded as 01/01/2011).

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Surgical Ablation**

The Maze operation is one surgical ablation option treat patients with both paroxysmal and chronic AF refractory to antiarrhythmic therapy.

Source: The surgical treatment of atrial fibrillation. IV. Surgical technique. Cox JL . J Thorac Cardiovasc Surg. 1991;101(4):584.

Vendor Instruction: Atrial Fibrillation Most Recent Surgical Ablation Date (4445) must be Less than or Equal to the Procedure Start Date and Time (7000)

Element: 4450 Atrial Flutter

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

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Atrial Flutter**

Atrial flutter is defined as a cardiac arrhythmia arising in the atrium which has a regular rate typically between 250 and 350 bpm (cycle length 240-170 ms) in the absence of antiarrhythmic drugs.

Source: January CT, Wann LS, Alpert JS, Calkins H, Cleveland Jr JC, Cigarroa JE, Conti JB, Ellinor PT, Ezekowitz MD, Field ME, Murray KT, Sacco RL, Stevenson WG, Tchou PJ, Tracy CM, Yancy CW, 2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation, Journal of the American College of Cardiology (2014), doi: 10.1016/j.jacc.2014.03.022.

Element: 4455 Atrial Flutter Classification

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

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Atrial Flutter Type**

Atrial flutter is further classified into typical or atypical dependent on whether or not re-entry is dependent upon conduction through the cavotricuspid isthmus.

Source: January CT, Wann LS, Alpert JS, Calkins H, Cleveland Jr JC, Cigarroa JE, Conti JB, Ellinor PT, Ezekowitz MD, Field ME, Murray KT, Sacco RL, Stevenson WG, Tchou PJ, Tracy CM, Yancy CW, 2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation, Journal of the American College of Cardiology (2014), doi: 10.1016/j.jacc.2014.03.022.

Atrial Flutter Classification - 1.3.6.1.4.1.19376.1.4.1.6.5.191

Selection	Definition	Source	Code	Code System
Typical/Cavotricuspid Isthmus (CTI) Dependent	Typical atrial flutter is a macro-re-entrant atrial tachycardia that usually proceeds up the atrial septum, down the lateral atrial wall, and through the cavotricuspid (subeustachian) isthmus between the tricuspid valve annulus and inferior vena cava, where it is commonly targeted for ablation.		100000982	ACC NCDR
Atypical	Atypical flutter, or "noncavotricuspid isthmus-dependent macro-re-entrant atrial tachycardia", describes macro-re-entrant atrial tachycardias that are not one of the typical forms of atrial flutter that use the cavotricuspid isthmus.		112231000	SNOMED CT

Element: 4460 Attempt at Atrial Flutter Termination

Coding Instruction: Indicate if the patient has had previous attempts to terminate the atrial flutter.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Previous Attempt at Atrial Flutter Termination**

Therapeutic options for conversion of atrial flutter to sinus rhythm includes: antiarrhythmic drugs, direct current cardioversion, and catheter ablation.

Source: McNamara RL, Brass LM, Drozda JP, Jr, et al. ACC/AHA key data elements and definitions for measuring the clinical management and outcomes of patients with atrial fibrillation: A report of the American College of Cardiology/American Heart Association Task Force on clinical data standards (writing committee to develop data standards on atrial fibrillation). J Am Coll Cardiol. 2004;44(2):475-495.

Element: 4465 Atrial Flutter Termination - Pharmacologic Cardioversion

Coding Instruction: Indicate if the patient has a history of pharmacologic cardioversion to terminate the atrial flutter.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Pharmacologic Cardioversion**

Antiarrhythmic drugs can be administered for attempted conversion of AF to sinus rhythm or to facilitate electrical cardioversion.

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

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

Element: 4470 Atrial Flutter Termination - DC Cardioversion

Coding Instruction: Indicate if the patient has a history of DC cardioversion to terminate the atrial flutter.

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **DC Cardioversion**

Direct-current cardioversion involves the delivery of an electrical shock synchronized with the QRS complex to avoid inducing ventricular fibrillation as can occur by a shock applied during ventricular repolarization on the T wave.

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

Element: 4475 Atrial Flutter Termination - Catheter Ablation

Coding Instruction: Indicate if the patient has a history of catheter ablation to terminate the atrial flutter.

Target Value: Any occurrence between birth and the procedure

Element: 4480 Atrial Flutter Most Recent Catheter Ablation Date

Coding Instruction: Indicate the date of the most recent catheter ablation.

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

Target Value: Any occurrence between birth and the procedure

Vendor Instruction: Atrial Flutter Most Recent Catheter Ablation Date (4480) must be Less than or Equal to the Procedure Start Date and Time (7000)

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

Element: 14802 Cardiac Structural Intervention

Coding Instruction: Indicate if the patient has a history of cardiac structural interventions (percutaneously or surgically).

Target Value: Any occurrence between birth and the procedure

Element: 14803 Cardiac Structural Intervention Type

Coding Instruction: Indicate the type of prior cardiac structural intervention.

Target Value: Any occurrence between birth and the procedure

Cardiac Structural Intervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.775

Selection	Definition	Source	Code	Code System
Aortic Balloon Valvuloplasty			77166000	SNOMED CT
Transcatheter Aortic Valve Replacement (TAVR)			41873006	SNOMED CT
AV Replacement - Surgical			725351001	SNOMED CT
AV Repair - Surgical			112816004	SNOMED CT
Mitral Balloon Valvuloplasty			112000001951	ACC NCDR
Transcatheter Mitral Valve Repair (TMVR)			112000001801	ACC NCDR
MV Replacement - Surgical			53059001	SNOMED CT
MV Repair - Surgical			384641003	SNOMED CT
Mitral Annuloplasty Ring - Surgical			232744004	SNOMED CT
Mitral Transcatheter - Valve-in-valve			112000002069	ACC NCDR
ASD Closure			112811009	SNOMED CT
PFO Closure			41817002	SNOMED CT
Pulmonic Replacement			88045004	SNOMED CT
Pulmonic Repair			386749005	SNOMED CT
Tricuspid Replacement			25236004	SNOMED CT
Tricuspid Repair			384643000	SNOMED CT

Element: 14804 Left Atrial Appendage Occlusion Intervention

Coding Instruction: Indicate if the patient has a history of a left atrial appendage occlusion intervention.

Note(s): Previously “Aborted” LAA interventions should be captured in this element.

Target Value: Any occurrence between birth and the procedure

Element: 14806 Left Atrial Appendage Intervention Type

Coding Instruction: Indicate the type of prior left atrial appendage occlusion intervention.

Target Value: Any occurrence between birth and the procedure

Left Atrial Appendage Intervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.776

Selection	Definition	Source	Code	Code System
Epicardial Ligation	Ligation via an epicardial approach, isolating the left atrial appendage (LAA) from circulation via inside the pericardial space.		112000002072	ACC NCDR
Surgical Amputation	Amputation and complete excision of the left atrial appendage (LAA) until no trabeculated portion remains, and the neck of the LAA is sewn closed. Another term for this technique is left atrial appendectomy.		112000002073	ACC NCDR
Surgical Ligation	Ligation via surgical approach where the left atrial appendage (LAA) is permanently sealed off from the rest of the heart preventing blood from circulating and pooling in the appendage.		112000002074	ACC NCDR
Percutaneous Occlusion	Occlusion of the left atrial appendage (LAA) using solely a percutaneous, catheter-based method.		112000002076	ACC NCDR
Surgical Closure Device	Left atrial appendage (LAA) surgical closure device was used.		112000002077	ACC NCDR
Surgical Stapling	Excision or exclusion technique of the left atrial appendage (LAA) via surgical approach using pericardial buttressing of the LAA staple line.		112000002075	ACC NCDR

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

Element: 4565 Cardiomyopathy (CM)

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

Target Value: Any occurrence between birth and the procedure

Element: 4570 Cardiomyopathy Type

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

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

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Cardiomyopathy Type**

Hypertrophic:
Characterized morphologically and defined by a hypertrophied, nondilated LV in the absence of another systemic or cardiac disease that is capable of producing the magnitude of wall thickening evident (eg, systemic hypertension, aortic valve stenosis). Clinical diagnosis is customarily made with 2-dimensional echocardiography (or alternatively with cardiac magnetic resonance imaging) by detection of otherwise unexplained LV wall thickening, usually in the presence of a small LV cavity, after suspicion is raised by the clinical profile or as part of family screening. [1]

Restrictive:
Non Hypertrophied, Non Dilated: A rare form of heart muscle disease and a cause of heart failure that is characterized by normal or decreased volume of both ventricles associated with biatrial enlargement, normal LV wall thickness and AV valves, impaired ventricular filling with restrictive physiology, and normal (or near normal) systolic function. [1]

Non ischemic:
Includes cardiomyopathies resulting from volume or pressure overload, such as hypertension or valvular heart disease. [2]

Ischemic:
Considered to be present in patients with HF who have had a myocardial infarction (MI) or have evidence of viable hibernating myocardium or, on angiography, severe coronary disease. The term ischemic cardiomyopathy has been used to describe significantly impaired left ventricular function (left ventricular ejection fraction ≤35 to 40 percent) that results from coronary artery disease. Despite the common clinical use of the term ischemic cardiomyopathy, ventricular dysfunction caused by coronary disease is not a cardiomyopathy as defined by the 2006 American Heart Association and 2008 European Society of Cardiology statements. [2]

The term ischemic cardiomyopathy has been used to describe significantly impaired left ventricular function (left ventricular ejection fraction ≤35 to 40 percent) that results from coronary artery disease. Despite the common clinical use of the term ischemic cardiomyopathy, ventricular dysfunction caused by coronary disease is not a cardiomyopathy as defined by the 2006 American Heart Association and 2008 European Society of Cardiology statements. [2]

Other cardiomyopathy type:
The term "unclassified cardiomyopathy" was included in the 2008 ESC classification system to describe disorders that do not readily fit into any of the above phenotypic categories [3]. Examples cited include LV noncompaction and stress-induced (takotsubo) cardiomyopathy. [3]

Source: [1] Barry J. Maron, MD, Chair;
Jeffrey A. Towbin, MD, FAHA;
Gaetano Thiene, MD;
Charles Antzelevitch, PhD, FAHA;
Domenico Corrado, MD, PhD;
Donna Arnett, PhD, FAHA;
Arthur J. Moss, MD, FAHA;
Christine E. Seidman, MD, FAHA;
James B. Young, MD, FAHA. Contemporary definitions and classification of the cardiomyopathies: an American Heart Association Scientific Statement from the Council on Clinical Cardiology, Heart Failure and Transplantation Committee; Quality of Care and Outcomes Research and Functional Genomics and Translational Biology Interdisciplinary Working Groups; and Council on Epidemiology and Prevention. Circulation. 2006;113(14):1807.

[2] Yancy CW, Jessup M, Bozkurt B, et al. 2013 ACCF/AHA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol. 2013;62(16):e147-e239. doi:10.1016/j.jacc.2013.05.019.

[3] Richardson P, McKenna W, Bristow M, Maisch B, Mautner B, O'Connell J, Olsen E, Thiene G, Goodwin J, Gyarfas I, Martin I, Nordet P . Report of the 1995 World Health Organization/International Society and Federation of Cardiology Task Force on the Definition and Classification of cardiomyopathies. Circulation. 1996;93(5):841

Cardiomyopathy Type - 1.3.6.1.4.1.19376.1.4.1.6.5.193

Selection	Definition	Source	Code	Code System
Non-ischemic cardiomyopathy	Includes cardiomyopathies resulting from volume or pressure overload, such as hypertension or valvular heart disease.		111000119104	SNOMED CT
Ischemic cardiomyopathy	Considered to be present in patients with HF who have had a myocardial infarction (MI) or have evidence of viable hibernating myocardium or, on angiography,		426856002	SNOMED CT

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

	severe coronary disease. The term ischemic cardiomyopathy has been used to describe significantly impaired left ventricular function (left ventricular ejection fraction =35 to 40 percent) that results from coronary artery disease. Despite the common clinical use of the term ischemic cardiomyopathy, ventricular dysfunction caused by coronary disease is not a cardiomyopathy as defined by the 2006 American Heart Association and 2008 European Society of Cardiology statements. [2]		
Restrictive cardiomyopathy	Non Hypertrophied, Non Dilated: A rare form of heart muscle disease and a cause of heart failure that is characterized by normal or decreased volume of both ventricles associated with biatrial enlargement, normal LV wall thickness and AV valves, impaired ventricular filling with restrictive physiology, and normal (or near normal) systolic function.	415295002	SNOMED CT
Hypertrophic cardiomyopathy	Characterized morphologically and defined by a hypertrophied, nondilated LV in the absence of another systemic or cardiac disease that is capable of producing the magnitude of wall thickening evident (eg, systemic hypertension, aortic valve stenosis). Clinical diagnosis is customarily made with 2-dimensional echocardiography (or alternatively with cardiac magnetic resonance imaging) by detection of otherwise unexplained LV wall thickening, usually in the presence of a small LV cavity, after suspicion is raised by the clinical profile or as part of family screening.	233873004	SNOMED CT
Other cardiomyopathy type	The term "unclassified cardiomyopathy" was included in the 2008 ESC classification system to describe disorders that do not readily fit into any of the above phenotypic categories [3]. Examples cited include LV noncompaction and stress-induced (takotsubo) cardiomyopathy.	100001065	ACC NCDR

Element: 4575 Chronic Lung Disease

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

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

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Chronic Lung Disease**

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

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

Element: 4285 Coronary Artery Disease

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

Target Value: Any occurrence between birth and the procedure

Supporting Definition: **Coronary Artery Disease**

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

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

Element: 4580 Sleep Apnea

Coding Instruction: Indicate if the patient has a history of sleep apnea that has been diagnosed by a sleep study.

Note(s):

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

Code "No" if sleep apnea has been surgically corrected.

CPAP or BiPAP therapy is not a requirement to code "Yes" for sleep apnea.

Both Obstructive Sleep Apnea (recurrent collapse of the pharynx during sleep) and Central Sleep apnea: (transient cessation of neural drive to respiratory muscles) should be considered. Capture patients with prescribed home therapy despite frequency of use. Do not capture suspected sleep apnea or that reported by family members as sleep apnea. Sleep apnea must be diagnosed by a physician.

Target Value: Any occurrence between birth and the procedure

Element: 4585 Sleep Apnea Recommended Treatment Followed

Coding Instruction: Indicate if the patient followed the sleep apnea treatment plan recommended.

Note(s):
CPAP or BiPAP therapy is not a requirement to code 'Yes' for sleep apnea.
Both Obstructive Sleep Apnea (recurrent collapse of the pharynx during sleep) and Central Sleep Apnea (transient cessation of neural drive to respiratory muscles) should be considered.
Capture patients with prescribed home therapy despite frequency of use.
Code 'No' if sleep apnea has been surgically corrected.

Target Value: Any occurrence between birth and the procedure

Section: Epicardial Access Assessment **Parent: History and Risk Factors**

Element: 14824 Epicardial Approach Considered

Coding Instruction: Indicate if an epicardial approach to the left atrial appendage intervention was considered for this episode of care.

Target Value: Any occurrence between birth and the procedure

Element: 14823 Medical Conditions

Coding Instruction: Indicate if any of the following medical conditions were present.

Target Value: Any occurrence between birth and the procedure

Medical Conditions - 1.3.6.1.4.1.19376.1.4.1.6.5.781

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
Pericarditis	Pericarditis is the inflammation of the pericardial layers characterized by chest pain, electrocardiographic changes and often pericardial effusion. It is often the result of an infectious or a noninfectious process but can also be idiopathic.	Chiabrando JG, Bonaventure A, Vecchie A, et al. Management of acute and recurrent pericarditis. J Am Coll Cardiol 2020;75:76-92.	3238004	SNOMED CT
Epicardial Access			112000002078	ACC NCDR
Thoracic Radiation Therapy			112000002090	ACC NCDR
Pectus Excavatum			391987005	SNOMED CT
Epigastric Surgery	Surgical procedure in the epigastric region of the ventral abdomen, including epigastric hernia repair.		112000002091	ACC NCDR
Autoimmune Disease			85828009	SNOMED CT
Hepatomegaly			80515008	SNOMED CT
Hiatal Hernia	Hiatal hernia or hiatus hernia is an abnormal bulging of a portion of the stomach through the diaphragm	https://www.merckmanuals.com/home/digestive-disorders/esophageal-and-swallowing-disorders/hiatus-hernia	84089009	SNOMED CT

Element: 14825 Lupus Erythematosus

Coding Instruction: Indicate if an Lupus Erythematosus was the condition for which an epicardial approach to the left atrial appendage intervention was considered for this episode of care.

Target Value: Any occurrence between birth and the procedure

Section: Diagnostic Studies — Parent: Root

Element: 5100 — Atrial Rhythm

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

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

Atrial Rhythm - 1.3.6.1.4.1.19376.1.4.1.6.5.187

Selection	Definition	Source	Code	Code System
Sinus node rhythm			106067008	SNOMED CT
Atrial fibrillation			49436004	SNOMED CT
Atrial tachycardia			276796006	SNOMED CT
Atrial flutter			5370000	SNOMED CT
Sinus arrest			5609005	SNOMED CT
Atrial paced			251268003	SNOMED CT
Not Documented			100001116	ACC NCDR

Element: 5110 — LVEF Assessed

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

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

Element: 5115 — Most Recent LVEF %

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

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

Supporting Definition: **Most Recent LVEF %**

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

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

Element: 5120 — Transthoracic Echo (TTE) Performed

Coding Instruction: Indicate if a transthoracic echocardiogram (TTE) was performed prior to the procedure.

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

Element: 5125 — Most Recent TTE Date

Coding Instruction: Indicate the date of the most recent transthoracic echocardiogram (TTE) performed and used to evaluate the patient for this intervention.

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

Vendor Instruction: Most Recent TTE Date (5125) must be Less than or Equal to the Procedure Start Date and Time (7000)

Element: 5170 — Baseline Imaging Performed

Coding Instruction: Indicate if pre-procedure imaging was performed.

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

Element: 5175 — Baseline CT Performed

Coding Instruction: Indicate if pre-procedure imaging was performed via CT.

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

Element: 5180 — Most Recent CT Date

Coding Instruction: Indicate the date of the most recent CT imaging.

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

Vendor Instruction: Most Recent CT Date (5180) must be Less than or Equal to the Procedure Start Date and Time (7000)

Element: 5185 — Baseline MRI Performed

Coding Instruction: Indicate if pre-procedure imaging was performed via MRI.

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

Element: 5190 — Most Recent MRI Date

Section: Diagnostic Studies **Parent: Root**

Coding Instruction: Indicate the date of the most recent MRI imaging.

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

Vendor Instruction: Most Recent MRI Date (5190) must be Less than or Equal to the Procedure Start Date and Time (7000)

Element: 14826 Intracardiac Echo Performed

Coding Instruction: Indicate if pre-procedure imaging was performed via intracardiac echo (ICE).

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

Supporting Definition: **Intracardiac three dimensional echocardiography**

Intracardiac echocardiography (ICE) is an imaging technique that is increasingly available as an alternative to transoesophageal echocardiography to guide percutaneous interventional procedures.

Source: Mitchell ARJ, Puwanarajah P, Timperley J, Becher H, Wilson N, Ormero OJ. The Emerging Role of Intracardiac Echocardiography -- Into the ICE Age. Br J Cardiol. 2007;14(1):31-36.

Element: 14827 Date of Intracardiac Echo

Coding Instruction: Indicate the date of the most recent intracardiac echo (ICE).

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

Supporting Definition: **Intracardiac three dimensional echocardiography**

Intracardiac echocardiography (ICE) is an imaging technique that is increasingly available as an alternative to transoesophageal echocardiography to guide percutaneous interventional procedures.

Source: Mitchell ARJ, Puwanarajah P, Timperley J, Becher H, Wilson N, Ormero OJ. The Emerging Role of Intracardiac Echocardiography -- Into the ICE Age. Br J Cardiol. 2007;14(1):31-36.

Section: Physical Exam and Labs **Parent: Root**

Element: 6000 Height

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

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

Element: 6005 Weight

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

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

Element: 6010 Pulse

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

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

Element: 6015 Systolic BP

Coding Instruction: Indicate the patient's systolic blood pressure in mmHg.

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

Element: 6020 Diastolic BP

Coding Instruction: Indicate the patient's diastolic blood pressure in mmHg.

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

Element: 6030 Hemoglobin

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

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

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

Supporting Definition: **Hemoglobin**

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

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

Element: 6031 Hemoglobin Not Drawn

Coding Instruction: Indicate if the hemoglobin was not drawn.

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

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: 6040 Prothrombin Time (PT)

Coding Instruction: Indicate the last prothrombin time (PT) in seconds.

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

Most recent values prior to the start of the procedure.

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

Supporting Definition: **Prothrombin Time (PT)**

The prothrombin time (PT) and its derived measures of prothrombin ratio (PR) and international normalized ratio (INR) are measures of the extrinsic pathway of coagulation. They are used to determine the clotting tendency of blood, in the measure of warfarin dosage, liver

Section: Physical Exam and Labs **Parent: Root**

damage and vitamin K status. The reference range for prothrombin time is usually around 12-15 seconds; the normal range for the INR is 0.8-1.2. It is used in conjunction with the activated partial thromboplastin time (aPTT) which measures the intrinsic pathway. PT is sometimes used as the third screening test in the lupus anticoagulant testing algorithm and is included in the LOINC LA aPTT & dRVVT & PT panel.

Source: http://s.details.loinc.org/LOINC/5902-2.html?sections=Simple

Element: 6041 Prothrombin Not Drawn

Coding Instruction: Indicate if prothrombin (PT) was not drawn.

Target Value: N/A

Supporting Definition: **Prothrombin Time (PT)**

The prothrombin time (PT) and its derived measures of prothrombin ratio (PR) and international normalized ratio (INR) are measures of the extrinsic pathway of coagulation. They are used to determine the clotting tendency of blood, in the measure of warfarin dosage, liver damage and vitamin K status. The reference range for prothrombin time is usually around 12-15 seconds; the normal range for the INR is 0.8-1.2. It is used in conjunction with the activated partial thromboplastin time (aPTT) which measures the intrinsic pathway. PT is sometimes used as the third screening test in the lupus anticoagulant testing algorithm and is included in the LOINC LA aPTT & dRVVT & PT panel.

Source: http://s.details.loinc.org/LOINC/5902-2.html?sections=Simple

Element: 6045 International Normalized Ratio (INR)

Coding Instruction: Indicate the international normalized ratio (INR) if the patient was on routine Warfarin/Coumadin therapy.

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

Most recent values prior to the start of the procedure.

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

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

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

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

Element: 6046 International Normalized Ratio Not Drawn

Coding Instruction: Indicate if INR was not drawn.

Target Value: N/A

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

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

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

Element: 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

Section: Physical Exam and Labs **Parent: Root**

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

Target Value: N/A

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: 14210 Albumin

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

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

Element: 14211 Albumin Not Drawn

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

Target Value: N/A

Element: 13213 Platelet Count

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

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

Element: 13214 Platelet Count Not Drawn

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

Target Value: N/A

Element: 14805 Modified Rankin Scale

Coding Instruction: Indicate the patient's functional ability according to the modified Rankin Scale (mRS) administered pre-procedure.

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

Supporting Definition: **Modified Rankin Scale**

The Modified Rankin Scale is a standardized neurological examination of patients with disability that provides a scale of global disability.

Source: Rankin J. Cerebral vascular accidents in patients over the age of 60. Scott Med J. 1957; 2:200-15.

Bonita R, Beaglehole R. Modification of Rankin Scale: Recovery of motor function after stroke. Stroke. 1988;19(12):1497-1500.

Rankin Scale Assessment Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.139

Selection	Definition	Source	Code	Code System
0: No symptoms at all			LA6111-4	LOINC
1: No significant disability despite symptoms	Able to carry out all usual duties and activities.		LA6112-2	LOINC
2: Slight disability	Unable to carry out all previous activities, but able to look after own affairs without assistance.		LA6113-0	LOINC
3: Moderate disability	Requiring some help, but able to walk without assistance.		LA6114-8	LOINC
4: Moderately severe disability	Unable to walk without assistance and unable to attend to own bodily needs without assistance.		LA6115-5	LOINC
5: Severe disability	Bedridden, incontinent and requiring constant nursing care and attention.		LA10137-0	LOINC
6: Death			419620001	SNOMED CT

Element: 9130 Modified Rankin Scale Not Administered

Coding Instruction: Indicate if the Modified Rankin Scale was not administered after the current procedure.

Target Value: N/A

Supporting Definition: **Modified Rankin Scale**

The Modified Rankin Scale is a standardized neurological examination of patients with disability that provides a scale of global disability.

Source: Rankin J. Cerebral vascular accidents in patients over the age of 60. Scott Med J. 1957; 2:200-15.

Bonita R, Beaglehole R. Modification of Rankin Scale: Recovery of motor function after stroke. Stroke. 1988;19(12):1497-1500.

Section: Pre-Procedure Medications — Parent: Root

Element: 6985 — Pre-procedure Medication Code

Coding Instruction: Indicate the NCDR-assigned IDs for the medications prescribed within 24 hours prior the procedure.

Target Value: Any occurrence within 24 hours prior to start of current procedure

Vendor Instruction: Pre-procedure Medication Code (6985) should not be duplicated in an episode

Pre-Procedure Medication - 1.3.6.1.4.1.19376.1.4.1.6.5.216

Selection	Definition	Source	Code	Code System
Fondaparinux			321208	RxNorm
Heparin Derivative			100000921	ACC NCDR
Low Molecular Weight Heparin			373294004	SNOMED CT
Unfractionated Heparin			96382006	SNOMED CT
Warfarin			11289	RxNorm
Aspirin 81 to 100 mg			112000002080	ACC NCDR
Aspirin 101 to 324 mg			112000002081	ACC NCDR
Aspirin 325 mg			317300	RxNorm
Aspirin/Dipyridamole			226716	RxNorm
Vorapaxar			1537034	RxNorm
Apixaban			1364430	RxNorm
Dabigatran			1546356	RxNorm
Edoxaban			1599538	RxNorm
Rivaroxaban			1114195	RxNorm
Cangrelor			1656052	RxNorm
Clopidogrel			32968	RxNorm
Other P2Y12			112000001003	ACC NCDR
Prasugrel			613391	RxNorm
Ticagrelor			1116632	RxNorm
Ticlopidine			10594	RxNorm

Element: 14883 — Medication Administered

Coding Instruction: Indicate the prescribing history and administration status (past, current, held, never) of each medication.

Target Value: Any occurrence within 24 hours prior to start of current procedure

Vendor Instruction: When a Pre-procedure Medication Code (6985) is selected, Medication Administered (14883) cannot be Null

Pre-procedure Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.44

Selection	Definition	Source	Code	Code System
Past	Code 'Past' if the medication was tried previously prior this hospital visit, and then discontinued with no intent to resume the medication after recovering from the procedure.		100001070	ACC NCDR
Current	Code 'Current' if the patient is taking this medication prior to the procedure and the medication has neither been held nor stopped for the procedure or if the patient has an active or a new prescription and is taking this medication.		100000987	ACC NCDR
Held	Code 'Held' if the patient is routinely taking this medication, yet the medication was temporarily not administered prior to the procedure with an intent to resume the medication after recovering from the procedure.		100001010	ACC NCDR
Never	Code 'Never' if this medication was never prescribed for this patient.		100001046	ACC NCDR

Section: Pre-Procedure Diagnostics **Parent: Procedure Information**

Element: 14828 Transesophageal Echocardiogram (TEE) Performed

Coding Instruction: Indicate if transesophageal echocardiogram (TEE) was performed prior to the device insertion or attempted device insertion during the current procedure.

Note: Prior to current procedure refers to prior to start of current procedure.

Target Value: The last value between 1 week prior to current procedure and current procedure

Element: 14829 Most Recent TEE Date

Coding Instruction: Indicate the date of the most recent transesophageal echocardiogram (TEE) performed prior to the device insertion or attempted device insertion during the current procedure.

Target Value: The last value between 1 week prior to current procedure and current procedure

Vendor Instruction: Most Recent TEE Date (14829) must be Less than or Equal to the Procedure Start Date and Time (7000)

Element: 14838 Atrial Thrombus Detected

Coding Instruction: Indicate if an atrial thrombus was detected or suspected.

Target Value: The last value between 1 week prior to current procedure and current procedure

Supporting Definition: **Atrial Thrombus Detected**

Presence of thrombus is considered to be definite if 3 of the following 5 criteria are present: Clear borders, echogenicity from the surrounding structures, independent mobility, longest diameter > 15mm, seen in more than one echocardiographic plane.

Source: Buxton AE, Calkins H, Callans DJ, et al. ACC/AHA/HRS 2006 Key Data Elements and Definitions for Electrophysiological Studies and Procedures: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Data Standards (ACC/AHA/HRS Writing Committee to Develop Data Standards on Electrophysiology). J Am Coll Cardiol. 2006;48(11):2360-2396.

Element: 14830 Left Atrial Appendage Occlusion Orifice width

Coding Instruction: Indicate the maximal orifice width of the left atrial appendage (LAA) in mm.

Target Value: The last value between 1 week prior to current procedure and current procedure

Section: Procedure **Parent: Procedure Information**

Element: 7000 Procedure Start Date and Time

Coding Instruction: Indicate the procedure start time as the time that the patient entered the location in which the procedure is intended to be performed.

Target Value: Any occurrence on current procedure

Vendor Instruction: Procedure Start Date and Time (7000) must be Greater than or Equal to Arrival Date (3000)

Procedure Start Date and Time (7000) must be Less than or Equal to Procedure End Date and Time (7005)

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

Element: 7005 Procedure End Date and Time

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

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

Target Value: The value on current procedure

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

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

Element: 14732 Shared Decision Making

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

Target Value: The value on current procedure

Element: 14733 Shared Decision Making Tool Used

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

Target Value: The value on current procedure

Element: 14734 Shared Decision Making Tool Name

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

Target Value: The value on current procedure

Shared Decision Making Tools - 1.3.6.1.4.1.19376.1.4.1.6.5.765

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

Element: 12871 Procedure Location

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

Target Value: The value on current procedure

Procedure Location - 1.3.6.1.4.1.19376.1.4.1.6.5.327

Selection	Definition	Source	Code	Code System
Operating Room			225738002	SNOMED CT
Hybrid Operating Room Suite			112000001265	ACC NCDR
Cardiac Catheterization Laboratory			112000000616	ACC NCDR
Hybrid Catheterization Laboratory Suite			112000001266	ACC NCDR
EP Lab			112000002109	ACC NCDR

Element: 7130 Sedation

Coding Instruction: Indicate the type of sedation used for the intervention.

Target Value: The value on current procedure

Sedation Method - 1.3.6.1.4.1.19376.1.4.1.6.5.199

Selection	Definition	Source	Code	Code System
Minimal Sedation/Anxiolysis			427255001	SNOMED CT
Moderate Sedation/Analgesia (Conscious Sedation)			314271007	SNOMED CT

Section: Procedure **Parent: Procedure Information**

Deep sedation/Analgesia	426155000	SNOMED CT
General Anesthesia	420653000	SNOMED CT

Element: 14837 LAA Occlusion Indication

Coding Instruction: Provide the documented indication for the left atrial appendage (LAA) occlusion procedure.

Target Value: The value on current procedure

Supporting Definition: **Procedure Indication**

The primary reason the procedure is being performed

Source:

LAAO Indications - 1.3.6.1.4.1.19376.1.4.1.6.5.784

Selection	Definition	Source	Code	Code System
High fall risk			112000000398	ACC NCDR
History of major bleed			112000002105	ACC NCDR
Clinically significant bleeding risk (Other than those listed here)			711536002	SNOMED CT
Increased thromboembolic stroke risk			112000002106	ACC NCDR
Labile INR			100001024	ACC NCDR
Non-compliance with anticoagulation therapy			112000002108	ACC NCDR
Patient preference			112000002107	ACC NCDR

Element: 14834 Procedure Canceled

Coding Instruction: Indicate if the procedure was canceled after the patient had entered the procedure room AND before venous or epicardial access was obtained.

Target Value: The value on current procedure

Element: 14833 Procedure Canceled Reason

Coding Instruction: Indicate the reason(s) why the procedure was canceled.

Target Value: The value on current procedure

Procedure Canceled Reasons - 1.3.6.1.4.1.19376.1.4.1.6.5.783

Selection	Definition	Source	Code	Code System
Anatomy not conducive for implant			112000002093	ACC NCDR
Appendage too large (for device implant)			112000002096	ACC NCDR
Appendage too small (for device implant)			112000002097	ACC NCDR
Catherization challenge			112000002094	ACC NCDR
Decompensation in patient condition			112000002098	ACC NCDR
Epicardial access issue			112000002100	ACC NCDR
Thrombus detected			112000002095	ACC NCDR
Unanticipated patient condition			112000002099	ACC NCDR
Patient/Family choice			112000002101	ACC NCDR

Element: 14831 Procedure Aborted

Coding Instruction: Indicate if the LAAO intervention was aborted at any time after venous or epicardial access was obtained.

Target Value: The value on current procedure

Vendor Instruction: If Device Successfully Deployed (14968) is 'Yes' for at least one device under the procedure, then Procedure Aborted (14831) must be 'No'.

If Device Successfully Deployed (14968) is 'No' for all the devices under the procedure, then Procedure Aborted (14831) must be 'Yes'.

If Procedure Aborted (14831) is 'No', at least one device within the procedure must have Device Successfully Deployed (14968) equal to 'Yes'

Element: 14832 Procedure Aborted Reason

Section: Procedure **Parent: Procedure Information**

Coding Instruction: Indicate the reason(s) why the procedure was aborted.

Target Value: The value on current procedure

Procedure Aborted Reasons - 1.3.6.1.4.1.19376.1.4.1.6.5.782

Selection	Definition	Source	Code	Code System
Anatomy not conducive for implant			112000002093	ACC NCDR
Appendage too large (for device implant)			112000002096	ACC NCDR
Appendage too small (for device implant)			112000002097	ACC NCDR
Catherization challenge			112000002094	ACC NCDR
Decompensation in patient condition			112000002098	ACC NCDR
Device related			112000001828	ACC NCDR
Transcatheter device retrieval			112000002124	ACC NCDR
Device release criteria not met			112000002104	ACC NCDR
Epicardial access issue			112000002100	ACC NCDR
Surgical device retrieval			112000001838	ACC NCDR
Device associated thrombus developed during procedure			112000002103	ACC NCDR
Unanticipated patient condition			112000002099	ACC NCDR
Patient/Family choice			112000002101	ACC NCDR

Element: 14848 Device Margin Residual Leak

Coding Instruction: Indicate the size (in mm) of the residual leak noted at the device margin.

Target Value: The value on current procedure

Element: 14849 Device Margin Residual Leak Not Assessed

Coding Instruction: Indicate if the device margin was not assessed for any potential residual leak.

Target Value: The value on current procedure

Element: 7200 Guidance Method

Coding Instruction: Indicate the assigned identification number associated with the guidance method used for this procedure.

Note(s):
The method(s) that should be collected in your application are controlled by a Guidance Method 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

Guidance Method - 1.3.6.1.4.1.19376.1.4.1.6.5.212

Selection	Definition	Source	Code	Code System
Intracardiac three dimensional echocardiography			448761005	SNOMED CT
Electro Anatomic Mapping			100000908	ACC NCDR
Fluoroscopy			44491008	SNOMED CT
Transesophageal Echocardiogram (TEE)			105376000	SNOMED CT

Element: 14846 Conversion to Open Heart Surgery

Coding Instruction: Indicate if this procedure converted to open heart surgery.

Target Value: The value on current procedure

Element: 14847 Conversion to Open Heart Surgery Reason

Coding Instruction: Indicate the reason why the procedure converted to open heart surgical access.

Target Value: The value on current procedure

Conversion to Open Heart Surgery Reasons - 1.3.6.1.4.1.19376.1.4.1.6.5.787

Selection	Definition	Source	Code	Code System
Complication			88797001	SNOMED CT
Device Retrieval			112000001838	ACC NCDR
Unfavorable Anatomy			112000002114	ACC NCDR

Section: Procedure	Parent: Procedure Information		
Medical decision for open ligation of appendage		112000002115	ACC NCDR

Element: 14855 Concomitant Procedures Performed

Coding Instruction: Indicate if other procedures (Afib Ablation, ICD, PCI, TAVR or TMVR) were performed during the same lab visit as this procedure.

Target Value: The value on current procedure

Element: 14857 Concomitant Procedures

Coding Instruction: Indicate which specific other procedures were performed during the same lab visit.

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
AFib Ablation			18286008:363702006=49436004	SNOMED CT
AFib Ablation - Cryo			112000004250	ACC NCDR
AFib Ablation - PFA			112000004251	ACC NCDR
AFib Ablation - Radiofrequency			112000004252	ACC NCDR
AFib Ablation - Other			112000004253	ACC NCDR
ICD			ACC-NCDR-ICD	ACC NCDR
PCI			415070008	SNOMED CT
TAVR			441873006	SNOMED CT
TMVR			112000001801	ACC NCDR
ASD Closure Congenital			112811009	SNOMED CT
ASD Closure Iatrogenic			112000001885	ACC NCDR
PFO Closure Congenital			41817002	SNOMED CT

Section: Operator Information **Parent: Procedure**

Element: 14861 Operator Last Name

Coding Instruction: Indicate the last name of operator.

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

Target Value: The value on current procedure

Vendor Instruction: Operator Last Name (14861) cannot be Null

Element: 14860 Operator First Name

Coding Instruction: Indicate the first name of operator.

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

Target Value: The value on current procedure

Vendor Instruction: Operator First Name (14860) cannot be Null

Element: 14862 Operator Middle Name

Coding Instruction: Indicate the middle name of operator.

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

Target Value: The value on current procedure

Element: 14863 LAAO Operator NPI

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

Target Value: The value on current procedure

Vendor Instruction: LAAO Operator NPI (14863) cannot be Null

LAAO Operator NPI (14863) may only be entered/selected once.

Section: Fellow Information **Parent: Procedure**

Element: 15433 Fellow Last Name

Coding Instruction: Indicate the last name of the Fellow-in-Training operator.

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

Target Value: The value on current procedure

Element: 15434 Fellow First Name

Coding Instruction: Indicate the first name of the Fellow-in-Training operator.

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

Target Value: The value on current procedure

Element: 15435 Fellow Middle Name

Coding Instruction: Indicate the middle name of the Fellow-in-Training operator.

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

Target Value: The value on current procedure

Element: 15436 Fellow NPI

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

Target Value: The value on current procedure

Vendor Instruction: Fellow NPI (15436) may only be entered/selected once.

The LAAO Operator NPI (14863) cannot be equal to the Fellow NPI (15436) within the same procedure, i.e., an individual cannot be the Operator and Fellow for the same 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 .

Section: Access Systems **Parent: Procedure Information**

Element: 14840 Access System Counter

Coding Instruction: The access system counter distinguishes an individual access system when multiple are used during one procedure.

Target Value: The value on current procedure

Element: 14839 Access System ID

Coding Instruction: Indicate the access system(s) utilized during the current procedure.

Target Value: The value on current procedure

Vendor Instruction: Access System ID (14839) cannot be Null when Procedure Canceled (14834) is No

Section: Devices **Parent: Access Systems**

Element: 14842 Device Counter

Coding Instruction: The device counter distinguishes individual devices when multiple are used during one procedure.

Target Value: The value on current procedure

Element: 14841 Device ID

Coding Instruction: Indicate the device(s) utilized during the current procedure.

Target Value: The value on current procedure

Element: 14843 Device UDI Direct Identifier

Coding Instruction: [Reserved for Future Use] Indicate the direct identifier portion of the Unique Device Identifier (UDI) associated with the device used. This ID is provided by the device manufacturer, and is either a GTIN or HIBBC 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

Element: 14844 LAA Isolation Approach

Coding Instruction: Indicate which approach was used to deliver the closure device.

Target Value: The value on current procedure

Isolation Approaches - 1.3.6.1.4.1.19376.1.4.1.6.5.785

Selection	Definition	Source	Code	Code System
Epicardial			112000002078	ACC NCDR
Percutaneous			103388001	SNOMED CT

Element: 14968 Device Successfully Deployed

Coding Instruction: Indicate whether the device was successfully deployed.

Target Value: The value on current procedure

Vendor Instruction: When Device ID (14841) is provided then Device Successfully Deployed (14968) cannot be Null.

If more than one Device Counter (14842) within the Procedure/Lab Visit have identical LAA Isolation Approach (14844) values, then only one Device Counter (14842) can have a Device Successfully Deployed (14968) = 'Yes'.

Element: 14845 Reason Device Not Deployed Successfully

Coding Instruction: Indicate the outcome listed for the device unsuccessfully deployed.

Target Value: The value on current procedure

Vendor Instruction: When Device Successfully Deployed (14968) is No then Outcome of Device Unsuccessfully Deployed (14845) cannot be Null

Intervention Device Outcomes - 1.3.6.1.4.1.19376.1.4.1.6.5.786

Selection	Definition	Source	Code	Code System
Deployed, not released			112000002112	ACC NCDR
Not Deployed			112000002113	ACC NCDR
Device retrieved			112000001838	ACC NCDR

Section: Radiation Exposure **Parent: Procedure Information**

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: 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: 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: Intraprocedure Anticoagulation Strategy — Parent: Procedure Information

Element: 7225 — Intraprocedure Anticoagulation

Coding Instruction: Indicate if intraprocedure anticoagulation therapy was provided.

Target Value: The value on current procedure

Element: 7230 — Uninterrupted Warfarin Therapy

Coding Instruction: Indicate if the patient continued on warfarin therapy and it was not held for the procedure.

Target Value: The value on current procedure

Element: 15139 — Heparin Administered During Procedure

Coding Instruction: Indicate if heparin was administered during the procedure.

Target Value: The value on current procedure

Anticoagulation Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.819

Selection	Definition	Source	Code	Code System
No - Not Prescribed			112000000168	ACC NCDR
Yes - Prescribed			100001247	ACC NCDR

Element: 14852 — Heparin Initial Administration Timing

Coding Instruction: Indicate the timing of initial administration of heparin.

Target Value: Any occurrence on current procedure

Medication Administration Timing - 1.3.6.1.4.1.19376.1.4.1.6.5.169

Selection	Definition	Source	Code	Code System
Pre-transseptal Puncture			100001082	ACC NCDR
Post-transseptal Puncture			100001081	ACC NCDR

Element: 15140 — Bivalirudin

Coding Instruction: Indicate if bivalirudin was administered during the procedure.

Target Value: The value on current procedure

Anticoagulation Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.819

Selection	Definition	Source	Code	Code System
No - Not Prescribed			112000000168	ACC NCDR
Yes - Prescribed			100001247	ACC NCDR

Element: 15138 — Other Anticoagulant

Coding Instruction: Indicate if any other anticoagulation medical therapy, not listed above, was used during the procedure.

Target Value: The value on current procedure

Anticoagulation Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.819

Selection	Definition	Source	Code	Code System
No - Not Prescribed			112000000168	ACC NCDR
Yes - Prescribed			100001247	ACC NCDR

Element: 14853 — Anticoagulation Reversal

Coding Instruction: Indicate if there was a reversal of the anticoagulation at the end of the LAA occlusion procedure.

Target Value: Any occurrence on current procedure

Section: Intra or Post-Procedure Events **Parent: Procedure Information**

Element: 12153 Intra or Post Procedure Events

Coding Instruction: Indicate if the specific intra or post procedure event(s) occurred.

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

Vendor Instruction: An Intra or Post Procedure - combination of Events (12153), Occurred (9002) and Event Date (14275) - may only be entered/selected once

Intra or Post Procedure Events - 1.3.6.1.4.1.19376.1.4.1.6.5.706

Selection	Definition	Source	Code	Code System
Air Embolism			271376002	SNOMED CT
Cardiac Arrest			410429000	SNOMED CT
Heart Failure			84114007	SNOMED CT
Heart Valve Damage			368009	SNOMED CT
Left Atrial Thrombus			473360003	SNOMED CT
Myocardial Infarction			22298006	SNOMED CT
Pericardial Effusion (no intervention required)			112000002125	ACC NCDR
Pericarditis			3238004	SNOMED CT
Anaphylaxis			39579001	SNOMED CT
Arterial Thrombosis			65198009	SNOMED CT
Deep Vein Thrombosis			128053003	SNOMED CT
Systemic Thromboembolism (other than stroke) (Complete Adjudication)			112000002126	ACC NCDR
Esophageal Injury (resulting from TEE probe)			112000002127	ACC NCDR
Hepatic Injury			112000002128	ACC NCDR
New Requirement for Dialysis			100014076	ACC NCDR
Device Explant			100001141	ACC NCDR
Device Infection			112000002137	ACC NCDR
Device Migration			370512004	SNOMED CT
Device Thrombus			112000001839	ACC NCDR
Device Systemic Embolization (catheter retrieval)			112000002138	ACC NCDR
Device Systemic Embolization (surgical retrieval)			112000002139	ACC NCDR
AV Fistula (no intervention required)			112000002140	ACC NCDR
AV Fistula (requiring surgical repair) (Complete Adjudication)			112000002141	ACC NCDR
Pseudoaneurysm (no intervention required)			112000002143	ACC NCDR
Pseudoaneurysm (requiring endovascular repair) (Complete Adjudication)			112000002144	ACC NCDR
Pseudoaneurysm (requiring surgical repair) (Complete Adjudication)			112000002145	ACC NCDR
Pseudoaneurysm (requiring thrombin injection only) (Complete Adjudication)			112000002146	ACC NCDR
Hemorrhagic Stroke (Complete Adjudication)			230706003	SNOMED CT
Intracranial Hemorrhage (other than hemorrhagic stroke) (Complete Adjudication)			1386000	SNOMED CT
Ischemic Stroke (Complete Adjudication)			422504002	SNOMED CT
TIA (Complete Adjudication)			266257000	SNOMED CT
Undetermined Stroke (Complete Adjudication)			230713003	SNOMED CT
Access Site Bleeding (Complete Adjudication)			1000142440	ACC NCDR
GI Bleeding (Complete Adjudication)			74474003	SNOMED CT
Hematoma (Complete Adjudication)			385494008	SNOMED CT
Hemothorax (not requiring			112000002147	ACC NCDR

Section: Intra or Post-Procedure Events	Parent: Procedure Information	
drainage) (Complete Adjudication)		
Hemothorax (requiring drainage) (Complete Adjudication)	100001011	ACC NCDR
Other Hemorrhage (non-intracranial) (Complete Adjudication)	50960005	SNOMED CT
Pericardial Effusion (requiring open heart surgery) (Complete Adjudication)	112000002148	ACC NCDR
Pericardial Effusion with tamponade (requiring percutaneous drainage) (Complete Adjudication)	112000002149	ACC NCDR
Pericardial Effusion without tamponade (requiring percutaneous drainage) (Complete Adjudication)	112000002150	ACC NCDR
Retroperitoneal Bleeding (Complete Adjudication)	95549001	SNOMED CT
Vascular Complications (Complete Adjudication)	213217008	SNOMED CT
Pleural Effusion	60046008	SNOMED CT
Pneumonia	233604007	SNOMED CT
Pneumothorax (no intervention required)	112000002153	ACC NCDR
Pneumothorax (requiring intervention)	112000002152	ACC NCDR
Pulmonary Embolism	59282003	SNOMED CT
Respiratory Failure	409622000	SNOMED CT

Element: 9002 — Intra/Post-Procedure Events Occurred

Coding Instruction: Indicate if the specific intra or post procedure event(s) occurred.

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

Vendor Instruction: When an Intra or Post-Procedure Event (12153) selection/code is provided more than once in a single Lab Visit, then its Intra/Post-Procedure Events Occurred (9002) value cannot have conflicting responses or be duplicate negatives.

When an Intra or Post Procedure Events (12153) is selected then Intra/Post-Procedure Events Occurred (9002) must not be Null

Element: 14275 — Intra and Post Procedure Event Date

Coding Instruction: Indicate all dates of intra or post procedure events that occurred.

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

Vendor Instruction: Intra and Post Procedure Event Date (14275) must be Greater than or Equal to Procedure Start Date and Time (7000)

Intra and Post Procedure Event Date (14275) must be Less than or Equal to Discharge Date (10100)

Section: In-Hospital Adjudication **Parent: Procedure Information**

Element: 14312 Adjudication Event

Coding Instruction: Indicate the event being adjudicated.

Target Value: N/A

Vendor Instruction: An Adjudication - combination of Event (14312) and Date (14313) - may only be entered/selected once

Adjudication Event (14312) cannot be Null if Intra or Post Procedure Events (12153) is Equal to (Hemorrhagic Stroke, Intracranial Hemorrhage (other than hemorrhagic stroke), Ischemic Stroke, TIA, Undetermined Stroke, Access Site Bleeding, GI Bleeding, Hematoma, Hemothorax (not requiring drainage), Hemothorax (requiring drainage), Other Hemorrhage (non-intracranial), Pericardial Effusion (requiring open heart surgery), Pericardial Effusion with tamponade (requiring percutaneous drainage), Pericardial Effusion without tamponade (requiring percutaneous drainage), Retroperitoneal Bleeding, Vascular Complications, Systemic Thromboembolism (other than stroke), AV Fistula (requiring surgical repair), Pseudoaneurysm (requiring endovascular repair), Pseudoaneurysm (requiring surgical repair), Pseudoaneurysm (requiring thrombin injection only)) and Intra/Post-Procedure Events Occurred (9002) is Yes. Every Intra or Post Procedure Event (combination of Event (12153), Occurred (9002) and Event Date (14275)) that requires adjudication must have a corresponding adjudication record (combination of Event (14312) and Event Date (14313).

Intra or Post Procedure Events - 1.3.6.1.4.1.19376.1.4.1.6.5.706

Selection	Definition	Source	Code	Code System
Air Embolism			271376002	SNOMED CT
Cardiac Arrest			410429000	SNOMED CT
Heart Failure			84114007	SNOMED CT
Heart Valve Damage			368009	SNOMED CT
Left Atrial Thrombus			473360003	SNOMED CT
Myocardial Infarction			22298006	SNOMED CT
Pericardial Effusion (no intervention required)			112000002125	ACC NCDR
Pericarditis			3238004	SNOMED CT
Anaphylaxis			39579001	SNOMED CT
Arterial Thrombosis			65198009	SNOMED CT
Deep Vein Thrombosis			128053003	SNOMED CT
Systemic Thromboembolism (other than stroke) (Complete Adjudication)			112000002126	ACC NCDR
Esophageal Injury (resulting from TEE probe)			112000002127	ACC NCDR
Hepatic Injury			112000002128	ACC NCDR
New Requirement for Dialysis			100014076	ACC NCDR
Device Explant			100001141	ACC NCDR
Device Infection			112000002137	ACC NCDR
Device Migration			370512004	SNOMED CT
Device Thrombus			112000001839	ACC NCDR
Device Systemic Embolization (catheter retrieval)			112000002138	ACC NCDR
Device Systemic Embolization (surgical retrieval)			112000002139	ACC NCDR
AV Fistula (no intervention required)			112000002140	ACC NCDR
AV Fistula (requiring surgical repair) (Complete Adjudication)			112000002141	ACC NCDR
Pseudoaneurysm (no intervention required)			112000002143	ACC NCDR
Pseudoaneurysm (requiring endovascular repair) (Complete Adjudication)			112000002144	ACC NCDR
Pseudoaneurysm (requiring surgical repair) (Complete Adjudication)			112000002145	ACC NCDR
Pseudoaneurysm (requiring thrombin injection only) (Complete Adjudication)			112000002146	ACC NCDR
Hemorrhagic Stroke (Complete Adjudication)			230706003	SNOMED CT
Intracranial Hemorrhage (other than hemorrhagic stroke) (Complete Adjudication)			1386000	SNOMED CT
Ischemic Stroke (Complete Adjudication)			422504002	SNOMED CT
TIA (Complete Adjudication)			266257000	SNOMED CT

Section: In-Hospital Adjudication	Parent: Procedure Information	
Undetermined Stroke (Complete Adjudication)	230713003	SNOMED CT
Access Site Bleeding (Complete Adjudication)	1000142440	ACC NCDR
GI Bleeding (Complete Adjudication)	74474003	SNOMED CT
Hematoma (Complete Adjudication)	385494008	SNOMED CT
Hemothorax (not requiring drainage) (Complete Adjudication)	112000002147	ACC NCDR
Hemothorax (requiring drainage) (Complete Adjudication)	100001011	ACC NCDR
Other Hemorrhage (non-intracranial) (Complete Adjudication)	50960005	SNOMED CT
Pericardial Effusion (requiring open heart surgery) (Complete Adjudication)	112000002148	ACC NCDR
Pericardial Effusion with tamponade (requiring percutaneous drainage) (Complete Adjudication)	112000002149	ACC NCDR
Pericardial Effusion without tamponade (requiring percutaneous drainage) (Complete Adjudication)	112000002150	ACC NCDR
Retroperitoneal Bleeding (Complete Adjudication)	95549001	SNOMED CT
Vascular Complications (Complete Adjudication)	213217008	SNOMED CT
Pleural Effusion	60046008	SNOMED CT
Pneumonia	233604007	SNOMED CT
Pneumothorax (no intervention required)	112000002153	ACC NCDR
Pneumothorax (requiring intervention)	112000002152	ACC NCDR
Pulmonary Embolism	59282003	SNOMED CT
Respiratory Failure	409622000	SNOMED CT

Element: 14313 Adjudication Event Date

Coding Instruction: Indicate the date the clinical event being adjudicated occurred.

Target Value: N/A

Vendor Instruction: When Adjudication Event (14312) is selected, Adjudication Event Date (14313) cannot be Null

The Adjudication Event Date (14313) / Adjudication Event Code (14312) must match with Intra or Post-Procedure Event Date (14275) / Intra or Post Procedure Event Code (12153)

Adjudication Event Date (14313) must be Less than or Equal to Discharge Date (10100)

Section: Neurologic **Parent: In-Hospital Adjudication**

Element: 14902 Adjudication Status

Coding Instruction: Indicate whether the patient was alive or deceased on the date the adjudication was performed.

Target Value: Any value between start of current procedure and discharge

Vendor Instruction: Adjudication Status (14902) cannot be Null if Adjudication Event (14312) is Equal to (Hemorrhagic Stroke, Intracranial Hemorrhage, Ischemic Stroke, TIA, Undetermined Stroke)

Adjudication Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.726

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

Element: 14903 Adjudication Date of Death

Coding Instruction: Indicate the date the patient was declared deceased.

Target Value: Any value between start of current procedure and discharge

Vendor Instruction: Adjudication Date of Death (14903) must be Greater than or Equal to Procedure Start Date and Time (7000)

Adjudication Date of Death (14903) must be Greater than or Equal to Adjudication Event Date (14313)

Adjudication Date of Death (14903) must be Greater than or Equal to Symptom Onset Date (14904)

Adjudication Date of Death (14903) must be Less than or Equal to Discharge Date (10100)

Element: 14904 Symptom Onset Date

Coding Instruction: Indicate the date of symptom onset associated with this event.

Target Value: Any value between start of current procedure and discharge

Vendor Instruction: Symptom Onset Date (14904) must be Greater than or Equal to Procedure Start Date and Time (7000)

Symptom Onset Date (14904) must be Less than or Equal to Discharge Date (10100)

Element: 14905 Neurologic Deficit with Rapid Onset

Coding Instruction: Indicate if the patient had a sudden onset of a focal or global neurologic deficit regardless of the duration of symptoms.

Rapid onset means sudden or maximal within minutes.

Target Value: Any value between start of current procedure and discharge

Element: 14906 Neurologic Deficit Clinical Presentation

Coding Instruction: Indicate the clinical presentation of the neurologic deficit.

Target Value: Any value between start of current procedure and discharge

Neurologic Deficit Clinical Presentation - 1.3.6.1.4.1.19376.1.4.1.6.5.716

Selection	Definition	Source	Code	Code System
Stroke-related			100014109	ACC NCDR
Non-Stroke-related			112000001860	ACC NCDR

Element: 14907 Diagnosis Confirmation by Neurology

Coding Instruction: Indicate if the diagnosis was confirmed by a neurologist or a neurosurgeon.

Target Value: Any value between start of current procedure and discharge

Element: 14908 Brain Imaging Performed

Coding Instruction: Indicate if neuro imaging (such as CT, MRI, cerebral angiography) was performed in an attempt to confirm the diagnosis.

Target Value: All values between start of current procedure and discharge

Element: 14909 Brain Imaging Type

Coding Instruction: Indicate the type of neurologic imaging which was performed.

Target Value: All values between start of procedure and end of procedure

Brain Imaging Type - 1.3.6.1.4.1.19376.1.4.1.6.5.808

Section: Neurologic **Parent: In-Hospital Adjudication**

Selection	Definition	Source	Code	Code System
Cerebral Angiography			3258003	SNOMED CT
Computed Tomography			77477000	SNOMED CT
Magnetic Resonance Imaging			113091000	SNOMED CT
Other			112000001862	ACC NCDR

Element: 14910 Deficit Type

Coding Instruction: Indicate the type of deficit identified by the neuroimaging study.

Target Value: All values between start of procedure and end of procedure

Brain Imaging Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.717

Selection	Definition	Source	Code	Code System
No deficit			100001231	ACC NCDR
Infarction			55641003	SNOMED CT
Hemorrhage			50960005	SNOMED CT
Both			112000002004	ACC NCDR

Element: 14911 Hemorrhagic Stroke Type

Coding Instruction: For patients presenting with an intracranial hemorrhage, indicate the hemorrhage location.

Target Value: All values between start of current procedure and discharge

Hemorrhagic Stroke Type - 1.3.6.1.4.1.19376.1.4.1.6.5.794

Selection	Definition	Source	Code	Code System
Intracerebral			274100004	SNOMED CT
Subarachnoid			21454007	SNOMED CT
Subdural			35486000	SNOMED CT

Element: 14912 Subsequent Intravenous Recombinant Tissue Plasminogen Activator Administered

Coding Instruction: Indicate if intravascular (IV) recombinant tissue plasminogen activator (rtPA) was used as a treatment option related to this event.

Target Value: Any value between start of current procedure and discharge

Element: 14913 Subsequent Endovascular Therapeutic Intervention

Coding Instruction: Indicate if an endovascular interventional therapy was performed as a treatment option related to this event.

Target Value: Any value between start of current procedure and discharge

Element: 14914 Neurologic Symptoms Duration

Coding Instruction: Indicate the duration (in hours) of the neurologic symptoms.

Target Value: All values between start of procedure and end of procedure

Duration - 1.3.6.1.4.1.19376.1.4.1.6.5.795

Selection	Definition	Source	Code	Code System
Less than 1 Hour			112000002130	ACC NCDR
1 - 24 Hours			112000002132	ACC NCDR
Greater than 24 Hours			112000002131	ACC NCDR

Element: 14915 Trauma

Coding Instruction: Indicate if the patient experienced a physical trauma within 24 hours prior to the neurologic event.

Target Value: Any value between start of current procedure and discharge

Element: 14916 Modified Rankin Scale

Coding Instruction: Indicate the patient's functional ability according to the modified Rankin Scale (mRS) administered following the event.

Target Value: Any value between start of current procedure and discharge

Supporting Definition: **Modified Rankin Scale**

The Modified Rankin Scale is a standardized neurological examination of patients with disability that provides a scale of global disability.

Source: Rankin J. Cerebral vascular accidents in patients over the age of 60. Scott Med J. 1957; 2:200-15.

Bonita R, Beaglehole R. Modification of Rankin Scale: Recovery of motor function after stroke. Stroke. 1988;19(12):1497-1500.

Rankin Scale Assessment Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.139

Section: Neurologic	Parent: In-Hospital Adjudication

Selection	Definition	Source	Code	Code System
0: No symptoms at all			LA6111-4	LOINC
1: No significant disability despite symptoms	Able to carry out all usual duties and activities.		LA6112-2	LOINC
2: Slight disability	Unable to carry out all previous activities, but able to look after own affairs without assistance.		LA6113-0	LOINC
3: Moderate disability	Requiring some help, but able to walk without assistance.		LA6114-8	LOINC
4: Moderately severe disability	Unable to walk without assistance and unable to attend to own bodily needs without assistance.		LA6115-5	LOINC
5: Severe disability	Bedridden, incontinent and requiring constant nursing care and attention.		LA10137-0	LOINC
6: Death			419620001	SNOMED CT

Element: 14917 Adjudication Modified Rankin Scale Not Administered

Coding Instruction: Indicate if the modified Rankin Scale (mRS) was not administered following the event.

Target Value: Any value between start of current procedure and discharge

Supporting Definition: **Modified Rankin Scale**

The Modified Rankin Scale is a standardized neurological examination of patients with disability that provides a scale of global disability.

Source: Rankin J. Cerebral vascular accidents in patients over the age of 60. Scott Med J. 1957; 2:200-15.

Bonita R, Beaglehole R. Modification of Rankin Scale: Recovery of motor function after stroke. Stroke. 1988;19(12):1497-1500.

Element: 14918 Procedure Related Neurologic Event

Coding Instruction: Indicate using the following selections the likelihood in which this event is related to the LAAO procedure based upon the clinician's best clinical judgement.

Target Value: Any value between start of current procedure and discharge

Qualifier Value - 1.3.6.1.4.1.19376.1.4.1.6.5.796

Selection	Definition	Source	Code	Code System
Certain	The clinical adverse event occurs in a plausible time relationship to the procedure and cannot be explained by concurrent disease or other drugs or devices.		17162000	SNOMED CT
Probable	The clinical adverse event occurs within a reasonable time sequence to the procedure and it is unlikely to be attributed to concurrent disease or other drugs or devices.		112000002134	ACC NCDR
Possible	The clinical adverse event occurs within a reasonable time sequence to the procedure, but the event could also be explained by concurrent disease or other drugs or devices.		371930009	SNOMED CT
Unlikely	The clinical adverse event, based upon its temporal relationship to the procedure, makes a causal relationship improbable. Additionally, other drugs, devices or underlying disease provide plausible explanations.		112000002135	ACC NCDR
Unclassifiable	The clinical adverse event is reported yet more data is essential for a proper assessment OR the clinical adverse event is reported yet the causality cannot be judged because information is insufficient or contradictory, and cannot be supplemented or verified.		112000002136	ACC NCDR

Section: Neurologic **Parent: Neurologic**

Element: 14931 Device Related Neurologic Event

Coding Instruction: Indicate using the following selections the likelihood in which this event is related to the LAAO device based upon the clinician's best clinical judgement.

Target Value: Any value between start of current procedure and discharge

Qualifier Value - 1.3.6.1.4.1.19376.1.4.1.6.5.796

Selection	Definition	Source	Code	Code System
Certain	The clinical adverse event occurs in a plausible time relationship to the procedure and cannot be explained by concurrent disease or other drugs or devices.		17162000	SNOMED CT
Probable	The clinical adverse event occurs within a reasonable time sequence to the procedure and it is unlikely to be attributed to concurrent disease or other drugs or devices.		112000002134	ACC NCDR
Possible	The clinical adverse event occurs within a reasonable time sequence to the procedure, but the event could also be explained by concurrent disease or other drugs or devices.		371930009	SNOMED CT
Unlikely	The clinical adverse event, based upon its temporal relationship to the procedure, makes a causal relationship improbable. Additionally, other drugs, devices or underlying disease provide plausible explanations.		112000002135	ACC NCDR
Unclassifiable	The clinical adverse event is reported yet more data is essential for a proper assessment OR the clinical adverse event is reported yet the causality cannot be judged because information is insufficient or contradictory, and cannot be supplemented or verified.		112000002136	ACC NCDR

Section: Bleeding **Parent: In-Hospital Adjudication**

Element: 14924 Adjudication Status

Coding Instruction: Indicate whether the patient was alive or deceased on the date the adjudication was performed.

Target Value: Any value between start of current procedure and discharge

Vendor Instruction: Adjudication Status (14924) cannot be Null if Adjudication Event (14312) is Equal to (Access Site Bleeding, GI Bleeding, Hematoma, Hemothorax (not requiring drainage), Hemothorax (requiring drainage), Other Hemorrhage, Pericardial Effusion (requiring open cardiac surgery), Pericardial Effusion with tamponade (requiring percutaneous drainage), Pericardial Effusion without tamponade (requiring percutaneous drainage), Retroperitoneal Bleeding, Vascular Complications, AV Fistula (requiring surgical repair), Pseudoaneurysm (requiring endovascular repair), Pseudoaneurysm (requiring surgical repair), Pseudoaneurysm (requiring thrombin injection only))

Adjudication Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.726

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

Element: 14930 Adjudication Date of Death

Coding Instruction: Indicate the date the patient was declared deceased.

Target Value: Any value between start of current procedure and discharge

Vendor Instruction: Adjudication Date of Death (14930) must be Greater than or Equal to Procedure Start Date and Time (7000)

Adjudication Date of Death (14930) must be Greater than or Equal to Adjudication Event Date (14313)

Element: 14929 Invasive Intervention Required

Coding Instruction: Indicate if there was a surgical or percutaneous intervention required to treat the patient for this bleeding event.

Target Value: Any value between start of current procedure and discharge

Element: 14919 RBC Transfusion

Coding Instruction: Indicate if there was at least one transfusion of PRBCs given to treat the patient for this bleeding event.

Target Value: All values between start of current procedure and discharge

Element: 14920 Number of RBC Units Transfused

Coding Instruction: Indicate the number of PRBC units transfused for treatment of this bleeding event.

Target Value: All values between start of current procedure and discharge

Element: 14921 Hemoglobin Pre-Transfusion

Coding Instruction: Indicate the lowest hemoglobin (Hgb) value (g/dL), obtained via lab assay or point of care assay, between the intra or post procedure bleeding event and prior to the transfusion.

Target Value: All values between start of current procedure and discharge

Element: 14922 Diagnostic Imaging Performed

Coding Instruction: Indicate if imaging (such as CT, MRI) was performed in an attempt to confirm the diagnosis.

Target Value: All values between start of current procedure and discharge

Element: 14923 End Organ Damage

Coding Instruction: Indicate if the patient was diagnosed with end organ damage after this bleeding event.

Target Value: All values between start of procedure and end of procedure

Element: 14927 Major Surgery

Coding Instruction: Indicate if the patient underwent surgery within 30 days prior to this bleeding event.

Target Value: Any value between start of current procedure and discharge

Element: 14928 Percutaneous Coronary Intervention

Coding Instruction: Indicate if the patient had a percutaneous coronary artery or percutaneous valvular intervention within 30 days prior to this bleeding event.

Section: Bleeding **Parent: In-Hospital Adjudication**

Target Value: Any value between start of current procedure and discharge

Element: 14925 Procedure Related Bleeding Event

Coding Instruction: Indicate using the following selections the likelihood in which this event is related to the LAAO procedure based upon the clinician's best clinical judgement.

Target Value: Any value between start of current procedure and discharge

Supporting Definition: **Bleeding Event**

A bleeding event observed and documented in the medical record that was associated with a hematocrit drop of ≥10% and/or a hemoglobin drop of ≥3 g/dL or that required transfusion or surgical intervention.

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.

Qualifier Value - 1.3.6.1.4.1.19376.1.4.1.6.5.796

Selection	Definition	Source	Code	Code System
Certain	The clinical adverse event occurs in a plausible time relationship to the procedure and cannot be explained by concurrent disease or other drugs or devices.		17162000	SNOMED CT
Probable	The clinical adverse event occurs within a reasonable time sequence to the procedure and it is unlikely to be attributed to concurrent disease or other drugs or devices.		112000002134	ACC NCDR
Possible	The clinical adverse event occurs within a reasonable time sequence to the procedure, but the event could also be explained by concurrent disease or other drugs or devices.		371930009	SNOMED CT
Unlikely	The clinical adverse event, based upon its temporal relationship to the procedure, makes a causal relationship improbable. Additionally, other drugs, devices or underlying disease provide plausible explanations.		112000002135	ACC NCDR
Unclassifiable	The clinical adverse event is reported yet more data is essential for a proper assessment OR the clinical adverse event is reported yet the causality cannot be judged because information is insufficient or contradictory, and cannot be supplemented or verified.		112000002136	ACC NCDR

Section: Bleeding **Parent: Bleeding**

Element: 14926 Device Related Bleeding Event

Coding Instruction: Indicate using the following selections the likelihood in which this event is related to the LAAO device based upon the clinician's best clinical judgement.

Target Value: Any value between start of current procedure and discharge

Supporting Definition: **Bleeding Event**

A bleeding event observed and documented in the medical record that was associated with a hematocrit drop of ≥10% and/or a hemoglobin drop of ≥3 g/dL or that required transfusion or surgical intervention.

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.

Qualifier Value - 1.3.6.1.4.1.19376.1.4.1.6.5.796

Selection	Definition	Source	Code	Code System
Certain	The clinical adverse event occurs in a plausible time relationship to the procedure and cannot be explained by concurrent disease or other drugs or devices.		17162000	SNOMED CT
Probable	The clinical adverse event occurs within a reasonable time sequence to the procedure and it is unlikely to be attributed to concurrent disease or other drugs or devices.		112000002134	ACC NCDR
Possible	The clinical adverse event occurs within a reasonable time sequence to the procedure, but the event could also be explained by concurrent disease or other drugs or devices.		371930009	SNOMED CT
Unlikely	The clinical adverse event, based upon its temporal relationship to the procedure, makes a causal relationship improbable. Additionally, other drugs, devices or underlying disease provide plausible explanations.		112000002135	ACC NCDR
Unclassifiable	The clinical adverse event is reported yet more data is essential for a proper assessment OR the clinical adverse event is reported yet the causality cannot be judged because information is insufficient or contradictory, and cannot be supplemented or verified.		112000002136	ACC NCDR

Section: Systemic Thromboembolism **Parent: In-Hospital Adjudication**

Element: 14932 Adjudication Status

Coding Instruction: Indicate whether the patient was alive or deceased on the date the adjudication was performed.

Target Value: Any value between start of current procedure and discharge

Vendor Instruction: Adjudication Status (14932) cannot be Null if Adjudication Event (14312) is Equal to (Systemic Thromboembolism (other than stroke))

Adjudication Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.726

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

Element: 14933 Adjudication Date of Death

Coding Instruction: Indicate the date the patient was declared deceased.

Target Value: Any value between start of current procedure and discharge

Vendor Instruction: Adjudication Date of Death (14933) must be Greater than or Equal to Procedure Start Date and Time (7000)

Adjudication Date of Death (14933) must be Greater than or Equal to Adjudication Event Date (14313)

Element: 14934 Cause of Death

Coding Instruction: If deceased, indicate if the patient's death cause was due to systemic thromboembolization, or focal end-organ hypoperfusion resulting from systemic thromboembolism, or therapeutic intervention to treat systemic thromboembolism.

Target Value: Any value between start of current procedure and discharge

Element: 14935 Focal End-Organ Hypoperfusion Present

Coding Instruction: Indicate if focal end-organ hypoperfusion resulted from the systemic thromboembolism event.

Target Value: Any value between start of current procedure and discharge

Element: 14939 Systemic Thromboembolization Imaging Evidence

Coding Instruction: Indicate if imaging evidence indicated systemic thromboembolism.

Target Value: All values between start of procedure and end of procedure

Element: 14936 Imaging Method

Coding Instruction: Indicate the imaging method to identify systemic thromboembolism.

Target Value: All values between start of current procedure and discharge

Imaging Type - 1.3.6.1.4.1.19376.1.4.1.6.5.417

Selection	Definition	Source	Code	Code System
Angiography			77343006	SNOMED CT
Computed Tomography			77477000	SNOMED CT
Magnetic Resonance Imaging			113091000	SNOMED CT
Ultrasound			112000001042	ACC NCDR
Other Imaging			112000001862	ACC NCDR

Element: 14937 Therapeutic Intervention Performed

Coding Instruction: Indicate if any pharmacological, catheter, surgical, or other therapeutic intervention was performed to treat the systemic thromboembolism.

Target Value: All values between start of procedure and end of procedure

Element: 14938 Intervention Type

Coding Instruction: Indicate the intervention type.

Target Value: All values between start of procedure and end of procedure

Intervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.797

Selection	Definition	Source	Code	Code System
Catheter			276272002	SNOMED CT
Pharmacological			182832007	SNOMED CT
Surgical			387713003	SNOMED CT
Other			112000000172	ACC NCDR

Section: Systemic Thromboembolism **Parent: In-Hospital Adjudication**

Section: In-Hospital Adjudication Medications — Parent: In-Hospital Adjudication

Element: 14940 Adjudication Medication Code

Coding Instruction: Indicate the NCDR assigned identification number for the medications the patient was taking or administered at the time of the event.

Target Value: All values between start of current procedure and discharge

Vendor Instruction: Adjudication Medication Code (14940) should not be duplicated within an adjudication event

Pre-Procedure Medication - 1.3.6.1.4.1.19376.1.4.1.6.5.216

Selection	Definition	Source	Code	Code System
Fondaparinux			321208	RxNorm
Heparin Derivative			100000921	ACC NCDR
Low Molecular Weight Heparin			373294004	SNOMED CT
Unfractionated Heparin			96382006	SNOMED CT
Warfarin			11289	RxNorm
Aspirin 81 to 100 mg			112000002080	ACC NCDR
Aspirin 101 to 324 mg			112000002081	ACC NCDR
Aspirin 325 mg			317300	RxNorm
Aspirin/Dipyridamole			226716	RxNorm
Vorapaxar			1537034	RxNorm
Apixaban			1364430	RxNorm
Dabigatran			1546356	RxNorm
Edoxaban			1599538	RxNorm
Rivaroxaban			1114195	RxNorm
Cangrelor			1656052	RxNorm
Clopidogrel			32968	RxNorm
Other P2Y12			112000001003	ACC NCDR
Prasugrel			613391	RxNorm
Ticagrelor			1116632	RxNorm
Ticlopidine			10594	RxNorm

Element: 14941 Medication Administered

Coding Instruction: Indicate if the patient was taking or being administered the medication at the time of the event.

Target Value: All values between start of procedure and end of procedure

Vendor Instruction: When an Adjudication Medication Code (14940) is selected, Medication Administered (14941) cannot be Null

Drug Administered - 1.3.6.1.4.1.19376.1.4.1.6.5.711

Selection	Definition	Source	Code	Code System
Yes			112000001851	ACC NCDR
No			100014173	ACC NCDR

Section: Post Procedure Labs **Parent: Procedure Information**

Element: 14868 Post Procedure Peak Creatinine

Coding Instruction: Indicate the post-procedure peak creatinine (Cr) level (mg/dL).

Target Value: The highest value between end of current procedure and discharge

Supporting Definition: **Creatinine**

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

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

Element: 14870 Post Procedure Peak Creatinine Not Drawn

Coding Instruction: Indicate if post-procedure peak creatinine level could not be assessed as either only one level or no creatinine labs were drawn.

Target Value: N/A

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: 14871 Post Procedure Hemoglobin

Coding Instruction: Indicate the lowest hemoglobin (Hgb) value (g/dL), obtained via lab assay or point of care assay, between the end of the procedure and the time of discharge.

Target Value: The lowest value between end of current procedure and discharge

Supporting Definition: **Hemoglobin**

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

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

Element: 14872 Post Procedure Hemoglobin Not Drawn

Coding Instruction: Indicate if the post-procedure hemoglobin was not drawn.

Target Value: N/A

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

Section: Post Procedure Creatinine **Parent: Post Procedure Labs**

Element: 14869 Post Procedure Creatinine

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

Target Value: The last value between end of last procedure and discharge

Supporting Definition: **Creatinine**

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

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

Element: 14867 Post Procedure Creatinine Not Drawn

Coding Instruction: Indicate if the post-procedure creatinine level was not drawn.

Target Value: N/A

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: Discharge **Parent: Root**

Element: 14835 Surgery

Coding Instruction: Indicate if the patient had an inpatient operation during this episode of care.

Target Value: The value on discharge

Element: 14836 Percutaneous Coronary Intervention

Coding Instruction: Indicate if the patient had any other percutaneous coronary artery, coronary valvular or coronary structural interventions during this episode of care.

Target Value: The value on discharge

Supporting Definition: **Percutaneous Coronary Intervention**

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.

Source: Medline Plus, 2017 by Merriam-Webster, Incorporated

Element: 10100 Discharge Date

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

Target Value: The value on discharge

Vendor Instruction: Discharge Date (10100) and Arrival Date (3000) must not overlap on multiple episodes

Discharge Date (10100) must be Greater than or Equal to 10/01/2022

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
Home			01	HL7 Discharge disposition
Extended Care/TCU/Rehab			62	HL7 Discharge disposition
Other acute care hospital			02	HL7 Discharge disposition
Skilled Nursing facility			64	HL7 Discharge disposition
Other			100001249	ACC NCDR
Left against medical advice (AMA)			07	HL7 Discharge disposition

Element: 10115 Hospice Care

Coding Instruction: Indicate if the patient was discharged to hospice care.

Target Value: The value on discharge

Element: 10120 Death During the Procedure

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

Note(s): Make sure to only capture 'death during the procedure' in the procedure appropriate registry.

For example, if the patient had a CathPCI procedure and a TVT procedure in the same episode of care (hospitalization) but different cath lab visits and the death occurred during the TVT procedure, code 'Yes' only in the TVT Registry and not the CathPCI Registry. If the CathPCI procedure and TVT procedure occurred during the same cath lab visit then code 'Yes' in both registries.

Target Value: Any occurrence on discharge

Section: Discharge **Parent: Root**

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

Vendor Instruction: When Cause of Death (10125) is Equal to Stroke, at least one of the following Adjudication Events (14312) must be selected: Hemorrhagic Stroke, Intracranial Hemorrhage, Ischemic Stroke, TIA, Undetermined Stroke

When Cause of Death (10125) is Equal to (Cardiovascular hemorrhage, Hemorrhage), at least one of the following Adjudication Events (14312) must be selected: Access Site Bleeding, GI Bleeding, Hematoma, Hemothorax (not requiring drainage), Hemothorax (requiring drainage), Other Hemorrhage, Pericardial Effusion (requiring open cardiac surgery), Pericardial Effusion with tamponade (requiring percutaneous drainage), Pericardial Effusion without tamponade (requiring percutaneous drainage), Retroperitoneal Bleeding, Vascular Complications, AV Fistula (requiring surgical repair), Pseudoaneurysm (requiring endovascular repair), Pseudoaneurysm (requiring surgical repair), Pseudoaneurysm (requiring thrombin injection only)

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			100000960	ACC NCDR
Sudden cardiac death			100000978	ACC NCDR
Heart failure			100000964	ACC NCDR
Stroke			100000977	ACC NCDR
Cardiovascular procedure			100000962	ACC NCDR
Cardiovascular hemorrhage			100000961	ACC NCDR
Other cardiovascular reason			100000972	ACC NCDR
Pulmonary			100000975	ACC NCDR
Renal			100000976	ACC NCDR
Gastrointestinal			100000963	ACC NCDR
Hepatobiliary			100000966	ACC NCDR
Pancreatic			100000974	ACC NCDR
Infection			100000967	ACC NCDR
Inflammatory/Immunologic			100000968	ACC NCDR
Hemorrhage			100000965	ACC NCDR
Non-cardiovascular procedure or surgery			100000971	ACC NCDR
Trauma			100000980	ACC NCDR
Suicide			100000979	ACC NCDR
Neurological			100000970	ACC NCDR
Malignancy			100000969	ACC NCDR
Other non-cardiovascular reason			100000973	ACC NCDR

Section: Discharge Medications — Parent: Discharge

Element: 10200 Discharge Medication Code

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

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

The medication(s) collected in this field are controlled by the Medication Master file. This file is maintained by the NCDR and will be made available on the internet for downloading and importing/updating into your application. Each medication in the Medication Master file is assigned to a value set. The value set is used to separate procedural medications from medications prescribed at discharge. The separation of these medications is depicted on the data collection form.

Target Value: N/A

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
Fondaparinux			321208	RxNorm
Heparin Derivative			100000921	ACC NCDR
Low Molecular Weight Heparin			373294004	SNOMED CT
Unfractionated Heparin			96382006	SNOMED CT
Warfarin			11289	RxNorm
Aspirin			1191	RxNorm
Aspirin/Dipyridamole			226716	RxNorm
Vorapaxar			1537034	RxNorm
Apixaban			1364430	RxNorm
Dabigatran			1546356	RxNorm
Edoxaban			1599538	RxNorm
Rivaroxaban			1114195	RxNorm
Cangrelor			1656052	RxNorm
Clopidogrel			32968	RxNorm
Other P2Y12			112000001003	ACC NCDR
Prasugrel			613391	RxNorm
Ticagrelor			1116632	RxNorm
Ticlopidine			10594	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			100001247	ACC NCDR
No - No Reason			100001048	ACC NCDR
No - Medical Reason			100001034	ACC NCDR
No - Patient Reason			100001071	ACC NCDR

Element: 10207 Discharge Medication Dose

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

Target Value: The value on discharge

Medication Dose - 1.3.6.1.4.1.19376.1.4.1.6.5.321

Selection	Definition	Source	Code	Code System
Aspirin 81 to 100 mg			112000002080	ACC NCDR
Aspirin 101 to 324 mg			112000002081	ACC NCDR
Aspirin 325 mg			317300	RxNorm

Section: 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 the Follow-Up Reference Procedure Start Date and Time (11001)

Follow-Up Assessment Date (11000) must be Greater than or Equal to 10/01/2022

Element: 14851 Follow Up Interval

Coding Instruction: Indicate the interval of follow-up: 45 days, 6 months, 1 year or 2 years.

Target Value: The value on Follow-up

Vendor Instruction: A Follow Up - combination of Follow Up Interval (14851), Follow-Up Assessment Date (11000) and Follow-Up Reference Procedure Start Date and Time (11001) - may only be entered/selected once

The date difference between Follow-up Assessment Date (11000) and Follow-up Reference Procedure Start Date and Time (11001) must fall within the valid range for the Follow Up Interval (14851). The valid ranges for the Follow Up Interval (14851) selections are as follows:

45 day: 1-91 days
6 month: 92-256 days
1 year: 257-548 days
2 year: 549-913 days

Follow Up Interval - 1.3.6.1.4.1.19376.1.4.1.6.5.806

Selection	Definition	Source	Code	Code System
45 day			112000002119	ACC NCDR
6 month			300042001	SNOMED CT
1 year			183627004	SNOMED CT
2 year			112000002118	ACC NCDR

Element: 14946 Reference Episode Arrival Date

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: 14338 Follow-Up Reference Discharge Date

Coding Instruction: Indicate the date of discharge for the episode of care that included the reference procedure.

Target Value: The value on Follow-up

Vendor Instruction: Follow-up Reference Discharge Date (14338) must not be Null

Element: 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: 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

Section: Follow-Up	Parent: Root	
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: 11006 Follow-Up Date of Death

Coding Instruction: Indicate the date of death.

Target Value: The value on Follow-up

Vendor Instruction: Follow-Up Date of Death (11006) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Follow-Up Date of Death (11006) must be Greater than or Equal to the Follow-Up Event Date (14277)

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

Vendor Instruction: When Cause of Death (11007) is Equal to Stroke, at least one of the following Adjudication Events (14967) must be selected: Hemorrhagic Stroke, Intracranial Hemorrhage, Ischemic Stroke, TIA, Undetermined Stroke

When Cause of Death (11007) is Equal to (Cardiovascular hemorrhage, Hemorrhage), at least one of the following Adjudication Events (14967) must be selected: Access Site Bleeding, GI Bleeding, Hematoma, Hemothorax (not requiring drainage), Hemothorax (requiring drainage), Other Hemorrhage, Pericardial Effusion (requiring open cardiac surgery), Pericardial Effusion with tamponade (requiring percutaneous drainage), Pericardial Effusion without tamponade (requiring percutaneous drainage), Retroperitoneal Bleeding, Vascular Complications, AV Fistula (requiring surgical repair), Pseudoaneurysm (requiring endovascular repair), Pseudoaneurysm (requiring surgical repair), Pseudoaneurysm (requiring thrombin injection only)

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			100000960	ACC NCDR
Sudden cardiac death			100000978	ACC NCDR
Heart failure			100000964	ACC NCDR
Stroke			100000977	ACC NCDR
Cardiovascular procedure			100000962	ACC NCDR
Cardiovascular hemorrhage			100000961	ACC NCDR
Other cardiovascular reason			100000972	ACC NCDR
Pulmonary			100000975	ACC NCDR
Renal			100000976	ACC NCDR
Gastrointestinal			100000963	ACC NCDR
Hepatobiliary			100000966	ACC NCDR
Pancreatic			100000974	ACC NCDR
Infection			100000967	ACC NCDR
Inflammatory/Immunologic			100000968	ACC NCDR
Hemorrhage			100000965	ACC NCDR
Non-cardiovascular procedure or surgery			100000971	ACC NCDR
Trauma			100000980	ACC NCDR
Suicide			100000979	ACC NCDR
Neurological			100000970	ACC NCDR
Malignancy			100000969	ACC NCDR
Other non-cardiovascular reason			100000973	ACC NCDR

Element: 14858 Left Ventricular Ejection Fraction Assessed

Coding Instruction: Indicate if a left ventricular ejection fraction (LVEF) has been assessed.

Target Value: The value on Follow-up

Section: Follow-Up **Parent: Root**

Element: 13690 Left Ventricular Ejection Fraction

Coding Instruction: Indicate the left ventricular ejection fraction.

Target Value: The value on Follow-up

Supporting Definition: **Most Recent LVEF %**

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

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

Element: 14859 Transthoracic Echo Performed

Coding Instruction: Indicate if a transthoracic echocardiogram (TTE) was performed.

Target Value: The value on Follow-up

Element: 14873 TTE Date

Coding Instruction: Indicate the date of the most recent transthoracic echo study performed.

Target Value: The value on Follow-up

Vendor Instruction: TTE Date (14873) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14874 Transesophageal Echocardiogram (TEE) Performed

Coding Instruction: Indicate if transesophageal echocardiogram (TEE) was performed.

Target Value: The value on Follow-up

Element: 14875 TEE Date

Coding Instruction: Indicate the date of the most recent transesophageal echocardiogram (TEE).

Target Value: The value on Follow-up

Vendor Instruction: TEE Date (14875) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14876 Cardiac CT Performed

Coding Instruction: Indicate if cardiac computed tomography (CT) was performed.

Target Value: The value on Follow-up

Element: 14877 Cardiac CT Date

Coding Instruction: Indicate the date of the most recent cardiac computed tomography (CT).

Target Value: The value on Follow-up

Vendor Instruction: Cardiac CT Date (14877) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14878 Cardiac MRI Performed

Coding Instruction: Indicate if cardiac magnetic resonance imaging (MRI) was performed.

Target Value: The value on Follow-up

Element: 14879 Cardiac MRI Date

Coding Instruction: Indicate the date of the most recent cardiac magnetic resonance imaging (MRI).

Target Value: The value on Follow-up

Vendor Instruction: Cardiac MRI Date (14879) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14880 Intracardiac Echo Performed

Coding Instruction: Indicate if intracardiac echo (ICE) was performed.

Target Value: The value on Follow-up

Supporting Definition: **Intracardiac three dimensional echocardiography**

Intracardiac echocardiography (ICE) is an imaging technique that is increasingly available as an alternative to transoesophageal echocardiography to guide percutaneous interventional procedures.

Source: Mitchell ARJ, Puwanarajah P, Timperley J, Becher H, Wilson N, Ormero OJ. The Emerging Role of Intracardiac

Section: Follow-Up **Parent: Root**

Echocardiography -- Into the ICE Age. Br J Cardiol. 2007;14(1):31-36.

Element: 14881 Date of Intracardiac Echo

Coding Instruction: Indicate the date of the most recent intracardiac echo (ICE).

Target Value: The value on Follow-up

Supporting Definition: **Intracardiac three dimensional echocardiography**

Intracardiac echocardiography (ICE) is an imaging technique that is increasingly available as an alternative to transoesophageal echocardiography to guide percutaneous interventional procedures.

Source: Mitchell ARJ, Puwanarajah P, Timperley J, Becher H, Wilson N, Ormero OJ. The Emerging Role of Intracardiac Echocardiography -- Into the ICE Age. Br J Cardiol. 2007;14(1):31-36.

Element: 14882 Atrial Thrombus Detected

Coding Instruction: Indicate if a left atrial thrombus was detected.

Target Value: The value on Follow-up

Supporting Definition: **Atrial Thrombus Detected**

Presence of thrombus is considered to be definite if 3 of the following 5 criteria are present: Clear borders, echogenicity from the surrounding structures, independent mobility, longest diameter > 15mm, seen in more than one echocardiographic plane.

Source: Buxton AE, Calkins H, Callans DJ, et al. ACC/AHA/HRS 2006 Key Data Elements and Definitions for Electrophysiological Studies and Procedures: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Data Standards (ACC/AHA/HRS Writing Committee to Develop Data Standards on Electrophysiology). J Am Coll Cardiol. 2006;48(11):2360-2396.

Element: 14884 Device Margin Residual Leak

Coding Instruction: Indicate the residual leak at the device margin in millimeters (mm).

Target Value: The value on Follow-up

Element: 14885 Device Margin Residual Leak Not Assessed

Coding Instruction: Indicate if the residual leak at the device margin was not assessed.

Target Value: The value on Follow-up

Element: 14886 Creatinine

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

Target Value: The value on Follow-up

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: 14887 Creatinine Not Drawn

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

Target Value: The value on Follow-up

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: 14888 Lowest Hemoglobin Value

Coding Instruction: Indicate the lowest hemoglobin (Hgb) value (g/dL), obtained via lab assay or point of care assay, after discharge if 45 day follow up; or the lowest value between the prior follow up visit and current follow up visit for any follow up after the 45 day follow up.

Target Value: The value on Follow-up

Section: Follow-Up **Parent: Root**

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: 14889 Hemoglobin Not Drawn

Coding Instruction: Indicate if the hemoglobin was not drawn.

Target Value: The value on Follow-up

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: 13148 Modified Rankin Scale Score

Coding Instruction: Indicate the Modified Rankin Scale score.

Target Value: The value on Follow-up

Supporting Definition: **Modified Rankin Scale**

The Modified Rankin Scale is a standardized neurological examination of patients with disability that provides a scale of global disability.

Source: Rankin J. Cerebral vascular accidents in patients over the age of 60. Scott Med J. 1957; 2:200-15.

Bonita R, Beaglehole R. Modification of Rankin Scale: Recovery of motor function after stroke. Stroke. 1988;19(12):1497-1500.

Rankin Scale Assessment Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.139

Selection	Definition	Source	Code	Code System
0: No symptoms at all			LA6111-4	LOINC
1: No significant disability despite symptoms	Able to carry out all usual duties and activities.		LA6112-2	LOINC
2: Slight disability	Unable to carry out all previous activities, but able to look after own affairs without assistance.		LA6113-0	LOINC
3: Moderate disability	Requiring some help, but able to walk without assistance.		LA6114-8	LOINC
4: Moderately severe disability	Unable to walk without assistance and unable to attend to own bodily needs without assistance.		LA6115-5	LOINC
5: Severe disability	Bedridden, incontinent and requiring constant nursing care and attention.		LA10137-0	LOINC
6: Death			419620001	SNOMED CT

Element: 14890 Modified Rankin Scale Not Administered

Coding Instruction: Indicate if the Modified Rankin Scale was not administered at follow-up.

Target Value: The value on Follow-up

Supporting Definition: **Modified Rankin Scale**

The Modified Rankin Scale is a standardized neurological examination of patients with disability that provides a scale of global disability.

Source: Rankin J. Cerebral vascular accidents in patients over the age of 60. Scott Med J. 1957; 2:200-15.

Bonita R, Beaglehole R. Modification of Rankin Scale: Recovery of motor function after stroke. Stroke. 1988;19(12):1497-1500.

Element: 14891 Barthel Index Evaluation Performed

Coding Instruction: Indicate if the Barthel Index Evaluation was performed. The Barthel Index (BI) or Barthel ADL index is a scale used to measure performance in basic activities of daily living (ADL).

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index**

An ordinal scale used to measure performance in activities of daily living (ADL).

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Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Section: Follow-Up **Parent: Root**

Element: 14892 Feeding

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper, spread butter, etc. The patient must accomplish this in a reasonable time.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night.	Mahoney FI, Barthel D. "Functional evaluation: the	165234001	SNOMED CT

Section: Follow-Up		Parent: Root		
	Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Barthel Index." Maryland State Med Journal 1965;14:56-61.		
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	733744002	SNOMED CT
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002155	ACC NCDR
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14893 Bathing

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

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Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Section: Follow-Up **Parent: Root**

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper, spread butter, etc. The patient must accomplish this in a reasonable time.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT

Section: Follow-Up	Parent: Root

	other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.			
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	733744002	SNOMED CT
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002155	ACC NCDR
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14894 Grooming

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

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Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper,	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT

Section: Follow-Up		Parent: Root		
	spread butter, etc. The patient must accomplish this in a reasonable time.			
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	733744002	SNOMED CT
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this	Mahoney FI, Barthel D. "Functional evaluation: the	112000002155	ACC NCDR

Section: Follow-Up		Parent: Root		
	activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Barthel Index." Maryland State Med Journal 1965;14:56-61.		
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14895 Dressing

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper, spread butter, etc. The patient must accomplish this in a reasonable time.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-	704440004	SNOMED CT

Section: Follow-Up		Parent: Root		
		61.		
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	733744002	SNOMED CT
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002155	ACC NCDR
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR

Section: Follow-Up **Parent: Root**

Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14896 Bowels

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

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Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper, spread butter, etc. The patient must accomplish this in a reasonable time.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-	129039006	SNOMED CT

Section: Follow-Up		Parent: Root		
	work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	61.		
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	733744002	SNOMED CT
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002155	ACC NCDR
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-	302042005	SNOMED CT

Section: Follow-Up	Parent: Root			
	use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	61		
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14897 Bladder

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

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Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper, spread butter, etc. The patient must accomplish this in a reasonable time.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT

Section: Follow-Up		Parent: Root		
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	733744002	SNOMED CT
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002155	ACC NCDR
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT

Section: Follow-Up **Parent: Root**

Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14898 Toilet

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

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Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper, spread butter, etc. The patient must accomplish this in a reasonable time.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
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Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
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Section: Follow-Up		Parent: Root		
		61.		
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
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Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
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Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
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Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14899 Transfers

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Section: Follow-Up — Parent: Root

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
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Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
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Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT

Section: Follow-Up		Parent: Root		
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	733744002	SNOMED CT
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002155	ACC NCDR
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14900 Mobility

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT

Section: Follow-Up		Parent: Root		
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper, spread butter, etc. The patient must accomplish this in a reasonable time.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129041007	SNOMED CT
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-	733744002	SNOMED CT

Section: Follow-Up	Parent: Root			
		61.		
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002155	ACC NCDR
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Element: 14901 Stairs

Coding Instruction: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

Target Value: The value on Follow-up

Supporting Definition: **Barthel Index Element**

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Source: Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.

Functional Ability - 1.3.6.1.4.1.19376.1.4.1.6.5.801

Selection	Definition	Source	Code	Code System
Unable	Complete assist for feeding required.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	289001005	SNOMED CT
Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165223004	SNOMED CT
Independent	The patient can feed themselves a meal from a tray or table when someone puts the food within reach. They must be able to cut up the food, use salt and pepper, spread butter, etc. The patient must accomplish this in a reasonable time.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165224005	SNOMED CT
Dependent	Patient requires assistance for bathing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129043005	SNOMED CT
Independent	Patient may use a bath tub, a shower, or take a	Mahoney FI, Barthel D. "Functional evaluation: the	129041007	SNOMED CT

Section: Follow-Up		Parent: Root		
	complete sponge bath. They must be able to do all the steps involved in whichever method is employed without another person being present.	Barthel Index." Maryland State Med Journal 1965;14:56-61.		
Needs Help	Patient needs assistance with any aspect of grooming.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704440004	SNOMED CT
Independent	Patient can wash hands and face, comb hair, clean teeth, and shave. They may use any kind of razor but must put in blade or plug in razor without help as well as get it from drawer or cabinet. Female patients must put on own makeup, if used, but need not braid or style hair.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	704437004	SNOMED CT
Dependent	Patient is unable to assist with any dressing.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129065005	SNOMED CT
Needs Help	Patient needs help in putting on and removing or fastening any clothing. They must do at least half the work themselves. They must accomplish this in a reasonable time. Women need not be scored on use of a brassiere or girdle unless these are prescribed garments.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129039006	SNOMED CT
Independent	Patient is able to put on and remove and fasten all clothing, and tie shoe laces (unless it is necessary to use adaptations for this). The activity includes putting on and removing and fastening corset or braces when these are prescribed. Such special clothing as suspenders, loafer shoes, dresses that open down the front may be used when necessary.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	29035000	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	72042002	SNOMED CT
Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165230005	SNOMED CT
Continent	Patient is able to control bowels and has no accidents. They can use a suppository or take an enema when necessary (as for spinal cord injury patients who have had bowel training).	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	24029004	SNOMED CT
Incontinent	Patient has routine incontinence.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165232002	SNOMED CT
Inconsistent	Patient has occasional accidents or can not wait for the bed pan or get to the toilet in time or needs help with an external device.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165233007	SNOMED CT
Continent	Patient is able to control his bladder day and night. Spinal cord injury patients who wear an external device and leg bag must put them on independently, clean and empty bag, and stay dry day and night.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165234001	SNOMED CT
Dependent	Patient requires full assistance.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129078005	SNOMED CT
Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165241007	SNOMED CT
Independent	Patient is able to get on and off toilet, fasten and unfasten clothes, prevent soiling of clothes, and use toilet paper without help. They may use a wall bar or other stable object for support if needed. If it is necessary to use a bed pan instead of a toilet, they must be able to place it on a chair, empty it, and clean it.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	129062008	SNOMED CT
Unable	Patient is unable to assist with any transfer.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	733744002	SNOMED CT
Major Assist Needed	Patient can come to a sitting position without the help of a second person but needs to be lifted out of bed, or if they transfer with a great deal of help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002154	ACC NCDR
Minor Assist Needed	Either some minimal help is needed in some step of this activity or the patient needs to be reminded or supervised for safety of one or more parts of this activity.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000002155	ACC NCDR
Independent	Independent in all phases of this activity. Patient can safely approach the bed in his wheelchair, lock brakes, lift footrests, move safely to bed, lie down, come to a	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	714915006	SNOMED CT

Section: Follow-Up		Parent: Root		
	sitting position on the side of the bed, change the position of the wheelchair, if necessary, to transfer back into it safely, and return to the wheelchair.			
Immobile	Patient is immobile.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	112000001492	ACC NCDR
Wheelchair	If a patient cannot ambulate but can propel a wheelchair independently. They must be able to go around corners, turn around, maneuver the chair to a table, bed, toilet, etc. They must be able to push a chair at least 50 yards. Do not score this item if the patient gets score for walking	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165243005	SNOMED CT
One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	707739007	SNOMED CT
Independent	Patient can walk at least 50 yards without help or supervision. They may wear braces or prostheses and use crutches, canes, or a walkerette but not a rolling walker. They must be able to lock and unlock braces if used, assume the standing position and sit down, get the necessary mechanical aides into position for use, and dispose of them when he sits. (Putting on and taking off braces is scored under dressing.)	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61	302042005	SNOMED CT
Unable	Patient is unable to use stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	301589003	SNOMED CT
Needs Help	Patient needs help with or supervision to go up or down stairs safely.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165248001	SNOMED CT
Independent	Patient is able to go up and down a flight of stairs safely without help or supervision. They may and should use handrails, canes, or crutches when needed. They must be able to carry canes or crutches as they ascend or descend stairs.	Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.	165249009	SNOMED CT

Section: Follow-Up Medications — Parent: Follow-Up

Element: 11990 Follow-Up Medications Code

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

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

Target Value: N/A

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
Fondaparinux			321208	RxNorm
Heparin Derivative			100000921	ACC NCDR
Low Molecular Weight Heparin			373294004	SNOMED CT
Unfractionated Heparin			96382006	SNOMED CT
Warfarin			11289	RxNorm
Aspirin			1191	RxNorm
Aspirin/Dipyridamole			226716	RxNorm
Vorapaxar			1537034	RxNorm
Apixaban			1364430	RxNorm
Dabigatran			1546356	RxNorm
Edoxaban			1599538	RxNorm
Rivaroxaban			1114195	RxNorm
Cangrelor			1656052	RxNorm
Clopidogrel			32968	RxNorm
Other P2Y12			112000001003	ACC NCDR
Prasugrel			613391	RxNorm
Ticagrelor			1116632	RxNorm
Ticlopidine			10594	RxNorm

Element: 14949 Follow-up Current Medications at Time of Follow-up

Coding Instruction: Indicate if the patient was taking or being administered the medication at the time of follow-up, or was not taking or being administered the medication for an undocumented, a medical, or a patient reason.

Target Value: The value on Follow-up

Follow-Up Medication Administration - 1.3.6.1.4.1.19376.1.4.1.6.5.371

Selection	Definition	Source	Code	Code System
Yes			100001247	ACC NCDR
No - No Reason			100001048	ACC NCDR
No - Medical Reason			100001034	ACC NCDR
No - Patient Reason			100001071	ACC NCDR

Element: 14950 Follow-Up Medication Dose

Coding Instruction: Indicate the category of the medication dose.

Target Value: The value on Follow-up

Medication Dose - 1.3.6.1.4.1.19376.1.4.1.6.5.321

Selection	Definition	Source	Code	Code System
Aspirin 81 to 100 mg			112000002080	ACC NCDR
Aspirin 101 to 324 mg			112000002081	ACC NCDR
Aspirin 325 mg			317300	RxNorm

Section: Follow-Up Anticoagulation Therapy — Parent: Follow-Up

Element: 14951 — Follow-up Warfarin Discontinued

Coding Instruction: Indicate if the patient discontinued Warfarin at any time since the last follow-up (or since discharge if this is the 45-day follow-up).

Target Value: The value on Follow-up

Anticoagulation Discontinuation - 1.3.6.1.4.1.19376.1.4.1.6.5.820

Selection	Definition	Source	Code	Code System
No - Not Discontinued			112000002220	ACC NCDR
Yes - Discontinued			112000002221	ACC NCDR

Element: 14952 — Follow-up Warfarin Discontinued Date

Coding Instruction: Indicate the date the Warfarin was discontinued.

Target Value: The value on Follow-up

Vendor Instruction: Follow-up Warfarin Discontinued Date (14952) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14953 — Follow-up Warfarin Resumed

Coding Instruction: Indicate if the patient resumed Warfarin at any time since the last follow-up (or since discharge if this is the 45-day follow-up).

Target Value: The value on Follow-up

Anticoagulation Resumption Reason - 1.3.6.1.4.1.19376.1.4.1.6.5.803

Selection	Definition	Source	Code	Code System
No			112000000168	ACC NCDR
Yes (Thrombotic Event)			112000002181	ACC NCDR
Yes (Other)			100001247	ACC NCDR

Element: 14954 — Follow-up Warfarin Resumed Date

Coding Instruction: Indicate the date the Warfarin was resumed.

Target Value: The value on Follow-up

Vendor Instruction: Follow-up Warfarin Resumed Date (14954) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14955 — Follow-up DOAC Therapy Discontinued

Coding Instruction: Indicate if the patient discontinued Direct Oral Anticoagulant (DOAC) Therapy at any time since the last follow-up (or since discharge if this is the 45-day follow-up).

Target Value: The value on Follow-up

Anticoagulation Discontinuation - 1.3.6.1.4.1.19376.1.4.1.6.5.820

Selection	Definition	Source	Code	Code System
No - Not Discontinued			112000002220	ACC NCDR
Yes - Discontinued			112000002221	ACC NCDR

Element: 14956 — Follow-up DOAC Therapy Discontinued Date

Coding Instruction: Indicate the date the DOAC was discontinued.

Target Value: The value on Follow-up

Vendor Instruction: Follow-up NOAC (DOAC) Therapy Discontinued Date (14956) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14957 — Follow-up DOAC Therapy Resumed

Coding Instruction: Indicate if the patient resumed Direct Oral Anticoagulant (DOAC) Therapy at any time since the last follow-up (or since discharge if this is the 45-day follow-up).

Target Value: The value on Follow-up

Anticoagulation Resumption Reason - 1.3.6.1.4.1.19376.1.4.1.6.5.803

Selection	Definition	Source	Code	Code System
No			112000000168	ACC NCDR
Yes (Thrombotic Event)			112000002181	ACC NCDR
Yes (Other)			100001247	ACC NCDR

Element: 14958 — Follow-up DOAC Therapy Resumed Date

Coding Instruction: Indicate the date the DOAC was resumed.

Section: Follow-Up Anticoagulation Therapy — Parent: Follow-Up

Target Value: The value on Follow-up

Vendor Instruction: Follow-up NOAC (DOAC) Therapy Resumed Date (14958) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14959 Follow-up Aspirin Therapy Discontinued

Coding Instruction: Indicate if the patient discontinued Aspirin Therapy at any time since the last follow-up (or since discharge if this is the 45-day follow-up).

Target Value: The value on Follow-up

Anticoagulation Discontinuation - 1.3.6.1.4.1.19376.1.4.1.6.5.820

Selection	Definition	Source	Code	Code System
No - Not Discontinued			112000002220	ACC NCDR
Yes - Discontinued			112000002221	ACC NCDR

Element: 14960 Follow-up Aspirin Therapy Discontinued Date

Coding Instruction: Indicate the date the Aspirin was discontinued.

Target Value: The value on Follow-up

Vendor Instruction: Follow-up Aspirin Therapy Discontinued Date (14960) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14961 Follow-up Aspirin Therapy Resumed

Coding Instruction: Indicate if the patient resumed Aspirin Therapy at any time since the last follow-up (or since discharge if this is the 45-day follow-up).

Target Value: The value on Follow-up

Anticoagulation Resumption Reason - 1.3.6.1.4.1.19376.1.4.1.6.5.803

Selection	Definition	Source	Code	Code System
No			112000000168	ACC NCDR
Yes (Thrombotic Event)			112000002181	ACC NCDR
Yes (Other)			100001247	ACC NCDR

Element: 14962 Follow-up Aspirin Therapy Resumed Date

Coding Instruction: Indicate the date the Aspirin was resumed.

Target Value: The value on Follow-up

Vendor Instruction: Follow-up Aspirin Therapy Resumed Date (14962) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14963 Follow-up P2Y12 Therapy Discontinued

Coding Instruction: Indicate if the patient discontinued P2Y12 Therapy at any time since the last follow-up (or since discharge if this is the 45-day follow-up).

Target Value: The value on Follow-up

Anticoagulation Discontinuation - 1.3.6.1.4.1.19376.1.4.1.6.5.820

Selection	Definition	Source	Code	Code System
No - Not Discontinued			112000002220	ACC NCDR
Yes - Discontinued			112000002221	ACC NCDR

Element: 14964 Follow-up P2Y12 Therapy Discontinued Date

Coding Instruction: Indicate the date the P2Y12 was discontinued.

Target Value: The value on Follow-up

Vendor Instruction: Follow-up P2Y12 Therapy Discontinued Date (14964) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Element: 14965 Follow-up P2Y12 Therapy Resumed

Coding Instruction: Indicate if the patient resumed P2Y12 Therapy at any time since the last follow-up (or since discharge if this is the 45-day follow-up).

Target Value: The value on Follow-up

Anticoagulation Resumption Reason - 1.3.6.1.4.1.19376.1.4.1.6.5.803

Selection	Definition	Source	Code	Code System
No			112000000168	ACC NCDR
Yes (Thrombotic Event)			112000002181	ACC NCDR

Section: Follow-Up Anticoagulation Therapy **Parent: Follow-Up**

Yes (Other)	100001247	ACC NCDR

Element: 14966 Follow-up P2Y12 Therapy Resumed Date

Coding Instruction: Indicate the date the P2Y12 was resumed.

Target Value: The value on Follow-up

Vendor Instruction: Follow-up P2Y12 Therapy Resumed Date (14966) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Section: Follow-Up Events **Parent: Follow-Up**

Element: 14948 Follow-Up Event

Coding Instruction: Indicate if any event from the NCDR-provided list had occurred between the time of the last follow-up (or discharge if this is the 45-day follow-up) and the current follow-up.

Target Value: The value on Follow-up

Vendor Instruction: A Follow-Up - combination of Event Name (14948), Occurred (14276) and Date (14277) - may only be entered/selected once

Follow-up Events - 1.3.6.1.4.1.19376.1.4.1.6.5.802

Selection	Definition	Source	Code	Code System
Endocarditis			56819008	SNOMED CT
Iatrogenic ASD (requiring intervention)			112000002179	ACC NCDR
LAA Occlusion Reintervention			112000002200	ACC NCDR
Myocardial Infarction			22298006	SNOMED CT
PCI			415070008	SNOMED CT
Pericarditis			3238004	SNOMED CT
Unplanned Cardiac Surgery			112000001892	ACC NCDR
Unplanned Intervention			112000002180	ACC NCDR
Deep Vein Thrombosis			128053003	SNOMED CT
New Requirement for Dialysis			100014076	ACC NCDR
Non-Device Related Readmission			112000002177	ACC NCDR
Systemic Thromboembolism (other than stroke) (Complete Adjudication)			112000002126	ACC NCDR
Device Explant			100001141	ACC NCDR
Device Fracture			112000001891	ACC NCDR
Device Migration			370512004	SNOMED CT
Device Related Readmission			112000002176	ACC NCDR
Device Systemic Embolism			112000002175	ACC NCDR
Device Thrombus			112000001839	ACC NCDR
Hemorrhagic Stroke (Complete Adjudication)			230706003	SNOMED CT
Intracranial Hemorrhage (other than hemorrhagic stroke) (Complete Adjudication)			1386000	SNOMED CT
Ischemic Stroke (Complete Adjudication)			422504002	SNOMED CT
TIA (Complete Adjudication)			266257000	SNOMED CT
Undetermined Stroke (Complete Adjudication)			230713003	SNOMED CT
Access Site Bleeding (Complete Adjudication)			1000142440	ACC NCDR
GI Bleeding (Complete Adjudication)			74474003	SNOMED CT
Hematoma (Complete Adjudication)			385494008	SNOMED CT
Hemothorax (not requiring drainage) (Complete Adjudication)			112000002147	ACC NCDR
Hemothorax (requiring drainage) (Complete Adjudication)			100001011	ACC NCDR
Other Hemorrhage (non-intracranial) (Complete Adjudication)			50960005	SNOMED CT
Pericardial Effusion (requiring open cardiac surgery) (Complete Adjudication)			112000002148	ACC NCDR
Pericardial Effusion with tamponade (requiring percutaneous drainage) (Complete Adjudication)			112000002149	ACC NCDR
Pericardial Effusion without tamponade (requiring percutaneous drainage) (Complete Adjudication)			112000002150	ACC NCDR
Retroperitoneal Bleeding (Complete Adjudication)			95549001	SNOMED CT

Section: Follow-Up Events	Parent: Follow-Up	
Vascular Complications (Complete Adjudication)	213217008	SNOMED CT
AV Fistula (requiring surgical repair) (Complete Adjudication)	112000002141	ACC NCDR
Pseudoaneurysm (requiring endovascular repair) (Complete Adjudication)	112000002144	ACC NCDR
Pseudoaneurysm (requiring surgical repair) (Complete Adjudication)	112000002145	ACC NCDR
Pseudoaneurysm (requiring thrombin injection only) (Complete Adjudication)	112000002146	ACC NCDR
Pulmonary Embolism	59282003	SNOMED CT

Element: 14276 Follow-Up Events Occurred

Coding Instruction: Indicate if the event occurred.

Target Value: Any occurrence on follow-up

Vendor Instruction: When a Follow-Up Event (14948) is provided then Follow-Up Events Occurred (14276) cannot be Null

Element: 14277 Follow-Up Event Date

Coding Instruction: Indicate the date the event occurred.

Target Value: Any occurrence on follow-up

Vendor Instruction: Follow-Up Event Date (14277) must be Less than or Equal to the Follow-Up Assessment Date (11000)

Follow-Up Event Date (14277) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Section: Follow-Up Adjudication **Parent: Follow-Up**

Element: 14967 Adjudication Event

Coding Instruction: Indicate the event being adjudicated.

Target Value: The value on Follow-up

Vendor Instruction: An Adjudication - combination of Event (14967) and Date (14386) - may only be entered/selected once

Adjudication Event (14967) cannot be Null if Follow-Up Event (14948) is Equal to (Hemorrhagic Stroke, Intracranial Hemorrhage (other than hemorrhagic stroke), Ischemic Stroke, TIA, Undetermined Stroke, Access Site Bleeding, GI Bleeding, Hematoma, Hemothorax (not requiring drainage), Hemothorax (requiring drainage), Other Hemorrhage (non-intracranial), Pericardial Effusion (requiring open heart surgery), Pericardial Effusion with tamponade (requiring percutaneous drainage), Pericardial Effusion without tamponade (requiring percutaneous drainage), Retroperitoneal Bleeding, Vascular Complications, Systemic Thromboembolism (other than stroke), AV Fistula (requiring surgical repair), Pseudoaneurysm (requiring endovascular repair), Pseudoaneurysm (requiring surgical repair), Pseudoaneurysm (requiring thrombin injection only)) and Follow-Up Events Occurred (14276) is Yes. Every Follow-up Event (combination of Event (14948), Occurred (14276) and Event Date (14277)) that requires adjudication must have a corresponding adjudication record (combination of Event (14967) and Event Date (14386).

Follow-up Events - 1.3.6.1.4.1.19376.1.4.1.6.5.802

Selection	Definition	Source	Code	Code System
Endocarditis			56819008	SNOMED CT
Iatrogenic ASD (requiring intervention)			112000002179	ACC NCDR
LAA Occlusion Reintervention			112000002200	ACC NCDR
Myocardial Infarction			22298006	SNOMED CT
PCI			415070008	SNOMED CT
Pericarditis			3238004	SNOMED CT
Unplanned Cardiac Surgery			112000001892	ACC NCDR
Unplanned Intervention			112000002180	ACC NCDR
Deep Vein Thrombosis			128053003	SNOMED CT
New Requirement for Dialysis			100014076	ACC NCDR
Non-Device Related Readmission			112000002177	ACC NCDR
Systemic Thromboembolism (other than stroke) (Complete Adjudication)			112000002126	ACC NCDR
Device Explant			100001141	ACC NCDR
Device Fracture			112000001891	ACC NCDR
Device Migration			370512004	SNOMED CT
Device Related Readmission			112000002176	ACC NCDR
Device Systemic Embolism			112000002175	ACC NCDR
Device Thrombus			112000001839	ACC NCDR
Hemorrhagic Stroke (Complete Adjudication)			230706003	SNOMED CT
Intracranial Hemorrhage (other than hemorrhagic stroke) (Complete Adjudication)			1386000	SNOMED CT
Ischemic Stroke (Complete Adjudication)			422504002	SNOMED CT
TIA (Complete Adjudication)			266257000	SNOMED CT
Undetermined Stroke (Complete Adjudication)			230713003	SNOMED CT
Access Site Bleeding (Complete Adjudication)			1000142440	ACC NCDR
GI Bleeding (Complete Adjudication)			74474003	SNOMED CT
Hematoma (Complete Adjudication)			385494008	SNOMED CT
Hemothorax (not requiring drainage) (Complete Adjudication)			112000002147	ACC NCDR
Hemothorax (requiring drainage) (Complete Adjudication)			100001011	ACC NCDR
Other Hemorrhage (non-intracranial) (Complete Adjudication)			50960005	SNOMED CT
Pericardial Effusion (requiring open cardiac surgery) (Complete Adjudication)			112000002148	ACC NCDR
Pericardial Effusion with			112000002149	ACC NCDR

Section: Follow-Up Adjudication	Parent: Follow-Up	
tamponade (requiring percutaneous drainage) (Complete Adjudication)		
Pericardial Effusion without tamponade (requiring percutaneous drainage) (Complete Adjudication)	112000002150	ACC NCDR
Retroperitoneal Bleeding (Complete Adjudication)	95549001	SNOMED CT
Vascular Complications (Complete Adjudication)	213217008	SNOMED CT
AV Fistula (requiring surgical repair) (Complete Adjudication)	112000002141	ACC NCDR
Pseudoaneurysm (requiring endovascular repair) (Complete Adjudication)	112000002144	ACC NCDR
Pseudoaneurysm (requiring surgical repair) (Complete Adjudication)	112000002145	ACC NCDR
Pseudoaneurysm (requiring thrombin injection only) (Complete Adjudication)	112000002146	ACC NCDR
Pulmonary Embolism	59282003	SNOMED CT

Element: 14386 Adjudication Event Date

Coding Instruction: Indicate the date the clinical event being adjudicated occurred.

Target Value: N/A

Vendor Instruction: When Adjudication Event (14967) is selected, Adjudication Event Date (14386) cannot be Null

The Adjudication Event Date (14386) / Adjudication Event (14967) must match with Follow-Up Event Date (14277) / Follow-Up Event (14948)

Section: Follow-Up Neurologic **Parent: Follow-Up Adjudication**

Element: 14969 Adjudication Status

Coding Instruction: Indicate whether the patient was alive or deceased on the date the adjudication was performed.

Target Value: Any value between discharge or last follow up and the current follow up

Vendor Instruction: Adjudication Status (14969) cannot be Null if Follow-Up Adjudication Event (14967) is Equal to (Hemorrhagic Stroke, Intracranial Hemorrhage, Ischemic Stroke, TIA, Undetermined Stroke)

Adjudication Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.726

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

Element: 14970 Adjudication Date of Death

Coding Instruction: Indicate the date the patient was declared deceased.

Target Value: Any value between discharge or last follow up and the current follow up

Vendor Instruction: Adjudication Date of Death (14970) must be Greater than Follow-Up Reference Procedure Start Date and Time (11001)

Adjudication Date of Death (14970) must be Greater than or Equal to Follow-Up Adjudication Event Date (14386)

Adjudication Date of Death (14970) must be Greater than or Equal to Follow-Up Symptom Onset Date (14976)

Element: 14976 Symptom Onset Date

Coding Instruction: Indicate the date of symptom onset associated with this event.

Target Value: Any value between discharge or last follow up and the current follow up

Vendor Instruction: Follow-Up Symptom Onset Date (14976) must be Greater than or Equal to Follow-Up Reference Discharge Date (14338)

Follow-Up Symptom Onset Date (14976) must be Greater than or Equal to Follow-Up Reference Procedure Start Date Time (11001)

Follow-up Symptom Onset Date (14976) must be Less than or Equal to Follow-up Adjudication Event Date (14386)

Element: 14977 Neurologic Deficit with Rapid Onset

Coding Instruction: Indicate if the patient had a sudden onset of a focal or global neurologic deficit regardless of the duration of symptoms.

Rapid onset means sudden or maximal within minutes.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 14978 Neurologic Deficit Clinical Presentation

Coding Instruction: Indicate the clinical presentation of the neurologic deficit.

Target Value: Any value between discharge or last follow up and the current follow up

Neurologic Deficit Clinical Presentation - 1.3.6.1.4.1.19376.1.4.1.6.5.716

Selection	Definition	Source	Code	Code System
Stroke-related			100014109	ACC NCDR
Non-Stroke-related			112000001860	ACC NCDR

Element: 14979 Diagnosis Confirmation by Neurology

Coding Instruction: Indicate if the diagnosis was confirmed by a neurologist or a neurosurgeon.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 14980 Brain Imaging Performed

Coding Instruction: Indicate if neuro imaging (such as CT, MRI, cerebral angiography) was performed in an attempt to confirm the diagnosis.

Target Value: All values between discharge or last follow up and the current follow up

Element: 14981 Brain Imaging Type

Coding Instruction: Indicate the type of neurologic imaging which was performed.

Target Value: All values between discharge or last follow up and the current follow up

Brain Imaging Type - 1.3.6.1.4.1.19376.1.4.1.6.5.808

Section: Follow-Up Neurologic **Parent: Follow-Up Adjudication**

Selection	Definition	Source	Code	Code System
Cerebral Angiography			3258003	SNOMED CT
Computed Tomography			77477000	SNOMED CT
Magnetic Resonance Imaging			113091000	SNOMED CT
Other			112000001862	ACC NCDR

Element: 14982 Deficit Type

Coding Instruction: Indicate the type of deficit identified by the neuroimaging study.

Target Value: All values between discharge or last follow up and the current follow up

Brain Imaging Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.717

Selection	Definition	Source	Code	Code System
No deficit			100001231	ACC NCDR
Infarction			55641003	SNOMED CT
Hemorrhage			50960005	SNOMED CT
Both			112000002004	ACC NCDR

Element: 14983 Hemorrhagic Stroke Type

Coding Instruction: For patients presenting with an intracranial hemorrhage, indicate the hemorrhage location.

Target Value: All values between discharge or last follow up and the current follow up

Hemorrhagic Stroke Type - 1.3.6.1.4.1.19376.1.4.1.6.5.794

Selection	Definition	Source	Code	Code System
Intracerebral			274100004	SNOMED CT
Subarachnoid			21454007	SNOMED CT
Subdural			35486000	SNOMED CT

Element: 14984 Subsequent Intravenous Recombinant Tissue Plasminogen Activator Administered

Coding Instruction: Indicate if intravascular (IV) recombinant tissue plasminogen activator (rtPA) was used as a treatment option related to this event.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 14985 Subsequent Endovascular Therapeutic Intervention

Coding Instruction: Indicate if an endovascular interventional therapy was performed as a treatment option related to this event.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 14986 Neurologic Symptoms Duration

Coding Instruction: Indicate the duration (in hours) of the neurologic symptoms.

Target Value: All values between discharge or last follow up and the current follow up

Duration - 1.3.6.1.4.1.19376.1.4.1.6.5.795

Selection	Definition	Source	Code	Code System
Less than 1 Hour			112000002130	ACC NCDR
1 - 24 Hours			112000002132	ACC NCDR
Greater than 24 Hours			112000002131	ACC NCDR

Element: 14987 Trauma

Coding Instruction: Indicate if the patient experienced a physical trauma within 24 hours prior to the neurologic event.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 14988 Modified Rankin Scale

Coding Instruction: Indicate the patient's functional ability according to the modified Rankin Scale (mRS) administered following the event.

Target Value: Any value between discharge or last follow up and the current follow up

Supporting Definition: **Modified Rankin Scale**

The Modified Rankin Scale is a standardized neurological examination of patients with disability that provides a scale of global disability.

Source: Rankin J. Cerebral vascular accidents in patients over the age of 60. Scott Med J. 1957; 2:200-15.

Bonita R, Beaglehole R. Modification of Rankin Scale: Recovery of motor function after stroke. Stroke. 1988;19(12):1497-1500.

Rankin Scale Assessment Finding - 1.3.6.1.4.1.19376.1.4.1.6.5.139

Section: Follow-Up Neurologic **Parent: Follow-Up Adjudication**

Selection	Definition	Source	Code	Code System
0: No symptoms at all			LA6111-4	LOINC
1: No significant disability despite symptoms	Able to carry out all usual duties and activities.		LA6112-2	LOINC
2: Slight disability	Unable to carry out all previous activities, but able to look after own affairs without assistance.		LA6113-0	LOINC
3: Moderate disability	Requiring some help, but able to walk without assistance.		LA6114-8	LOINC
4: Moderately severe disability	Unable to walk without assistance and unable to attend to own bodily needs without assistance.		LA6115-5	LOINC
5: Severe disability	Bedridden, incontinent and requiring constant nursing care and attention.		LA10137-0	LOINC
6: Death			419620001	SNOMED CT

Element: 14989 Adjudication Modified Rankin Scale Not Administered

Coding Instruction: Indicate if the modified Rankin Scale (mRS) was not administered following the event.

Target Value: Any value between discharge or last follow up and the current follow up

Supporting Definition: **Modified Rankin Scale**

The Modified Rankin Scale is a standardized neurological examination of patients with disability that provides a scale of global disability.

Source: Rankin J. Cerebral vascular accidents in patients over the age of 60. Scott Med J. 1957; 2:200-15.

Bonita R, Beaglehole R. Modification of Rankin Scale: Recovery of motor function after stroke. Stroke. 1988;19(12):1497-1500.

Element: 14990 Procedure Related Neurologic Event

Coding Instruction: Indicate using the following selections the likelihood in which this event is related to the LAAO procedure based upon the clinician's best clinical judgement.

Target Value: All values between discharge or last follow up and the current follow up

Qualifier Value - 1.3.6.1.4.1.19376.1.4.1.6.5.796

Selection	Definition	Source	Code	Code System
Certain	The clinical adverse event occurs in a plausible time relationship to the procedure and cannot be explained by concurrent disease or other drugs or devices.		17162000	SNOMED CT
Probable	The clinical adverse event occurs within a reasonable time sequence to the procedure and it is unlikely to be attributed to concurrent disease or other drugs or devices.		112000002134	ACC NCDR
Possible	The clinical adverse event occurs within a reasonable time sequence to the procedure, but the event could also be explained by concurrent disease or other drugs or devices.		371930009	SNOMED CT
Unlikely	The clinical adverse event, based upon its temporal relationship to the procedure, makes a causal relationship improbable. Additionally, other drugs, devices or underlying disease provide plausible explanations.		112000002135	ACC NCDR
Unclassifiable	The clinical adverse event is reported yet more data is essential for a proper assessment OR the clinical adverse event is reported yet the causality cannot be judged because information is insufficient or contradictory, and cannot be supplemented or verified.		112000002136	ACC NCDR

Section: Follow-Up Neurologic **Parent: Follow-Up Neurologic**

Element: 15015 Follow-up Device Related Neurologic Event

Coding Instruction: Indicate using the following selections the likelihood in which this event is related to the LAAO device based upon the clinician's best clinical judgement.

Target Value: Any value between discharge or last follow up and the current follow up

Qualifier Value - 1.3.6.1.4.1.19376.1.4.1.6.5.796

Selection	Definition	Source	Code	Code System
Certain	The clinical adverse event occurs in a plausible time relationship to the procedure and cannot be explained by concurrent disease or other drugs or devices.		17162000	SNOMED CT
Probable	The clinical adverse event occurs within a reasonable time sequence to the procedure and it is unlikely to be attributed to concurrent disease or other drugs or devices.		112000002134	ACC NCDR
Possible	The clinical adverse event occurs within a reasonable time sequence to the procedure, but the event could also be explained by concurrent disease or other drugs or devices.		371930009	SNOMED CT
Unlikely	The clinical adverse event, based upon its temporal relationship to the procedure, makes a causal relationship improbable. Additionally, other drugs, devices or underlying disease provide plausible explanations.		112000002135	ACC NCDR
Unclassifiable	The clinical adverse event is reported yet more data is essential for a proper assessment OR the clinical adverse event is reported yet the causality cannot be judged because information is insufficient or contradictory, and cannot be supplemented or verified.		112000002136	ACC NCDR

Section: Follow-Up Bleeding **Parent: Follow-Up Adjudication**

Element: 14971 Adjudication Status

Coding Instruction: Indicate whether the patient was alive or deceased on the date the adjudication was performed.

Target Value: Any value between discharge or last follow up and the current follow up

Vendor Instruction: Adjudication Status (14971) cannot be Null if Adjudication Event (14967) is Equal to (Access Site Bleeding, GI Bleeding, Hematoma, Hemothorax (not requiring drainage), Hemothorax (requiring drainage), Other Hemorrhage, Pericardial Effusion (requiring open cardiac surgery), Pericardial Effusion with tamponade (requiring percutaneous drainage), Pericardial Effusion without tamponade (requiring percutaneous drainage), Retroperitoneal Bleeding, Vascular Complications), AV Fistula (requiring surgical repair), Pseudoaneurysm (requiring endovascular repair), Pseudoaneurysm (requiring surgical repair), Pseudoaneurysm (requiring thrombin injection only)

Adjudication Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.726

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

Element: 14972 Adjudication Date of Death

Coding Instruction: Indicate the date the patient was declared deceased.

Target Value: Any value between discharge or last follow up and the current follow up

Vendor Instruction: Adjudication Date of Death (14972) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Adjudication Date of Death (14972) must be Greater than or Equal to Follow-Up Adjudication Event Date (14386)

Element: 14991 Invasive Intervention Required

Coding Instruction: Indicate if there was a surgical or percutaneous intervention required to treat the patient for this bleeding event.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 14992 RBC Transfusion

Coding Instruction: Indicate if there was at least one transfusion of PRBCs given to treat the patient for this bleeding event.

Target Value: All values between discharge or last follow up and the current follow up

Element: 14993 Follow-up number of RBC Units Transfused

Coding Instruction: Indicate the number of PRBC units transfused for treatment of this bleeding event.

Target Value: All values between discharge or last follow up and the current follow up

Element: 14994 Hemoglobin Pre-Transfusion

Coding Instruction: Indicate the lowest hemoglobin (Hgb) value (g/dL), obtained via lab assay or point of care assay, between the intra or post procedure bleeding event and prior to the transfusion.

Target Value: All values between discharge or last follow up and the current follow up

Element: 14995 Diagnostic Imaging Performed

Coding Instruction: Indicate if imaging (such as CT, MRI) was performed in an attempt to confirm the diagnosis.

Target Value: All values between discharge or last follow up and the current follow up

Element: 14996 End Organ Damage

Coding Instruction: Indicate if the patient was diagnosed with end organ damage after this bleeding event.

Target Value: All values between discharge or last follow up and the current follow up

Element: 14975 Bleeding Event Readmission

Coding Instruction: Indicate if a readmission was associated with a bleeding related diagnosis.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 14997 Major Surgery

Coding Instruction: Indicate if the patient underwent surgery within 30 days prior to this bleeding event.

Target Value: Any value between discharge or last follow up and the current follow up

Section: Follow-Up Bleeding **Parent: Follow-Up Adjudication**

Element: 14998 Percutaneous Coronary Intervention

Coding Instruction: Indicate if the patient had a percutaneous coronary artery or percutaneous valvular intervention within 30 days prior to this bleeding event.

Target Value: Any value between discharge or last follow up and the current follow up

Supporting Definition: **Percutaneous Coronary Intervention**

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.

Source: Medline Plus, 2017 by Merriam-Webster, Incorporated

Element: 14999 Procedure Related Bleeding Event

Coding Instruction: Indicate using the following selections the likelihood in which this event is related to the LAAO procedure based upon the clinician's best clinical judgement.

Target Value: Any value between discharge or last follow up and the current follow up

Supporting Definition: **Bleeding Event**

A bleeding event observed and documented in the medical record that was associated with a hematocrit drop of ≥10% and/or a hemoglobin drop of ≥3 g/dL or that required transfusion or surgical intervention.

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.

Qualifier Value - 1.3.6.1.4.1.19376.1.4.1.6.5.796

Selection	Definition	Source	Code	Code System
Certain	The clinical adverse event occurs in a plausible time relationship to the procedure and cannot be explained by concurrent disease or other drugs or devices.		17162000	SNOMED CT
Probable	The clinical adverse event occurs within a reasonable time sequence to the procedure and it is unlikely to be attributed to concurrent disease or other drugs or devices.		112000002134	ACC NCDR
Possible	The clinical adverse event occurs within a reasonable time sequence to the procedure, but the event could also be explained by concurrent disease or other drugs or devices.		371930009	SNOMED CT
Unlikely	The clinical adverse event, based upon its temporal relationship to the procedure, makes a causal relationship improbable. Additionally, other drugs, devices or underlying disease provide plausible explanations.		112000002135	ACC NCDR
Unclassifiable	The clinical adverse event is reported yet more data is essential for a proper assessment OR the clinical adverse event is reported yet the causality cannot be judged because information is insufficient or contradictory, and cannot be supplemented or verified.		112000002136	ACC NCDR

Section: Follow-Up Bleeding **Parent: Follow-Up Bleeding**

Element: 15000 Device Related Bleeding Event

Coding Instruction: Indicate using the following selections the likelihood in which this event is related to the LAAO device based upon the clinician's best clinical judgement.

Target Value: Any value between discharge or last follow up and the current follow up

Supporting Definition: **Bleeding Event**

A bleeding event observed and documented in the medical record that was associated with a hematocrit drop of ≥10% and/or a hemoglobin drop of ≥3 g/dL or that required transfusion or surgical intervention.

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.

Qualifier Value - 1.3.6.1.4.1.19376.1.4.1.6.5.796

Selection	Definition	Source	Code	Code System
Certain	The clinical adverse event occurs in a plausible time relationship to the procedure and cannot be explained by concurrent disease or other drugs or devices.		17162000	SNOMED CT
Probable	The clinical adverse event occurs within a reasonable time sequence to the procedure and it is unlikely to be attributed to concurrent disease or other drugs or devices.		112000002134	ACC NCDR
Possible	The clinical adverse event occurs within a reasonable time sequence to the procedure, but the event could also be explained by concurrent disease or other drugs or devices.		371930009	SNOMED CT
Unlikely	The clinical adverse event, based upon its temporal relationship to the procedure, makes a causal relationship improbable. Additionally, other drugs, devices or underlying disease provide plausible explanations.		112000002135	ACC NCDR
Unclassifiable	The clinical adverse event is reported yet more data is essential for a proper assessment OR the clinical adverse event is reported yet the causality cannot be judged because information is insufficient or contradictory, and cannot be supplemented or verified.		112000002136	ACC NCDR

Section: Follow-Up Systemic Thromboembolism — Parent: Follow-Up Adjudication

Element: 14973 Adjudication Status

Coding Instruction: Indicate whether the patient was alive or deceased on the date the adjudication was performed.

Target Value: Any value between discharge or last follow up and the current follow up

Vendor Instruction: Adjudication Status (14973) cannot be Null if Adjudication Event (14967) is Equal to (Systemic Thromboembolism (other than stroke))

Adjudication Life Status - 1.3.6.1.4.1.19376.1.4.1.6.5.726

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

Element: 14974 Adjudication Date of Death

Coding Instruction: Indicate the date the patient was declared deceased.

Target Value: Any value between discharge or last follow up and the current follow up

Vendor Instruction: Adjudication Date of Death (14974) must be Greater than the Follow-Up Reference Procedure Start Date and Time (11001)

Adjudication Date of Death (14974) must be Greater than or Equal to the Follow-Up Adjudication Event Date (14386)

Element: 15016 Death Cause (End-Organ Hypoperfusion OR Systemic Thromboembolization OR Intervention)

Coding Instruction: If deceased, indicate if the patient's death cause was due to systemic thromboembolization, or focal end-organ hypoperfusion resulting from systemic thromboembolism, or therapeutic intervention to treat systemic thromboembolism.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 15001 Focal End-Organ Hypoperfusion Present

Coding Instruction: Indicate if focal end-organ hypoperfusion resulted from the systemic thromboembolism event.

Target Value: Any value between discharge or last follow up and the current follow up

Element: 15002 Systemic Thromboembolization Imaging Evidence

Coding Instruction: Indicate if imaging evidence indicated systemic thromboembolism.

Target Value: All values between discharge or last follow up and the current follow up

Element: 15003 Follow-up Imaging Method

Coding Instruction: Indicate the imaging method to identify systemic thromboembolism.

Target Value: All values between discharge or last follow up and the current follow up

Imaging Type - 1.3.6.1.4.1.19376.1.4.1.6.5.417

Selection	Definition	Source	Code	Code System
Angiography			77343006	SNOMED CT
Computed Tomography			77477000	SNOMED CT
Magnetic Resonance Imaging			113091000	SNOMED CT
Ultrasound			112000001042	ACC NCDR
Other Imaging			112000001862	ACC NCDR

Element: 15004 Therapeutic Intervention Performed

Coding Instruction: Indicate if any pharmacological, catheter, surgical, or other therapeutic intervention was performed to treat the systemic thromboembolism.

Target Value: All values between discharge or last follow up and the current follow up

Element: 15005 Intervention Type

Coding Instruction: Indicate the intervention type.

Target Value: All values between discharge or last follow up and the current follow up

Intervention Type - 1.3.6.1.4.1.19376.1.4.1.6.5.797

Selection	Definition	Source	Code	Code System
Catheter			276272002	SNOMED CT
Pharmacological			182832007	SNOMED CT
Surgical			387713003	SNOMED CT
Other			112000000172	ACC NCDR

Section: Follow-Up Systemic Thromboembolism **Parent: Follow-Up Adjudication**

Section: Follow-Up Adjudication Medications — Parent: Follow-Up Adjudication

Element: 15006 Adjudication Medication Code

Coding Instruction: Indicate the NCDR assigned identification number for the medications the patient was taking or administered at the time of the event.

Target Value: All values between discharge or last follow up and the current follow up

Vendor Instruction: Adjudication Medication Code (15006) should not be duplicated within an adjudication event

Pre-Procedure Medication - 1.3.6.1.4.1.19376.1.4.1.6.5.216

Selection	Definition	Source	Code	Code System
Fondaparinux			321208	RxNorm
Heparin Derivative			100000921	ACC NCDR
Low Molecular Weight Heparin			373294004	SNOMED CT
Unfractionated Heparin			96382006	SNOMED CT
Warfarin			11289	RxNorm
Aspirin 81 to 100 mg			112000002080	ACC NCDR
Aspirin 101 to 324 mg			112000002081	ACC NCDR
Aspirin 325 mg			317300	RxNorm
Aspirin/Dipyridamole			226716	RxNorm
Vorapaxar			1537034	RxNorm
Apixaban			1364430	RxNorm
Dabigatran			1546356	RxNorm
Edoxaban			1599538	RxNorm
Rivaroxaban			1114195	RxNorm
Cangrelor			1656052	RxNorm
Clopidogrel			32968	RxNorm
Other P2Y12			112000001003	ACC NCDR
Prasugrel			613391	RxNorm
Ticagrelor			1116632	RxNorm
Ticlopidine			10594	RxNorm

Element: 15007 Medication Administered

Coding Instruction: Indicate if the patient was taking or being administered the medication at the time of the event.

Target Value: All values between discharge or last follow up and the current follow up

Vendor Instruction: When an Adjudication Medication Code (15006) is selected, Medication Administered (15007) cannot be Null

Drug Administered - 1.3.6.1.4.1.19376.1.4.1.6.5.711

Selection	Definition	Source	Code	Code System
Yes			112000001851	ACC NCDR
No			100014173	ACC NCDR

Section: Administration **Parent: Root**

Element: 1000 Participant ID

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

Target Value: N/A

Element: 1010 Participant Name

Coding Instruction: Indicate the full name of the facility where the procedure was performed.

Note(s):
Values should be full, official hospital names with no abbreviations or variations in spelling.

Target Value: N/A

Element: 1020 Time Frame of Data Submission

Coding Instruction: Indicate the time frame of data included in the data submission. Format: YYYYQQ. e.g.,2016Q1

Target Value: N/A

Element: 1040 Transmission Number

Coding Instruction: This is a unique number created, and automatically inserted by the software into export file. It identifies the number of times the software has created a data submission file. The transmission number should be incremented by one every time the data submission files are exported. The transmission number should never be repeated.

Target Value: N/A

Element: 1050 Vendor Identifier

Coding Instruction: Vendor identification (agreed upon by mutual selection between the vendor and the NCDR) to identify software vendor. This is entered into the schema automatically by vendor software. Vendors must use consistent name identification across sites. Changes to vendor name identification must be approved by the NCDR.

Target Value: N/A

Element: 1060 Vendor Software Version

Coding Instruction: Vendor's software product name and version number identifying the software which created this record (assigned by vendor). Vendor controls the value in this field. This is entered into the schema automatically by vendor software.

Target Value: N/A

Element: 1070 Registry Identifier

Coding Instruction: The NCDR registry identifier describes the data registry to which these records apply. It is implemented in the software at the time the data is collected and records are created. This is entered into the schema automatically by software.

Target Value: N/A

Element: 1071 Registry Schema Version

Coding Instruction: Schema version describes the version number of the Registry Transmission Document (RTD) schema to which each record conforms. It is an attribute that includes a constant value indicating the version of schema file. This is entered into the schema automatically by software.

Target Value: N/A

Element: 1085 Submission Type

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

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

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

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

Section: Administration — Parent: Root

Target Value: N/A

Submission Type

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