



A. Demographics

Seq. #: 2000 Name: Last Name

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

Target Value: The value on arrival at this facility

Selections: (none)

Supporting Definitions: (none)

Seq. #: 2010 Name: First Name

Coding Instructions: Indicate the patient's first name.

Target Value: The value on arrival at this facility

Selections: (none)

Supporting Definitions: (none)

Seq. #: 2020 Name: Middle Name

Coding Instructions: 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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 2030 Name: SSN

Coding Instructions: 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

Selections: (none)

Supporting Definitions: (none)



A. Demographics

Seq. #: 2031 **Name:** SSN N/A**Coding Instructions:** Indicate if the patient does not have a United States Social Security Number (SSN).**Target Value:** The value on arrival at this facility**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #:** 2040 **Name:** Patient ID**Coding Instructions:** 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 should never be changed or reassigned to a different patient. If the patient returns to the same participating facility or for follow-up, they must receive this same unique patient identifier.

Target Value: The value on arrival at this facility**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 2045 **Name:** Other ID**Coding Instructions:** Indicate an optional patient identifier, such as medical record number, that can be associated with the patient.**Target Value:** N/A**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 2050 **Name:** Birth Date**Coding Instructions:** Indicate the patient's date of birth.**Target Value:** The value on arrival at this facility**Selections:** (none)**Supporting Definitions:** (none)



A. Demographics

Seq. #: 2060 **Name:** Sex**Coding Instructions:** Indicate the patient's sex at birth.**Target Value:** The value on arrival at this facility**Selections:** *Selection Text* *Definition*

Male

Female

Supporting Definitions: (none)**Seq. #:** 2070 **Name:** Race - White**Coding Instructions:** 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**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **White (race):**

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

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

Seq. #: 2071 **Name:** Race - Black/African American**Coding Instructions:** 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**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Black/African American (race):**

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

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



A. Demographics

Seq. #: 2072 **Name:** Race - Asian

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Asian (race):**

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

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

Seq. #: 2073 **Name:** Race - American Indian/Alaskan Native

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **American Indian or Alaskan Native (race):**

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

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



A. Demographics

Seq. #: 2074 **Name:** Race - Native Hawaiian/Pacific Islander**Coding Instructions:** 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**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: **Native Hawaiian/Pacific Islander:**

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

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

Seq. #: 2076 **Name:** Hispanic or Latino Ethnicity**Coding Instructions:** Indicate if the patient is of Hispanic or Latino ethnicity 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**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: **Hispanic or Latino Ethnicity:**

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

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

Seq. #: 2080 **Name:** Race - Asian Indian**Coding Instructions:** Indicate if the patient is Asian Indian as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: **Asian Indian:**

Having origins in any of the original peoples of India.

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



A. Demographics

Seq. #: 2081 **Name:** Race - Chinese**Coding Instructions:** Indicate if the patient is Chinese as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Asian - Chinese:**

Having origins in any of the original peoples of China.

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

Seq. #: 2082 **Name:** Race - Filipino**Coding Instructions:** Indicate if the patient is Filipino as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Asian - Filipino:**

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

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

Seq. #: 2083 **Name:** Race - Japanese**Coding Instructions:** Indicate if the patient is Japanese as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Asian - Japanese:**

Having origins in any of the original peoples of Japan.

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



A. Demographics

Seq. #: 2084 **Name:** Race - Korean**Coding Instructions:** Indicate if the patient is Korean as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Asian - Korean:**

Having origins in any of the original peoples of Korea.

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

Seq. #: 2085 **Name:** Race - Vietnamese**Coding Instructions:** Indicate if the patient is Vietnamese as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Asian - Vietnamese:**

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

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

Seq. #: 2086 **Name:** Race - Other Asian**Coding Instructions:** Indicate if the patient is of Other Asian descent as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Asian - Other Asian:**

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

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



A. Demographics

Seq. #: 2090 **Name:** Race - Native Hawaiian**Coding Instructions:** 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**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No

Yes

Supporting Definitions: **Native Hawaiian/Pacific Islander - Native Hawaiian:**

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

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

Seq. #: 2091 **Name:** Race - Guamanian or Chamorro**Coding Instructions:** Indicate if the patient is Guamanian or Chamorro as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No

Yes

Supporting Definitions: **Native Hawaiian/Pacific Islander - Guamanian or Chamorro:**

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

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

Seq. #: 2092 **Name:** Race - Samoan**Coding Instructions:** Indicate if the patient is Samoan as determined by the patient/family.**Note(s):**

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No

Yes

Supporting Definitions: **Native Hawaiian/Pacific Islander - Samoan:**

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

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



A. Demographics

Seq. #: 2093 **Name:** Race - Other Pacific Islander

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

Note(s):

If the patient has multiple race origins, specify them using the other race selections in addition to this one.

Target Value: The value on arrival at this facility

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Native Hawaiian/Pacific Islander - Other Pacific Island:**

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

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

Seq. #: 2100 **Name:** Hispanic Ethnicity Type - Mexican, Mexican-American, Chicano

Coding Instructions: Indicate if the patient is Mexican, Mexican - American, or Chicano 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.

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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Hispanic Ethnicity - Mexican/Mexican American/Chicano:**

Having origins in any of the original peoples of Mexico.

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



A. Demographics

Seq. #: 2101 Name: Hispanic Ethnicity Type - Puerto Rican

Coding Instructions: Indicate if the patient is Puerto Rican 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Hispanic Ethnicity - Puerto Rican:**

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

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

Seq. #: 2102 Name: Hispanic Ethnicity Type - Cuban

Coding Instructions: Indicate if the patient is Cuban 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Hispanic Ethnicity - Cuban:**

Having origins in any of the original peoples of Cuba.

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

Seq. #: 2103 Name: Hispanic Ethnicity Type - Other Hispanic, Latino or Spanish Origin

Coding Instructions: Indicate if the patient is another Hispanic, Latino, or Spanish origin 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Hispanic Ethnicity - Other Hispanic, Latino or Spanish Origin:**

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

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



B. Episode of Care

Seq. #: 2065 **Name:** Patient Zip Code

Coding Instructions: 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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 2066 **Name:** Zip Code N/A

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 3000 **Name:** Arrival Date

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

Target Value: N/A

Selections: (none)

Supporting Definitions: (none)

Seq. #: 3005 **Name:** Health Insurance

Coding Instructions: Indicate if the patient has health insurance.

Target Value: The value on arrival at this facility

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



B. Episode of Care

Seq. #: 3010 Name: Health Insurance Payment Source

Coding Instructions: Indicate the patient's health insurance payment type.**Note(s):**

If the patient has multiple insurance payors, select all payors.

Target Value: The value on arrival at this facility

Selections:	<i>Selection Text</i>	<i>Definition</i>
	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.
	Medicare	A health maintenance organization (HMO) is considered private health insurance. 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.
	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 in different states.
	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).
	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.
	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.
	Non-US Insurance	Non-US insurance refers to individuals with a payor that does not originate in the United States.

Supporting Definitions: (none)

**B. Episode of Care****Seq. #: 3015 Name:** Health Insurance Claim Number (HIC)**Coding Instructions:** Indicate the patient's Health Insurance Claim (HIC) number.**Target Value:** The value on arrival at this facility**Selections:** (none)**Supporting Definitions:** **Health Insurance Claim Number (HIC):**

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

Source: Center for Medicare and Medicaid Services

Seq. #: 3020 Name: Patient Enrolled in Research Study**Coding Instructions:** Indicate if the patient is enrolled in an ongoing ACC - NCDR research study related to this registry.**Target Value:** Any occurrence between arrival at this facility and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	No should be selected if the patient is enrolled in a non-ACC sponsored study or is not enrolled in any clinical trial/research study.
Yes	Yes should be selected only for those patients enrolled in an ACC-sponsored study involving the LAAO Registry.

Supporting Definitions: (none)**Seq. #: 3025 Name:** Research Study Name**Coding Instructions:** Indicate the research study name as provided by ACC - NCDR Research Staff.**Note(s):**

If the patient is in more than one research study, list each separately.

Study names must follow the format indicated by ACC - NCDR Research Staff. Deviations will result in an error message.

Target Value: N/A**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 3030 Name:** Research Study Patient ID**Coding Instructions:** Indicate the research study patient identification number as assigned by ACC - NCDR Research Staff.**Target Value:** N/A**Selections:** (none)**Supporting Definitions:** (none)



B. Episode of Care

Seq. #: 3035 Name: Patient Restriction

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

Note(s):

Documentation must be found in the patient record to support the request of removal of their information.

Target Value: The value on arrival at this facility

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 3045 Name: Admitted for LAA Occlusion Intervention

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



C. History and Risk Factors

Seq. #: 4005 Name: CHA2DS2-VASc Congestive Heart Failure

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

Note(s):

CHA2DS2-VASc Score

Congestive HF/LV Dysfunction: If Yes (to either or both) = + 1 (No = 0 points)

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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: CHAD2DS2-VASc Congestive Heart Failure:

The presence of signs and symptoms of either right (elevated central venous pressure, hepatomegaly, dependent edema) or left ventricular failure (exertional dyspnea, 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: Lip G.Y., Nieuwlaet R., Pisters R., et al; 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. Chest. 2010;137:263-272.

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Source: ACC — NCDR



C. History and Risk Factors

Seq. #: 4010 Name: NYHA Functional Classification

Coding Instructions: Indicate the New York Heart Association (NYHA) functional classification for patients diagnosed with heart failure.**Note(s):**

NYHA classification is based upon the patient's report of symptoms.

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

<i>Selection Text</i>	<i>Definition</i>
Class I	
Class II	
Class III	
Class IV	

Supporting Definitions: NYHA Functional Classification:

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**Class I:**

Patients with cardiac disease but without resulting limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea, or anginal pain.

Source: The Criteria Committee of the New York Heart Association. (1994). Nomenclature and Criteria for Diagnosis of Diseases of the Heart and Great Vessels. (9th ed.). Boston: Little, Brown & Co. pp. 253–256.

Class II:

Patients with cardiac disease resulting in slight limitation of physical activity. They are comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea, or anginal pain.

Source: The Criteria Committee of the New York Heart Association. (1994). Nomenclature and Criteria for Diagnosis of Diseases of the Heart and Great Vessels. (9th ed.). Boston: Little, Brown & Co. pp. 253–256.

Class III:

Patients with cardiac disease resulting in marked limitation of physical activity. They are comfortable at rest. Less than ordinary activity causes fatigue, palpitation, dyspnea, or anginal pain.

Source: The Criteria Committee of the New York Heart Association. (1994). Nomenclature and Criteria for Diagnosis of Diseases of the Heart and Great Vessels. (9th ed.). Boston: Little, Brown & Co. pp. 253–256.

Class IV:

Patients with cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms of heart failure or the anginal syndrome may be present even at rest. If any physical activity is undertaken, discomfort is increased.

Source: The Criteria Committee of the New York Heart Association. (1994). Nomenclature and Criteria for Diagnosis of Diseases of the Heart and Great Vessels. (9th ed.). Boston: Little, Brown & Co. pp. 253–256.



C. History and Risk Factors

Seq. #: 4015 **Name:** CHA2DS2-VASc LV Dysfunction**Coding Instructions:** Indicate if the patient has been diagnosed with Left Ventricular (LV) Dysfunction according to the CHA2DS2-VASc definition.**Note(s):**

CHA2DS2-VASc Score

Congestive HF/LV Dysfunction: If Yes (to either or both) = + 1 (No = 0 points)

Target Value: Any occurrence between 30 days prior to the procedure and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **CHAD2DS2-VASc LV Dysfunction:**

Left Ventricular (LV) Dysfunction is defined as Left Ventricular Ejection Fraction (LVEF) < 40 %.

Source: Lip G.Y., Nieuwlaat R., Pisters R., et al; 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. Chest. 2010;137:263-272.

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Source: ACC — NCDR

Seq. #: 4020 **Name:** CHA2DS2-VASc Hypertension**Coding Instructions:** Indicate if the patient has been diagnosed with hypertension according to the CHA2DS2-VASc definition.**Note(s):**

CHA2DS2-VASc Score

Hypertension: If Yes = + 1 (No = 0 points)

Target Value: Any occurrence between 30 days prior to the procedure and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **CHAD2DS2-VASc Hypertension:**

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

Source: Lip G.Y., Nieuwlaat R., Pisters R., et al; 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. Chest. 2010;137:263-272.

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Source: ACC — NCDR



C. History and Risk Factors

Seq. #: 4025 **Name:** CHA2DS2-VASc Diabetes Mellitus**Coding Instructions:** Indicate if the patient has been diagnosed with diabetes mellitus according to the CHA2DS2-VASc definition.**Note(s):**

CHA2DS2-VASc Score

Diabetes Mellitus: If Yes = + 1 (No = 0 points)

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

Selection Text	Definition
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No	
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Yes	
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Supporting Definitions: CHAD2DS2-VASc Diabetes Mellitus:

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

Source: Lip G.Y., Nieuwlaat R., Pisters R., et al; 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. Chest. 2010;137:263-272.

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Source: ACC — NCDR

Seq. #: 4030 **Name:** CHA2DS2-VASc Stroke**Coding Instructions:** Indicate if the patient has been diagnosed with an ischemic stroke according to the CHA2DS2-VASc definition.**Note(s):**

CHA2DS2-VASc Score

Stroke (Ischemic) / Transient Ischemic Attack (TIA) / Thromboembolic event (TE): If Yes (to any or all) = + 2

Target Value: Any occurrence between birth and the procedure**Selections:**

Selection Text	Definition
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No	No indicates either the patient has had no stroke in the past, or if there is a positive history of a stroke, it was not ischemic.
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Yes	Yes indicates the patient is documented as having a stroke, specifically an ischemic stroke, in the past.
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Supporting Definitions: CHAD2DS2-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: Lip G.Y., Nieuwlaat R., Pisters R., et al; 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. Chest. 2010;137:263-272.

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Source: ACC — NCDR

Effective for Patient Discharges July 01, 2017



C. History and Risk Factors

Seq. #: 4035 Name: CHA2DS2-VASc TIA

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

CHA2DS2-VASc Score

Stroke (Ischemic) / Transient Ischemic Attack (TIA) / Thromboembolic event (TE): If Yes (to any or all) = + 2

Target Value: Any occurrence between birth and the procedure**Selections:**

Selection Text	Definition
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No	
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Yes	
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Supporting Definitions: CHA2DS2-VASc TIA:

TIA is defined as a focal neurologic deficit of sudden onset as diagnosed by a neurologist, lasting < 24 h.

Source: Lip G.Y., Nieuwlaet R., Pisters R., et al; 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. Chest. 2010;137:263-272.

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Source: ACC — NCDR

Seq. #: 4040 Name: CHA2DS2-VASc Thromboembolic Event

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

CHA2DS2-VASc Score

Stroke (Ischemic) / Transient Ischemic Attack (TIA) / Thromboembolic event (TE): If Yes (to any or all) = + 2

Target Value: Any occurrence between birth and the procedure**Selections:**

Selection Text	Definition
----------------	------------

No	
----	--

Yes	
-----	--

Supporting Definitions: CHA2DS2-VASc Thromboembolic Event:

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: Lip G.Y., Nieuwlaet R., Pisters R., et al; 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. Chest. 2010;137:263-272.

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Source: ACC — NCDR



C. History and Risk Factors

Seq. #: 4045 Name: CHA2DS2-VASc Vascular Disease

Coding Instructions: 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

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: CHA2DS2-VASc Vascular Disease:

The presence of any the following: intermittent claudication, previous surgery or percutaneous intervention on the abdominal aorta or the lower extremity vessels, abdominal or thoracic surgery, arterial and venous thrombosis.

Source: Lip G.Y., Nieuwlaat R., Pisters R., et al; 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. Chest. 2010;137:263-272.

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Source: ACC — NCDR



C. History and Risk Factors

Seq. #: 4050 Name: Vascular Disease Type

Coding Instructions: 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.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

Myocardial Infarction
(MI)

Peripheral arterial
occlusive disease
(PAD)

Known Aortic Plaque

Supporting Definitions: Myocardial Infarction (MI):

Criteria for prior myocardial infarction is any one of the following criteria meets the diagnosis for prior MI:

1. Pathological Q waves with or without symptoms in the absence of non-ischemic causes.
2. Imaging evidence of a region of loss of viable myocardium that is thinned and fails to contract, in the absence of a non-ischemic cause.
3. Pathological findings of a prior MI.

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

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:

1. Claudication on exertion
2. Amputation for arterial vascular insufficiency
3. Vascular reconstruction, bypass surgery, or percutaneous revascularization in the arteries of the extremities
4. Positive noninvasive test (e.g., ankle brachial index \leq 0.9, ultrasound, MR or CT imaging of $>50\%$ diameter stenosis in any peripheral artery (i.e., subclavian, femoral, iliac) or angiographic imaging)

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

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).

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 GY, Nieuwlaat R, Pisters R, et al. Chest. 2010;137:263-72.



C. History and Risk Factors

Seq. #: 4055 **Name:** HAS-BLED Hypertension (Uncontrolled)**Coding Instructions:** Indicate if the patient has been diagnosed with uncontrolled hypertension as defined by the HAS-BLED Risk Model.**Note(s):**

HAS-BLED Score

Hypertension (+ 1 point)

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

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	Coding "Yes" implies the patient's current, actual systolic blood pressure is greater than 160 mmHg. ("HAS-BLED Hypertension" is not a history of hypertension.)

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

Uncontrolled Hypertension is defined by the HAS-BLED Risk Model 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.

HAS-BLED Hypertension is not a history of hypertension.

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

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Source: ACC — NCDR



C. History and Risk Factors

Seq. #: 4060 Name: HAS-BLED Abnormal Renal Function

Coding Instructions: Indicate if the patient has been diagnosed with abnormal renal function as defined by the HAS-BLED Risk Model.**Note(s):**

HAS-BLED Score

Abnormal renal function (+ 1 point)

Target Value: Any occurrence between 30 days prior to the procedure and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

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

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Source: ACC — NCDR

**C. History and Risk Factors****Seq. #: 4065 Name:** HAS-BLED Abnormal Liver Function**Coding Instructions:** Indicate if the patient has been diagnosed with abnormal liver function as defined by the HAS-BLED Risk Model.**Note(s):**

HAS-BLED Score

Abnormal liver function (+ 1 point)

Target Value: Any occurrence between 30 days prior to the procedure and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

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

Abnormal liver function is defined by the HAS-BLED Risk Model as chronic hepatic disease (e.g., cirrhosis) or biochemical evidence of significant hepatic derangement (e.g., 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: Pisters R., Lane D.A., Nieuwlaet R., et al; A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. Chest. 2010;138:1093-1100.

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Source: ACC — NCDR

Seq. #: 4070 Name: HAS-BLED Stroke**Coding Instructions:** Indicate if the patient has experienced a stroke in the past as defined by the HAS-BLED Risk Model.**Note(s):**

HAS-BLED Score

Stroke (any type) (+1 point)

Target Value: Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **HAS-BLED Stroke:**

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

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Source: ACC — NCDR



C. History and Risk Factors

Seq. #: 4075 **Name:** Hemorrhagic Stroke

Coding Instructions: Indicate if the patient experienced a hemorrhagic stroke as defined by an acute episode of focal or global cerebral or spinal dysfunction caused by intraparenchymal, intraventricular, or subarachnoid hemorrhage.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **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 stroke.

Hemorrhagic stroke is defined as an acute episode of focal or global cerebral or spinal dysfunction caused by intraparenchymal, intraventricular, or subarachnoid hemorrhage.

Subdural hematomas are intracranial hemorrhagic events and not strokes.

Source: Standardized Definitions for Cardiovascular Endpoints in Clinical Trials (FDA Draft) Cardiovascular Trials

Seq. #: 4080 **Name:** Ischemic Stroke

Coding Instructions: Indicate if the patient experienced an ischemic stroke, as defined by an acute episode of focal cerebral, spinal, or retinal dysfunction caused by infarction of central nervous system tissue. Hemorrhage may be a consequence of ischemic stroke. In this situation, the stroke is an ischemic stroke with hemorrhagic transformation and not a hemorrhagic stroke.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **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.

Source: Standardized Definitions for Cardiovascular Endpoints in Clinical Trials(FDA Draft) Cardiovascular Trials



C. History and Risk Factors

Seq. #: 4085 Name: Undetermined Stroke

Coding Instructions: Indicate if the patient experienced an undetermined stroke, as defined by 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 either an ischemic stroke or hemorrhagic stroke.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **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.

Source: Standardized Definitions for Cardiovascular Endpoints in Clinical Trials (FDA Draft)

Seq. #: 4095 Name: HAS-BLED Bleeding

Coding Instructions: Indicate if the patient has a history of a major bleeding event or predisposition to bleeding (e.g., 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 > 2g/dL, and/or requiring blood transfusion that was not hemorrhagic stroke.

HAS-BLED Score

Bleeding tendency or predisposition for bleeding (+1 point)

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

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

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Source: ACC—NCDR



C. History and Risk Factors

Seq. #: 4100 Name: HAS-BLED Labile INR

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

Note(s):

HAS-BLED Score

Labile INRs (for patients taking Warfarin) (+1 point)

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

Selections: *Selection Text* *Definition*

No

Yes

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

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Source: ACC — NCDR

Seq. #: 4105 Name: HAS-BLED Alcohol

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

Note(s):

HAS-BLED Score

Alcohol abuse (+ 1 point)

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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: HAS-BLED Alcohol:

Alcohol excess is defined by the HAS-BLED Risk Model as consuming ≥ 8 units of alcohol/week.

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

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Source: ACC — NCDR



C. History and Risk Factors

Seq. #: 4110 **Name:** HAS-BLED Drugs - Antiplatelet**Coding Instructions:** Indicate if the patient is taking antiplatelet medications.**Note(s):**

If the patient is taking 325 mg Aspirin code as 'Yes'.

HAS-BLED Score

Drugs [Concomitant use of Aspirin and a non steroidal anti - inflammatory drug (NSAID)] (1 point total if both Antiplatelet SEQ 4110 and NSAID SEQ 4115 are coded Yes. If Alcohol Abuse is coded Yes, then a total of 2 points allotted to the HAS - BLED score for Yes selections to SEQ 4105, 4110 and 4115.)

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

<i>Selection Text</i>	<i>Definition</i>
No	Code 'No' if the patient takes neither ASA or any other antiplatelet medication on a regular basis.
Yes	Code 'Yes' if the patient currently uses or is prescribed Aspirin or any other antiplatelet medication.

Supporting Definitions: HAS-BLED Drugs - Antiplatelets:

Concomitant use of ASA or other antiplatelet medication or NSAID with alcohol may predispose the patient to bleeding per the HAS-BLED Risk Model.

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

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Source: ACC — NCDR

**C. History and Risk Factors****Seq. #: 4115 Name:** HAS-BLED Drugs - NSAIDS**Coding Instructions:** Indicate if the patient is taking a non-steroidal anti-inflammatory drug (NSAID).**Note(s):**

If the patient is taking 81mg Aspirin code as 'Yes'.

HAS-BLED Score

Drugs [Concomitant use of Aspirin and a non steroidal anti - inflammatory drug (NSAID)] (1 point total if both Antiplatelet SEQ 4110 and NSAID SEQ 4115 are coded Yes. If Alcohol Abuse is coded Yes, then a total of 2 points allotted to the HAS - BLED score for Yes selections to SEQ 4105, 4110 and 4115.)

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

<i>Selection Text</i>	<i>Definition</i>
No	Select No if the patient does not use any NSAID medication on a regular basis.
Yes	Select Yes if the patient currently uses or is prescribed any NSAID medication.

Supporting Definitions: HAS-BLED Drugs - NSAIDS:

Concomitant use of ASA or other antiplatelet medication or NSAID with alcohol may predispose the patient to bleeding per the HAS-BLED Risk Model.

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

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Source: ACC — NCDR

Seq. #: 4120 Name: Increased Fall Risk**Coding Instructions:** 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 the procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: 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 difficulty 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.



C. History and Risk Factors

Seq. #: 4125 Name: Clinically Relevant Bleeding Event**Coding Instructions:** Indicate if the patient has a history of a clinically relevant bleeding event.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **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

Seq. #: 4130 Name: Bleeding Event Type**Coding Instructions:** Indicate if the patient has a history of a prior Intracranial, Epistaxis, Gastrointestinal, or Other. If the patient has multiple bleeding events, select all bleeding types.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

Intracranial

Epistaxis

Gastrointestinal

Other

Supporting Definitions: (none)**Seq. #: 4135 Name:** Genetic Coagulopathy**Coding Instructions:** Indicate if the patient has been diagnosed with a genetic coagulopathy.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



C. History and Risk Factors

Seq. #: 4140 Name: Concurrent Anticoagulant Therapy

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4285 Name: Coronary Artery Disease

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

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **Coronary Artery Disease (CAD):**

Current or previous history of any of the following:

- * Coronary artery stenosis $\geq 50\%$ (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)

Seq. #: 4380 Name: Valvular Atrial Fibrillation

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

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

**C. History and Risk Factors****Seq. #: 4381 Name:** History of Rheumatic Valve Disease

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

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4385 Name: History of Mitral Valve Replacement

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4390 Name: Mechanical Valve in Mitral Position

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

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4395 Name: History of Mitral Valve Repair

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



C. History and Risk Factors

Seq. #: 4400 Name: Atrial Fibrillation Classification**Coding Instructions:** Indicate the type of atrial fibrillation experienced by the patient.**Target Value:** Any occurrence between birth and first procedure in this admission

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Paroxysmal	AF that terminates spontaneously or with intervention within 7 days of onset. Episodes may recur with variable frequency.
	Persistent	Continuous AF that is sustained >7 days or with electrical or pharmacological termination.
	Long-standing Persistent	Continuous AF of >12 months duration.
	Permanent	Permanent AF is used when there has been a joint decision by the patient and clinician to cease 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.

Supporting Definitions: 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.

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

Seq. #: 4410 Name: Attempt at Atrial Fibrillation Termination**Coding Instructions:** Indicate if the patient has had previous attempts to terminate the atrial fibrillation.**Target Value:** Any occurrence between birth and the procedure

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: Attempt at Atrial Fibrillation Termination:

Therapeutic options for conversion of AF to sinus rhythm includes: anti-arrhythmic 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



C. History and Risk Factors

Seq. #: 4415 Name: Atrial Fibrillation Termination - Pharmacologic Cardioversion**Coding Instructions:** Indicate if the patient has a history of pharmacological cardioversion.**Target Value:** Any occurrence between birth and the procedure**Selections:**

Selection Text	Definition
----------------	------------

No	
----	--

Yes	
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Supporting Definitions: **Pharmacologic Cardioversion:**

Anti-arrhythmic 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

Seq. #: 4420 Name: Atrial Fibrillation Termination - DC Cardioversion**Coding Instructions:** Indicate if the patient has a history of direct current (DC) cardioversion.**Target Value:** Any occurrence between birth and the procedure**Selections:**

Selection Text	Definition
----------------	------------

No	
----	--

Yes	
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Supporting Definitions: **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

Seq. #: 4425 Name: Atrial Fibrillation Termination - Catheter Ablation**Coding Instructions:** Indicate if the patient has a history of catheter ablation for termination of atrial fibrillation.**Target Value:** Any occurrence between birth and the procedure**Selections:**

Selection Text	Definition
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No	
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Yes	
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Supporting Definitions: **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 radio frequency energy or cryotherapy (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.

**C. History and Risk Factors****Seq. #: 4430 Name:** Atrial Fibrillation, Most Recent Catheter Ablation Date**Coding Instructions:** 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 time-frames found in prior medical record documentation (Example: If the patient had "most recent electrocardiogram" documented in a record from 2015, then the year 2015 can be utilized and coded as 01/01/2015).

Target Value: The last value between birth and the procedure**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 4435 Name:** Prior Catheter Ablation Strategy**Coding Instructions:** Indicate the previously attempted catheter ablation strategy used to treat the atrial fibrillation.**Note(s):**

From the supplied list, select all applicable strategies which were performed during the most recent ablation.

Target Value: Any occurrence between birth and the procedure**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 4440 Name:** Atrial Fibrillation Termination - Surgical Ablation**Coding Instructions:** Indicate if the patient has a history of surgical ablation.**Target Value:** Any occurrence between birth and the procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: **Surgical Ablation:**

The Maze operation is one surgical ablation option to 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.



C. History and Risk Factors

Seq. #: 4445 **Name:** Atrial Fibrillation, Most Recent Surgical Ablation Date

Coding Instructions: 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 time-frames found in prior medical record documentation (Example: If the patient had "most recent electrocardiogram" documented in a record from 2015, then the year 2015 can be utilized and coded as 01/01/2015).

Target Value: The last value between birth and the procedure

Selections: (none)

Supporting Definitions: (none)

Seq. #: 4450 **Name:** Atrial Flutter

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

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: **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.



C. History and Risk Factors

Seq. #: 4455 Name: Atrial Flutter Classification**Coding Instructions:** Indicate the predominate type of atrial flutter experienced by the patient.**Target Value:** Any occurrence between birth and the procedure

Selections:	Selection Text	Definition
	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.
	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.

Supporting Definitions: 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: anuary 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.

Seq. #: 4460 Name: Attempt at Atrial Flutter Termination**Coding Instructions:** Indicate if the patient has had previous attempts to terminate the atrial flutter.**Target Value:** Any occurrence between birth and the procedure

Selections:	Selection Text	Definition
	No	
	Yes	

Supporting Definitions: 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.

**C. History and Risk Factors****Seq. #: 4465 Name:** Atrial Flutter Termination - Pharmacologic Cardioversion**Coding Instructions:** Indicate if the patient has a history of pharmacologic cardioversion to terminate the atrial flutter.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **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.

Seq. #: 4470 Name: Atrial Flutter Termination - DC Cardioversion**Coding Instructions:** Indicate if the patient has a history of direct current (DC) cardioversion to terminate the atrial flutter.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: **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.

Seq. #: 4475 Name: Atrial Flutter Termination - Catheter Ablation**Coding Instructions:** Indicate if the patient has a history of catheter ablation to terminate the atrial flutter.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

**C. History and Risk Factors****Seq. #: 4480 Name:** Atrial Flutter Most Recent Catheter Ablation Date**Coding Instructions:** Indicate the date of the most recent catheter ablation to terminate the atrial flutter.**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 time-frames found in prior medical record documentation (Example: If the patient had "most recent electrocardiogram" documented in a record from 2015, then the year 2015 can be utilized and coded as 01/01/2015).

Target Value: The last value between birth and the procedure**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 4565 Name:** Cardiomyopathy (CM)**Coding Instructions:** Indicate if the patient has a history of cardiomyopathy.**Target Value:** Any occurrence between birth and the procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: **Cardiomyopathy (CM):**

Cardiomyopathies are a heterogeneous group of diseases of the myocardium associated with mechanical and/or electrical dysfunction that usually (but not invariably) exhibit inappropriate ventricular hypertrophy or dilatation and are due to a variety of causes that frequently are genetic. Cardiomyopathies either are confined to the heart or are a part of generalized systemic disorders, often leading to cardiovascular death or progressive heart failure-related disability.

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.



C. History and Risk Factors

Seq. #: 4570 Name: Cardiomyopathy Type

Coding Instructions: Indicate the type of cardiomyopathy experienced by the patient.**Target Value:** Any occurrence between birth and the procedure

Selections:	Selection Text	Definition
	Non-ischemic cardiomyopathy	Includes cardiomyopathies resulting from volume or pressure overload, such as hypertension or valvular heart disease. [2]
	Ischemic cardiomyopathy	Considered to be present in patients with HF who have had a myocardial infarction (MI) or have evidence of viable hibernating myocardium or, on angiography, severe coronary disease. The term ischemic cardiomyopathy has been used to describe significantly impaired left ventricular function (left ventricular ejection fraction =35 to 40 percent) that results from coronary artery disease. Despite the common clinical use of the term ischemic cardiomyopathy, ventricular dysfunction caused by coronary disease is not a cardiomyopathy as defined by the 2006 American Heart Association and 2008 European Society of Cardiology statements. [2]
	Restrictive cardiomyopathy	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]
	Hypertrophic cardiomyopathy	Characterized morphologically and defined by a hypertrophied, non-dilated 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]
	Other Cardiomyopathy Type	The term "unclassified cardiomyopathy" was included in the 2008 European Heart Journal (ESC) classification system to describe disorders that do not readily fit into any of the above phenotypic categories. Examples cited include LV noncompaction and stress-induced (takotsubo) cardiomyopathy. [3]

Supporting Definitions: Cardiomyopathy Type:

Supporting definitions are provided in the selection text.

Source: [1] Barry J. Maron, MD, et al. 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, et al. 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



C. History and Risk Factors

Seq. #: 4575 **Name:** Chronic Lung Disease**Coding Instructions:** Indicate if the patient has a history of chronic lung disease.**Target Value:** Any occurrence between birth and the procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No	
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Yes	
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Supporting Definitions: **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

Seq. #: 4580 **Name:** Sleep Apnea**Coding Instructions:** Indicate if the patient has a history of sleep apnea that has been diagnosed by a sleep study.**Note(s):**

Do not capture suspected sleep apnea or that reported by family members as sleep apnea. Sleep apnea must be diagnosed by a physician. A patient documented to be on CPAP or BiPAP therapy may equate with evidence that sleep apnea has been diagnosed and coding may reflect "Yes".

Target Value: Any occurrence between birth and the procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
-----------------------	-------------------

No	
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Yes	
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Supporting Definitions: (none)



C. History and Risk Factors

Seq. #: 4585 **Name:** Sleep Apnea Recommended Treatment Followed

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4590 **Name:** Cardiac Structural Intervention

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

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



C. History and Risk Factors

Seq. #: 4595 Name: Cardiac Structural Intervention Type

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

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

Aortic Balloon
Valvuloplasty

Transcatheter Aortic
Valve Replacement
(TAVR)

Aortic Valve
Replacement –
Surgical

Aortic Valve Repair –
Surgical

Mitral Balloon
Valvuloplasty

Transcatheter Mitral
Valve Repair (TMVR)

Mitral Valve
Replacement –
Surgical

Mitral Valve Repair –
Surgical

Mitral Annuloplasty
Ring – Surgical

Mitral Transcatheter –
Valve-in-Valve

Atrial Septal Defect
Closure

Patent Foramen
Ovale Closure

Pulmonic
Replacement

Pulmonic Repair

Tricuspid
Replacement

Tricuspid Repair

Supporting Definitions: (none)

**C. History and Risk Factors****Seq. #: 4600 Name:** Left Atrial Appendage (LAA) Intervention**Coding Instructions:** Indicate if the patient has a history of a left atrial appendage occlusion intervention.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #: 4605 Name:** Left Atrial Appendage (LAA) Intervention Type**Coding Instructions:** Indicate the type of prior left atrial appendage occlusion intervention.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

Epicardial Ligation	Ligation via an epicardial approach, isolating the left atrial appendage (LAA) from circulation via inside the pericardial space.
Percutaneous Occlusion	Occlusion of the left atrial appendage (LAA) using solely a percutaneous, catheter-based method.
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.
Surgical Closure Device	Left atrial appendage (LAA) surgical closure device was used.
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.
Surgical Stapling	Excision or exclusion technique of the left atrial appendage (LAA) via surgical approach using pericardial buttressing of the LAA staple line.

Supporting Definitions: (none)**Seq. #: 4815 Name:** Epicardial Approach Considered**Coding Instructions:** 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**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

**C. History and Risk Factors****Seq. #: 4820 Name: Cardiac Surgery**

Coding Instructions: Indicate if the patient has a history of cardiac surgery.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4825 Name: Pericarditis

Coding Instructions: Indicate if the patient has a history of pericarditis.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4830 Name: Epicardial Access

Coding Instructions: Indicate if the patient has a history of epicardial access.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4835 Name: Autoimmune Disease

Coding Instructions: Indicate if the patient has a history of any autoimmune disease.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

**C. History and Risk Factors****Seq. #: 4836 Name:** Lupus**Coding Instructions:** Indicate if the patient has a history of lupus.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #: 4840 Name:** Thoracic Radiation Therapy**Coding Instructions:** Indicate if the patient has a history of thoracic radiation therapy.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #: 4845 Name:** Pectus excavatum**Coding Instructions:** Indicate if the patient has a history of pectus excavatum.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #: 4850 Name:** Epigastric Surgery**Coding Instructions:** Indicate if the patient has a history of epigastric surgery.**Target Value:** Any occurrence between birth and the procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



C. History and Risk Factors

Seq. #: 4855 **Name:** Hepatomegaly

Coding Instructions: Indicate if the patient has a history of hepatomegaly.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 4860 **Name:** Hiatal Hernia

Coding Instructions: Indicate if the patient has a history of a hiatal hernia.

Target Value: Any occurrence between birth and the procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



D. Diagnostic Studies

Seq. #: 5100 Name: Atrial Rhythm**Coding Instructions:** Indicate the patient's atrial rhythm at the start of the procedure.**Target Value:** The last value on 30 days prior to the first procedure in this admission**Selections:**

<i>Selection Text</i>	<i>Definition</i>
Sinus node rhythm	
Atrial fibrillation	
Atrial tachycardia	
Atrial flutter	
Sinus arrest	
Atrial paced	
Undocumented atrial rhythm	

Supporting Definitions: (none)**Seq. #: 5110 Name:** LVEF Assessed**Coding Instructions:** Indicate if a left ventricular ejection fraction (LVEF) has been assessed.**Target Value:** The last value between 90 days prior to the start of the current procedure and start of procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: (none)**Seq. #: 5115 Name:** LVEF %**Coding Instructions:** 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 start of procedure**Selections:** (none)**Supporting Definitions:** (none)

**D. Diagnostic Studies****Seq. #: 5120 Name:** Transthoracic Echo (TTE) Performed

Coding Instructions: 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 start of procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 5125 Name: Most Recent TTE Date

Coding Instructions: 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 start of procedure

Selections: (none)

Supporting Definitions: (none)

Seq. #: 5170 Name: Baseline Imaging Performed

Coding Instructions: Indicate if other pre-procedure imaging was performed.

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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 5175 Name: Baseline CT Performed

Coding Instructions: Indicate if pre-procedure imaging was performed via computed tomography (CT).

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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



D. Diagnostic Studies

Seq. #: 5180 **Name:** Most Recent CT Date

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

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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 5185 **Name:** Baseline MRI Performed

Coding Instructions: Indicate if pre-procedure imaging was performed via magnetic resonance imaging (MRI).

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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 5190 **Name:** Most Recent MRI Date

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

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

Selections: (none)

Supporting Definitions: (none)



E. Physical Exam and Labs

Seq. #: 6000 Name: Height**Coding Instructions:** Indicate height in centimeters.**Target Value:** The last value prior to the start of the first procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 6005 Name: Weight**Coding Instructions:** Indicate weight in kilograms.**Target Value:** The last value prior to the start of the first procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 6010 Name: Pulse**Coding Instructions:** Indicate heart rate (beats per minute).**Target Value:** The last value prior to the start of the first procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 6015 Name: Systolic BP**Coding Instructions:** Indicate systolic blood pressure in mmHg.**Target Value:** The last value prior to the start of the first procedure**Selections:** (none)**Supporting Definitions:** (none)



E. Physical Exam and Labs

Seq. #: 6020 **Name:** Diastolic BP

Coding Instructions: Indicate diastolic blood pressure in mmHg.

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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 6030 **Name:** Hemoglobin

Coding Instructions: Indicate the most recent hemoglobin (Hgb) value (g/dL).

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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 6031 **Name:** Hemoglobin Not Drawn

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 6040 **Name:** Prothrombin (PT)

Coding Instructions: Indicate the most current prothrombin (PT) time in seconds.

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

Selections: (none)

Supporting Definitions: (none)



E. Physical Exam and Labs

Seq. #: 6041 **Name:** Prothrombin Not Drawn

Coding Instructions: Indicate if the prothrombin time (PT) was not drawn.

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 6045 **Name:** International Normalized Ratio (INR)

Coding Instructions: Indicate the pre procedure international normalized ratio (INR) if applicable.

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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 6046 **Name:** International Normalized Ratio Not Drawn

Coding Instructions: Indicate if the INR was not drawn.

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 6050 **Name:** Creatinine

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

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

Selections: (none)

Supporting Definitions: (none)



E. Physical Exam and Labs

Seq. #: 6051 **Name:** Creatinine Not Drawn**Coding Instructions:** Indicate if the creatinine level was not drawn.**Target Value:** N/A**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #:** 6075 **Name:** Albumin**Coding Instructions:** Indicate the albumin level (g/dL).**Target Value:** The last value between 30 days prior to the procedure and the current procedure**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 6076 **Name:** Albumin Not Drawn**Coding Instructions:** Indicate if the albumin level was not drawn.**Target Value:** N/A**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #:** 6080 **Name:** Platelet Count**Coding Instructions:** Indicate the platelet count (1,000/ μ L).**Target Value:** The last value between 30 days prior to the procedure and the current procedure**Selections:** (none)**Supporting Definitions:** (none)



E. Physical Exam and Labs

Seq. #: 6081 **Name:** Platelet Count Not Drawn**Coding Instructions:** Indicate if the platelet count was not drawn.**Target Value:** N/A**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No

Yes

Supporting Definitions: (none)**Seq. #:** 6085 **Name:** Modified Rankin Scale**Coding Instructions:** 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**Selections:**

<i>Selection Text</i>	<i>Definition</i>
-----------------------	-------------------

0: No symptoms at all

1: No significant
disability despite
symptoms

Able to carry out all usual duties and activities

2: Slight disability

Unable to carry out all previous activities, but able to
look after own affairs without assistance

3: Moderate disability

Requiring some help, but able to walk without
assistance.4: Moderately severe
disabilityUnable to walk without assistance and unable to
attend to own bodily needs without assistance

5: Severe disability

Bedridden, incontinent and requiring constant nursing
care and attention**Supporting Definitions:** **Modified Rankin Scale (mRS):**

The modified Rankin Scale (mRS) is a commonly used scale for measuring the degree of disability or dependence in the daily activities of people who have suffered a stroke or other causes of neurological disability.

Source: Rankin J (May 1957). "Cerebral vascular accidents in patients over the age of 60. II. Prognosis". Scott Med J 2 (5): 200–15.

Seq. #: 6086 **Name:** Modified Rankin Scale Not Administered**Coding Instructions:** Indicate if the modified Rankin Scale (mRS) was not administered pre-procedure.**Target Value:** N/A**Selections:**

<i>Selection Text</i>	<i>Definition</i>
-----------------------	-------------------

No

Yes

Supporting Definitions: (none)



F. Pre-Procedure Medications

Seq. #: 6985 **Name:** Pre-Procedure Medication Code

Coding Instructions: Indicate the NCDR assigned identification number for the pre-procedure medication and medication history.

Target Value: The value between 24 hours prior to the start of current procedure and end of current procedure

Selections: (none)

Supporting Definitions: (none)

Seq. #: 6990 **Name:** Pre-Procedure Medication Administered

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

Target Value: The value between 24 hours prior to the start of current procedure and end of current procedure

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Past	Code 'Past' if the medication was tried previously prior to this hospital visit, and then discontinued with no intent to resume the medication after recovering from the procedure.
	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.
	Held	Code 'Held' if the patient is routinely taking this medication, yet the medication was temporarily not administered prior to the procedure with intent to resume the medication after recovering from the procedure.
	Never	Code 'Never' if this medication was never prescribed for this patient.

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 5156 Name: Transesophageal Echocardiogram (TEE) Performed

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

Target Value: The last value between 7 days prior to the device insertion or attempted device insertion and actual device insertion or attempted device insertion during current procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 5157 Name: Most Recent TEE Date

Coding Instructions: 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 7 days prior to the device insertion or attempted device insertion and actual device insertion or attempted device insertion during current procedure

Selections: (none)

Supporting Definitions: (none)

Seq. #: 5158 Name: Atrial Thrombus Detected

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

Target Value: The last value between 7 days prior to the start of the current procedure and start of procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 5166 Name: LAA Orifice Maximal Width

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

Target Value: The last value between 7 days prior to the start of the current procedure and start of procedure

Selections: (none)

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 7001 **Name:** Procedure Start Date**Coding Instructions:** Indicate the date the procedure started.**Target Value:** The value on current procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 7002 **Name:** Procedure Start Time**Coding Instructions:** Indicate the procedure start time as the time that the patient entered the location in which the procedure is intended to be performed.**Note(s):**

Indicate the time (hours:minutes) using the military 24-hour clock, beginning at midnight (0000 hours).

Target Value: The value on current procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 7006 **Name:** Procedure Stop Date**Coding Instructions:** Indicate the date the procedure stopped.**Target Value:** The value on current procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 7007 **Name:** Procedure Stop Time**Coding Instructions:** Indicate the procedure stop time as the time when the operator breaks scrub at the end of the procedure.**Note(s):**

Indicate the time (hours:minutes) using the military 24-hour clock, beginning at midnight (0000 hours).

If more than one operator is involved in the case then use the time the last operator breaks scrub.

Target Value: The value on current procedure**Selections:** (none)**Supporting Definitions:** (none)



G. Procedure Information

Seq. #: 7030 **Name:** Procedure Location**Coding Instructions:** Indicate the location within the hospital in which the procedure was performed.**Target Value:** The value on current procedure**Selections:** *Selection Text* *Definition*

OR
Hybrid OR
Cath Lab
Hybrid Cath Lab
EP Lab

Supporting Definitions: (none)**Seq. #:** 7035 **Name:** LAA Occlusion Indication**Coding Instructions:** Provide the documented indication for the left atrial appendage (LAA) occlusion procedure.**Target Value:** The value on current procedure**Selections:** *Selection Text* *Definition*

Increased thromboembolic stroke risk	
History of major bleed	Defined as a history of 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
High 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 difficulty walking or balancing.
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.
Patient preference	Shared decision making (SDM) is a collaborative process that allows patients and their health care providers to make health care decisions together, taking into account the best scientific evidence available, as well as the patient's values and preferences. Select "Patient Preference" if other options for treatment were indicated and the patient chose to proceed with this approach.
Non-compliance with anticoagulation therapy	

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 7040 **Name:** Procedure Canceled**Coding Instructions:** Indicate if the procedure was canceled after the patient had entered the procedure room AND before venous or epicardial access was obtained.**Note(s):**

Once the patient is in the procedure room, if venous or epicardial access was attempted and no access was obtained in order to proceed with the LAAO intervention, the procedure will still be considered canceled.
After the point of obtaining either venous or epicardial access, a procedure that stops for any reason is considered 'aborted' for the purpose of the LAAO Registry and 'Procedure Canceled' would be coded as 'No'.

Target Value: The value on current procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
-----------------------	-------------------

No

Yes

Supporting Definitions: (none)**Seq. #:** 7041 **Name:** Procedure Canceled Reason**Coding Instructions:** Indicate the reason(s) why the procedure was canceled.**Target Value:** The value on current procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
-----------------------	-------------------

Anatomy not
conducive for implantAppendage too large
(for device implant)Appendage too small
(for device implant)Catheterization
challengeDecompensation in
patient conditionEpicardial access
issue

Thrombus detected

Unanticipated patient
condition

Patient/Family choice

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 7100 **Name:** Operator Last Name**Coding Instructions:** Indicate the last name of operator.**Note(s):**

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

Target Value: The value on current procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 7105 **Name:** Operator First Name**Coding Instructions:** Indicate the first name of operator.**Note(s):**

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

Target Value: The value on current procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 7110 **Name:** Operator Middle Name**Coding Instructions:** Indicate the middle name of operator.**Note(s):**

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

Target Value: The value on current procedure**Selections:** (none)**Supporting Definitions:** (none)

Seq. #: 7115 **Name:** Operator NPI**Coding Instructions:** 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**Selections:** (none)**Supporting Definitions:** (none)



G. Procedure Information

Seq. #: 7130 Name: Sedation

Coding Instructions: Indicate the type of sedation used for the intervention.**Target Value:** The value on current procedure**Selections:** *Selection Text* *Definition*

Minimal
Sedation/Anxiolysis

Moderate
Sedation/Analgesia
(Conscious Sedation)

Deep
Sedation/Analgesia

General Anesthesia

Supporting Definitions: Minimal Sedation/Anxiolysis:

Minimal Sedation/Anxiolysis is a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and physical coordination may be impaired, airway reflexes, and ventilatory and cardiovascular functions are unaffected.

Source: American Society of Anesthesiologists <http://www.asahq.org/publicationsAndServices/standards/20.pdf>

Moderate Sedation/Analgesia (Conscious Sedation):

Moderate Sedation/Analgesia ("Conscious Sedation") is a drug induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. Reflex withdrawal from a painful stimulus is NOT considered a purposeful response.

Source: American Society of Anesthesiologists <http://www.asahq.org/publicationsAndServices/standards/20.pdf>

Deep Sedation/Analgesia:

Deep Sedation/Analgesia is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate.

Source: American Society of Anesthesiologists <http://www.asahq.org/publicationsAndServices/standards/20.pdf>

General Anesthesia:

General Anesthesia is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilator function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

Source: American Society of Anesthesiologists <http://www.asahq.org/publicationsAndServices/standards/20.pdf>

Seq. #: 7200 Name: Guidance Method

Coding Instructions: Indicate the assigned identification number associated with the guidance method used for this procedure.**Target Value:** The value on current procedure**Selections:** (none)**Supporting Definitions:** (none)



G. Procedure Information

Seq. #: 7210 **Name:** Cumulative Air Kerma

Coding Instructions: 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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 7211 **Name:** Cumulative Air Kerma Units

Coding Instructions: Indicate the unit reported for radiation dose (Cumulative Air Kerma, or Reference Air Kerma) recorded.

Target Value: The value on current procedure

Selections: *Selection Text* *Definition*

mGy

Gy

Supporting Definitions: (none)

Seq. #: 7215 **Name:** Contrast Volume

Coding Instructions: Indicate the total procedure contrast volume in mL.

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

Selections: (none)

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 7220 **Name:** Dose Area Product**Coding Instructions:** Indicate the total fluoroscopy dose to the nearest integer. The value recorded should include the total dose for the lab visit.**Note(s):**

DAP (Gy-cm2): 1 - 700 (usual range)
DAP (dGy-cm2): 10 - 7000 (usual range)
DAP (cGy-cm2): 100 - 70000 (usual range)
DAP (mGy-cm2): 1000 - 700000 (usual range)
DAP (μGy-M2): 100 - 70000 (usual range)

Target Value: The total between start of current procedure and end of current procedure**Selections:** (none)**Supporting Definitions:** **Dose Area Product:**

Dose Air 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 Air Product).

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

Seq. #: 7221 **Name:** Dose Area Product Units**Coding Instructions:** Indicate the unit reported for radiation dose area product (Kerma area product).**Target Value:** The value on current procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
Gy-cm2	
dGy-cm2	
cGy-cm2	
mGy-cm2	
μGy-M2	

Supporting Definitions: (none)**Seq. #:** 7225 **Name:** Intraprocedure Anticoagulation**Coding Instructions:** Indicate if intraprocedure anticoagulation therapy was provided.**Target Value:** The value on current procedure**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 7230 **Name:** Uninterrupted Warfarin Therapy

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

Note(s):

"Continuous warfarin therapy" suggests the medication was not held for the procedure.

Target Value: The value on current procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 7235 **Name:** Heparin Administered During Procedure

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

Target Value: Any occurrence on current procedure

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 7240 **Name:** Heparin Initial Administration Timing

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

Target Value: Any occurrence on current procedure

Selections: *Selection Text* *Definition*

Pre-transseptal
Puncture

Code pre-transseptal if the first procedural heparin dose was administered prior to the transseptal puncture.

Post-transseptal
Puncture

Code post-transseptal if the first procedural heparin dose was administered after the transseptal puncture.

Supporting Definitions: (none)

**G. Procedure Information****Seq. #:** 7245 **Name:** Bivalirudin**Coding Instructions:** Indicate if bivalirudin was administered during the procedure.**Target Value:** The value on current procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #:** 7250 **Name:** Other Anticoagulant**Coding Instructions:** Indicate if any other anticoagulation medical therapy, not listed above, was used during the procedure.**Target Value:** The value on current procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #:** 7265 **Name:** Anticoagulation Reversal**Coding Instructions:** Indicate if there was a reversal of the anticoagulation at the end of the LAA occlusion procedure.**Target Value:** Any occurrence on current procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #:** 7269 **Name:** Access System Counter**Coding Instructions:** The access system counter distinguishes an individual access system when multiple are used during one procedure.**Target Value:** N/A**Selections:** (none)**Supporting Definitions:** (none)



G. Procedure Information

Seq. #: 7270 Name: Access System ID

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

Note(s):

Code all access systems used during the procedure.

Target Value: The value on current procedure

Selections: (none)

Supporting Definitions: (none)

Seq. #: 7274 Name: Device Counter

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

Note(s):

The software-assigned device counter should start at one and be incremented by one for each device used.

Target Value: N/A

Selections: (none)

Supporting Definitions: (none)

Seq. #: 7275 Name: Device ID

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

Note(s):

Code all devices used during the procedure.

Target Value: The value on current procedure

Selections: (none)

Supporting Definitions: (none)

Seq. #: 7280 Name: Device UDI Direct Identifier

Coding Instructions: [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: N/A

Selections: (none)

Supporting Definitions: **Unique Device Identification (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: U.S. Food and Drug Administration Unique Device Identification - UDI
<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/UniqueDeviceIdentification/default.htm>



G. Procedure Information

Seq. #: 7285 **Name:** LAA Isolation Approach**Coding Instructions:** Indicate which approach was used to deliver the closure device.**Target Value:** The value on current procedure

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Epicardial	Ligation via an epicardial approach, isolating the left atrial appendage (LAA) from circulation via inside the pericardial space.
	Percutaneous	Occlusion of the left atrial appendage (LAA) using solely a percutaneous, catheter-based method.

Supporting Definitions: (none)**Seq. #:** 7290 **Name:** Device Outcome**Coding Instructions:** Indicate the outcome of the device listed.**Target Value:** The value on current procedure

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Deployed, released	The device was deployed and released in the intended location and no retrieval was indicated.
	Deployed, not released	The device was deployed and not released from the delivery system.
	Not Deployed	The device was advanced into the patient and was never deployed.
	Device retrieved	The device was deployed and released and the device subsequently required retrieval due to placement issues.

Supporting Definitions: (none)**Seq. #:** 7295 **Name:** Procedure Aborted**Coding Instructions:** Indicate if the LAAO intervention was aborted at any time after venous or epicardial access was obtained.**Note(s):**

Aborted would imply that venous or epicardial access was obtained and then the procedure had to be stopped without a final device being deployed and released.

Target Value: The value on current procedure

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 7296 **Name:** Procedure Aborted Reason**Coding Instructions:** Indicate the reason(s) why the procedure was aborted.**Target Value:** The value on current procedure**Selections:** *Selection Text* *Definition*Anatomy not
conductive for implantAppendage too large
(for device implant)Appendage too small
(for device implant)Catheterization
challengeDecompensation in
patient condition

Device related

Device retrieval

Device release
criteria not metEpicardial access
issueOpen heart device
retrievalThrombus developed
during procedureUnanticipated patient
condition

Patient/Family choice

Supporting Definitions: (none)**Seq. #:** 7300 **Name:** Conversion to Open Heart Surgery**Coding Instructions:** Indicate if this procedure converted to open heart surgery.**Target Value:** The value on current procedure**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 7301 **Name:** Conversion to Open Heart Surgery Reason

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

Target Value: The value on current procedure

Selections: *Selection Text* *Definition*

Complication
Device Retrieval
Unfavorable anatomy
Medical decision for open ligation of appendage

Supporting Definitions: (none)

Seq. #: 7305 **Name:** Device Margin Residual Leak

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

Target Value: The value on current procedure

Selections: (none)

Supporting Definitions: (none)

Seq. #: 7306 **Name:** Device Margin Residual Leak Not Assessed

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No
Yes

Supporting Definitions: (none)



G. Procedure Information

Seq. #: 7310 Name: Concomitant Procedures Performed**Coding Instructions:** 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**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #: 7315 Name:** Concomitant Procedures**Coding Instructions:** Indicate which specific other procedures were performed during the same lab visit.**Target Value:** The value on current procedure**Selections:** *Selection Text* *Definition*

AFib Ablation

Concomitant atrial fibrillation ablation procedure was performed to correct electrical abnormalities.

ICD

Concomitant implantable cardiac defibrillator placed to prevent sudden death.

PCI

Concomitant percutaneous coronary intervention, or coronary angioplasty was performed to improve cardiac blood flow.

TAVR

Concomitant transcatheter aortic valve replacement (TAVR) was performed to correct aortic stenosis.

TMVR

Concomitant transcatheter mitral valve repair (TMVR) was performed to correct mitral valve regurgitation.

ASD Closure
Congenital

Concomitant procedure was performed to correct congenital atrial septal defect (ASD).

ASD Closure
Iatrogenic

Concomitant procedure was performed to correct iatrogenic atrial septal defect (ASD).

PFO Closure
Congenital

Concomitant procedure was performed to correct patent foramen ovale (PFO).

Supporting Definitions: (none)



H. Intra or Post-Procedure Events

Seq. #: 9984 **Name:** Intra or Post Procedure Events Occurred**Coding Instructions:** Indicate if any Intra or Post Procedure Events occurred from the NCDR provided list.**Target Value:** Any occurrence between start of procedure and until next procedure or discharge**Selections:**

No

Yes

Supporting Definitions: (none)**Seq. #:** 9985 **Name:** Event ID**Coding Instructions:** Indicate the NCDR assigned identification number for the patient's history of intra or post procedure events.**Target Value:** Any occurrence between start of procedure and until next procedure or discharge**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 9990 **Name:** Event Occurred**Coding Instructions:** 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**Selections:**

No

Yes

Supporting Definitions: (none)**Seq. #:** 9995 **Name:** Event Date**Coding Instructions:** 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**Selections:** (none)**Supporting Definitions:** (none)



I. Post-Procedure Labs

Seq. #: 8500 Name: Post Procedure Peak Creatinine**Coding Instructions:** Indicate the post-procedure peak creatinine (Cr) level (mg/dL).**Target Value:** The highest value between the end of the procedure and prior to the time of discharge**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 8501 Name:** Post Procedure Peak Creatinine Not Drawn**Coding Instructions:** 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**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: (none)**Seq. #: 8505 Name:** Post Procedure Hemoglobin**Coding Instructions:** Indicate the post-procedure hemoglobin (Hgb) value (g/dL).**Target Value:** The lowest value between the end of the procedure and the time of discharge**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 8506 Name:** Post Procedure Hemoglobin Not Drawn**Coding Instructions:** Indicate if the post-procedure hemoglobin was not drawn.**Target Value:** N/A**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: (none)



I. Post-Procedure Labs

Seq. #: 8510 **Name:** Post Procedure Creatinine

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

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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 8511 **Name:** Post Procedure Creatinine Not Drawn

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



J. Discharge

Seq. #: 10000 **Name:** Surgery

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

Note(s):

Code "Yes" to "Surgery" if the inpatient operation meets all the these conditions:

1. It was performed in the OR;
2. It was performed by a surgeon;
3. The patient was under deep sedation or general anesthesia at the time of the operation. Code "No" for outpatient procedures, endoscopies or percutaneous interventions.

Target Value: The value on discharge

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 10001 **Name:** Percutaneous Coronary Interventions (Other)

Coding Instructions: 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

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 10100 **Name:** Discharge Date

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

Target Value: The value on discharge

Selections: (none)

Supporting Definitions: (none)

**J. Discharge****Seq. #: 10105 Name: Discharge Status**

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

Target Value: The value on discharge

Selections: *Selection Text* *Definition*

Alive

Deceased

Supporting Definitions: (none)

Seq. #: 10110 Name: Discharge Location

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

Target Value: The value on discharge

Selections: *Selection Text* *Definition*

Home

Discharged to home or Self-care (routine discharge).

Extended
care/TCU/Rehab

Discharged/transferred to an inpatient rehabilitation facility (IRF). Continued "non-acute" care at an extended care facility, transitional care unit, or rehabilitation unit.

Other acute care
hospital

Skilled nursing facility

Discharged/transferred to a skilled nursing facility.

Other

Left against medical
advice or
discontinued care

The patient was discharged or eloped against medical advice.

Supporting Definitions: (none)

Seq. #: 10115 Name: Hospice Care

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

Target Value: The value on discharge

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



J. Discharge

Seq. #: 10120 **Name:** Death during the Procedure**Coding Instructions:** Indicate if the patient expired during the procedure.**Target Value:** Any occurrence on discharge**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #:** 10125 **Name:** Cause of Death**Coding Instructions:** 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**Selections:** *Selection Text* *Definition*

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

**J. Discharge**

Hepatobiliary	Non-cardiovascular death attributable to disease of the liver, gall bladder, or biliary ducts (exclude malignancy).
Pancreatic	Non-cardiovascular death attributable to disease of the pancreas (excludes malignancy).
Infection	Non-cardiovascular death attributable to an infectious disease.
Inflammatory/Immuno logic	Non-cardiovascular death attributable to an inflammatory or immunologic disease process.
Hemorrhage	Non-cardiovascular death attributable to bleeding that is not considered cardiovascular hemorrhage or stroke per this classification.
Non-cardiovascular procedure or surgery	Death caused by the immediate complication(s) of a non-cardiovascular procedure or surgery.
Trauma	Non-cardiovascular death attributable to trauma.
Suicide	Non-cardiovascular death attributable to suicide.
Neurological	Non-cardiovascular death attributable to disease of the nervous system (excludes malignancy).
Malignancy	Non-cardiovascular death attributable to malignancy.
Other non-cardiovascular reason	Non-cardiovascular death attributable to a cause other than those listed in this classification (specify organ system).

Supporting Definitions: (none)**Seq. #:** 10200 **Name:** Discharge Medication Code**Coding Instructions:** Indicate the NCDR assigned identification number associated with the medications the patient was prescribed upon discharge**Target Value:** The value on discharge**Selections:** (none)**Supporting Definitions:** (none)

**K. In-hospital Adjudication****Seq. #:** 10205 **Name:** Discharge Medication Prescribed**Coding Instructions:** 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Yes - Prescribed	
	Not Prescribed - No Reason	Code 'No' if this medication was not prescribed post procedure or for discharge and there was no mention of a reason why it was not ordered within the medical documentation.
	Not Prescribed - Medical Reason	Code 'No Medical Reason' if this medication was not prescribed post procedure or for discharge and there was a reason documented related to a medical issue or medical concern for not prescribing the medicine.
	Not Prescribed - Patient Reason	Code 'No, Patient Reason' if this medication was not prescribed post procedure or for discharge and there was a reason documented related to the patient's preference.

Supporting Definitions: (none)**Seq. #:** 12000 **Name:** Adjudication Status**Coding Instructions:** Indicate whether the patient was alive or deceased on the date the adjudication was performed.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Alive	
	Deceased	

Supporting Definitions: (none)**Seq. #:** 12005 **Name:** Adjudication Date of Death**Coding Instructions:** Indicate the date the patient was declared deceased.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:** (none)**Supporting Definitions:** (none)

**K. In-hospital Adjudication****Seq. #: 12010 Name:** Symptom Onset Date

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: (none)

Supporting Definitions: (none)

Seq. #: 12015 Name: Neurologic Deficit with Rapid Onset

Coding Instructions: 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.

Note(s):

At least one of the following symptoms might be present to code 'Yes': change in level of consciousness, hemiplegia, hemiparesis, numbness or sensory loss affecting one side of the body, dysphasia or aphasia, hemianopia, amaurosis fugax.

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections:

<i>Selection Text</i>	<i>Definition</i>
-----------------------	-------------------

No	
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Yes	
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Supporting Definitions: (none)

Seq. #: 12020 Name: Neurologic Deficit Clinical Presentation

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections:

<i>Selection Text</i>	<i>Definition</i>
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Stroke-related	Neurologic deficits in the form of signs or symptoms associated with an acute episode of focal or neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury as a result of ischemia, hemorrhage or infarction.
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Non-Stroke-related	Neurologic deficits in the form of signs or symptoms due to non-stroke cause. Potential non stroke related causes include brain tumor, trauma, infection, hypoglycemia, peripheral lesion, pharmacological influence.
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Supporting Definitions: (none)

**K. In-hospital Adjudication****Seq. #: 12025 Name:** Diagnosis Confirmation by Neurology**Coding Instructions:** Indicate if the diagnosis was confirmed by a neurologist or a neurosurgeon.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	'No' indicates that the diagnosis was not confirmed by either Neurology or Neurosurgery.
	Yes	'Yes' indicates either Neurology or Neurosurgery confirmed the diagnosis.

Supporting Definitions: (none)**Seq. #: 12030 Name:** Brain Imaging Performed**Coding Instructions:** Indicate if neuro imaging (such as CT, MRI, cerebral angiography) was performed in an attempt to confirm the diagnosis.**Note(s):**

The intent of asking 'Brain Imaging Performed' is to identify if the imaging tests were ordered and the patient underwent imaging in order for the working diagnosis to be confirmed or ruled out. This data element is not asking whether or not the imaging confirmed or ruled out the diagnosis.

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	'No' indicates neuroimaging was not performed for this event.
	Yes	'Yes' indicates neuroimaging was performed in an attempt to confirm the diagnosis.

Supporting Definitions: (none)**Seq. #: 12035 Name:** Deficit Type**Coding Instructions:** Indicate the type of deficit identified by the neuroimaging study.**Note(s):**

In the event that multiple modes of imaging were performed for diagnosis, for the purpose of this adjudication code based on the type of deficit identified using the results that provided the final, confirmed diagnosis (if available).

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No deficit	No deficit noted at the time of imaging.
	Infarction	
	Hemorrhage	
	Both	

Supporting Definitions: (none)

**K. In-hospital Adjudication****Seq. #:** 12040 **Name:** Intracranial Hemorrhage Type**Coding Instructions:** For patients presenting with an intracranial hemorrhage, indicate the hemorrhage location.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Intracerebral	Intracerebral hemorrhage (ICH) bleeding is usually derived from arterioles. The bleeding is directly into the brain, forming a localized hematoma that spreads along white matter pathways. Accumulation of blood occurs over minutes or hours and the neurologic symptoms usually increase gradually over minutes or a few hours.
	Subarachnoid	Subarachnoid hemorrhage (SAH) occurs with the rupture of an aneurysm releasing blood directly into the cerebrospinal fluid (CSF) under arterial pressure. The blood spreads quickly within the CSF, rapidly increasing intracranial pressure. Death or deep coma ensues if the bleeding continues. The bleeding usually lasts only a few seconds but re-bleeding is very common. With causes of SAH other than aneurysm rupture, the bleeding is less abrupt and may continue over a longer period of time.
	Subdural	Subdural hematomas form between the dura and the arachnoid membranes and often require surgical treatment to prevent irreversible brain injury and death caused by hematoma expansion, elevated intracranial pressure, and brain herniation.

Supporting Definitions: (none)**Seq. #:** 12045 **Name:** Subsequent IV rtPA Administered**Coding Instructions:** Indicate if intravascular (IV) recombinant tissue plasminogen activator (rtPA) was used as a treatment option related to this event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: (none)

**K. In-hospital Adjudication****Seq. #: 12050 Name:** Subsequent Endovascular Therapeutic Intervention

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 12055 Name: Symptoms Duration

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: *Selection Text* *Definition*

< 1 Hour

1 – 24 Hours

> 24 Hours

Supporting Definitions: (none)

Seq. #: 12060 Name: Trauma

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

**K. In-hospital Adjudication****Seq. #: 12065 Name:** Modified Rankin Scale**Coding Instructions:** Indicate the patient's functional ability according to the modified Rankin Scale (mRS) administered following the event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	0: No symptoms at all	
	1: No significant disability despite symptoms	Able to carry out all usual duties and activities
	2: Slight disability	Unable to carry out all previous activities, but able to look after own affairs without assistance
	3: Moderate disability	Requiring some help, but able to walk without assistance
	4: Moderately severe disability	Unable to walk without assistance and unable to attend to own bodily needs without assistance
	5: Severe disability	Bedridden, incontinent and requiring constant nursing care and attention
	6: Death	

Supporting Definitions: (none)**Seq. #: 12066 Name:** Adjudication Modified Rankin Scale Not Administered**Coding Instructions:** Indicate if the modified Rankin Scale (mRS) was not administered following the event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: (none)



K. In-hospital Adjudication

Seq. #: 12070 **Name:** Procedure Related Neurologic Event**Coding Instructions:** 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:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	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.
	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.
	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.
	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.
	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.

Supporting Definitions: Procedure Related Neurologic Event:

It is optimal to have the implanting physician or consulting neurologist/neurosurgeon complete this data element.

Source: Adapted from Olsson S (Ed). National Pharmacovigilance Systems. World Health Organization (WHO) Collaborating Centre for International Drug Monitoring, Uppsala, Sweden. 2nd ed 1999, ISBN 91-630-7678-0. Retrieved from <http://apps.who.int/medicinedocs/en/d/Jh2934e/15.html>

**K. In-hospital Adjudication****Seq. #: 12075 Name:** Device Related Neurologic Event**Coding Instructions:** 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:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	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.
	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.
	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.
	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.
	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.

Supporting Definitions: Device Related Neurologic Event:

It is optimal to have the implanting physician or consulting neurologist/neurosurgeon complete this data element.

Source: Adapted from Olsson S (Ed). National Pharmacovigilance Systems. World Health Organization (WHO) Collaborating Centre for International Drug Monitoring, Uppsala, Sweden. 2nd ed 1999, ISBN 91-630-7678-0. Retrieved from <http://apps.who.int/medicinedocs/en/d/Jh2934e/15.html>**Seq. #: 12080 Name:** Adjudication Status**Coding Instructions:** Indicate whether the patient was alive or deceased on the date the adjudication was performed.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Alive	
	Deceased	

Supporting Definitions: (none)

**K. In-hospital Adjudication****Seq. #: 12085 Name:** Adjudication Date of Death**Coding Instructions:** Indicate the date the patient was declared deceased.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 12090 Name:** Invasive Intervention Required**Coding Instructions:** Indicate if there was a surgical or percutaneous intervention required to treat the patient for this bleeding event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: (none)**Seq. #: 12095 Name:** RBC Transfusion**Coding Instructions:** Indicate if there was at least one transfusion of PRBCs given to treat the patient for this bleeding event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	
Yes	

Supporting Definitions: (none)**Seq. #: 12100 Name:** Number of RBC Units Transfused**Coding Instructions:** Indicate the number of PRBC units transfused for treatment of this bleeding event.**Note(s):**

Do not include autologous, cell-saver or chest tube recirculated blood.

Target Value: The value on the in-hospital event occurring between procedure start and discharge**Selections:** (none)**Supporting Definitions:** (none)

**K. In-hospital Adjudication****Seq. #: 12105 Name:** Hemoglobin Pre-Transfusion

Coding Instructions: Indicate the patient's hemoglobin level immediately prior to the transfusion.

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: (none)

Supporting Definitions: (none)

Seq. #: 12110 Name: Diagnostic Imaging Performed

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 12115 Name: End Organ Damage

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 12120 Name: Major Surgery within Past 30 days

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

**K. In-hospital Adjudication****Seq. #: 12125 Name:** Percutaneous Coronary Intervention within Past 30 days**Coding Instructions:** Indicate if the patient had a percutaneous coronary artery or percutaneous valvular intervention within 30 days prior to this bleeding event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No	
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Yes	
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Supporting Definitions: (none)**Seq. #: 12130 Name:** Procedure Related Bleeding Event**Coding Instructions:** 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:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
-----------------------	-------------------

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.
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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.
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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.
----------	--

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.
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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.
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Supporting Definitions: **Procedure Related Bleeding Event:**

It is optimal to have the implanting physician or consulting neurologist/neurosurgeon complete this data element.

Source: Adapted from Olsson S (Ed). National Pharmacovigilance Systems. World Health Organization (WHO) Collaborating Centre for International Drug Monitoring, Uppsala, Sweden. 2nd ed 1999, ISBN 91-630-7678-0. Retrieved from <http://apps.who.int/medicinedocs/en/d/Jh2934e/15.html>

**K. In-hospital Adjudication****Seq. #: 12135 Name:** Device Related Bleeding Event**Coding Instructions:** 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:** The value on the in-hospital event occurring between procedure start and discharge

Selections:	<i>Selection Text</i>	<i>Definition</i>
	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.
	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.
	Possible	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.
	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.
	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.

Supporting Definitions: Device Related Bleeding Event:

It is optimal to have the implanting physician or consulting neurologist/neurosurgeon complete this data element.

Source: Adapted from Olsson S (Ed). National Pharmacovigilance Systems. World Health Organization (WHO) Collaborating Centre for International Drug Monitoring, Uppsala, Sweden. 2nd ed 1999, ISBN 91-630-7678-0. Retrieved from <http://apps.who.int/medicinedocs/en/d/Jh2934e/15.html>

Seq. #: 12140 Name: Adjudication Medication Code**Coding Instructions:** Indicate the NCDR assigned identification number for the medications the patient was taking or administered at the time of the event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:** (none)**Supporting Definitions:** (none)

**K. In-hospital Adjudication****Seq. #:** 12145 **Name:** Current Medications at Time of Event**Coding Instructions:** Indicate if the patient was taking or being administered the medication at the time of the event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No	
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Yes	
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Supporting Definitions: (none)**Seq. #:** 12150 **Name:** Adjudication Status**Coding Instructions:** Indicate whether the patient was alive or deceased on the date the adjudication was performed.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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Alive	
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Deceased	
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Supporting Definitions: (none)**Seq. #:** 12155 **Name:** Adjudication Date of Death**Coding Instructions:** Indicate the date the patient was declared deceased.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 12160 **Name:** Death Cause (End-Organ Hypoperfusion/Systemic Thromboembolization/Intervention)**Coding Instructions:** 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:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No	
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Yes	
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Supporting Definitions: (none)

**K. In-hospital Adjudication****Seq. #:** 12165 **Name:** Focal End-Organ Hypoperfusion Present**Coding Instructions:** Indicate if focal end-organ hypoperfusion resulted from the systemic thromboembolism event.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No	
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Yes	
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Supporting Definitions: (none)**Seq. #:** 12170 **Name:** Systemic Thromboembolization Imaging Evidence**Coding Instructions:** Indicate if imaging evidence indicated systemic thromboembolism.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No	
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Yes	
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Supporting Definitions: (none)**Seq. #:** 12175 **Name:** Imaging Method**Coding Instructions:** Indicate the imaging method to identify systemic thromboembolism.**Target Value:** The value on the in-hospital event occurring between procedure start and discharge**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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Angiography	Indicate if the systemic thromboembolism imaging method is angiography.
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CT scan	Indicate if the systemic thromboembolism imaging method is a computed tomography (CT) scan.
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MRI	Indicate if the systemic thromboembolism imaging method is magnetic resonance imaging (MRI).
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Ultrasound	Indicate if the systemic thromboembolism imaging method is ultrasound.
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Other	Indicate if the imaging method is not angiography, CT, MRI, or ultrasound.
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Supporting Definitions: (none)



K. In-hospital Adjudication

Seq. #: 12180 Name: Therapeutic Intervention Performed

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

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 12185 Name: Intervention Type

Coding Instructions: Indicate the intervention type.

Target Value: The value on the in-hospital event occurring between procedure start and discharge

Selections: *Selection Text* *Definition*

Catheter Indicate if the systemic thromboembolism intervention type is catheter based.

Pharmacological Indicate if the systemic thromboembolism intervention type is pharmacological.

Surgical Indicate if the systemic thromboembolism intervention type is surgical.

Other Indicate if the systemic thromboembolism intervention type is not catheter based, pharmacological, or surgical.

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13000 **Name:** Follow-up Assessment Date**Coding Instructions:** Indicate the date the follow-up assessment was performed.**Target Value:** The value on follow-up**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 13001 **Name:** Follow-up Interval**Coding Instructions:** Indicate the interval of follow-up: 45 days, 6 months, 1 year or 2 years.**Target Value:** The value on follow-up

Selections:	<i>Selection Text</i>	<i>Definition</i>
	45 day	Follow-up interval post-procedure is 45 days plus or minus 14 days.
	6 month	Follow-up interval post-procedure is 6 months plus 60 days or minus 30 days.
	1 year	Follow-up interval post-procedure is 1 year plus or minus 60 days.
	2 year	Follow-up interval post-procedure is 2 years plus or minus 60 days.

Supporting Definitions: (none)**Seq. #:** 13005 **Name:** Follow-up Status Method - Office Visit**Coding Instructions:** Indicate if the method to determine follow-up status was an office or clinic visit.**Target Value:** The value on follow-up

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: (none)

**L. Follow-up****Seq. #: 13006 Name:** Follow-up Status Method - Medical Records

Coding Instructions: Indicate if the method to determine follow-up status was from medical records.

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13007 Name: Follow-up Status Method - Letter from Medical Provider

Coding Instructions: Indicate if the method to determine follow-up status was from a letter from the medical provider.

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13008 Name: Follow-up Status Method - Phone call

Coding Instructions: Indicate if the method to determine follow-up status was from a phone call.

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13009 Name: Follow-up Status Method - Social Security Death Master File

Coding Instructions: Indicate if the method to determine follow-up status was from using Social Security Death Master file.

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13010 **Name:** Follow-up Status Method - Hospitalized

Coding Instructions: Indicate if the method to determine follow-up status was that the patient was hospitalized.

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13011 **Name:** Follow-up Status Method - Other

Coding Instructions: Indicate if the method to determine follow-up status was a means other than listed.

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13015 **Name:** Follow-up Status

Coding Instructions: Indicate whether the patient was alive or deceased at the date the follow-up was performed.

Note(s):

If a follow up was unable to be performed, code "Lost to Follow-up".

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

Alive

Deceased

Lost to Follow-up

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13020 **Name:** Follow-up Date of Death**Coding Instructions:** Indicate the date the patient was declared deceased.**Target Value:** The value on follow-up**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 13025 **Name:** Follow-up Cause of Death**Coding Instructions:** Indicate the PRIMARY cause of death (i.e. the first significant event which ultimately led to death).**Target Value:** The value on follow-up**Selections:** *Selection Text* *Definition*

Acute myocardial infarction	Death by any cardiovascular mechanism (e.g., arrhythmia, sudden death, heart failure, stroke, pulmonary embolus, peripheral arterial disease) = 30 days after an acute myocardial infarction, related to the immediate consequences of the MI, such as progressive HF or recalcitrant arrhythmia. There may be other assessable (attributable) mechanisms of cardiovascular death during this time period, but for simplicity, if the cardiovascular death occurs <=30 days of an acute myocardial infarction, it will be considered a death due to myocardial infarction.
Sudden cardiac death	Death that occurs unexpectedly, and not within 30 days of an acute MI.
Heart failure	Death associated with clinically worsening symptoms and/or signs of heart failure.
Stroke	Death after a stroke that is either a direct consequence of the stroke or a complication of the stroke.
Cardiovascular procedure	Death caused by the immediate complication(s) of a cardiovascular procedure.
Cardiovascular hemorrhage	Death related to hemorrhage such as a non-stroke intracranial hemorrhage, non-procedural or non-traumatic vascular rupture (e.g., aortic aneurysm), or hemorrhage causing cardiac tamponade.
Other cardiovascular reason	Cardiovascular death not included in the above categories but with a specific, known cause (e.g., pulmonary embolism, peripheral arterial disease).
Pulmonary	Non-cardiovascular death attributable to disease of the lungs (excludes malignancy).
Renal	Non-cardiovascular death attributable to renal failure.
Gastrointestinal	Non-cardiovascular death attributable to disease of the esophagus, stomach, or intestines (excludes malignancy).
Hepatobiliary	Non-cardiovascular death attributable to disease of the liver, gall bladder, or biliary ducts (exclude malignancy).

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Pancreatic	Non-cardiovascular death attributable to disease of the pancreas (excludes malignancy).
Infection	Non-cardiovascular death attributable to an infectious disease.
Inflammatory/Immunologic	Non-cardiovascular death attributable to an inflammatory or immunologic disease process.
Hemorrhage	Non-cardiovascular death attributable to bleeding that is not considered cardiovascular hemorrhage or stroke per this classification.
Non-cardiovascular procedure or surgery	Death caused by the immediate complication(s) of a non-cardiovascular procedure or surgery.
Trauma	Non-cardiovascular death attributable to trauma.
Suicide	Non-cardiovascular death attributable to suicide.
Neurological	Non-cardiovascular death attributable to disease of the nervous system (excludes malignancy).
Malignancy	Non-cardiovascular death attributable to malignancy.
Other non-cardiovascular reason	Non-cardiovascular death attributable to a cause other than those listed in this classification (specify organ system).

Supporting Definitions: (none)**Seq. #: 13030 Name:** Follow-up LVEF Assessed**Coding Instructions:** Indicate if a left ventricular ejection fraction (LVEF) has been assessed.**Target Value:** The value on follow-up**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #: 13035 Name:** Follow-up Most Recent LVEF %**Coding Instructions:** Indicate the most recent left ventricular ejection fraction (LVEF) percentage (%).**Target Value:** The value on follow-up**Selections:** (none)**Supporting Definitions:** (none)



L. Follow-up

Seq. #: 13040 **Name:** Follow-up Transthoracic Echo (TTE) Performed

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

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13045 **Name:** Follow-up TTE Date

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

Target Value: The value on follow-up

Selections: (none)

Supporting Definitions: (none)

Seq. #: 13050 **Name:** Follow-up Transesophageal Echocardiogram (TEE) Performed

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

Target Value: The value on follow-up

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13055 **Name:** Follow-up Most Recent TEE Date

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

Target Value: The value on follow-up

Selections: (none)

Supporting Definitions: (none)

**L. Follow-up****Seq. #:** 13060 **Name:** Follow-up Atrial Thrombus Detected**Coding Instructions:** Indicate if an atrial thrombus was detected.**Target Value:** The value on follow-up**Selections:**

<i>Selection Text</i>	<i>Definition</i>
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No	
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Yes	
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Supporting Definitions: (none)**Seq. #:** 13065 **Name:** Follow-up Residual Leak at Device Margin**Coding Instructions:** Indicate the residual leak at the device margin in millimeters (mm).**Target Value:** The value on follow-up**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 13066 **Name:** Follow-up Residual Leak at Device Margin Not Assessed**Coding Instructions:** Indicate if the residual leak at the device margin was not assessed.**Target Value:** N/A**Selections:**

<i>Selection Text</i>	<i>Definition</i>
-----------------------	-------------------

No	
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Yes	
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Supporting Definitions: (none)**Seq. #:** 13070 **Name:** Follow-up Creatinine**Coding Instructions:** Indicate the most recent creatinine (Cr) level (mg/dL).**Target Value:** The value on follow-up**Selections:** (none)**Supporting Definitions:** (none)



L. Follow-up

Seq. #: 13071 **Name:** Follow-up Creatinine Not Drawn

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13075 **Name:** Follow-up Hemoglobin

Coding Instructions: Indicate the most recent hemoglobin (Hgb) value (g/dL).

Target Value: The value on follow-up

Selections: (none)

Supporting Definitions: (none)

Seq. #: 13076 **Name:** Follow-up Hemoglobin Not Drawn

Coding Instructions: Indicate if the hemoglobin was not drawn.

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

**L. Follow-up****Seq. #: 13080 Name:** Follow-up Modified Rankin Scale

Coding Instructions: Indicate the patient's functional ability according to the modified Rankin Scale (mRS) administered at follow-up.

Target Value: The value on follow-up

Selections:	<i>Selection Text</i>	<i>Definition</i>
	0: No symptoms at all	
	1: No significant disability despite symptoms	Able to carry out all usual duties and activities
	2: Slight disability	Unable to carry out all previous activities, but able to look after own affairs without assistance
	3: Moderate disability	Requiring some help, but able to walk without assistance
	4: Moderately severe disability	Unable to walk without assistance and unable to attend to own bodily needs without assistance
	5: Severe disability	Bedridden, incontinent and requiring constant nursing care and attention
	6: Death	

Supporting Definitions: (none)

Seq. #: 13081 Name: Follow-up Modified Rankin Scale Not Administered

Coding Instructions: Indicate if the modified Rankin Scale (mRS) was not administered at follow-up.

Target Value: N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: (none)

Seq. #: 13085 Name: Follow-up Barthel Index Evaluation

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13086 Name: Follow-up Barthel Index Evaluation Feeding

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Unable	Complete assist for feeding required.
	Needs Help	Some help is necessary (with cutting up food, use salt and pepper, spread butter, etc).
	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.

Supporting Definitions: Copyright Notice:

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

Seq. #: 13087 Name: Follow-up Barthel Index Evaluation Bathing

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Dependent	Patient requires assistance for bathing.
	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.

Supporting Definitions: Copyright Notice:

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



L. Follow-up

Seq. #: 13088 Name: Follow-up Barthel Index Evaluation Grooming

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Needs Help	Patient needs assistance with any aspect of grooming.
	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.

Supporting Definitions: Copyright Notice:

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

Seq. #: 13089 Name: Follow-up Barthel Index Evaluation Dressing

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Dependent	Patient is unable to assist with any dressing.
	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.
	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.

Supporting Definitions: Copyright Notice:

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



L. Follow-up

Seq. #: 13090 **Name:** Follow-up Barthel Index Evaluation Bowels

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Incontinent	Patient has routine incontinence.
	Inconsistent	Patient needs help in using a suppository or taking an enema or has occasional accidents.
	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).

Supporting Definitions: Copyright Notice:

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

Seq. #: 13091 **Name:** Follow-up Barthel Index Evaluation Bladder

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Incontinent	Patient has routine incontinence.
	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.
	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.

Supporting Definitions: Copyright Notice:

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



L. Follow-up

Seq. #: 13092 Name: Follow-up Barthel Index Evaluation Toilet Use

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Dependent	Patient requires full assistance.
	Needs Help	Patient needs help because of imbalance or in handling clothes or in using toilet paper.
	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.

Supporting Definitions: Copyright Notice:

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

Seq. #: 13093 Name: Follow-up Barthel Index Evaluation Transfers

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Unable	Patient is unable to assist with any transfer.
	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.
	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.
	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.

Supporting Definitions: Copyright Notice:

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



L. Follow-up

Seq. #: 13094 **Name:** Follow-up Barthel Index Evaluation Mobility

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Immobile	Patient is immobile.
	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.
	One Person Assist	Patient needs help or supervision in any of the above but can walk at least 50 yards with a little help.
	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.)

Supporting Definitions: Copyright Notice:

Used with permission.

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

Seq. #: 13095 **Name:** Follow-up Barthel Index Evaluation Stairs

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Unable	Patient is unable to use stairs.
	Needs Help	Patient needs help with or supervision to go up or down stairs safely.
	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.

Supporting Definitions: Copyright Notice:

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



L. Follow-up

Seq. #: 13110 Name: Follow-up Medication Code

Coding Instructions: Indicate the NCDR assigned identification number for the medications the patient was taking at the time of follow-up.

Target Value: The value on follow-up

Selections: (none)

Supporting Definitions: (none)

Seq. #: 13115 Name: Follow-up Current Medications at Time of Follow-up

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Yes	Code 'Yes' if the patient was taking the medication at the time of follow-up.
	No (No Reason)	Code 'No – No Reason' if the patient was not taking the medication at the time of follow-up and there was no mention of a reason why it was not ordered within the medical documentation.
	No (Medical Reason)	Code 'No – Medical Reason' if the patient was not taking the medication at the time of follow-up because they were not prescribed the medication for a reason documented to be related to a medical issue or medical concern.
	No (Patient Reason)	Code 'No – Patient Reason' if the patient was not taking the medication at the time of the follow-up because of a reason documented to be related to the patient's preference.

Supporting Definitions: (none)

Seq. #: 13120 Name: Follow-up Warfarin Discontinued

Coding Instructions: 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	Code 'No' if the patient did not discontinue Warfarin at any point since the last follow-up. The medication was either continued or it was not part of the patient's medical regimen.
	Yes	Code 'Yes' if the patient was taking Warfarin at the last follow-up and stopped taking it at any point since then.

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13125 Name: Follow-up Warfarin Discontinued Date**Coding Instructions:** Indicate the date the Warfarin was discontinued.**Note(s):**

The value should be a date between the time of the previous follow-up (or at hospital discharge if this is the 45-day follow-up) and the current follow-up.

Target Value: The value on follow-up**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 13130 Name:** Follow-up Warfarin Resumed**Coding Instructions:** 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**Selections:**

<i>Selection Text</i>	<i>Definition</i>
No	Code 'No' if the patient did not resume taking Warfarin at any point since the last follow-up, the medication had been previously discontinued or the medication was not part of the patient's medical regimen.
Yes (Thrombotic Event)	Code 'Yes (Thrombotic Event)' if the Warfarin had at one point been discontinued AND then was prescribed again at any point since the last follow-up, specifically for the treatment of a thrombotic event.
Yes (Other)	Code 'Yes (Other)' if the Warfarin had at one point been discontinued AND then was prescribed again at any point since the last follow-up, for an indication other than a thrombotic event.

Supporting Definitions: (none)**Seq. #: 13135 Name:** Follow-up Warfarin Resumed Date**Coding Instructions:** Indicate the date the Warfarin was resumed.**Note(s):**

The value should be a date between the time of the previous follow-up (or at hospital discharge if this is the 45-day follow-up) and the current follow-up.

Target Value: The value on follow-up**Selections:** (none)**Supporting Definitions:** (none)



L. Follow-up

Seq. #: 13140 Name: Follow-up NOAC Therapy Discontinued

Coding Instructions: Indicate if the patient discontinued Novel Oral Anticoagulant 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	Code 'No' if the patient did not discontinue Novel Oral Anticoagulant Therapy at any point since the last follow-up. The medication was either continued or it was not part of the patient's medication regimen.
	Yes	Code 'Yes' if the patient was taking Novel Oral Anticoagulant Therapy at the last follow-up and stopped taking it at any point since then.

Supporting Definitions: (none)

Seq. #: 13145 Name: Follow-up NOAC Therapy Discontinued Date

Coding Instructions: Indicate the date the NOAC was discontinued.

Note(s):

The value should be a date between the time of the previous follow-up (or at hospital discharge if this is the 45-day follow-up) and the current follow-up.

Target Value: The value on follow-up

Selections: (none)

Supporting Definitions: (none)

Seq. #: 13150 Name: Follow-up NOAC Therapy Resumed

Coding Instructions: Indicate if the patient resumed Novel Oral Anticoagulant 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

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	Code 'No' if the patient did not resume or initiate taking NOAC Therapy at any point since the last follow-up. The medication had been previously discontinued or the medication was not part of the patient's medical regimen.
	Yes (Thrombotic Event)	Code 'Yes (Thrombotic Event)' if the NOAC Therapy had at one point been discontinued AND then was prescribed again at any point since the last follow-up, specifically for the treatment of a thrombotic event.
	Yes (Other)	Code 'Yes (Other)' if the NOAC Therapy had one point been discontinued AND then was prescribed again at any point since the last follow-up, for an indication other than a thrombotic event.

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13155 **Name:** Follow-up NOAC Therapy Resumed Date**Coding Instructions:** Indicate the date the NOAC was resumed.**Note(s):**

The value should be a date between the time of the previous follow-up (or at hospital discharge if this is the 45-day follow-up) and the current follow-up.

Target Value: The value on follow-up**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 13160 **Name:** Follow-up Events Occurred**Coding Instructions:** 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**Selections:**

No

Yes

Supporting Definitions: (none)**Seq. #:** 13165 **Name:** Follow-up Event ID**Coding Instructions:** Indicate the NCDR assigned IDs for any events that 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**Selections:** (none)**Supporting Definitions:** (none)**Seq. #:** 13170 **Name:** Follow-up Event Occurred**Coding Instructions:** Indicate if the specific event 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**Selections:**

No

Yes

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13175 Name: Follow-up Event Date

Coding Instructions: Indicate all dates of events that 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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 13180 Name: Follow-up Adjudication Status

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

Target Value: The value on the follow-up event

Selections:

<i>Selection Text</i>	<i>Definition</i>
Alive	
Deceased	

Supporting Definitions: (none)

Seq. #: 13185 Name: Follow-up Adjudication Date of Death

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

Target Value: N/A

Selections: (none)

Supporting Definitions: (none)

Seq. #: 13190 Name: Follow-up Symptom Onset Date

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

Target Value: N/A

Selections: (none)

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13195 Name: Follow-up Neurologic Deficit with Rapid Onset

Coding Instructions: 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.

Note(s):

At least one of the following symptoms might be present to code 'Yes': change in level of consciousness, hemiplegia, hemiparesis, numbness or sensory loss affecting one side of the body, dysphasia or aphasia, hemianopia, amaurosis fugax.

Target Value: N/A

Selections:

Selection Text	Definition
----------------	------------

No	
----	--

Yes	
-----	--

Supporting Definitions: (none)

Seq. #: 13200 Name: Follow-up Neurologic Deficit Clinical Presentation

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

Target Value: N/A

Selections:

Selection Text	Definition
----------------	------------

Stroke-related	
----------------	--

Neurologic deficits in the form of signs or symptoms associated with an acute episode of focal or neurological dysfunction caused by presumed brain, spinal cord, or retinal vascular injury as a result of ischemia, hemorrhage or infarction.

Non-Stroke-related	
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Neurologic deficits in the form of signs or symptoms due to non-stroke cause. Potential non stroke related causes include brain tumor, trauma, infection, hypoglycemia, peripheral lesion, pharmacological influence.

Supporting Definitions: (none)

Seq. #: 13205 Name: Follow-up Confirmation of Diagnosis by Neurology

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

Target Value: N/A

Selections:

Selection Text	Definition
----------------	------------

No	
----	--

'No' indicates that the diagnosis was not confirmed by either Neurology or Neurosurgery.

Yes	
-----	--

'Yes' indicates either Neurology or Neurosurgery confirmed the diagnosis.

Supporting Definitions: (none)

**L. Follow-up****Seq. #: 13210 Name:** Follow-up Brain Imaging Performed

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

Note(s):

The intent of asking 'Brain Imaging Performed' is to identify if the imaging tests were ordered and the patient underwent imaging in order for the working diagnosis to be confirmed or ruled out.

This data element is not asking whether or not the imaging confirmed or ruled out the diagnosis.

'No' indicates neuro imaging was not performed for this event.

'Yes' indicates neuro imaging was performed in an attempt to confirm the diagnosis.

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13215 Name: Follow-up Deficit Type

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

Note(s):

In the event that multiple modes of imaging were performed for diagnosis, for the purpose of this adjudication code based on the type of deficit identified using the results that provided the final, confirmed diagnosis (if available).

Target Value: N/A

Selections: *Selection Text* *Definition*

No deficit

Infarction

Hemorrhage

Both

Supporting Definitions: (none)

**L. Follow-up****Seq. #:** 13220 **Name:** Follow-up Intracranial Hemorrhage Type**Coding Instructions:** For patients presenting with an intracranial hemorrhage, indicate the hemorrhage location.**Target Value:** N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Intracerebral	Intracerebral hemorrhage (ICH) bleeding is usually derived from arterioles. The bleeding is directly into the brain, forming a localized hematoma that spreads along white matter pathways. Accumulation of blood occurs over minutes or hours and the neurologic symptoms usually increase gradually over minutes or a few hours.
	Subarachnoid	SAH occurs with the rupture of an aneurysm releasing blood directly into the cerebrospinal fluid (CSF) under arterial pressure. The blood spreads quickly within the CSF, rapidly increasing intracranial pressure. Death or deep coma ensues if the bleeding continues. The bleeding usually lasts only a few seconds but rebleeding is very common. With causes of SAH other than aneurysm rupture, the bleeding is less abrupt and may continue over a longer period of time.
	Subdural	Subdural hematomas form between the dura and the arachnoid membranes and often require surgical treatment to prevent irreversible brain injury and death caused by hematoma expansion, elevated intracranial pressure, and brain herniation.

Supporting Definitions: (none)**Seq. #:** 13225 **Name:** Follow-up Subsequent IV rtPA Administered**Coding Instructions:** Indicate if intravascular (IV) recombinant tissue Plasminogen Activator (rtPA) was used as a treatment option related to this event.**Target Value:** N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13230 **Name:** Follow-up Subsequent Endovascular Therapeutic Intervention

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13235 **Name:** Follow-up Symptoms Duration

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

Target Value: N/A

Selections: *Selection Text* *Definition*

< 1 Hour

1 – 24 Hours

> 24 Hours

Supporting Definitions: (none)

Seq. #: 13240 **Name:** Follow-up Trauma

Coding Instructions: Indicate if the patient experienced a traumatic event within 24 hours prior the neurologic event.

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13245 **Name:** Follow-up Modified Rankin Scale

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

Target Value: N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	0: No symptoms at all	
	1: No significant disability despite symptoms	Able to carry out all usual duties and activities
	2: Slight disability	Unable to carry out all previous activities, but able to look after own affairs without assistance
	3: Moderate disability	Requiring some help, but able to walk without assistance
	4: Moderately severe disability	Unable to walk without assistance and unable to attend to own bodily needs without assistance
	5: Severe disability	Bedridden, incontinent and requiring constant nursing care and attention
	6: Death	

Supporting Definitions: (none)

Seq. #: 13246 **Name:** Follow-up Adjudication Modified Rankin Scale Not Administered

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

Target Value: N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	No	
	Yes	

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13250 **Name:** Follow-up Procedure Related Neurologic Event**Coding Instructions:** 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:** N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	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.
	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.
	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.
	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.
	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.

Supporting Definitions: (none)

**L. Follow-up****Seq. #: 13255 Name:** Follow-up Device Related Neurologic Event**Coding Instructions:** 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:** N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	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.
	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.
	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.
	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.
	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.

Supporting Definitions: (none)**Seq. #: 13260 Name:** Follow-up Adjudication Status**Coding Instructions:** Indicate whether the patient was alive or deceased on the date the adjudication was performed.**Target Value:** N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Alive	
	Deceased	

Supporting Definitions: (none)**Seq. #: 13265 Name:** Follow-up Adjudication Date of Death**Coding Instructions:** Indicate the date the patient was declared deceased.**Target Value:** N/A**Selections:** (none)**Supporting Definitions:** (none)



L. Follow-up

Seq. #: 13270 Name: Follow-up Invasive Intervention Required

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13275 Name: Follow-up RBC Transfusion

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13280 Name: Follow-up Number of RBC Units Transfused

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

Note(s):

Do not include autologous, cell-saver or chest tube recirculated blood.

Target Value: N/A

Selections: (none)

Supporting Definitions: (none)

Seq. #: 13285 Name: Follow-up Hemoglobin Pre-Transfusion

Coding Instructions: Indicate the patient's hemoglobin level immediately prior to the transfusion.

Target Value: N/A

Selections: (none)

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13290 Name: Follow-up Diagnostic Imaging Performed

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13295 Name: Follow-up End Organ Damage

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13300 Name: Follow-up Bleeding Event Readmission

Coding Instructions: Indicate if a readmission was associated with a bleeding related diagnosis.

Note(s):

This data element "Follow-up Bleeding Event Readmission" is not relevant for patients who have an event during the index episode of care. Code "No" if this bleeding event occurred during the index episode of care before the patient was discharged.

Target Value: N/A

Selections: *Selection Text* *Definition*

No

'No' in this case implies either, the event occurred prior to discharge and thus this data element is not relevant or a readmission did occur and it was not bleeding related.

Yes

'Yes' implies this patient experienced a bleeding event and subsequent hospitalization that was related to bleeding.

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13305 **Name:** Follow-up Major Surgery within Past 30 days

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13310 **Name:** Follow-up Percutaneous Coronary Intervention within Past 30 days

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13315 **Name:** Follow-up Procedure Related Bleeding Event

Coding Instructions: 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: N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	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.
	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.
	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.
	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.
	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.

Supporting Definitions: Procedure Related Bleeding Event:

It is optimal to have the implanting physician or consulting neurologist/neurosurgeon complete this data element.

Source: Adapted from Olsson S (Ed). National Pharmacovigilance Systems. World Health Organization (WHO) Collaborating Centre for International Drug Monitoring, Uppsala, Sweden. 2nd ed 1999, ISBN 91-630-7678-0. Retrieved from <http://apps.who.int/medicinedocs/en/d/Jh2934e/15.html>



L. Follow-up

Seq. #: 13320 **Name:** Follow-up Device Related Bleeding Event**Coding Instructions:** 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:** N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	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.
	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.
	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.
	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.
	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.

Supporting Definitions: Device Related Bleeding Event:

It is optimal to have the implanting physician or consulting neurologist/neurosurgeon complete this data element.

Source: Adapted from Olsson S (Ed). National Pharmacovigilance Systems. World Health Organization (WHO) Collaborating Centre for International Drug Monitoring, Uppsala, Sweden. 2nd ed 1999, ISBN 91-630-7678-0. Retrieved from <http://apps.who.int/medicinedocs/en/d/Jh2934e/15.html>

Seq. #: 13325 **Name:** Follow-up Adjudication Medication Code**Coding Instructions:** Indicate the NCDR assigned identification number associated with the medications the patient was taking at the time of the event.**Target Value:** N/A**Selections:** (none)**Supporting Definitions:** (none)

**L. Follow-up****Seq. #: 13330 Name:** Follow-up Current Medications at Time of Event

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

Target Value: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

Seq. #: 13335 Name: Follow-up Adjudication Status

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

Target Value: The value on the follow-up event

Selections: *Selection Text* *Definition*

Alive

Deceased

Supporting Definitions: (none)

Seq. #: 13340 Name: Follow-up Adjudication Date of Death

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

Target Value: N/A

Selections: (none)

Supporting Definitions: (none)

Seq. #: 13345 Name: Follow-up Death Cause (End-Organ Hypoperfusion/Systemic Thromboembolization/Intervention)

Coding Instructions: 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: N/A

Selections: *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)

**L. Follow-up****Seq. #: 13350 Name:** Follow-up Focal End-Organ Hypoperfusion Present

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

Target Value: N/A

Selections:

<i>Selection Text</i>	<i>Definition</i>
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No

Yes

Supporting Definitions: (none)

Seq. #: 13355 Name: Follow-up Systemic Thromboembolization Imaging Evidence

Coding Instructions: Indicate if imaging evidence indicated systemic thromboembolization at follow-up.

Target Value: N/A

Selections:

<i>Selection Text</i>	<i>Definition</i>
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No

Yes

Supporting Definitions: (none)

Seq. #: 13360 Name: Follow-up Imaging Method

Coding Instructions: Indicate the imaging method to identify systemic thromboembolism at follow-up.

Target Value: N/A

Selections:

<i>Selection Text</i>	<i>Definition</i>
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Angiography
Indicate if the systemic thromboembolism imaging method is angiography.

CT scan
Indicate if the systemic thromboembolism imaging method is a computed tomography (CT) scan.

MRI
Indicate if the systemic thromboembolism imaging method is magnetic resonance imaging (MRI).

Ultrasound
Indicate if the systemic thromboembolism imaging method is ultrasound.

Other
Indicate if the imaging method is not angiography, CT, MRI, or ultrasound.

Supporting Definitions: (none)



L. Follow-up

Seq. #: 13365 **Name:** Follow-up Therapeutic Intervention Performed**Coding Instructions:** Indicate if a therapeutic intervention was performed at follow-up. Indicate if any pharmacological, catheter, surgical, or other therapeutic intervention was performed to treat the systemic thromboembolism.**Target Value:** N/A**Selections:** *Selection Text* *Definition*

No

Yes

Supporting Definitions: (none)**Seq. #:** 13370 **Name:** Follow-up Intervention Type**Coding Instructions:** Indicate the intervention type.**Target Value:** N/A**Selections:** *Selection Text* *Definition*

Catheter

Indicate if the systemic thromboembolism intervention type is catheter based.

Pharmacological

Indicate if the systemic thromboembolism intervention type is pharmacological.

Surgical

Indicate if the systemic thromboembolism intervention type is surgical.

Other

Indicate if the systemic thromboembolism intervention type is not catheter based, pharmacological, or surgical.

Supporting Definitions: (none)



Z. Administration

Seq. #: 1000 Name: Participant ID**Coding Instructions:** Indicate the participant ID of the submitting facility.**Target Value:** N/A**Selections:** (none)**Supporting Definitions:** **Participant ID:**

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

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

Source: NCDR

Seq. #: 1010 Name: Participant Name**Coding Instructions:** 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**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 1020 Name:** Time Frame of Data Submission**Coding Instructions:** Indicate the time frame of data included in the data submission. Format: YYYYQQ. e.g.,2016Q1**Target Value:** N/A**Selections:** (none)**Supporting Definitions:** (none)**Seq. #: 1040 Name:** Transmission Number**Coding Instructions:** 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**Selections:** (none)**Supporting Definitions:** (none)



Z. Administration

Seq. #: 1050 Name: Vendor Identifier

Coding Instructions: 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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 1060 Name: Vendor Software Version

Coding Instructions: 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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 1070 Name: Registry Identifier

Coding Instructions: 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

Selections: (none)

Supporting Definitions: (none)

Seq. #: 1080 Name: Registry Version

Coding Instructions: Registry version describes the version number of the Data Specifications/Dictionary, to which each record conforms. It identifies which fields should have data, and what are the valid data for each field. It is the version implemented in the software at the time the data is collected and the records are created. This is entered into the schema automatically by software.

Target Value: N/A

Selections: (none)

Supporting Definitions: (none)



Z. Administration

Seq. #: 1085 Name: Submission Type

Coding Instructions: 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 (Seq Num 10000) contained in the selected timeframe, regardless of the procedure or discharge date.

For example, if a patient has a procedure on 3/30/2016, is discharged on 3/31/2016, and has a follow-up assessment on 5/6/2016, the patient's episode of care data will be transmitted in the 2016Q1 Base Registry Record file, but the Follow-up data will be transmitted in the 2016Q2 Follow-Up File.

Target Value: N/A

Selections:	<i>Selection Text</i>	<i>Definition</i>
	Episode of Care Records Only	Contains all patient and episode of care records with eligible procedures with a Discharge Date (Seq Num 9000) in the selected time-frame. An Episode of Care is defined as a patient's admission/arrival to the facility performing the procedure(s), including any symptoms or medical history prior to arrival, ending at discharge or death.
	Follow-up Records Only	Contains all patient records with at least one Follow-up Assessment performed (Seq Num 12000) in the selected time-frame.

Supporting Definitions: (none)