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THE CANADIAN CARDIOVASCULAR SOCIETY DATA DICTIONARY

A CCS Consensus Document

HEART FAILURE

DATA ELEMENTS AND DEFINITIONS

FINAL VERSION v1.1

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Background

The Canadian Cardiovascular Society Data Dictionary is comprised of multiple "chapter" data elements and definitions that reflect national input and consensus on definitions within several spheres of cardiovascular disease, treatment and subspecialty expertise.

THIS CHAPTER'S DATA ELEMENTS AND DEFINITIONS ARE SPECIFIC TO **HEART FAILURE** AND SHOULD BE CONSIDERED AS A SUPPLEMENT TO THE CORE ELEMENTS CHAPTER.

This Dictionary also contains the supporting data elements and definitions for the Canadian Cardiovascular Society Quality Indicators E-Catalogues for Heart Failure. The data elements in this dictionary have been identified into classification levels as follows:

> **ESSENTIAL**: Are deemed as a minimum recommended data element to be used as a standard to enable reporting of key quality indicators and to allow cross-comparison with other centres using these common data elements.
>
> **SPECIALIZED**: Are deemed as an expanded set of recommended data element to be used for more in-depth data collection and analysis.

Visit www.ccs.ca/ for the latest version of the CCS Quality Indicators E-Catalogues for HF and other areas.

Definitions

The following are the definitions of terminology and key outcome indicators used throughout this data dictionary, as well as terminology and key outcome indicators used by Heart Failure Quality Indicators E-Catalogue.

Term	Definition
TERMINOLOGY	
Heart Failure (HF)	Clinical syndrome characterized by abnormal cardiac systolic and/or diastolic function and resulting symptoms of low cardiac output of venous congestion.or congestion due to abnormal myocardial function.
Acute Heart Failure	Heart failure with new or worsening signs and symptoms which develop over a period of less than 30 days.
Chronic Heart Failure	Same as 'Congestive Heart Failure (CHF)' Same as stable chronic heart failure
Newly Diagnosed HF	Heart failure diagnosed for the first time. Date of Newly Diagnosed HF (YYYYMMDD)
Electrocardiographic documentation (ECG)	12-lead ECG, rhythm strip, Holter monitor, intracardiac electrograms, event recorder, or electrical cardiac activity measured by any implanted device that does not have intracardiac electrode.
Rheumatic mitral valve disease	As rheumatic mitral regurgitation cannot be reliably diagnosed without a pathological specimen, "rheumatic mitral valve disease" is defined as mitral stenosis (usually an echocardiographic diagnosis) that is moderate or greater in severity (valve area ≤1.5 cm^2 [Source: BSE Echocardiography: Guidelines for Valve Quantification]).
Qualifying HF	Episode of HF that resulted in first entry into the database, regardless of whether or not it is newly diagnosed. Date of Qualifying HF (YYYYMMDD)
HF Management	Method of heart failure treatment which includes ongoing follow up, provision of patient and family education, provision of self-care skill teaching,
Documented History	The patient has been told by a physician that they clearly have this diagnosis or there is a medical record of this diagnosis/event.

KEY OUTCOME INDICATORS	
IV Therapy	Any therapy provided via the intravenous route with the intention to effect control improvement of heart failure such as Sodium (Na), Potassium (K), BUN and Creatinine.
Stroke	Stroke is an acute onset of a focal neurologic deficit of presumed vascular origin lasting for ≥24 hours or resulting in death. Stroke [is] [can be] categorized as ischemic or hemorrhagic or cause unknown (based on computed tomographic or magnetic resonance scanning or autopsy) [but in this instance all strokes are included]. Fatal stroke is defined as death from any cause within 30 days of stroke. [Modified from Source: Am Heart J 2009;157:810.e1] Stroke must be confirmed by imaging of the brain (computed tomographic or magnetic resonance scanning) or by autopsy. Date of Stroke (YYYYMMDD): date of onset of symptoms of stroke CHA_2DS_2VASc score at time of stroke = CHA_2DS_2-VASc Score 1. Score = 0 2. Score = 1 3. Score = 2 4. Score = 3 5. Score = 4 or greater 6. Score Unknown/Uncertain Antithrombotic therapy at time of stroke = Antithrombotic Therapy 1. No antithrombotic therapy 2. Anticoagulation only i. Warfarin or other vitamin K antagonist ii. Dabigatran iii. Rivaroxaban iv. Apixaban 3. Antiplatelet only 4. Anticoagulation and antiplatelet i. Warfarin or other vitamin K antagonist ii. Dabigatran iii. Rivaroxaban iv. Apixaban 5. Unknown/Uncertain

Contraindication to Anticoagulation	List of examples from the ROCKET AF Study:
	
	• Active internal bleeding
	• History of, or condition associated with, increased bleeding risk, including:
	  o Major surgical procedure or trauma within 30 days before randomization
	  o Clinically significant gastrointestinal bleeding within 6 months before randomization
	  o History of intracranial, intraocular, spinal, or atraumatic intra-articular bleeding
	  o Chronic hemorrhagic disorder
	  o Known intracranial neoplasm, arteriovenous malformation, or aneurysm
	  o Planned invasive procedure with potential for uncontrolled bleeding, including major surgery
	[Source: Am Heart J 2010;159:340-7.e1]
	Date when Contraindication was First Noted (YYYYMMDD)

Systemic Embolus	Systemic embolism is an acute vascular occlusion of the extremities or any organ (kidneys, mesenteric arteries, spleen, retina or grafts) and must be documented by angiography, surgery, scintigraphy, or autopsy. [Modified from Source: Am Heart J 2009;157:810.e1]
	
	Date of Systemic Embolus (YYYYMMDD): date of the onset of symptoms of systemic embolus
	
	CHA_2DS_2VASc Score at time of Systemic Embolus = CHA_2DS_2-VASc Score
	1. Score = 0
	2. Score = 1
	3. Score = 2
	4. Score = 3
	5. Score = 4 or greater
	6. Score Unknown/Uncertain
	Antithrombotic Therapy at Time of Systemic Embolus = Antithrombotic Therapy
	1. No antithrombotic therapy
	2. Anticoagulation only
	  i. Warfarin or other vitamin K antagonist
	  ii. Dabigatran
	  iii. Rivaroxaban
	  iv. Apixaban
	3. Antiplatelet only
	4. Anticoagulation and antiplatelet
	  i. Warfarin or other vitamin K antagonist
	  ii. Dabigatran
	  iii. Rivaroxaban
	  iv. Apixaban
	5. Unknown/Uncertain

TIA	Same as stroke but symptoms resolve within <24h and no imaging evidence of cerebral infarct or hemorrhage. Date of TIA (YYYYMMDD): date of onset of symptoms of TIA CHA_2DS_2VASc at Time of TIA = CHA_2DS_2-VASc Score 1. Score = 0 2. Score = 1 3. Score = 2 4. Score = 3 5. Score = 4 or greater 6. Score Unknown/Uncertain Antithrombotic Therapy at Time of TIA = Antithrombotic Therapy 1. No antithrombotic therapy 2. Anticoagulation only i. Warfarin or other vitamin K antagonist ii. Dabigatran iii. Rivaroxaban iv. Apixaban 3. Antiplatelet only 4. Anticoagulation and antiplatelet i. Warfarin or other vitamin K antagonist ii. Dabigatran iii. Rivaroxaban iv. Apixaban 5. Unknown/Uncertain

Major Hemorrhage	Major hemorrhage is defined by ≥1 of the following criteria: • Overt bleeding associated with reduction in haemoglobin level of at least 2.0 g/L; • Overt bleeding leading to transfusion of at least 2 U of blood or packed cells; or • Symptomatic bleeding in a critical area or organ such as intraocular, intracranial, intraspinal or intramuscular with compartment syndrome, retroperitoneal bleeding, intra-articular bleeding, or pericardial bleeding. [Modified from Source: Am Heart J 2009;157:810.e2] In the AF Quality Indicators e-Catalogue the Cross-sectional Analysis is based on hospitalization for major hemorrhage as defined above. Date of Major Bleeding (YYYYMMDD) = date of onset of symptoms of bleeding or detection of overt bleeding when asymptomatic CHA_2DS_2VASc at Time of TIA = CHA_2DS_2-VASc Score 1. Score = 0 2. Score = 1 3. Score = 2 4. Score = 3 5. Score = 4 or greater 6. Score Unknown/Uncertain Antithrombotic Therapy at Time of Major Hemorrhage = Antithrombotic Therapy 1. No antithrombotic therapy 2. Anticoagulation only i. Warfarin or other vitamin K antagonist ii. Dabigatran iii. Rivaroxaban iv. Apixaban 3. Antiplatelet only 4. Anticoagulation and antiplatelet i. Warfarin or other vitamin K antagonist ii. Dabigatran iii. Rivaroxaban iv. Apixaban 5. Unknown/Uncertain
CV Hospitalization	Primary reason for hospitalization was cardiovascular categorized by reason(s) for hospitalization (Check all that apply): 1. Rhythm management of AF/AFL 2. Bleeding 3. Acute HF 4. MI 5. Other Acute Coronary Syndrome 6. Rhythm management for other SVT 7. Bradycardia Management 8. Rhythm management for VT/VF/SCD 9. Other, specify Date of CV Hospitalization (YYYYMMDD)

Non-CV Hospitalization Only	Primary reason for hospitalization was non-cardiovascular and no secondary CV problem during hospitalization Date of Non-CV Hospitalization (YYYYMMDD)
Non-CV Hospitalization with Secondary CV Problem	Primary reason for hospitalization was non-cardiovascular but a secondary cardiovascular problem developed during hospitalization categorized by CV problem(s) (Check all that apply): 1. Rhythm management for AF/AFL 2. Bleeding 3. Acute HF 4. MI 5. Other Acute Coronary Syndrome 6. Rhythm management for other SVT 7. Bradycardia Management 8. Rhythm management for VT/AF/SCD 9. Other, specify Date of Non-CV Hospitalization with Secondary CV Problem (YYYYMMDD)
CV Emergency Department Visit (whether or not followed by hospital admission)	Primary reason for Emergency Department Visit was cardiovascular categorized by reason(s) for ER Visit (Check all that apply): 1. Rhythm management of AF/AFL 2. Bleeding 3. Acute HF 4. MI 5. Other Acute Coronary Syndrome 6. Rhythm management for other SVT 7. Bradycardia management 8. Rhythm management for VT/VF/SCD 9. Other, specify Date of CV Emergency Department Visit (YYYYMMDD)
Lost to Follow-up	Patient is permanently lost to any further follow-up due to moving or any other administrative or other reason they are no longer included in the database. Date of Last Contact (YYYYMMDD)

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PART 1 – DEMOGRAPHICS

Note: All Demographic data elements and definitions are defined in the Core Elements Data Dictionary Chapter.

PART 2 – HISTORY & RISK FACTORS

- INDICATE DATE DATA COLLECTED (YYYYMMDD)

NOTE: The following data elements and definitions are specific to this Chapter and should be considered as a supplement to History & Risk Factors section defined in the Core Elements Data Dictionary Chapter.

A. MEDICAL HISTORY AND COMORBIDITIES

NOTE: Includes any occurrence between birth and this episode of care, unless otherwise indicated.

FIELD NAME	CLASSIFICATION	DEFINITION
History of Dementia	SPECIALIZED	Patient has a documented history of dementia, Alzheimer's disease, chronic confusion (at least one month in duration), or senility. 1. Yes 2. No 3. Unknown
History of Depression	SPECIALIZED	Patient has a documented history of treated depression, or is currently taking antidepressant medication. 1. Yes 2. No 3. Unknown
History of Sleep Apnea	SPECIALIZED	Patient has a documented history of sleep apnea. 1. Yes If yes, specify: a. Central b. Obstructive c. Mixed d. Unknown If yes, are they on CPAP/BiPAP a. Yes b. No 2. No 3. Unknown
History of Liver Disease	SPECIALIZED	Patient has a documented history of chronic hepatitis or cirrhosis. 1. Yes 2. No 3. Unknown
History of Anemia	SPECIALIZED	Patient has a documented history of anemia. 1. Yes 2. No 3. Unknown
History of Asthma	SPECIALIZED	Patient has a documented history of asthma/Reactive Airways disease. 1. Yes 2. No 3. Unknown
History of Thyroid Disorder	SPECIALIZED	Patient has a documented history of thyroid disorder. 1. Yes If yes, specify a. Hypothyroid b. Hyperthyroid c. Unknown 2. No 3. Unknown

History of exposure to Cardiotoxic Chemotherapy	SPECIALIZED	Patient has a documented history of exposure to cardiotoxic chemotherapy. 1. Yes, if yes, select Class: a. Anthracyclines: Adriamycin, Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, etc. b. Mitoxantrone c. Cyclophosphamide d. Mitomycin C e. Trastuzamab (Herceptin) f. Tyrosine kinase inhibitor g. Other, specify h. Unknown 2. No 3. Unknown
History of Thoracic Radiation	SPECIALIZED	Patient has a documented history of thoracic radiation therapy. 1. Yes If Yes, then specify: a. Radiation therapy was received i. Before 20 years of age ii. After 20 years of age b. Location i. Mediastinal ii. Chest iii. Breast iv. Other, specify c. Total radiation dose (mCu) 2. No 3. Unknown
History of Alcohol Consumption/ Dependency	SPECIALIZED	Patient has a documented history of alcohol consumption/dependency. 1. Yes If yes, categorize alcohol consumption history a. Prior b. Current i. < 14 units* per week ii. ≥14 units* per week 2. No 3. Unknown *Unit = 1 oz hard = 1 beer = 1 glass wine
History of Substance Abuse	SPECIALIZED	Patient has a documented history of substance abuse. 1. Yes If Yes, specify a. Cocaine/crack b. Amphetamine c. Opiates/heroin d. Other, specify 2. No 3. Unknown
HIV Status	SPECIALIZED	Patient has a documented history of HIV seropositivity. 1. Yes 2. No 3. Unknown

History of Malignancy	SPECIALIZED	Patient has a documented history of cancer, excluding non-melanoma basal cell skin cancers. 1. Yes If yes, specify cancer site. Select all that apply and indicate date of first diagnosis, if available. a. Breast b. Cervical c. Lung d. Ovarian e. Prostate f. Colon g. Liver h. Bone i. Amyloidosis j. Lymphoma/Leukemia k. Other, specify If yes, specify cancer therapies. Select all that apply. a. Chemotherapy b. Radiation Therapy c. Surgery d. Transplantation e. Other, specify 2. No 3. Unknown
History of Primary Muscular Disease	SPECIALIZED	Patient has a documented history of primary muscular disease. 1. Yes If yes, specify: a. Muscular Dystrophy b. Myasthenia Gravis c. Dermatomyositis d. Other, specify 2. No 3. Unknown
History of Arthritis or Collagen Vascular Disease	SPECIALIZED	Patient has a documented history of arthritis and/or collagen vascular disease. 1. Yes If yes, specify all that apply: a. Lupus Erythematosis b. Scleroderma c. Osteoarthritis d. Gout e. Rheumatoid Arthritis f. Seronegative arthropathy g. Other, Specify 2. No 3. Unknown
History of Influenza Immunization	SPECIALIZED	Patient has a documented history of influenza immunization. 1. Yes If yes, Month and Year of most recent immunization should be noted. 2. No 3. Unknown
History of Pneumococcal Immunization	SPECIALIZED	Patient has a documented history of pneumococcal immunization. 1. Yes If yes, Month and Year of most recent immunization should be noted. 2. No 3. Unknown

B. CARDIOVASCULAR HISTORY

FIELD NAME	CLASSIFICATION	DEFINITION
History of Arrhythmogenic Disease, Syndrome, or Substrate	SPECIALIZED	Patient has a documented history of any of the following arrhythmogenic conditions. Select all that apply. 1. None 2. Ventricular Tachycardia/fibrillation 3. Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC) 4. Brugada syndrome 5. Wolf-Parkinson-White syndrome 6. Long QT syndrome 7. Hypertrophic cardiomyopathy (HCM) 8. Unknown
Family History of Sudden Cardiac Death	SPECIALIZED	Patient has a family history (parent, sibling or children) of sudden cardiac death, defined as natural death due to cardiac causes, within one hour of any new or changing cardiovascular symptom. The time and mode of death are unexpected even though pre-existing heart disease may have been known to be present. Sudden death without obvious cause is considered sudden cardiac death. Unwitnessed death without any evidence of new CV symptoms are considered SCD. 1. Yes 2. No 3. Unknown Age at time of sudden cardiac death may be specified.
History of Valvular Disease	SPECIALIZED	Patient has a documented history of primary valvular disease or history of valvular disease of other etiology. Select all that apply. 1. Yes If yes, may include: a. History of acute rheumatic fever/carditis (usually determined through correspondence with major and minor criteria) i. Yes ii. No iii. Unknown b. History of valve disease with echocardiographic findings suggestive of or diagnostic of rheumatic valvular disease. i. Yes ii. No iii. Unknown c. Congenital (present at birth or occurring association with congenital heart disease syndrome) d. Degenerative (acquired during adulthood, usually after age 50) e. Infectious (acquired as a result of infectious endocarditis) f. Toxic (for example, as a result of exposure to fenfluramine phentermine dexfenfluramine) g. Myxomatous h. Other (specify) i. Unknown 2. No 3. Unknown Valve affected and Year of the first episode may be helpful.

History of Congenital Cardiac Lesions	ESSENTIAL	Patient has a documented history of congenital cardiac lesions. Also indicate if surgery was performed on lesion(s). Select all that apply. 1. Yes If yes, specify each type and if surgery was performed: a. Cyanotic i. Congenitally Corrected Transposition ii. Ebstein's Anomaly iii. Hypoplastic Left Heart iv. Pulmonary Atresia v. Single Ventricle vi. Tetralogy of Fallot vii. Total Anomalous Pulmonary Venous Return viii. Transposition of Great Vessels ix. Tricuspid Atresia x. Truncus Arteriosus xi. Other, specify b. Non-cyanotic i. Aortic Stenosis ii. Atrial Septic Defect (ASD) iii. Atrioventricular Canal (endocardial cushion defect) iv. Coarctaction of the Aorta v. Patent Ductus Arteriosus (PDA) vi. Pulmonic Stenosis vii. Ventricular Septal Defect (VSD) viii. Other, specify 2. No 3. Unknown

C. HEART FAILURE ETIOLOGY

FIELD NAME	CLASSIFICATION	DEFINITION
Etiology of Heart Failure	SPECIALIZED	Etiology of heart failure. Select all that apply and identify the primary and/or secondary etiology: 1. Ischemic/CAD 2. Valvular 3. Infiltrative - Amyloid 4. Infiltrative – Sarcoid 5. Iron overload 6. Myocarditis 7. Hypertrophic 8. Hypertensive 9. Idiopathic 10. Tachyarrhythmia Induced 11. Familial 12. ARVC 13. Substance Abuse 14. Alcoholic 15. Pregnancy 16. Chemotherapy 17. Other(s), specify

PART 3 – SYMPTOMS AND FUNCTIONAL ASSESSMENT

INDICATE ATE ATA COLLECTED (YYYYMMDD)

NOTE: The following data elements and definitions are specific to this Chapter and should be considered as a supplement to Symptoms section defined in the Core Elements Data Dictionary Chapter.

FIELD NAME	CLASSIFICATION	DEFINITION
Dyspnea at Rest	SPECIALIZED	Indicate if the patient describes frequent uncomfortable awareness of breathing while resting in a sitting position. 1. Yes 2. No Date of onset and duration may be helpful.
Dyspnea on Exertion	SPECIALIZED	Indicate if the patient describes uncomfortable awareness of breathing while exerting him/herself. 1. Yes If yes, Indicate degree of activity required to elicit dyspnea symptom a. Running or other sport (specify sport) b. Walking up an incline (specify distance) c. Walking on a flat surface (specify distance) d. Stopping to rest while dressing e. Standing (specify length of time) f. Other activity (i.e. shopping or housework), specify 2. No Date of onset and duration may be helpful.
Orthopnea	SPECIALIZED	Indicate if the patient describes at least one of the following: 1. Uncomfortable awareness of breathing while in a supine position 2. Positioning with 3 or more pillows or in a chair or recliner to maintain comfortable breathing during sleep 3. Recurrent supine cough without other known cause may be an orthopnea equivalent 4. None of the above Date of onset and duration may be helpful.
Paroxysmal Nocturnal Dyspnea	SPECIALIZED	Indicate if the patient describes awakening suddenly from sleep with uncomfortable awareness of breathing, or with general distress relieved by the upright position. Any report of this symptom lasting greater than 5 minutes is considered positive. 1. Yes 2. No Date of onset and duration may be helpful.
Swelling	SPECIALIZED	Indicate if the patient reports swelling or puffiness in extremities, bloating in abdomen, and/or other areas. 1. Yes 2. No Date of onset and duration may be helpful.
Fatigue	SPECIALIZED	Indicate if the patient describes unusual tiredness and inability to perform usual activities. 1. Yes 2. No Date of onset and duration may be helpful.

Syncope	SPECIALIZED	Indicate if the patient describes sudden loss of consciousness not related to anesthesia, with spontaneous recovery as reported by patient or observer. Patients losing consciousness prior to an implantable cardiac defibrillator (ICD) discharge will be considered to have syncope. 1. Yes 2. No Date of most recent episode may be helpful.
FUNCTIONAL ASSESSMENT AND STAGING OF DISEASE		
NYHA Functional Capacity^	SPECIALIZED	^Refer to Core Elements chapter for definition.
ACC/AHA Heart Failure Stage	SPECIALIZED	Indicate the ACC/AHA Heart Failure Stage: A. Patient at high risk for developing heart failure but who has no structural disorder of the heart. B. Patient with a structural disorder of the heart but who has never developed symptoms of heart failure. C. Patient with past or current symptoms of heart failure associated with structural heart disease. D. Patient with end-stage disease who requires SPECIALIZED treatment strategies such as mechanical circulatory support, continuous inotropic infusions, cardiac transplantation or hospice care.

PART 4 – PHYSICAL EXAM AND VITAL SIGNS FOR THIS EPISODE OF CARE

- INDICATE DATE DATA COLLECTED (YYYYMMDD)

FIELD NAME	CLASSIFICATION	DEFINITION
Heart Rate*	SPECIALIZED	Indicate the patients first recorded Heart Rate (in beats per minute) reading. Note: if zero, take the first obtainable reading. **This data element and definition originates from the Acute Coronary Syndrome (ACS) Data Dictionary and is duplicated here for consistency.*
Systolic Blood Pressure*	ESSENTIAL	Indicate the patients first recorded Systolic Blood Pressure (mm Hg) reading. Note: If zero, take the first obtainable reading. Note which arm is used **This data element and definition originates from the Acute Coronary Syndrome (ACS) Data Dictionary and is duplicated here for consistency.*
Diastolic Blood Pressure*	SPECIALIZED	Indicate the patients first recorded Diastolic Blood Pressure (mm Hg) reading. Note: If zero, take the first obtainable reading. Note which arm is used **This data element and definition originates from the Acute Coronary Syndrome (ACS) Data Dictionary and is duplicated here for consistency.*
Jugular Venous Pressure	SPECIALIZED	Record the height above sternal angle (cm).
Hepatojugular Reflux	SPECIALIZED	Indicate the presence or absence of Hepatojugular Reflux. 1. Positive 2. Negative
Respiratory Rate	SPECIALIZED	Indicate the patient's first recorded Respiratory Rate in respiratory cycles per minute.
Third Heart Sound	SPECIALIZED	Indicate the presence or absence of Third Heart Sound. 1. Present 2. Absent
Fourth Heart Sound	SPECIALIZED	Indicate the presence or absence of Fourth Heart Sound. 1. Present 2. Absent
Lung Examination	SPECIALIZED	Indicate the findings in the Lung Examination. Select all that apply. 1. Normal 2. Rales 3. Wheezing 4. Decreased breath sounds, or dullness to percussion
Peripheral Edema	SPECIALIZED	Indicate the presence or absence of Peripheral Edema. 1. Present 2. Absent
Ascites	SPECIALIZED	Indicate the presence or absence of Ascites. 1. Present 2. Absent
Hepatomegaly	SPECIALIZED	Indicate the presence or absence of Hepatomegaly. 1. Present 2. Absent

PART 5 – MEDICATIONS

NOTE: The following data elements and definitions are specific to this Chapter and should be considered as a supplement to the Medications section defined in the Core Elements Data Dictionary Chapter.

A. PRE-ENCOUNTER

- INDICATE DATE DATA COLLECTED (YYYYMMDD)

FIELD NAME	CLASSIFICATION	DEFINITION
Aspirin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Clopidogrel^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Prasugrel^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Ticagrelor^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Digoxin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Anti-arrhythmics^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Carvedilol	SPECIALIZED	Indicate if the patient has been taking Carvedilol routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Bisoprolol	SPECIALIZED	Indicate if the patient has been taking Bisoprolol routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Metoprolol	SPECIALIZED	Indicate if the patient has been taking Metroprolol routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Other Beta-blocker	SPECIALIZED	Indicate if the patient has been taking any other Beta-blocker(s) routinely prior to this encounter. 1. Yes, specify drug(s) 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
ACE Inhibitors	ESSENTIAL	Indicate if the patient has been taking ACE Inhibitors routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Angiotensin II Receptor Blockers	ESSENTIAL	Indicate if the patient has been taking Angiotensin II Receptor Blockers routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Warfarin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Dabigatran	SPECIALIZED	Indicate if the patient has been taking Dabigatran routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Rivaroxaban	SPECIALIZED	Indicate if the patient has been taking Rivaroxaban routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Apixaban	SPECIALIZED	Indicate if the patient has been taking Apixaban routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Loop Diuretics	SPECIALIZED	Indicate if the patient has been taking Loop Diuretics routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Metolazone	SPECIALIZED	Indicate if the patient has been taking Metolazone routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Non-Metolazone Thiazide Diuretics	SPECIALIZED	Indicate if the patient has been taking Non-Metolazone Thiazide Diuretics routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Mineralocorticoid Receptor Antagonists	SPECIALIZED	Indicate if the patient has been taking Mineralocorticoid Receptor Antagonists (Spironolactone or Eplerenone) routinely prior to this encounter. 1. Yes, specify a. Spironolactone b. Eplerenone c. Other, specify 2. No 3. Contraindicated 4. Blinded 5. Not tolerated
Other Diuretic Agents	SPECIALIZED	Indicate if the patient has been taking any other Diuretic Agents routinely prior to this encounter. 1. Yes, specify drug(s) 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Direct Renin Inhibitors^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Statins^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Other Lipid Lowering Agents^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Insulin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Oral Antihyperglycemics^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Non-Insulin Injectables^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Dihydropyridine Calcium Channel Blockers^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Non-Dihydropyridine Calcium Channel Blockers^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Ivabradine	SPECIALIZED	Indicate if the patient has been taking Ivabradine routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Supplemental Potassium or Magnesium	SPECIALIZED	Indicate if the patient has been taking any supplemental Potassium or Magnesium routinely prior to this encounter. 1. Yes, specify a. Potassium b. Magnesium 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Intravenous (IV) Inotropic Agent	SPECIALIZED	Indicate if the patient has had intravenous Positive Inotrope administered prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Intravenous (IV) Nesiritide	SPECIALIZED	Indicate if the patient has had intravenous Nesiritide administered prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Intravenous (IV) Vasodilator Agents	SPECIALIZED	Indicate if the patient has had intravenous Vasodilator administered prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Oral or Intravenous (IV) Vasopressin Antagonist	SPECIALIZED	Indicate if the patient has had oral or intravenous Vasopressin Antagonist administered prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Morphine Sulfate	SPECIALIZED	Indicate if patient has been taking Morphine Sulfate routinely (orally or intravenously) prior to this encounter. May be administered for pain or pulmonary edema. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Hydromorphone	SPECIALIZED	Indicate if patient has been taking Hydromorphone routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Fentanyl	SPECIALIZED	Indicate if patient has been taking Fentanyl routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Nitrate Therapy	SPECIALIZED	Indicate if patient has been using Nitrate Therapy routinely prior to this encounter. Nitroglycerin may be in the form of topical, oral, or sublingual. Nitroglycerin spray or pills used on an as-needed basis only should be noted in this category as sublingual. 1. Yes a. Topical b. Oral c. Sublingual 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Hydralazine	SPECIALIZED	Indicate if the patient has been taking Hydralazine routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Oxygen Therapy	SPECIALIZED	Indicate if the patient has been using Oxygen Therapy for chronic use rountinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Female Hormone Replacement Therapy	SPECIALIZED	Indicate if the patient has been using Female Hormone Replacement Therapy routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Male Hormone Replacement Therapy	SPECIALIZED	Indicate if the patient has been using Male Hormone Replacement Therapy routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Inhaled Bronchodilator	SPECIALIZED	Indicate if the patient has been using an Inhaled Bronchodilator routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Inhaled Corticosteroid	SPECIALIZED	Indicate if the patient has been using an Inhaled Corticosteroid routinely prior to this encounter. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Non-Steroidal Anti-Inflammatory Drug (NSAID)	SPECIALIZED	Indicate if the patient has been taking any Non-Steroidal Anti-Inflammatory Drugs routinely prior to this encounter. As NSAIDs are generally contraindicated in patients with heart failure, specific indications for their use should be noted. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Vitamins, Food Supplements, and Other Non-Prescription Treatments	SPECIALIZED	Indicate if the patient is taking any vitamins, food supplements, homeopathic treatments routinely prior to this encounter. 1. Yes If yes, please specify 2. No

B. DURING HEALTHCARE ENCOUNTER

- INDICATE DATE DATA COLLECTED (YYYYMMDD)

FIELD NAME	CLASSIFICATION	DEFINITION
Aspirin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Clopidogrel^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Prasugrel^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Ticagrelor^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Digoxin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Anti-arrhythmics^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Carvedilol	SPECIALIZED	Indicate if Carvedilol was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Bisoprolol	SPECIALIZED	Indicate if Bisoprolol was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Metoprolol	SPECIALIZED	Indicate if Metroprolol was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Other Beta-blocker	SPECIALIZED	Indicate if any other Beta-blocker(s) were administered at any point in time during this episode of health care. 1. Yes, specify drug(s) 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
ACE Inhibitors	ESSENTIAL	Indicate if ACE Inhibitors were administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Angiotensin II Receptor Blockers	ESSENTIAL	Indicate if Angiotensin II Receptor Blockers were administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Warfarin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Dabigatran	SPECIALIZED	Indicate if Dabigatran was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Rivaroxaban	SPECIALIZED	Indicate if Rivaroxaban was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Apixaban	SPECIALIZED	Indicate if Apixaban was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Loop Diuretics	SPECIALIZED	Indicate if Loop Diuretics were administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Metolazone	SPECIALIZED	Indicate if Metolazone was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Non-Metolazone Thiazide Diuretics	SPECIALIZED	Indicate if Non-Metolazone Thiazide Diuretics were administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Mineralocorticoid Receptor Antagonists	SPECIALIZED	Indicate if Mineralocorticoid Receptor Antagonists (Spironolactone or Eplerenone) were administered at any point in time during this episode of health care. 1. Yes, specify a. Spironolactone b. Eplerenone c. Other, specify 2. No 3. Contraindicated 4. Blinded 5. Not tolerated
Other Diuretic Agents	SPECIALIZED	Indicate if any other Diuretic Agents were administered at any point in time during this episode of health care. 1. Yes, specify drug(s) 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Direct Renin Inhibitors^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Statins^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Other Lipid Lowering Agents^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Insulin^	SPECIALIZED	^Refer to Core Elements chapter for definition.

Oral Antihyperglycemics^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Non-Insulin Injectables^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Dihydropyridine Calcium Channel Blockers^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Non-Dihydropyridine Calcium Channel Blockers^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Ivabridine	SPECIALIZED	Indicate if Ivabridine was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Supplemental Potassium or Magnesium	SPECIALIZED	Indicate if Supplemental Potassium or Magnesium were administered at any point in time during this episode of health care. 1. Yes, specify a. Potassium b. Magnesium 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Intravenous (IV) Inotropic Agent	SPECIALIZED	Indicate if Positive Inotrope was intravenously administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Intravenous (IV) Nesiritide	SPECIALIZED	Indicate if Nesiritide was intravenously administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Intravenous (IV) Vasodilator Agents	SPECIALIZED	Indicate if Vasodilator Agents was intravenously administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Oral or Intraveneous (IV) Vasopressin Antagonist	SPECIALIZED	Indicate if Vasopressin Antagonist was orally or intravenously administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Morphine Sulfate	SPECIALIZED	Indicate if Morphine Sulfate was administered at any point in time during this episode of health care. May be administered for pain or pulmonary edema. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Hydromorphone	SPECIALIZED	Indicate if Hydromorphone was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Fentanyl	SPECIALIZED	Indicate if Fentanyl was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Nitrate Therapy	SPECIALIZED	Indicate if Nitrate Therapy was administered at any point in time during this episode of health care. Nitroglycerin may be in the form of topical, oral, or sublingual. Nitroglycerin spray or pills used on an as-needed basis only should be noted in this category as sublingual. 1. Yes a. Topical b. Oral c. Sublingual 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Hydralazine	SPECIALIZED	Indicate if Hydralazine was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Oxygen Therapy	SPECIALIZED	Indicate if Oxygen Therapy for chronic use was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Female Hormone Replacement Therapy	SPECIALIZED	Indicate if Female Hormone Replacement Therapy was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Male Hormone Replacement Therapy	SPECIALIZED	Indicate if Male Hormone Replacement Therapy was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Inhaled Bronchodilator	SPECIALIZED	Indicate if an Inhaled Bronchodilator was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Inhaled Corticosteroid	SPECIALIZED	Indicate if an Inhaled Corticosteroid was administered at any point in time during this episode of health care. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Non-Steroidal Anti-Inflammatory Drug (NSAID)	SPECIALIZED	Indicate if any Non-Steroidal Anti-Inflammatory Drugs were administered at any point in time during this episode of health care. As NSAIDs are generally contraindicated in patients with heart failure, specific indications for their use should be noted. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Vitamins, Food Supplements, and Other Non-Prescription Treatments	SPECIALIZED	Indicate if any Vitamins, Food Supplements, Homeopathic Treatments were administered at any point in time during this episode of health care. 1. Yes If yes, please specify 2. No

C. AT DISCHARGE

- INDICATE DATE DATA COLLECTED (YYYYMMDD)

FIELD NAME	CLASSIFICATION	DEFINITION
Aspirin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Clopidogrel^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Prasugrel^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Ticagrelor^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Digoxin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Anti-arrhythmics^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Carvedilol	SPECIALIZED	Indicate if Carvedilol was continued or prescribed at discharge 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Bisoprolol	SPECIALIZED	Indicate if Bisoprolol was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Metoprolol	SPECIALIZED	Indicate if Metroprolol was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Other Beta-blocker	SPECIALIZED	Indicate if any other Beta-blocker(s) were continued or prescribed at discharge. 1. Yes, specify drug(s) 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
ACE Inhibitors	ESSENTIAL	Indicate if ACE Inhibitors was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Angiotensin II Receptor Blockers	ESSENTIAL	Indicate if Angiotensin II Receptor Blockers were continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Warfarin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Dabigatran	SPECIALIZED	Indicate if Dabigatran was continued or prescribed at discharge 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Rivaroxaban	SPECIALIZED	Indicate if Rivaroxaban was continued or prescribed at discharge 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Apixaban	SPECIALIZED	Indicate if Apixaban was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Loop Diuretics	SPECIALIZED	Indicate if Loop Diuretics was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Metolazone	SPECIALIZED	Indicate if Metolazone was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Non-Metolazone Thiazide Diuretics	SPECIALIZED	Indicate if Non-Metolazone Thiazide Diuretics was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Mineralocorticoid Receptor Antagonists	SPECIALIZED	Indicate Mineralocorticoid Receptor Antagonists (Spironolactone or Eplerenone) were continued or prescribed at discharge. 1. Yes, specify a. Spironolactone b. Eplerenone c. Other, specify 2. No 3. Contraindicated 4. Blinded 5. Not tolerated
Other Diuretic Agents	SPECIALIZED	Indicate if any other Diuretic Agents were continued or prescribed at discharge 1. Yes, specify drug(s) 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Direct Renin Inhibitors^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Statins^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Other Lipid Lowering Agents^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Insulin^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Oral Antihyperglycemics^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Non-Insulin Injectables^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Dihydropyridine Calcium Channel Blockers^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Non-Dihydropyridine Calcium Channel Blockers^	SPECIALIZED	^Refer to Core Elements chapter for definition.
Ivabradine	SPECIALIZED	Indicate if Ivabradine was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Supplemental Potassium or Magnesium	SPECIALIZED	Indicate if supplemental Potassium or Magnesium was continued or prescribed at discharge. 1. Yes, specify a. Potassium b. Magnesium 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Morphine Sulfate	SPECIALIZED	Indicate if Morphine Sulfate was continued or prescribed at discharge. May be administered for pain or pulmonary edema. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Hydromorphone	SPECIALIZED	Indicate if Hydromorphone was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Fentanyl	SPECIALIZED	Indicate if Fentanyl was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Nitrate Therapy	SPECIALIZED	Indicate if Nitrate Therapy was continued or prescribed at discharge. Nitroglycerin may be in the form of topical, oral, or sublingual. Nitroglycerin used on an as-needed basis only should be noted in this category. 1. Yes a. Topical b. Oral c. Sublingual 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Hydralazine	SPECIALIZED	Indicate if Hydralazine was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Oxygen Therapy	SPECIALIZED	Indicate if Oxygen Therapy for chronic use was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Female Hormone Replacement Therapy	SPECIALIZED	Indicate if Female Hormone Replacement Therapy was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Male Hormone Replacement Therapy	SPECIALIZED	Indicate if Male Hormone Replacement Therapy was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated

Inhaled Bronchodilator	SPECIALIZED	Indicate if an Inhaled Bronchodilator was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Inhaled Corticosteroid	SPECIALIZED	Indicate if an Inhaled Corticosteroid was continued or prescribed at discharge. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Non-Steroidal Anti-Inflammatory Drug (NSAID)	SPECIALIZED	Indicate if a Non-Steroidal Anti-Inflammatory Drug was continued or prescribed at discharge. As NSAIDs are generally contraindicated in patients with heart failure, specific indications for their use should be noted. 1. Yes 2. No 3. Contraindicated 4. Blinded 5. Not Tolerated
Vitamins, Food Supplements, and Other Non-Prescription Treatments	SPECIALIZED	Indicate if any Vitamins, Food Supplements, Homeopathic Treatments were continued or prescribed at discharge. 1. Yes If yes, please specify 2. No

PART 6 – DEVICES

- INDICATE DATE DATA COLLECTED (YYYYMMDD)

A. IMPLANTABLE CARDIAC DEVICES (PACEMAKERS, DEFIBRILLATORS AND MONITORING DEVICES)

FIELD NAME	CLASSIFICATION	DEFINITION
Device implant	SPECIALIZED	Indicate if the patient was implanted with an implantable cardiac device during this episode of health care. 1. Yes If yes, indicate device type and date of device implant (YYYYMMDD): a. S-ICD (single chamber Implantable defibrillator only), Date of implant b. D-ICD (dual chamber Implantable cardioverter defibrillator), Date of implant c. CRT (Biventricular pacemaker without defibrillator), Date of implant d. CRT-D (biventricular pacemaker with defibrillator, Date of implant e. Dual chamber Pacer (Dual chamber pacemaker), Date of implant f. Single chamber pacer (Single chamber pacemaker), Date of implant 2. No
Referral By	OPTIONAL	Specialty of Referral MD for this device implant. 1. Generalist 2. Internist 3. Cardiologist 4. Other, specify
Indication	SPECIALIZED	1. Primary Prevention Prophylaxis of sudden cardiac death in patient without previous event. If multiple indications, use lower numbered reason for primary and higher numbered reason for secondary indication. 2. Secondary Prevention Prophylaxis of sudden cardiac death in patients with previously aborted sudden cardiac death due to VT or VF 3. Syncope: History of or for the prevention of syncope 4. Heart Failure 5. Other, specify

B. MECHANICAL CARDIAC ASSISTS DEVICES

FIELD NAME	CLASSIFICATION	DEFINITION
Device Implant	SPECIALIZED	Indicate if the patient was implanted with a device during this episode of health care. Select all that apply. 1. Yes If yes, indicated the device implanted and date of device implant (YYYYMMDD) [1] a. LVAD, Date implanted b. RVAD, Date implanted c. BiVAD, Date implanted d. TAH, Date implanted e. ECMO, please specify: i. V-A ECMO, Date implanted ii. V-V ECMO, Date implanted f. other, specify and Date implanted 2. No
Device Strategy	SPECIALIZED	Indicate device strategy for this implantation. 1. Bridge-to-Transplant (patient listed) 2. Bridge-to-Recovery 3. Bridge-to-Decision, specify: a. Likely to be eligible for transplant b. Moderate likelihood of being eligible for transplant c. Unlikely to be transplant eligible 4. Destination Therapy 5. Other, specify 6. Unknown
Device Brand (LVAD)	SPECIALIZED	If the patient was implanted with an LVAD, indicate the device brand. 1. Not implanted with an LVAD 2. HeartMate II 3. Heartware 4. Thoratec PVAD 5. Jarvik 2000 6. Berlin Heart, please specify: a. EXCOR b. INCOR 7. Arrow Lionheart 8. Micromed Debakey Heart 9. Biomedicus 10. Tandem Heart 11. Levitronix Centrimag 12. Abiomed Impella a. LD 2.5 b. LD 5.0 c. 8F 4.0 L percutaneous 13. Other, specify

[1] This is the standard European format for date and also follows the CIHI Discharge Abstract Database (DAD) for dates. All data elements across all chapters should consistently use the YYYYMMDD format.

Device Brand (RVAD)	SPECIALIZED	If the patient was implanted with an RVAD, Indicate the device brand: 1. Not implanted with an RVAD 2. Thoratec PVAD 3. Biomedicus 4. Levitronix Centrimag 5. Abiomed Impella, please specify: a. RD 2.5 b. RD 5.0 6. Other, specify
Device Brand (BiVAD)	SPECIALIZED	If the patient was implanted with an BiVAD, indicate the device brand: 1. Not implanted with a BIVAD 2. Thoratec, please specify: a. IVAD b. PVAD 3. Other, specify
Device Brand (TAH)	SPECIALIZED	If the patient was implanted with a TAH, indicate the device: 1. SynCardia Cardiowest 2. Other, specify
Is this VAD an investigational device?	SPECIALIZED	If the patient was implanted with a VAD, indicate if it was an investigational device. 1. Yes 2. No 3. Unknown
Is patient part of a device clinical trial?	SPECIALIZED	Indicate if this patient is part of a device clinical trial. 1. Yes 2. No 3. Unknown
INTERMACS Patient Profile	SPECIALIZED	Indicate the corresponding INTERMACS patient profile at the time of this device implant. 1. INTERMACS 1 2. INTERMACS 2 3. INTERMACS 3 4. INTERMACS 4 5. INTERMACS 5 6. INTERMACS 6 7. INTERMACS 7
First Implant	SPECIALIZED	Indicate if the patient was implanted with a device prior to this episode of health care. 1. Yes If yes, then indicate former implant(s): a. LVAD b. RVAD c. BiVAD d. TAH e. ECMO f. Other, specify 2. No 3. Unknown

Complications of Device Implant (excluding LVAD Therapy)	SPECIALIZED	Indicate if the patient suffered a complication as a result of the device implant (excluding LVAD therapy) during or requiring hospitalization. Indicate all that apply. 1. Pneumothorax 2. Hemothorax 3. Infection 4. Death 5. Stroke 6. Pericardial Tamponade 7. Myocardial Infarction 8. Cardiac Arrest 9. Respiratory Failure 10. Cardiogenic Shock 11. Ventricular Arrhythmia (Requiring treatment) 12. Coronary Sinus Dissection 13. Atrial Pacer Lead Dislodgement 14. RV Pacer Lead Dislodgement 15. Defibrillator Lead Dislodgement (ventricle) 16. Coronary Sinus Lead Dislodgement 17. Diaphragmatic Pacing 18. Other, specify
Complications of LVAD Therapy	SPECIALIZED	Indicate if the patient suffered a complication as a result of LVAD therapy during or requiring hospitalization. Indicate all that apply. 1. Death 2. Tamponade 3. Low output syndrome 4. RV failure 5. MOSF 6. Pneumonia 7. Sepsis 8. UTI 9. PE 10. Other infection 11. Device thrombosis 12. Vasogenic hypotension (post pump vasoplegia) 13. Embolism 14. Stroke 15. TIA 16. Driveline infection 17. Pump dysfunction 18. Device infection 19. ARF 20. Bleeding requiring transfusion 21. Hemolysis 22. Other, specify

PART 7 – LABORATORY RESULTS

Note: The laboratory testing elements listed below are those reflecting the laboratory tests most likely to be followed longitudinally by cardiologists taking care of heart failure patients for the purpose of metabolic and cardiovascular risk mitigation via direct interventional management of the laboratory abnormalities.

These laboratory result data elements are useful adjunct to clinical evaluation, assessing the appropriate use of cardiovascular procedures (including LVAD implantation risk factors), prognosis (Seattle HF model) and for quality-performance measurement, and for meaningful use reporting.

FIELD NAME	CLASSIFICATION	DEFINITION
BNP	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Nt-proBNP	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Troponin	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units d. Date of test (YYYYMMDD) 2. Not done
Total cholesterol (mmol/L)	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
LDL cholesterol (mmol/L)	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Uric Acid (umol/L)	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Albumin (mg/L)	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done

TSH	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Creatinine (mmol/L)	ESSENTIAL	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
BUN (mmol/L)	ESSENTIAL	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done BUN is defined as blood urea nitrogen.
Sodium (mmol/L)	ESSENTIAL	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Potassium (mmol/L)	ESSENTIAL	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Hemoglobin A1c	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Hemoglobin (g/L)	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Hematocrit	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
WBC count	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done

Lymphocytes (%)	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
Platelet (µL)	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done
INR	SPECIALIZED	1. Yes Indicate the following: a. Value b. Units c. Date of test (YYYYMMDD) 2. Not done

PART 8 – DIAGNOSTIC TESTS

FIELD NAME	CLASSIFICATION	DEFINITION
(LV) Function^	ESSENTIAL	^Refer to Core Elements Chapter for definition.
Ejection Fraction Modality	ESSENTIAL	Indicate the modality used to determine the ejection fraction. When multiple measures are available, the most recent is preferred. 1. No documentation of ejection fraction 2. Magnetic resonance imaging (MRI) 3. Echocardiography 4. LV Angiogram 5. CT Angiogram 6. Other nuclear imaging technique including Radionuclide ventriculography 7. Other Indicate the Date of Ejection Fraction (YYYYMMDD)
Electrocardiography	SPECIALIZED	Indicate the results of first 12-lead electrocardiography results. When a quantitative range is given, provide the midpoint of the range. Documented findings may include: 1. Rhythm: a. Sinus rhythm b. Atrial fibrillation or flutter c. Indicate if paroxysmal or persistent? d. Paced or other rhythm 2. Heart rate (beats per minute) 3. Left bundle branch block (LBBB) 4. Right bundle branch block (RBBB) 5. Non-specific intraventricular conduction delay 6. Location of abnormal Q waves (0.03 second in width and 1 mm [0.1 mV] in depth in at least 2 contiguous leads) 7. QRS duration (in milliseconds): may be reported as the measured duration, or categorically as shorter than 120 milliseconds; 121 to 150 milliseconds; or longer than 150 milliseconds 8. Heart block, indicate degree a. None b. 1st degree c. 2nd type 1 (Wenckebach) d. 2nd type 2 e. 3rd degree Indicate the Date of Electrocardiography (YYYYMMDD)
Chest Radiography	ESSENTIAL	Indicate the results of the first Radiological examination of the chest. Documented findings from the chest X-ray pertinent to heart failure patients may include: 1. Presence of Pulmonary vascular redistribution, pulmonary congestion, or pulmonary edema 2. Presence of Cardiomegaly 3. Presence of Pleural effusion(s) Indicate the Date and Time of Chest Radiology (YYYYMMDD)

ISCHEMIA AND INFARCT EVALUATION		
Myocardial Imaging	ESSENTIAL	Indicate the following 1. Type of imaging: a. Radionuclide (nuclear) imaging i. Planar ii. SPECT iii. PET b. MRI c. Echocardiogram d. CT e. Coronary angiogram f. Unknown 2. Stress-induced Perfusion defect: a. Yes b. No c. Unknown 3. Fixed Perfusion defect: a. Yes b. No c. Unknown Indicate the Date of Imaging (YYYYMMDD)
Coronary Lesions	SPECIALIZED	Indicate the extent of coronary lesions. 1. Normal (< 20% stenosis in all epicardial vessels) 2. Obstructive (> 50% in one or more vessels) a. Yes, if yes, select one: i. Single vessel. Indicate if LM or Prox LAD involvement 1. Neither 2. If Yes, specify a. >50% LM b. >50% Prox LAD ii. Two vessel. Indicate if LM or Prox LAD involvement 1. Neither 2. If Yes, (Select <u>all</u> that apply) a. >50% LM b. >50% Prox LAD iii. Three vessel. Indicate if LM or Prox LAD involvement 1. Neither 2. Yes, (Select all that apply) a. >50% LM b. >50% Prox LAD b. No *Note: This data definition is duplicated here from the Atrial Fibrillation Data Dictionary Chapter and is consistent with the originating definition from the Coronary Angiography/Revascularization Data Dictionary Chapter.*

Right Heart Catheterization	SPECIALIZED	Indicate the results of a Right heart catheterization with or without pulmonary angiography. Documented findings may include: 1. No right heart catheterization documented 2. RA pressure (mm Hg): mean right atrial pressure from pulmonary artery catheter. Indicate number and reference range. 3. PA systolic pressure (mm Hg): systolic pulmonary pressure from pulmonary artery catheter. Indicate number and reference range. 4. PA diastolic pressure (mm Hg): diastolic pulmonary pressure from pulmonary artery catheter. Indicate number and reference range. 5. Mean pulmonary artery occlusion pressure from pulmonary artery catheter (wedge pressure, mm Hg). May be recorded with or without V-wave. Indicate number and reference range. 6. Cardiac output/index (liters per minute). Indicate number and reference range. 7. Pulmonary vascular resistance (Wood's units). Indicate number and reference range. 8. Systemic vascular resistance (dynes/second/cm2). Indicate number and reference range. Indicate the Date of Catherization (YYYYMMDD)
Heart Biopsy	SPECIALIZED	Biopsy of the endomyocardium. 1. Yes 2. No 3. Unknown Indicate the Date of Biopsy (YYYYMMDD)

Stress Testing	SPECIALIZED	Cardiovascular stress test including exercise (treadmill, bicycle) and pharmacological stress. Documented findings may include: 1. Maximal (symptom limited) or submaximal test 2. Workload achieved. May be expressed as Watts, exercise stage achieved (include exercise protocol) or metabolic equivalents (METS). 3. Reason for terminating exercise test: a. Chest pain b. Dyspnea c. Dizziness d. Leg fatigue e. Other discomfort (specify) f. Tachyarrhythmias g. Asymptomatic tachyarrhythmias 4. Evidence for ischemia on stress test (positive or negative): a. Positive: on an exercise tolerance test, the patient developed either i. Greater than or equal to 1 mm of horizontal or downsloping ST-segment depression or elevation for at least 60 to 80 milliseconds (ms) after the end of the QRS complex, in asymptomatic patients, or ii. New ST-segment depression greater than or equal to 2 mm (0.2 mV) (horizontal or downsloping) believed to represent ischemia even in the absence of ischemic discomfort. If the patient had an equivalent type of exercise test (e.g., exercise thallium or MIBI test, stress echocardiography, or dipyridamole, thallium, or adenosine radioisotope scan) that showed definite evidence of ischemia (e.g., an area of clear reversible ischemia), this should be considered a positive test. b. Negative: no evidence of ischemia (i.e., no typical angina pain and no ST depressions, no imaging evidence for ischemia) 5. 6-minute walk test. Record the distanced walked during 6-minute walk (on a flat surface), in meters. Indicate the Date of Stress Test (YYYYMMDD)
CPET	SPECIALIZED	Record the following. 1. Exercise time 2. Maximum workload achieved 3. VO2 (ml/kg/min; L/min) 4. % predicted 5. VE/VCO2 6. RER Indicate Date of CPET (YYYYMMDD)

PART 9 – COUNSELLING

- INDICATE DATE DATA COLLECTED (YYYYMMDD)

FIELD NAME	CLASSIFICATION	DEFINITION
ADVANCE DIRECTIVES/END OF LIFE MANAGEMENT/PROGNOSIS		
Do Not Resuscitate (DNR)	SPECIALIZED	Indicate if there is any explicit documentation by physician and/or patient indicating that no resuscitative efforts are to be performed in the event of circulatory or respiratory arrest. 1. Yes 2. No
Advance Care Planning	SPECIALIZED	Indicate if there is any documentation of discussion carried out with the patient and/or family (by physician or nurse) about advance directive. 1. Yes 2. No
EDUCATION ON HEART FAILURE AND SELF-MANAGEMENT SKILLS - PATIENT EDUCATION: ASSESSMENT OF LEARNING READINESS		
Education Level^	SPECIALIZED	^Refer to Core Elements Chapter for definition.
EDUCATION ON HEART FAILURE AND SELF-MANAGEMENT SKILLS - EDUCATION/COUNSELLING INTERVENTION (NOTE: SHOULD BE THE SAME FOR INPATIENT AND OUTPATIENT COUNSELLING)		
Referral to Dietician for Diet Counselling	SPECIALIZED	Indicate if there is any documentation in the medical record that the patient was referred to Dietician for weight management and/or advanced nutritional instruction. 1. Yes 2. No
Referral to Cardiac Rehabilitation Program	SPECIALIZED	Indicate if there is any documentation in the medical record that the patient was referred to cardiac rehabilitation or other structured exercise program. 1. Yes 2. No

PART 10 – CARE EPISODE

- INDICATE DATE DATA COLLECTED (YYYYMMDD)

A. DEMOGRAPHICS

FIELD NAME	CLASSIFICATION	DEFINITION
Care Period	SPECIALIZED	For inpatient admission, note the date the patient was admitted to the hospital and the date the patient was discharged from the hospital. For outpatient, note the date (day, month, year) of the encounter (physician visit, nurse visit, consultation, procedures, and so on). For emergency department visit without hospital admission, note the date (day, month, year) of the encounter (physician visit, nurse visit, consultation, procedures, and so on).
Presentation to Health Care Facility	SPECIALIZED	Indicate the type of health care contact for this episode of care. 1. Emergency department visit only without hospital admission 2. Hospital admission for HF 3. other cardiovascular problem 4. non-cardiovascular problem (e.g. pneumonia) 5. Planned admission 6. Regularly scheduled outpatient visit 7. urgent outpatient visits 8. Remote monitoring 9. Telephone contact 10. Electronic communication (e.g. email, messaging) 11. Other, specify
Location of Health Care Encounter	SPECIALIZED	Indicate the type of location of health care encounter. 1. Acute-care hospital 2. Long-term care facility 3. Emergency department 4. Caregiver office 5. Heart failure clinic a. Cardiology practice b. Primary care physician office c. Other caregiver office 6. Other, specify
Initial Location Type	SPECIALIZED	Indicate the type of facility where the patient was first evaluated at. 1. Academic Teaching Hospital 2. Community Hospital
Date-Time of First Medical Contact*	SPECIALIZED	Indicate the date and time of first medical contact. Note: First medical contact is defined as arrival of paramedic to patient or arrival at emergency if patient self-transports to the emergency department. 1. Date and Time values 2. Not Available **Note: this data element originates in the ACS Chapter and is duplicated here for consistency in definitions.*
Arrival Date-Time At First Facility*	SPECIALIZED	Indicate the date and time the patient arrived at first facility. 1. Date and Time values 2. Not available **Note: this data element originates in the ACS Chapter and is duplicated here for consistency in definitions.*

Admission Date-Time*	SPECIALIZED	If admitted, indicate the date and time the patient was admitted as an inpatient to first facility for the current episode of care. 1. Date and Time values 2. Not available **Note: this data element originates in the ACS Chapter and is duplicated here for consistency in definitions.*
Initial Means of Transport*	SPECIALIZED	Indicate the means of transportation to the facility where the patient was evaluated first. Select code: 1. Ambulance 2. Air 3. Other 4. Not Available **Note: this data element originates in the ACS Chapter and is duplicated here for consistency in definitions.*

B. INTER-HOSPITAL TRANSFER

FIELD NAME	CLASSIFICATION	DEFINITION
Inter-Hospital Transfer?*	SPECIALIZED	Was the patient transferred to another hospital after assessment at first facility (regardless of whether treatment was received at first hospital or not)? 1. Yes 2. No **Note: this data element originates in the ACS Chapter and is duplicated here for consistency in definitions.*
Inter-Hospital Transfer - Means of Transport*	SPECIALIZED	Indicate the means of inter-hospital transfer. Select code: 1. Ambulance 2. Air 3. Other 4. Not Available **Note: this data element originates in the ACS Chapter and is duplicated here for consistency in definitions.*
Date-Time of Patient Transfer between Facilities*	SPECIALIZED	Indicate the date and time the patient left the initial hospital. 1. Date and Time values 2. Not available **Note: this data element originates in the ACS Chapter and is duplicated here for consistency in definitions.*

C. INVASIVE THERAPEUTIC PROCEDURES

FIELD NAME	CLASSIFICATION	DEFINITION
Coronary Artery Bypass Graft (CABG) Surgery	SPECIALIZED	Indicate the number and types of grafts and surgical approach may be further specified: 1. None 2. Number and placement of vein bypass grafts 3. Number and placement of arterial bypass grafts 4. Standard bypass surgery approach Approach may be further specified: 1. Median Sternotomy Approach 2. Small Thoracotomy 3. With or without cardiopulmonary bypass

Valve Repair	SPECIALIZED	Indicate the type(s) of repair. Valve(s) and procedure(s) may be specified. 1. None 2. Mitral 3. Aortic, and/or 4. Tricuspid valve surgical repair. 5. Percutaneous Mitral repair (Mitraclip)
Valve Replacement	SPECIALIZED	Indicate the type of replacement. Valve(s) and procedure(s) may be specified. 1. None 2. Mitral 3. Aortic 4. Tricuspid
Valvuloplasty	SPECIALIZED	Indicate if the patient required valvuloplasty for stenotic valve lesions. Valve(s) and procedure(s) may be specified. 1. None 2. Mitral 3. Aortic 4. Tricuspid
Ventricular Remodeling Surgery	SPECIALIZED	Indicate if the patient required ventricular remodeling surgery. 1. None 2. Aneurysectomy 3. Anterior Ventricular Resection (Surgical Anterior Ventricular Restoration [SAVR], Dor procedure)
Intervention for Hypertrophic Cardiomyopathy	SPECIALIZED	Indicate if the patient required hypertrophic cardiomyopathy treatment. 1. Septal Myectomy 2. Septal Myectomy with mitral valve replacement or repair 3. Percutaneous Septal Alcohol embolization
Pericardiectomy	SPECIALIZED	Indicate if the patient required surgical removal of the pericardium, usually because of constrictive pericardial disease or infection. 1. Yes 2. No
Pericardiocentesis, Surgical	SPECIALIZED	Indicate if the patient required surgical drainage of fluid in the pericardim. 1. Yes 2. No
Closure of Patent Foramen Ovale (PFO) or Atrial Septal Defect	SPECIALIZED	Indicate if the patient required open surgical PFO closure or correction of atrial septal defect. 1. Yes, specify: a. Stroke b. Left to Right Shunt c. Right to Left Shunt d. Percutaneous e. Other, specify 2. No
Surgery for Congenital Heart Disease	SPECIALIZED	Indicate if the patient required surgery for congenital heart disease and specify what was required. 1. Yes, specify: a. Fontan Procedure b. Mustard Procedure c. Senning Procedure d. Other procedure, specify 2. No
Atrial Fibrillation Surgery	SPECIALIZED	Indicate if the patient required atrial fibrillation surgery. 1. Yes, specify a. Maze b. Modified Maze Procedure 2. No

Organ Transplantation	SPECIALIZED	Indicate if the patient has required an organ transplant. 1. Yes, select one a. Heart b. Heart/Lung c. Lung, Single/Double d. Kidney e. Liver f. Other, please specify (may include combination of organs) 2. No

D. COURSE IN-HOSPITAL

FIELD NAME	CLASSIFICATION	DEFINITION
Renal Failure	SPECIALIZED	Documentation in the medical record of Renal Failure: 1. Yes – defined as a 50% increase in baseline/first Creatinine recorded in hospital 2. No 3. Unknown
Dialysis	SPECIALIZED	Documentation in the medical record of a new requirement for dialysis. 1. Yes, indicate duration a. Temporary b. Permanent 2. No

E. CIRCULATORY/ VENTILATORY SUPPORT

FIELD NAME	CLASSIFICATION	DEFINITION
Mechanical Ventilator Support	SPECIALIZED	Indicate if patient required mechanical ventilatory support. Specify dates of initiation and termination of therapy. 1. Yes, specify: a. Mechanical ventilation/intubation b. CPAP c. BiPAP 2. No

F. AT DISCHARGE FROM HOSPITAL

FIELD NAME	CLASSIFICATION	DEFINITION
Discharge Status	ESSENTIAL	Indicate whether the patient was alive or deceased at discharge from this hospitalization. 1. Alive 2. Deceased **This data element and definition originates from the Acute Coronary Syndrome (ACS) Data Dictionary and is duplicated here for consistency.*

Death	ESSENTIAL	Specify date of death. Indicate cause of death, if available: 1. Cardiovascular: a. Myocardial infarction b. Cardiogenic shock c. Heart failure d. Sudden cardiac death e. Cardiac arrest f. Arrhythmia (specify) g. Stroke h. Other, specify 2. Non-cardiovascular: a. Pulmonary embolism b. Cancer c. Trauma d. Sepsis e. Chronic obstructive lung disease f. Renal failure i. Other, specify 3. Indicate location of death: a. At home b. In hospice care c. In hospital j. Other, specify d. Unknown
Disposition after Health Care Encounter	ESSENTIAL	Indicate disposition after health care encounter. 1. Discharged to home or self care (routine discharge) 2. Discharged/transferred to another short-term general hospital for inpatient care 3. Discharged/transferred to skilled nursing facility (SNF) 4. Discharged/transferred to an intermediate care facility (ICF) 5. Discharged/transferred to another type of institution 6. Discharged/transferred to home under care of organized home health service organization 7. Left against medical advice or discontinued care 8. Discharged/transferred to home under care of a home IV drug therapy provider 9. Expired 10. Hospice-home 11. Hospice-medical facility 12. Discharged/transferred to an inpatient rehabilitation facility including rehabilitation distinct part units of a hospital Specify date.
Discharge Date	ESSENTIAL	Indicate the date the patient was discharged from hospital or left against medical advice or was transferred to another centre or died during this admission. **This data element and definition originates from the Acute Coronary Syndrome (ACS) Data Dictionary and is duplicated here for consistency.*

Patient Referral	ESSENTIAL	Patient referred to other care: 1. Heart Failure Specialty Clinic 2. Heart Failure Transitional Care by advanced practice nurses 3. Heart Failure Disease Management Program 4. Evaluation for Heart Transplant Transitional Care (specify duration): 1. Home Health Care 2. Heart Failure Nurse Case Manager 3. Hospice or Palliative Care 4. Home Telemonitoring 5. Ambulatory Cardiac Telemetric Monitoring (e.g. mobile cardiac outpatient telemetry) Period of time enrolled in program and/or qualitative characterization of level of patient's success/participation in the program(s) may be specified.

PART 11 – OUTCOMES

FIELD NAME	CLASSIFICATION	DEFINITION
Alive 30 Days post service date end	SPECIALIZED	1. Yes 2. No
Mortality (6 and 12 months)	SPECIALIZED	Specify date of death. Indicate cause of death, if available: 1. Cardiovascular: a. Myocardial infarction b. Cardiogenic shock c. Heart failure d. Sudden cardiac death e. Cardiac arrest f. Arrhythmia (specify) g. Stroke h. Other, specify 2. Non-cardiovascular: a. Pulmonary b. Cancer c. Trauma d. Sepsis e. Chronic obstructive lung disease f. Renal failure g. Other, specify 3. Indicate location of death, if known: a. At home b. In hospice care c. In hospital d. Other, specify
Follow up after last episode of care	SPECIALIZED	Date of first medical visit. 1. GP/Specialist/Cardiologist/Heart Failure Clinics 2. Patient referred to other care: a. Heart Failure Specialty Clinic b. Heart Failure Transitional Care by advanced practice nurses c. Heart Failure Disease Management Program d. Evaluation for Heart Transplant 3. Transitional Care (specify duration): a. Home Health Care b. Heart Failure Nurse Case Manager c. Hospice or Palliative Care d. Home Telemonitoring e. Ambulatory Cardiac Telemetric Monitoring (e.g. mobile cardiac outpatient telemetry) 4. Period of time enrolled in program and/or qualitative characterization of level of patient's; success/participation in the program(s) may be specified 5. Other SPECIALIZED clinics (renal failure /anemia/geriatrics/pacing/home monitoring)

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