

CMS 2025 Measure 144 v13 for NextGen[®] HQM

NOTICE: This document contains information that is confidential and proprietary to NextGen Healthcare, Inc. and its subsidiaries and affiliates ("Company") and is intended for use solely by Company's authorized clients. This document may not be copied, reproduced, published, displayed, otherwise used, transmitted, or distributed in any form by any means as a whole or in any part, nor may any of the information it contains be used or stored in any information retrieval system or media, translated into another language, or otherwise made available or used by anyone other than the authorized client to whom this document was originally delivered without the prior, written consent of Company.

By retaining or using this document, you represent that you are a client or an authorized representative of a client of Company who is authorized to use this document under one or more agreements between you and Company now in force, and that you will use this document and the information it contains solely as and to the extent those agreements permit. Any other use or distribution of the contents of this document, as a whole or in any part, is prohibited. Although we exercised great care in creating this publication, Company assumes no responsibility for errors or omissions that may appear in this publication and reserves the right to change this publication at any time without notice.

You will not, directly or indirectly, use, or permit any third party to use, any information obtained from or through this document: (a) as a training set for machine learning or the training of an artificial intelligence ("AI"); (b) in connection with machine learning, development and refinement of algorithms, and/or the enhancement and/or improvement of the operation and functionality of your or any third party's products or services; or (c) in any generative artificial intelligence software, tools or technologies, including, but not limited to, any natural language processing, deep learning algorithms, or machine learning models (commonly known as "Generative AI").

© 2024 NXGN Management, LLC. All Rights Reserved.

NextGen is a registered trademark of NXGN Management, LLC. Microsoft Edge and Windows are the trademarks of the Microsoft group of companies. Apple and macOS are the registered trademarks of Apple Inc. Android is a trademark of Google LLC. Mozilla Firefox is the trademark of the Mozilla Foundation in the US and other countries. CPT® is a registered trademark of the American Medical Association. All other names and marks are the property of their respective owners.

Contents

Overview	5
NextGen HQM Supported Versions	
NextGen HQM Supported Browsers	6
	_
Initial Population Workflow	7
Document Qualifying Encounters and Heart Failure Outpatient Encounters	7
List of Values for Initial Population	8
Denominator Workflow	14
ECHO Result Wizard Window, NextGen Adaptive Content Engine 8.4.x and Later	14
MPI Result Wizard Window, NextGen Adaptive Content Engine 8.4.x and Later	15
Cath Result Wizard Window, NextGen Adaptive Content Engine 8.4.x and Later	
Echo GS, NextGen Adaptive Content Engine 8.4.x and Later	17
Echocardiogram, NextGen Adaptive Content Engine 8.4.x and Later	
Stress Nuclear, NextGen Adaptive Content Engine 8.4.x and Later	
Stress Test-Card, NextGen Adaptive Content Engine 8.4.x and Later	
List of Values for Denominator	
Denominator Exclusion Workflow	22
Document History of Heart Transplant	22
Document Left Ventricular Assist Device (LVAD)	22 23
List of Values for Denominator Exclusion	23
Numerator Workflow	27
List of Values for Numerator	
Numerator Exclusions Workflow	29
Denominator Exceptions Workflow	30
Document Heart Rate	
Document Medication, Order not done: Medical, Patient, or System Reason for Beta B	
Exceptions/Measures Window, NextGen Enterprise 6.2021.1 (with Patch 79) and	
Higher	
Document Medication, Intolerance: Beta Blocker Therapy	32
Document Medication, Allergy: Beta Blocker Therapy Ingredient	
Document Cardiac Pacer	34
Device Result Wiz Window, NextGen Adaptive Content Engine 8.4.x and Later	
Manage Past Medical/Surgical History Window, NextGen Adaptive Content Engine	8.4.x
and Later	
List of Values for Denominator Exceptions	36
Initial Population: Analysis of Specification	49
Denominator: Analysis of Specification	51

Denominator Exclusion: Analysis of Specification	52
Numerator: Analysis of Specification	53
Denominator Exception: Analysis of Specification	54
Special Considerations	59
Assumptions	60
References: Configure Medical, Surgical, Family Hx System Template	61
CRS 2.0 Configuration	62
NextGen HQM Data Assumptions	63

Overview

Measure Name

CMS 144 v13: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Description

Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) $\leq 40\%$ who were prescribed or already taking beta-blocker therapy during the measurement period.

Definition

LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction (LVSD).

The LVSD may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of LVSD or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function.

Any current or prior ejection fraction study documenting LVSD can be used to identify patients.

Guidance

This eCQM is to be reported as patient-based. To satisfy this measure, it must be reported for all heart failure patients at least once during the measurement period if seen in the outpatient setting.

A range value should satisfy the logic requirement for 'Ejection Fraction' as long as the ranged observation value clearly meets the less than or equal to the 40% threshold noted in the denominator logic. A range that is inclusive of or greater than 40% would not meet the measure requirement.

In order for the Ejection Fraction result pathway to be recognized as below 40%, the result must be reported as a number with unit of %. A text string of "below 40%" or "ejection fraction between 35 and 40%" will not be recognized through electronic data capture. Although, this criteria can also be met using the diagnosis pathway if specified as moderate or severe.

Beta-blocker therapy:

For patients with prior LVEF < = 40%, beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate.

The requirement of two or more visits used in Population Criteria 1 is to establish that the eligible professional or eligible clinician has an existing relationship with the patient.

This version of the eCQM uses QDM version 5.6. For more information on the QDM, refer to the eCQI resource center (<u>https://ecqi.healthit.gov/qdm</u>).

Reporting Period

January 1st, 20xx to December 31st, 20xx

NextGen HQM Supported Versions

The NextGen[®] HQM supported versions are the following:

- NextGen[®] Adaptive Content Engine 8.4.x and higher
- NextGen[®] Enterprise EHR Cures 6.2021.1 (with Patch 79) and higher

Note: Within each workflow, you must verify the specific NextGen Adaptive Content Engine or NextGen Enterprise EHR versions required.

NextGen HQM Supported Browsers

NextGen Healthcare supports the following third-party web browsers for NextGen HQM:

- Google Chrome[™]: current plus one previous major version
 - Windows[®], macOS[®], $iOS^{\mathbb{B}}$, AndroidTM
- Microsoft Edge[®] for Windows 10: current plus one previous version
 - Windows, macOS, iOS, Android
- Firefox[®]: current plus one previous major version
 - Windows, macOS, iOS, Android
- Safari[®]: current plus one previous major version
 - ° Windows, macOS, iOS, Android

Initial Population Workflow

- Data elements for the Initial Population for this measure are captured in the Procedures, Diagnosis and Problems modules, in addition to the Person table. Workflows for this Initial Population include how to:
 - Document Care Services

Document Qualifying Encounters and Heart Failure Outpatient Encounters

Use the **SNOMED Visit Type** window, NextGen Adaptive Content Engine 8.4.x and later.

- 1. Open the Intake template, and then in the Finalize tab, select the SNOMED Visit Type (optional) link.
- 2. Select a qualifying Care Services in Long-Term Residential Facility or Home Healthcare Services or Nursing Facility Visit or Office Visit or Outpatient Consultation or Patient Provider Interaction encounter code from the List of Values for Initial Population.
- 3. Select Save & Close.

Note: This workflow is not required. It is an alternative to using the Procedures module to document a qualifying encounter.

General						
Today's Assessment						(
SNOMED Visit Type	×	I				
					Add Co	ommon Assessa
NOMED Visit Types are only used in MU-2 reporting and will not 8	be			Code	Status	
ssociated with or uploaded to the procedure module				110	Acute	
SNOMED Visit Type Description	Code 🔺					
Abuse prevention assessment (procedure)	370881007					
Acoustic reflex testing (procedure)	48423005					
Adr	inter		Add	Edit	Sort	Remov
Adn Adn Adn Adn			Add	Edit	Sort	Remov
Adn Adn Adn Adn Admission to private hospital (procedure)	305339001	Counteling	Add) (Edit) Sort	(
Ade Ade Ade Ade Admission to private hospital (procedure) Admission to prijchiatric day hospital (procedure)	305339001 305345009	Counseling) Edit	Sort	(
Ade Ade Ade Ader Admission to prycholizer (ag hospital (procedure) Admission to psychologeritäht (agh hospital (procedure)	305339001 305345009 305346005	Counseling Counseling Details Total visit time (mi) (Edit	Sort	(
Aon Adn Adn Admission to private hospital (procedure) Admission to prychiatric day hospital (procedure) Admission to tertary referai hospital (procedure) Admission to tertary referai hospital (procedure)	305339001 305345009 305346005 305341000	Counseling Details	nutes):) (Edit	Sort	(
Ade Ade Ade Ade Admission to private hospital (procedure) Admission to prychogeriatric day hospital (procedure) Admission to vartiary referrai hospital (procedure) Admission to vartiary referrai hospital (procedure)	305339001 305345009 305341000 305341000 305342007 18427006	 Counseling Details Total visit time (min Total counsel time 	nutes):			(
Ade Ade Ade Admission to private hospital (procedure) Admission to psychiatric day hospital (procedure) Admission to synchoperiatric day hospital (procedure) Admission to varial (procedure) Admission to tertaing referrai hospital (procedure) Admission to tertaing referrai hospital (procedure) Admission to tertaing referrai hospital (procedure) Admis cardiothosacic emergency (procedure) Admit cardiothosacic emergency (procedure)	305339001 305345009 305346005 305341000 305342007	Counseling Details Total visit time (min Total counsel time Counseled greate Cotegory by clicking	inutes): (minutes): r than S0% of time a in the 2nd or 3rd Via	and documented	d content	(
Ann Ann Ann Ann Annission to private hospital (procedure) Admission to psychiatric day hospital (procedure) Admission to psychogeriatric day hospital (procedure) Admission to tertiary referral hospital (procedure) Admission to tertiary referral hospital (procedure) Admission to ward (procedure)	305339001 305345009 305346005 305341000 305342007 183477006	 Counseling Details Total visit time (min Total counsel time 	nutes):			
Aon Aon Aon Aon Admission to prychiatric day hospital (procedure) Admission to prychogeriatric day hospital (procedure) Admission to britalay referral hospital (procedure) Admission to vardi (procedure)	30533001 305345009 305346005 30554000 30554000 183477005	Counseling Details Total visit time (mil Total counsel time Counseled greate Cotegory by clicking SNOMED Visit Type (Consumation)	inutes): (minutes): in the 2nd or 3rd Vin (solitonal) Preventive new:	and documented sit code field are Preventive Co Preventive	i content	Post Op:
Aen Aen Aen Aen Admission to prychiatri (procedure) Admission to prychogeriatric day hospital (procedure) Admission to variagy referrai hospital (procedure) Admission to varia (procedure) Admit cardiothoracic emergency (procedure)	30533001 305345009 305346005 30554000 30554000 183477005	Counseling Details Total visit time (min Total counsel time Counseled greate Cotegory by clicking SNOMED Visit Type (in	i (minutes): (minutes): r than 50% of time a in the 2nd or 3rd Via bootionali & Medica	and documented sit code field are Preventive Co	j content	

See Also

• List of Values for Initial Population

List of Values for Initial Population

СРТ

List of Home	Healthcare S	ervices CPT (Codes		
99341	99342	99344	99345	99347	99348
99349	99350				

List of Nursing Facility Visit CPT Codes					
99304	99305	99306	99307	99308	99309
99310	99315	99316			

List of Office Visit CPT Codes					
99202	99203	99204	99205	99212	99213
99214	99215				

List of Outpatient Consultation CPT Codes				
99242	99243	99244	99245	

ICD

List of Heart Failure ICD-10 Codes							
111.0	l13.0	I13.2	I50.1	150.20	150.21	150.22	
150.23	150.30	150.31	150.32	150.33	150.40	150.41	
150.42	150.43	150.814	150.82	150.83	150.84	150.89	
150.9							

SNOMED

List of Care Services in Long-Term Residential Facility SNOMED Codes				
Description	Code			
History and physical examination with management of domiciliary or rest home patient (procedure)	209099002			
Domiciliary or rest home patient evaluation and management (procedure)	210098006			

List of Heart Failure SNOMED Codes				
Description	Code			
High output heart failure (disorder)	10091002			
Congestive heart failure due to cardiomyopathy (disorder)	101281000119 107			

List of Heart Failure SNOMED Codes	
Description	Code
Acute congestive heart failure (disorder)	10633002
Chronic left-sided heart failure (disorder)	111283005
Systolic heart failure stage D (disorder)	120851000119 104
Systolic heart failure stage C (disorder)	120861000119 102
Systolic heart failure stage B (disorder)	120871000119 108
Diastolic heart failure stage D (disorder)	120881000119 106
Diastolic heart failure stage C (disorder)	120891000119 109
Diastolic heart failure stage B (disorder)	120901000119 108
Acute combined systolic and diastolic heart failure (disorder)	153931000119 109
Chronic combined systolic and diastolic heart failure (disorder)	153941000119 100
Acute on chronic combined systolic and diastolic heart failure (disorder)	153951000119 103
Congestive heart failure stage C due to Ischemic cardiomyopathy (disorder)	15629541000119 106
Congestive heart failure stage B due to ischemic cardiomyopathy (disorder)	15629591000119 103
Systolic heart failure stage B due to ischemic cardiomyopathy (disorder)	15629641000119 107
Systolic heart failure stage C due to ischemic cardiomyopathy (disorder)	15629741000119 102
Hypertensive heart AND chronic kidney disease with congestive heart failure (disorder)	15781000119107
Acute cor pulmonale co-occurrent and due to saddle embolus of pulmonary artery (disorder)	15964701000119 109
Benign hypertensive heart disease with congestive cardiac failure (disorder)	194767001
Hypertensive heart and renal disease with (congestive) heart failure (disorder)	194779001
Hypertensive heart and renal disease with both (congestive) heart failure and renal failure (disorder)	194781004
Decompensated cardiac failure (disorder)	195111005

List of Heart Failure SNOMED Codes	
Description	Code
Compensated cardiac failure (disorder)	195112003
Acute left ventricular failure (disorder)	195114002
Congenital cardiac failure (disorder)	206586007
Congestive heart failure with right heart failure (disorder)	23341000119109
Heart failure as a complication of care (disorder)	233924009
Low output heart failure (disorder)	25544003
Refractory heart failure (disorder)	314206003
Acute left-sided heart failure (disorder)	364006
Cardiorespiratory failure (disorder)	410431009
Systolic heart failure (disorder)	417996009
Diastolic heart failure (disorder)	418304008
Congestive heart failure (disorder)	42343007
Decompensated chronic heart failure (disorder)	424404003
Congestive heart failure due to left ventricular systolic dysfunction (disorder)	426263006
Congestive heart failure due to valvular disease (disorder)	426611007
Rheumatic left ventricular failure (disorder)	43736008
Low cardiac output syndrome (disorder)	44088000
Chronic systolic heart failure (disorder)	441481004
Chronic diastolic heart failure (disorder)	441530006
Right heart failure secondary to left heart failure (disorder)	44313006
Acute on chronic systolic heart failure (disorder)	443253003
Acute systolic heart failure (disorder)	443254009
Acute diastolic heart failure (disorder)	443343001
Acute on chronic diastolic heart failure (disorder)	443344007
Hypertensive heart failure (disorder)	46113002
Heart failure due to end stage congenital heart disease (disorder)	471880001
Chronic heart failure (disorder)	48447003
Hypertensive heart disease with congestive heart failure (disorder)	5148006
Chronic left-sided congestive heart failure (disorder)	5375005
Acute heart failure (disorder)	56675007
Congestive heart failure stage D (disorder)	67431000119105

List of Heart Failure SNOMED Codes	
Description	Code
Congestive heart failure stage C (disorder)	67441000119101
Symptomatic congestive heart failure (disorder)	698594003
Heart failure with reduced ejection fraction (disorder)	703272007
Heart failure with reduced ejection fraction due to coronary artery disease (disorder)	703273002
Heart failure with reduced ejection fraction due to myocarditis (disorder)	703274008
Heart failure with reduced ejection fraction due to cardiomyopathy (disorder)	703275009
Heart failure with reduced ejection fraction due to heart valve disease (disorder)	703276005
Congestive heart failure stage B (disorder)	717840005
Congestive heart failure as early postoperative complication (disorder)	72481000119103
Acute left-sided congestive heart failure (disorder)	74960003
Congestive rheumatic heart failure (disorder)	82523003
Malignant hypertensive heart disease with congestive heart failure (disorder)	83105008
Heart failure (disorder)	84114007
Left heart failure (disorder)	85232009
Low output heart failure due to and following Fontan operation (disorder)	871617000
Chronic congestive heart failure (disorder)	88805009
Pleural effusion due to congestive heart failure (disorder)	90727007
Biventricular congestive heart failure (disorder)	92506005
Left ventricular failure with normal ejection fraction due to valvular heart disease (disorder)	1204200007
Left ventricular failure with normal ejection fraction due to coronary arteriosclerosis (disorder)	1204203009
Left ventricular failure with normal ejection fraction due to myocarditis (disorder)	1204204003
Left ventricular failure with normal ejection fraction due to cardiomyopathy (disorder)	1204206001
Left ventricular failure with sepsis (disorder)	1204462004

List of Home Healthcare Services SNOMED Codes					
Description	Code				
Home visit request by patient (procedure)	185460008				
Home visit request by relative (procedure)	185462000				

List of Home Healthcare Services SNOMED Codes						
Description	Code					
Home visit for urgent condition (procedure)	185466002					
Home visit for acute condition (procedure)	185467006					
Home visit for chronic condition (procedure)	185468001					
Home visit elderly assessment (procedure)	185470005					
Joint home visit (procedure)	225929007					
Bank holiday home visit (procedure)	315205008					
Home visit (procedure)	439708006					
Home visit for rheumatology service (procedure)	698704008					
Home visit for anticoagulant drug monitoring (procedure)	704126008					

List of Nursing Facility Visit SNOMED Codes						
Description	Code					
Subsequent nursing facility visit (procedure)	18170008					
History and physical examination with evaluation and management of nursing facility patient (procedure)	207195004					

List of Office Visit SNOMED Codes	
Description	Code
Visit out of hours (procedure)	185463005
Out of hours visit - not night visit (procedure)	185464004
Weekend visit (procedure)	185465003
Office visit for pediatric care and assessment (procedure)	3391000175108
Postoperative follow-up visit (procedure)	439740005

List of Outpatient Consultation SNOMED Codes					
Description	Code				
Follow-up consultation (procedure)	281036007				
Confirmatory medical consultation (procedure)	77406008				

List of Patient Provider Interaction SNOMED Codes					
Description	Code				
Indirect encounter (procedure)	185316007				
Telephone encounter (procedure)	185317003				
Third party encounter (procedure)	185318008				

Г

List of Patient Provider Interaction SNOMED Codes						
Description	Code					
Encounter by computer link (procedure)	185320006					
Letter encounter to patient (procedure)	185321005					
Encounter for checkup (procedure)	185349003					
Visit out of hours (procedure)	185463005					
Weekend visit (procedure)	185465003					
Letter encounter from patient (procedure)	270424005					
Patient-initiated encounter (procedure)	270427003					
Provider-initiated encounter (procedure)	270430005					
Patient encounter procedure (procedure)	308335008					
Letter encounter (procedure)	308720009					
Telephone follow-up (procedure)	386473003					
Follow-up encounter (procedure)	390906007					
Telephone triage encounter (procedure)	401267002					
Email sent to patient (procedure)	401271004					
Urgent follow-up (procedure)	406547006					
Email encounter from caregiver (procedure)	438515009					
Email encounter to caregiver (procedure)	438516005					
Encounter by short message service text messaging (procedure)	445450000					
Telemedicine consultation with patient (procedure)	448337001					
Follow-up inpatient consultation visit (procedure)	87790002					

Denominator Workflow

Data elements for the Denominator also include the Initial Population criteria, in addition to other data elements for the Denominator which are captured in the Problems, Procedures and Orders modules. Workflows for this Denominator include how to:

• Document Ejection Fraction

Document Ejection Fraction

Use any of the following templates

- ECHO Result Wizard
- MPI Result Wizard
- Cath Result Wizard
- Echo GS
- Echocardiogram
- Stress Nuclear
- Stress Nuclear

ECHO Result Wizard Window, NextGen Adaptive Content Engine 8.4.x and Later

- **1.** From the **Intake** template, select **Cardiology** as the specialty and then select the **Procedures** tab.
- **2.** From the **Cardiac Procedures** pane, select the **Echo/MUGA** link, and then select **any**. The **Echo Result Wizard** window opens.
- **3.** Enter the **Procedure Date**.
- 4. Enter LVEF results using the number pad on the ECHO Result Wizard window.

5. To save the LVEF results, select Accept.

			ECHO	Result Wiza	ard			×
Procedure: Echo Result Date: 05/05/2016 Performed Dy: Ef:	ts	TDS	Docum	ent Ejectio	n Frac	tion		Procedure Codes
Normal 1 2 3 4 5 6 7 8 9 0 Clear	Severity: Mild Moderate Severe	Size: Small Medium Large	Aortic AS AR Ao Sci Bicusp AV Prosth AV Repair AV	Mitrat: MS MR MVP MAC Prosth MV Repair MV	Other: TR PR ASD VSD PFO	Atria: LAE RAE BAE LAA Clot	Ventricles: LVH Diast Dysf HOCM ASH SAM LV Thrombus	Misc Pericard Eff Tamponade Pieural Eff Pulm HTN
Severity: Next Mild Moderate Severe Finding: M Hypo Akin Dysk		Global ERIOR M D C FEX C C M M B ERIOR	Clear	Dimensions: Septum: Post Wall: LVEDD: LVEDD: Ao Roob: LA Diam: RV Diast: LA Area: LV Mass: LV Syst Vok LV Diast Vo		on on on on on on on on on on on on on o	Doppler Findings: AV Peak: AV Mean: AV Area: MV Peak: MV Mean: MV Area: Putmonic Peak: TV Peak Velocity: Est RVSP:	mmHg mmHg mmHg mmHg mmHg mmHg mmHg mmHg
Comments:				Nanative Sum	mary:	Cle	ar All Accep	t Cancel

MPI Result Wizard Window, NextGen Adaptive Content Engine 8.4.x and Later

- **1.** From the **Intake** template, select **Cardiology** as the Specialty and then select the **Procedures** tab.
- 2. From the Cardiac Procedures pane, select the Stress Test link, and then select any value from the Stress Test picklist except ETT and Exercise Tolerance Test. The MPI Result Wizard window opens.
- **3.** Enter the **Procedure Date**.
- 4. Enter LVEF results using the number pad on the MPI Result Wizard window.

5. Select Accept to save the LVEF results.

EF: Severity: Normal Equivocal		-			
Equivoral				Next Normal Global Clear	
	Scar	Equivocal	Motion	ANTERIOR	
4 5 6 Possible	No Scar	Possible	Breast	B	
7 8 9 Small	Ischemia	Small	Diaphragm	A A B Z B	
0 Clear Moderate	No Ischemia	Moderate	Gut		5
Large	PI Ischemia	Severe	Artifact	C APEX C	ERA
MI:				0 42 D 5 4	7
Transmural				M	/
Nontransmu	ral.			INFERIOR	
Noncrarismo	rai				

Cath Result Wizard Window, NextGen Adaptive Content Engine 8.4.x and Later

- **1.** From the **Intake** template, select **Cardiology** as the Specialty and then select the **Procedures** tab.
- Select the Cath Lab hyperlink from the Cardiac Procedures blue navigation pane and select Cath from the Invasive picklist. The Cath Result Wizard window opens.
- **3.** Enter the procedure date.
- **4.** To activate EF, select the **EF** link.

EF text changes to purple

5. Enter LVEF results using the number pad on the Cath Result Wizard window.

6. Select **Accept** to save the LVEF results.



Echo GS, NextGen Adaptive Content Engine 8.4.x and Later

1. Open the **Echo GS** template, and then in the Chambers section, select **Ejection fraction** and enter the LVEF results using the number pad.

Note:

You must enter the percentage value in Ejection fraction.

2. Select Save & Close.

05/09/2018 10:16 AM : "	Echo GS" X		
Pt age: Date: Diagnosis: Sonographer:	05/09/2018 Tape:	Reading MD: Referring: PCP:	
Chambers:	,		
	Description:		Document Ejection fraction
Left ventricle:			All LV segments normal: 🔽 🖌
Right atrium:			Ejection fraction: B0
Right ventricle:			
Atrial septum:			
Pericardium:		_	
Comments:			×.
	1		
npression:			
1.			
2.	~		
3.			
4.			
5.			
6.	2		
7.			
8.			
9.			
10.			
	Compared w/prior study, Recommend TEE if clinical Recommend Chest CT for Clinical correlation is reco	lly indicated. further evaluation.	

Echocardiogram, NextGen Adaptive Content Engine 8.4.x and Later

• Open the Echocardiogram template, and then under LV Systolic Function, Ejection fraction, enter the LVEF results.

Note: You must enter the percentage value in Ejection fraction.

Note: This workflow requires user configuration of CRS 2.0 to support accurate reporting. Please ensure that mappings are added to Coded Results

Mapping template. Please reference CRS 2.0 Configuration section for more information.



Stress Nuclear, NextGen Adaptive Content Engine 8.4.x and Later

1. Open the **Stress Nuclear** template, and then under **Resting**, in **Resting LVEF**, enter the LVEF results.

Note: You must enter the percentage value in Ejection fraction.

2. Select Save & Close.

06/06/2018 12:21 PM : 1	Stress Nuclear	×					
Nuclear Stress Inter	pretation		Orderin	g MD:			
	-			PCP:			
Study Date	e: 06/06/2018		Cardio	logist:			
Heigh	t	in	Interpretin	g MD:			
Weight	t	lb	Indication for				Clear
					pdate Assessment		
		Image Qu	aliba A	rtifacts:		Add to Today's Assessments	s
Resting MIBI dose:	mci	C Adequ		Breast Attenu	ation		
Stress MIBI dose:	mci	C Subor			ic Attenuation		
SPECT: Normal	perfusion		(Bowel Uptake			
Size:	Intensity:	Territory:	Territory:	Defect:			
Stress							
	1			- <u> </u>			
	-i		- i	<u> </u>	-		
	í —	-i	-i	<u> </u>	-		
Gated Study							
	stress wall mo	tion Abn	ormal wall motio	in:			
Stress LVEF:	severity:	location	locatio	n: wall	motion:		
9	6						
			<u> </u>	— î=			
Resting: Normal	resting wall m	otion	- 1				
Resting LVEF							
35 5							
Comments:	K r	1	1	<u> </u>			
	10	ocument Eje	ection Fractio	on			
Stress Nuclear Do	~			Stress Ma	star Doc		
Juess Hucidal De	~						
				Save	e & Close		

Stress Test-Card, NextGen Adaptive Content Engine 8.4.x and Later

- 1. From the Stress Test-Card template, navigate to the Procedure Information panel.
- 2. Under the Test/Patient Data section, select the blue dropdown arrow and select Stress Echo for Stress type.
- **3.** Navigate to the Wall Motion section and select the **Open Wall Motion** button. The **Card Testing St Wallmotion** window opens.
- 4. Scroll to the Pre-exercise section and enter LVEF results in the Ejection Fraction field.

Note: Need to enter the percentage value in the **Ejection fraction** field.



Note: This workflow requires user configuration of CRS 2.0 to support accurate reporting. Ensure that mappings are added to **Coded Results Mapping** template. Refer to <u>CRS 2.0 Configuration</u> section for more information.

List of Values for Denominator

LOINC

List of Ejection Fraction LOINC Codes				
10230-1	18043-0	18044-8	18045-5	18046-3
18047-1	18048-9	18049-7	77889-4	77890-2
77891-0	77892-8	79990-8	79991-6	79992-4
79993-2	8806-2	8807-0	8808-8	8809-6
8810-4	8811-2	8812-0		

SNOMED

List of Left Ventricular Systolic Dysfunction Direct Reference SNOMED Code	
134401001	

List of Moderate or Severe LVSD SNOMED Codes			
981000124106	991000124109		

Denominator Exclusion Workflow

Data elements for the Denominator Exclusion are captured in the Problems, Procedures and Diagnosis modules. Workflows for this Denominator Exclusion include how to:

- Document History of Heart Transplant
- Document Left Ventricular Assist Device (LVAD)

Document History of Heart Transplant

Use the CARD CH CHF CM window, NextGen Adaptive Content Engine 8.4.x and later.

- 1. From the Intake template, select Cardiology as the Specialty and any visit type.
- Select the Histories tab. The Histories – Cardiology template opens.
- **3.** In the **Problems** section, select the **CHF/Cardiomypathy** link from the blue navigation pane. The **CARD CH CHF CM** window opens.
- **4.** Enter the procedure date.
- 5. In the Detail section, select the Heart Transplant Patient check box.
- **6.** Select **Accept** to complete the documentation.

Note: This workflow requires user configuration of CRS 2.0 to support accurate reporting. Ensure that mappings are added to Coded Results Mapping template. Refer to the CRS 2.0 Configuration section for more information.

/ 05/22/2022 04:50 PM EDT : HIStoffes - C	angiology X		
Specialty v Cardiology	Risk Level Care Team Contagion Visit Type Office Consult	Risk ② TOB ② HTN ② CHOL ③ FH ③ DM	() PVD
📅 Intake His	tories Procedures SO	AP Finalize Checkout	
Education Law an	p cetters/Clearance Counseling Deta	Is Document Library	
	CARD CH CHE CM		×
Care Guidelines Global Days	care croir ch		Cycle J
	History:	Detail:	mation 🕡
Problems			۲
	Date: 01/01/2022	C Inpatient Evaluation C Outpatient Evaluation	
Cardiac Problem List: Combine	Cardio my opathy:	EF Information:	
CAD	C Etiology Unknown C Idiopathic	CHF C Acute C Chronic C Recurrent	5
CHF/Cardiomyopathy	C Ischemic	Heart Transplant Patient	
Armythinia PVD	C Hypertensive	I IVH	
Valve/Congenital	C Hypertrophic (Non-Obstructive)	Diastolic Dysfunction	
Other	CHOCM	Amyloid Heart Disease	
	C Valvular Disease	Myopericardial Disease:	
		Constrictive Pericarditis	
	C Alcoholic C Restrictive	S/P Pericardectomy Myocarditis	
	C Other	Pericarditis C Acute C Chronic	
	Comments:		
	History:		
			Edit
Problem List: Select a problem to edit or click in the prob	Detail:		red
Show chronic Show my tracked	Letter.		ve problems
Last A parentea pointer parent			ible Provide
	+ history of hoor	Clear All Accept Cancel	
Documen	t history of hear		
l transmiant			
transplan	t i i i i i i i i i i i i i i i i i i i		

See Also

<u>CRS 2.0 Configuration</u>

Document Left Ventricular Assist Device (LVAD)

Use the VAD Test Result Wiz window, NextGen Adaptive Content Engine 8.4.x and later.

- **1.** From the **Intake** template, select **Cardiology** as the Specialty and any visit type.
- 2. Select the **Procedures** tab.
- **3.** In the left blue navigation pane, select **CV Surgery**, then select **VAD**. The **Test Result Wiz** window opens.
- **4.** Enter the procedure date.
- **5.** In Type of VAL, select **LVAD** and then add any other details.
- 6. Select Accept to complete the documentation.

Note: This workflow requires user configuration of CRS 2.0 to support accurate reporting. Ensure that mappings are added to Coded Results Mapping template. Refer to the CRS 2.0 Configuration section for more information.

	Risk Level Care Team Contagion Risk @TOB @HTN @CHOL @FH @DM @PVD	-
Specialty # Cardiology	Visit Type v Office Consult	
fi Intake H	Histories Procedures SOAP Finalize Checkout	
Education Lab	Slip Letters/Clearance Counseling Details Document Library)	
Care Guidelines Global Day	III Test Result Wizard	×
		Procedure Codes
Cardiac Procedures	Category: Clear Procedure: Clear Performed by:	
C Launch Template C Launch Atta		
Do not launch procedure from Gri	Type of VAD Clear Bridge to transplant Clear Brand Clear Additional	Clear
Echo/MUGA 🕢	Invator Invator Invator	
Electrophysiology	Alley Interaction	
Cath Lab		
Vascular		
CV Surgery		
COMP		
Other		
	Document Left	
	Document Lett	
	Ventricular Assist Device (LVAD)	
	Ventricular Assist Device (LVAD)	
Ejection Fraction		
	Comments:	
	Result/Interpretation:	
	Type on end to end	
	Characters left: 892 Link to an order	
	See scanned document Clear All	Accept Cancel

See Also

• CRS 2.0 Configuration

List of Values for Denominator Exclusion

CPT

List of Heart Transplant CPT Codes				
33935 33945				
List of Left Ventricular Assist Device Placement CPT Codes				
33976	33981	33990	33991	33993

ICD

List of Heart Transplant Complications ICD-10 Codes		
Description	Code	
Atherosclerosis of native coronary artery of transplanted heart with unstable angina	125.750	
Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	125.751	

List of Heart Transplant Complications ICD-10 Codes			
Description	Code		
Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	125.758		
Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	125.759		
Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	125.760		
Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	125.761		
Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	125.768		
Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	125.769		
Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	125.811		
Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris	125.812		
Unspecified complication of heart transplant	T86.20		
Heart transplant rejection	T86.21		
Heart transplant failure	T86.22		
Heart transplant infection	T86.23		
Other complications of heart transplant	T86.298		
Unspecified complication of heart-lung transplant	T86.30		
Heart-lung transplant rejection	T86.31		
Heart-lung transplant failure	T86.32		
Heart-lung transplant infection	T86.33		
Other complications of heart-lung transplant	T86.39		

SNOMED

List of Heart Transplant Complications SNOMED Codes			
Description	Code		
Lymphoproliferative disorder following heart transplantation (disorder)	122511000119103		
Unstable angina due to arteriosclerosis of coronary artery bypass graft of transplanted heart (disorder)	15960341000119104		
Heart transplant failure and rejection (disorder)	213151004		
Heart-lung transplant failure and rejection (disorder)	213152006		

Description	Code
Accelerated coronary artery disease in transplanted heart (disorder)	233844002
Disorder of transplanted heart (disorder)	429257001
Arteriosclerosis of coronary artery bypass graft of transplanted heart (disorder)	444855007
Disorder of myocardium associated with rejection of cardiac transplant (disorder)	471851005
Coronary arteriosclerosis in artery of transplanted heart (disorder)	792842004
Infection of transplanted heart (disorder)	12224461000119108

List of Heart Transplant SNOMED Codes					
174803001	32413006	32477003	3	450816007	47058000
List of Left Ventricular Assist Device Placement SNOMED Codes					
232967006			2329680	01	
700151002					
List of Left Ventricular Assist Device Complications SNOMED Codes					

List of Left Ventricular Assist Device Complications OfOmLD Codes				
764680009	765181003	765465004		

Numerator Workflow

All data elements for the Numerator for this measure are captured in the Medications module

List of Values for Numerator

RxNorm

List of Beta Blocker Therapy for LVSD RxNorm Codes					
Description	Code				
24 HR metoprolol succinate 100 MG Extended Release Oral Capsule	1999031				
24 HR metoprolol succinate 200 MG Extended Release Oral Capsule	1999033				
24 HR metoprolol succinate 25 MG Extended Release Oral Capsule	1999035				
24 HR metoprolol succinate 50 MG Extended Release Oral Capsule	1999037				
carvedilol 6.25 MG Oral Tablet	200031				
carvedilol 12.5 MG Oral Tablet	200032				
carvedilol 25 MG Oral Tablet	200033				
carvedilol 3.125 MG Oral Tablet	686924				
Bisoprolol Fumarate 10 MG Oral Tablet	854901				
Bisoprolol Fumarate 5 MG Oral Tablet	854905				
Bisoprolol Fumarate 10 MG / Hydrochlorothiazide 6.25 MG Oral Tablet	854908				
Bisoprolol Fumarate 2.5 MG / Hydrochlorothiazide 6.25 MG Oral Tablet	854916				
Bisoprolol Fumarate 5 MG / Hydrochlorothiazide 6.25 MG Oral Tablet	854919				
24 HR carvedilol phosphate 10 MG Extended Release Oral Capsule	860510				
24 HR carvedilol phosphate 20 MG Extended Release Oral Capsule	860516				
24 HR carvedilol phosphate 40 MG Extended Release Oral Capsule	860522				
24 HR carvedilol phosphate 80 MG Extended Release Oral Capsule	860532				
24 HR metoprolol succinate 100 MG Extended Release Oral Tablet	866412				
24 HR metoprolol succinate 200 MG Extended Release Oral Tablet	866419				
24 HR metoprolol succinate 25 MG Extended Release Oral Tablet	866427				
24 HR metoprolol succinate 50 MG Extended Release Oral Tablet	866436				
24 HR Hydrochlorothiazide 12.5 MG / metoprolol succinate 100 MG Extended Release Oral Tablet	866452				

List of Beta Blocker Therapy for LVSD RxNorm Codes					
Description	Code				
24 HR Hydrochlorothiazide 12.5 MG / metoprolol succinate 25 MG Extended Release Oral Tablet	866461				
24 HR Hydrochlorothiazide 12.5 MG / metoprolol succinate 50 MG Extended Release Oral Tablet	866472				

Numerator Exclusions Workflow

There are no Numerator Exclusions for this measure.

Denominator Exceptions Workflow

Data elements for the Denominator Exceptions for this measure are also captured in the Allergies, Diagnosis and Problems module. Workflows for this Denominator Exceptions include how to:

- Document Heart Rate
- Document Medication, Order not done: Medical, Patient, or System Reason for Beta Blocker Therapy for LVSD
- Document Medication, Intolerance: Beta Blocker Therapy Ingredient
- Document Medication, Allergy: Beta Blocker Therapy Ingredient
- Document Cardiac Pacer

Document Heart Rate

Use the Adult Vital Signs window, NextGen Adaptive Content Engine 8.4.x and later.

- 1. From the Intake template, select Add under the Vital Signs section. The Adult Vital Signs window opens.
- 2. From the Adult Vital Signs window, enter the heart rate in the Pulse field.
- 3. Select Save, then select Close.

Note: You can capture the LOINC code for heart rate in NextGen Adaptive Content Engine 8.4.x and later. If you are on a lower version than ACE 8.4.x, only heart rate value will be captured.



Document Medication, Order not done: Medical, Patient, or System Reason for Beta Blocker Therapy for LVSD

You can complete the documentation of Medication, Order not done: Medical, Patient, or System Reason for Beta Blocker Therapy for LVSD in the **Exceptions/Measures** window.

Note: It is not necessary to document this criterion in all of the specified windows to meet the intent of this measure.

Exceptions/Measures Window, NextGen Enterprise 6.2021.1 (with Patch 79) and Higher

- **1.** From the **Intake** template, select **Exceptions//Measures** from the left navigation bar. The **Exceptions/Measures** window opens.
- 2. Select Exceptions (all).
- **3.** Select Measure Heart failure: Beta-Blocker Therapy for LVSD and Class Beta Blocker Therapy for LVSD to be addressed in the fields above.

- **4.** Select the **ltem** field and select any qualifying value for **Beta-Blocker Therapy for LVSD** from the List of Values for Denominator Exceptions
- 5. Select a qualifying Medical, Patient, or System reason in the Exception field.
- 6. Select Update.
- 7. Select Save & Close.

Measure Details Title: Heart Failure (P#): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) Description: Precentbage of patients aged 31 years and older with a diagnosis of heart failure (P#) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed beta-blocker therapy either within a 12 month period when seen in the outpatient setting OR at each hospital discharge Instructions: Prease refer to the HQM White Paper for supported workflows. Select a raw with a "website" indicator (an the right) to go to the website. Master Measure Website References: Select a raw with a "website" indicator (an the right) to go to the website. Master Measure Website References: Select a raw with a "website" indicator (an the right) to go to the website. Master Measure Website References: Descument Medical, Patient or System Therapy for LVSD The Advit Witing Commit. Heart Failure in advits: a report of 2146-82. Review notes: Descument Medical, Patient or System Therapy for LVSD Therapy for LVSD Select a row with a "website" indicator (an other right) to go to the website. Review notes: Exception: Exception is permanent. Exception: Details: Exception Select Therapy for LVSD Exception is permanent. Exception is permanent. Update: Measures C Incorptions (current template) @ Exception Clas						
Title: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) Description: Precentage of patients aged 31 years and older with a disgnosis of heart failure (HP) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed beta-blocker Therapy either within a 12 month period when seen in the outpatient setting OR at each hospital dicharge Instruction:: Prescribed beta-blocker Therapy either within a 12 month period when seen in the outpatient setting OR at each hospital dicharge Master Measure Vetable Select a raw with a "website" indicator (an the right) to go to the website. Master Measure Vetable Master Measure Vetable References: Jesting OR at each hospital dicharge of Chronic Heart Failure (MP) to go to the website. Int of Chronic Heart Failure (MP) eight) to go to the website. Int of Chronic Heart Failure (MP) eight) to go to the website. References: Decument Medical, Patient or System Therapy for LVSD Int of Chronic Heart Failure (MP) eight) to go to the website. Int of Chronic Heart Failure (MP) eight) eight to go to the website. Review notes: Decument Medical, Patient or System Therapy for LVSD Int of Chronic Heart Failure (MP) eight) eight to go to the website. Int of Chronic Heart Failure (MP) eight) eight to go to the website. Review notes: Exception Chronic Leart Failure (MP) eight to go to the website. Int of Chronic Heart Failure (MP) eight to go to the website. Int of Chronic Heart Failure (MP) eight to	Manual Dataily					
Description:		Heart Failure (HF): Beta-Blocker Thera	py for Left Ventri	icular Systolic Dysfunction BVSDI		
Presorbeid beta-blocker Therapy either within a 12 month period when seen in the outpatient setting OR at each hospital dicharge Instructions: Presore refer to the HQM White Paper for supported workflows. Select a new with a "wetnite" indicator on the right to go to the wetnite References: I storp A Advance of Candidor on the right to go to the wetnite Reason for not prescribing Beta Blocker Therapy for LVSD Review notes: Previous Review notes: Previ					nnion left ventrik	pular election fraction EVED - All suba subre
References: Issue Masare Measure With a "website" indicator iso the right) to go to the website Master Measure Website References: Issue M. Abathasa Wit, Casey DE, in the Aduit Writing Committee, and the Aduit Wri	Description:					
References:	Instructions:	Please refer to the HQM White Paper	for supported w	rorkflows.		
		Select a raw with a "website" indicator (ar	n the right) to go t	to the website.		Master Measure Websit
Predous statu/comment: Exception Management Class: Beta Blocker Therapy for USD Rem: Exception: Details: Chaster Measures C Exceptions (ourrent template) C Exceptions (all) Measure Measures C Exceptions (ourrent template) C Exception Class Multiple Exception Class Multiple Exception Class Multiple Exception Class Measure Failures Beta Blocker Therapy for USD Multiple Exception Class Multiple Exception Class	References:	in the Adult Writing Committee. 20		n for not prescribing Beta I		failure in adults: a report of
Istau/connents:	Review notes:			Therapy for LVSD		
Exception Masagement Class: Exception Masagement Class: Exception: Exceptio						
Class: Beta Blocker Therapy for LVSD Rem: Exception: Details: Masure Masure Casceptions (current template) Casceptions (all) Masure Masure Casceptions (current template) Casceptions (all) Masure Masure Masure Casceptions (current template) Casception Class Masure Masure Masure Casceptions (current template) Casception Class Masure Masure Masure Solution with Casception Class Mature Masure Masure Solution with Casception Class Costs14 Costs14 Costs14 Costs14 Costs14 Costs14 Casception Casc						
Rem: Exception: Exception: Details: This exception is permanent: Update Consider Measures Consider Measure Consider Me	Exception Manag					
Exception: Details: D	Class:	Beta Blocker Therapy for LVSD				
Details: Image: This exception is permanent Update Remove Isplay: C: Provider Measures: C: Exceptions (current template) @ Exceptions (all) Ishow measures followed Display measure system: CMS Measure: Measure: Measure: Measure: Exception Class Exception Measure: Measure: Measure: Measure: Exception Class Exception NORF0089; Primary Open Angle Glaucoma: Optic Nerve CMS Multiple Exception Class Norf0109; NORF0089; Eval Nultiple Exception Class Norf0109; Norf0109; If CMS14; Heart Failure: Beta Blocker Therapy For VSD Multiple Exception Class Norf0109; If CMS14; Heart Failure: Beta Blocker Therapy For VSD Multiple Exception Class Norf0109; If CMS14; Heart Failure: Beta Blocker Therapy For VSD Multiple Exception Class Norf0109;	Bem:					
Chrowider Measures C Exceptions (current template) © Exception (Liss Measure Mea	Exception:	1				
Isplay: C Provider Measures C Exceptions (airrent template) C Exception (airrent template) Exception (airrent templat						
Measure Multiple Exception Class	Details:					
CMS142 CMS142 CMS142 CMS142 CMS142 CMS142 CMS142 CMS142 CMS14 CMS	Details:			ſ	This exception	n is permanent Update Remove
NOCPOIDS NO	isplay: C Provide	er Measures 🔿 Exceptions (current tempi		ons (all)		
INCPORT I CMS144 I CMS145 CMS Eta-Blocker Therapy for LVSD CMS I CMS145 CAD: Beta-Blocker Therapy-Prior ML or LVSD CMS Multiple Exception Class I CMS145 I	isplay: O Provide Measure # M	deasure	Measure Syst	ons (all) Show measures follow tem Exception Class	ed	Display measure system: CMS
(NC/E003) K (MS145 GAD: Beta-Blocker Therapy-Prior ML or LVSD CMS Multiple Exception Class pucted on the	isplay: O Provide Measure # M N CM5142 D	deasure Diabetic Retinopathy: Communication with	Measure Syst	ons (all) Show measures follow tem Exception Class	ed	Display measure system: CMS
0/0500700	Isplay: C Provide Measure • M (NG142 D (NQF0089) P (NQF0086) E	Aeasure Viabetic Retinopathy: Communication with CP Yimary Open Angle Glaucoma: Optic Nervi val	Measure System CMS CMS	Ins (bil) Show measures follow tem Exception Class Multiple Exception Class Multiple Exception Class	ed	Display measure system: CMS
	Measure M Measure M (NQF0085) P N (NQF0085) N (MQF0085) N (MQF0086) N (MS144)	Aeasure Viabetic Retinopathy: Communication with CP Yimary Open Angle Glaucoma: Optic Nervi val	Measure System CMS CMS	Ins (bil) Show measures follow tem Exception Class Multiple Exception Class Multiple Exception Class	ed	Display measure system: CMS
	isplay: C Provide Measure M M N CM5142 D (NQF0085) P (NQF0086) E NQF0086) E NQF0086 H (NQF0085) CM5145 C	Measure Diabetic Retinopathy: Communication with CP Wimary Open Angle Glaucoma: Optic Nervy Val Keart Failure: Beta-Blocker Therapy for IVS	Measure Syst CMS CMS CMS D CMS	Ins [all] Show measures follow tem Exception Class Multiple Exception Class Multiple Exception Class Bets Blocker Therapy for LVSD	ed	Display measure system: CMS

Document Medication, Intolerance: Beta Blocker Therapy

Use the Medication Allergies module

- From the Medication Allergies module, select the Allergy search magnifying glass icon and type in a qualifying Beta Blocker Therapy medication from the List of Beta Blocker Therapy RxNorm Codes in the Description field.
- 2. Highlight and select OK to select the Beta Blocker Therapy medication allergy.
- **3.** Select the **Intolerance** checkbox.

4. Select Add.

Image: state of the second exploration of the second						e to Medica Therapy	tion	
Allergy: 1862 PENBUTOLOL SULFATE Fintolerance Intolerance Clear Cl	<							_
Provider: Provider. Test T Recorded Elsewhere Onset/Sym: 00/00/0000 Resolved: 00/00/0000 Add Update Interactions.	Allergy:			SULFATE	1			llergies
Cnset/Sym: 00/00/0000 P Reactions: Delete Add Update Interactions.	Location:	Main Clinic		• A	llergy type:	Base Ingredient		
Onset/Sym: 00/00/0000 Pections: Questions: Add Update Interactions:	Provider:	Provider, Test T		•				Clear
Onset/Sym: 00/00/0000		Recorded Elsewhere	Desetions					
Resolved: 00/00/0000			reactions					Maleie
								Add
			+					
Review			+					
			+					Update

See Also

• List of Values for Denominator Exceptions

Document Medication, Allergy: Beta Blocker Therapy Ingredient

Use the Medication Allergies module.

- **1.** From the Medication Allergies module, select the **Allergy search magnifying glass** icon and type in a qualifying description for Beta Blocker Therapy Ingredient medication from the List of Beta Blocker Therapy Ingredient RxNorm Codes in the Description field.
- 2. Highlight and select OK to select the Beta Blocker Therapy Ingredient allergy.

3. Select Add.

Date		Descriptio	on		Onset/Sympt	Resolved	Туре	Comment
8/01/2015 09	:25 AM	NADOLOL	-		00/00/0000	00/00/0000	Base Ingredient	J
							1	
[BI		tion Allergy to Ingredient	o Beta		
	Include Res	olved Alle	Bl					
Allergy:	1854	olved Alle	BI	ocker	Ingredient			Clear
	1854 Main Clinic	olved Alle	Bl	ocker	Ingredient			
llergy:	1854	olved Alle	Bl	ocker	Ingredient			Delete
llergy: ocation:	1854 Main Clinic	olved Alle	Bl	ocker	Ingredient			
llergy: ocation: Yrovider:	1854 Main Clinic A, A	olved Alle	BI nes	ocker	Ingredient			Delete
ocation: rovider: Inset/Sym:	1854 Main Clinic A A □ Recorded E	olved Alla	Bi nadolol Source:	v v	Ingredient			Delete Add
llergy: .ocation:	1854 Main Clinic A A □ Recorded E [00/00/0000	olved Alls	BI nadolol Source: Reaction:	v v	Ingredient		2	Add Update

See Also

• List of Values for Denominator Exceptions

Document Cardiac Pacer

Use any of the following templates

- Device Result Wiz window
- Manage Past Medical/Surgical History window

Note: Documentation of Cardiac Pacer can be completed using any of the popups indicated in this section of the document. It is not necessary to document this criterion in all of the specified pop-ups to meet the intent of this measure.

Device Result Wiz Window, NextGen Adaptive Content Engine 8.4.x and Later

- 1. From the **Intake** template, select **Cardiology** as the Specialty.
- Select the Procedures tab. The Cardiology Procedures template opens.

- 3. In Cardiac Procedures, select the Electrophysiology link from the navigation bar.
- **4.** From the **Cardiac Procedures** template, in the Cardiac Procedures section, select the **Electrophysiology** link from the blue navigation pane.
- **5.** Select **Devices** from the EP picklist. The **Device Result Wiz** window opens.
- **6.** Enter the procedure date.
- 7. Select the Pacemaker or ICD Single Chamber or Dual Chamber options.
- 8. Select Accept.

	Device Result Wiz	x
Procedure: Devices Results Date: 12/08/2017 Performed By:	Document Cardiac Pacer	Procedure Codes
Pacemaker: Single Chamber Dual Chamber BiV Generator Repla Manufacturer:	ICD: C Single Chamber C Dual Chamber BiV cement Generator Replacement	Implantable EVR:
Model: Comments:		Clear All Accept Cancel

Manage Past Medical/Surgical History Window, NextGen Adaptive Content Engine 8.4.x and Later

- **1.** From the **Histories** template, select **Add** from the **Medical/Surgical/Interim** section. The **Past Medical History** window opens.
- **2.** Select **Cardiology** as the specialty.
- **3.** From the **Surgical** section, select the **Cardiac Pacemaker** check box and then select the **Manage** link.

The Manage Past Medical/Surgical History window opens.

4. Enter the full Procedure date MM/DD/YYYY in the Date field.

Note: While it is possible to enter MM/YYYY and YYYY in the **Manage Past Medical/Surgical History** window in 5.9/8.4, NextGen Healthcare recommends that users continue to enter the full date in the MM/DD/YYYY format for the most accurate measure calculations. To enter partial dates, **Use partial date for Past Medical/Surgical History** must be fully configured in the System/Practice templates.

5. Select Save to Grid & Close.

Note: Capturing additional CABG values requires user configuration.

Past Medical History				×
Speciality: Cardiology		Manage Past Medical/Surgica	Panel Co.	
Medical		Disease/Disorder		Management
Te add convents, click Details Addeominal sortic Athenoide Addeominal Sortic Athe	Onoet Date:	Diversity/disorder Diversity/disorder Diversity/disorder Diversity/disorder Diversity/diversity	Side	Date:
Concer Concer	<u></u> p	Outcome/Kemments Outcome: Outcome: Comments: Comments:	Document (Cardiac Pacer
Surgical To add comments, click Details.	Date	Characters left 987		(Save to Grid & Close) Cancel
Appendictiony III and surgery Collines surgery Collines		regregationers		 OK. [Cancel]

See Also

• References: Configure Medical, Surgical, Family Hx System Template

List of Values for Denominator Exceptions

CPT

List of Cardiac Pacer CPT Codes					
33210	33224				
33206	33207				
33208	33211				
33212	33213				
33214	33216				
33217	33221				
33225	33274				

ICD

List of Asthma ICD-10 Codes								
J45.20	J45.21	J45.22	J45.30	J45.31	J45.32			
J45.40	J45.41	J45.42	J45.50	J45.51	J45.52			
J45.901	J45.902	J45.909	J45.990	J45.991	J45.998			
List of Atrioventricular Block ICD-10 Codes								
---	--------------------	---------	-------	-------	--------			
144.0	144.1	144.2	144.3	30	144.39			
List of Bradycard	dia ICD-10 Codes							
149.5	149.8			R00.1				
List of Cardiac P	acer in Situ ICD-1	0 Codes						

Z95.0

Z95.810

List of Hypotension ICD-10 Codes					
195.0	195.1	195.2	195.3	195.81	195.89
195.9	O26.50	O26.51	O26.52	O26.53	

LOINC

List of Ejection Fraction LOINC Codes	
Description	Code
Left ventricular Ejection fraction	10230-1
Left ventricular Ejection fraction by US	18043-0
Left ventricular Ejection fraction by US.2D+Calculated by single-plane ellipse method	18044-8
Left ventricular Ejection fraction by US.2D+Calculated by biplane ellipse method	18045-5
Left ventricular Ejection fraction by US 2D modified	18046-3
Left ventricular Ejection fraction by US 2D modified biplane	18047-1
Left ventricular Ejection fraction by US 2D modified single-plane	18048-9
Left ventricular Ejection fraction by US.M-mode+Calculated by Teichholz method	18049-7
Left ventricular Ejection fraction by US.M-mode+Calculated by cube method	77889-4
Left ventricular Ejection fraction by US.2D+Calculated by cube method	77890-2
Left ventricular Ejection fraction by US.2D+Calculated by Teichholz method	77891-0
Left ventricular Ejection fraction by US.2D+Calculated by modified Simpson method	77892-8
Left ventricular Ejection fraction by US.3D.segmentation	79990-8
Left ventricular Ejection fraction by US.2D+Calculated by biplane method of disks	79991-6
Left ventricular Ejection fraction by US.2D.A2C+Calculated by single plane method of disks	79992-4

List of Ejection Fraction LOINC Codes			
Description	Code		
Left ventricular Ejection fraction by US.2D.A4C+Calculated by single plane method of disks	79993-2		
Left ventricular Ejection fraction by 2D echo	8806-2		
Left ventricular Ejection fraction by 2D echo.visual estimate	8807-0		
Left ventricular Ejection fraction by Cardiac angiogram	8808-8		
Left ventricular Ejection fraction by Cardiac angiogram.visual estimate	8809-6		
Left ventricular Ejection fraction by Spiral CT	8810-4		
Left ventricular Ejection fraction by MR	8811-2		
Left ventricular Ejection fraction by Nuclear blood pool	8812-0		
Left ventricular Ejection fraction by US.2D.A2C+Calc by single plane area-length method	93644-3		
Left ventricular Ejection fraction by US.2D.A4C+Calc by single plane area-length method	93645-0		
Left ventricular Ejection fraction by US.2D+Calculated by biplane area-length method	93646-8		

List of Heart Rate	e LOINC Codes			
11328-2	68999-2	69000-8	69001-6	8867-4

RxNorm

List of Beta Blocker Therapy for LVSD RxNorm Codes		
Description	Code	
carvedilol 6.25 MG Oral Tablet	200031	
carvedilol 12.5 MG Oral Tablet	200032	
carvedilol 25 MG Oral Tablet	200033	
carvedilol 3.125 MG Oral Tablet	686924	
Bisoprolol Fumarate 10 MG Oral Tablet	854901	
Bisoprolol Fumarate 5 MG Oral Tablet	854905	
Bisoprolol Fumarate 10 MG / Hydrochlorothiazide 6.25 MG Oral Tablet	854908	
Bisoprolol Fumarate 2.5 MG / Hydrochlorothiazide 6.25 MG Oral Tablet	854916	
Bisoprolol Fumarate 5 MG / Hydrochlorothiazide 6.25 MG Oral Tablet	854919	
24 HR carvedilol phosphate 10 MG Extended Release Oral Capsule	860510	
24 HR carvedilol phosphate 20 MG Extended Release Oral Capsule	860516	
24 HR carvedilol phosphate 40 MG Extended Release Oral Capsule	860522	

List of Beta Blocker Therapy for LVSD RxNorm Codes		
Description	Code	
24 HR carvedilol phosphate 80 MG Extended Release Oral Capsule	860532	
24 HR metoprolol succinate 100 MG Extended Release Oral Tablet	866412	
24 HR metoprolol succinate 200 MG Extended Release Oral Tablet	866419	
24 HR metoprolol succinate 25 MG Extended Release Oral Tablet	866427	
24 HR metoprolol succinate 50 MG Extended Release Oral Tablet	866436	
24 HR Hydrochlorothiazide 12.5 MG / metoprolol succinate 100 MG Extended Release Oral Tablet	866452	
24 HR Hydrochlorothiazide 12.5 MG / metoprolol succinate 25 MG Extended Release Oral Tablet	866461	
24 HR Hydrochlorothiazide 12.5 MG / metoprolol succinate 50 MG Extended Release Oral Tablet	866472	

List of Beta Blocker Therapy Ingredient RxNorm Codes		
Description	Code	
Timolol	10600	
Atenolol	1202	
Acebutolol	149	
Betaxolol	1520	
Bisoprolol	19484	
carvedilol	20352	
Carteolol	2116	
Nebivolol	31555	
Labetalol	6185	
Metoprolol	6918	
Nadolol	7226	
Pindolol	8332	
Propranolol	8787	
Sotalol	9947	
levobunolol	1813	
metipranolol	10824	
esmolol	49737	

Г

SNOMED

List of Allergy to	Beta Blocker The	erapy SNOMED Co	odes	
293962009	293963004	293964005	293965006	293966007
293967003	293968008	293969000	293970004	293972007
293973002	293974008	293975009	293976005	293977001
293978006	293979003	293980000	293981001	293982008
293983003	293984009			

List of Arrhythmia SNOMED Codes	
Description	Code
Paroxysmal atrial fibrillation with rapid ventricular response (disorder)	1010405004
Parasystole (disorder)	10164001
Multifocal premature ventricular complexes (disorder)	10626002
Ventricular bigeminy (disorder)	11157007
Right atrial non-cavotricuspid isthmus dependent macro re-entrant atrial tachycardia (disorder)	1142040009
Non-scar mediated right atrial non-cavotricuspid isthmus dependent macro re-entrant atrial tachycardia (disorder)	1142041008
Anticlockwise cavotricuspid isthmus dependent macroreentry tachycardia: clockwise (disorder)	1142057008
Antidromic atrioventricular reciprocating tachycardia using atrio-ventricular accessory pathway with antegrade unidirectional conduction (disorder)	1142064005
Antidromic atrioventricular reciprocating tachycardia using atrio-fascicular accessory pathway with antegrade unidirectional conduction (disorder)	1142066007
Non scar mediated left atrial non-cavotricuspid isthmus dependent macro re-entrant atrial tachycardia (disorder)	1142067003
Antidromic atrioventricular reciprocating tachycardia using accessory pathway with antegrade unidirectional conduction (disorder)	1142068008
Scar mediated left atrial non-cavotricuspid isthmus dependent macro re-entrant atrial tachycardia (disorder)	1142069000
Idiopathic junctional ectopic tachycardia (disorder)	1142082008
Congenital junctional ectopic tachycardia (disorder)	1142086006
Clockwise cavotricuspid isthmus dependent macroreentry tachycardia (disorder)	1142090008
Left atrial non-cavotricuspid isthmus dependent macro re-entrant atrial tachycardia (disorder)	1142093005
Junctional ectopic tachycardia following surgical procedure on heart (disorder)	1142098001

Antidromic atrioventricular reciprocating tachycardia using nodo-fascicular accessory pathway with antegrade unidirectional conduction (disorder) 1142103004 Typical atrioventricular nodal re-entry tachycardia (disorder) 1142105006 Scar mediated right atrial non-cavotricuspid isthmus dependent macro e-entrant atrial tachycardia (disorder) 1142117008 Atypical slow slow atrioventricular nodal re-entry tachycardia (disorder) 1142118003 Atypical fast slow atrioventricular nodal re-entry tachycardia (disorder) 1142112000 Atypical fast slow atrioventricular nodal re-entry tachycardia (disorder) 114212000 Atypical fast slow atrioventricular nodal re-entry tachycardia using manifest accessory pathway (disorder) 114212000 Atrioventricular nodal reentry tachycardia using accessory pathway with bidirectional conduction (disorder) 114212001 Antidromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder) 1142204001 Atrioventricular junctional following acute myocardial infarction (disorder) 144158100011910 Supraventricular tachycardia (disorder) 17869006 Atrioventricular atrioventricular excitation (disorder) 17869006 Atridoventricular accestricular (disorder) 195060002 Paroxysmal atrial tachycardia (disorder) 19507001 Paroxysmal nodal tach	List of Arrhythmia SNOMED Codes	·
accessory pathway with antegrade unidirectional conduction (disorder)1142105006Typical atrioventricular nodal re-entry tachycardia (disorder)1142114001Scar mediated right atrial non-cavotricuspid isthmus dependent macro1142117008Atypical slow slow atrioventricular nodal re-entry tachycardia (disorder)1142118003Atypical atrioventricular nodal re-entry tachycardia (disorder)1142118003Atypical fast slow atrioventricular nodal re-entry tachycardia (disorder)1142119006Orthodronic atrioventricular nodal re-entry tachycardia (disorder)114212000Atrioventricular nodal re-entry tachycardia using manifest114212000Caccessory pathway (disorder)114212000Antidromic atrioventricular reciprocating tachycardia using accessory114212008antway with bidirectional conduction (disorder)1142204001Antiorentricular incorporcating tachycardia using concealed1142204001accessory pathway (disorder)13640000Supraventricular tachycardia following acute myocardial infarction (disorder)17869006Withdrawal arrhythmia (disorder)17869006Withdrawal arrhythmia (disorder)19506002Paroxysmal atrial tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233892002Paroxysmal nodal tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233893007Paroxysmal nodal tachy	Description	Code
Scar mediated right atrial non-cavotricuspid isthmus dependent macro1142114001re-entrant atrial tachycardia (disorder)1142117008Atypical slow slow atrioventricular nodal re-entry tachycardia (disorder)1142118003Atypical fast slow atrioventricular nodal re-entry tachycardia (disorder)1142119006Drthodromic atrioventricular nodal re-entry tachycardia using manifest accessory pathway (disorder)114212000Atrioventricular nodal reeptry tachycardia using manifest accessory pathway (disorder)114212000Atrioventricular nodal reciprocating tachycardia using accessory pathway (disorder)1142122008Antidromic atrioventricular reciprocating tachycardia using accessory pathway (disorder)114212000Orthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder)114212000Orthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder)11421001Atrioventricular junctional rhythm (disorder)11849007Supraventricular tachycardia following acute myocardial infarction (disorder)1641508100011910Atrial arrhythmia (disorder)17869006Withdrawal arrhythmia (disorder)19506002Paroxysmal atrial tachycardia (disorder)19506002Paroxysmal nodal tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)23389007Re-entrant atrial tachycardia (disorder)23389007Re-entrant atrial tachycardia (disorder)23389007Permanent junctional reciprocating tachycardia (disorder)23389000	Antidromic atrioventricular reciprocating tachycardia using nodo-fascicular accessory pathway with antegrade unidirectional conduction (disorder)	1142103004
re-entrant atrial tachycardia (disorder) Atypical slow slow atrioventricular nodal re-entry tachycardia (disorder) 1142117008 Atypical atrioventricular nodal re-entry tachycardia (disorder) 1142118003 Atypical fast slow atrioventricular nodal re-entry tachycardia (disorder) 1142119006 Drthodromic atrioventricular reciprocating tachycardia using manifest accessory pathway (disorder) 114212000 accessory pathway (disorder) 114212000 Atrioventricular nodal reentry tachycardia with twin atrioventricular nodes Atrioventricular reciprocating tachycardia using accessory 114212008 Drthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder) 114204001 accessory pathway (disorder) 114204001 Atrioventricular incomentricular reciprocating tachycardia using concealed accessory pathway (disorder) 11849007 Fusion beats (disorder) 11849007 Fusion beats (disorder) 11849007 Fusion beats (disorder) 13640000 Supraventricular tachycardia following acute myocardial infarction (disorder) 1641508100011910 Atrial arrhythmia (disorder) 17869006 Withdrawal arrhythmia (disorder) 17869006 Withdrawal arrhythmia (disorder) 19506002 Paroxysmal atrial tachycardia (disorder) 19506002 Paroxysmal inctional tachycardia (disorder) 195071001 Paroxysmal nodal tachycardia (disorder) 19507008 Ventricular fibrillation and flutter (disorder) 233891009 Ectopic atrial tachycardia (disorder) 233891009 Ectopic atrial tachycardia (disorder) 23389007 ncessant atrial tachycardia (disorder) 23389000 Permanent junctional reciprocating tachycardia (disorder) 23389000	Typical atrioventricular nodal re-entry tachycardia (disorder)	1142105006
Atypical atrioventricular nodal re-entry tachycardia (disorder) 1142118003 Atypical fast slow atrioventricular nodal re-entry tachycardia (disorder) 1142119006 Drthodromic atrioventricular reciprocating tachycardia using manifest accessory pathway (disorder) 1142121000 Atrioventricular nodal re-entry tachycardia using manifest disorder) 1142121001 Atrioventricular nodal re-entry tachycardia using accessory pathway (disorder) 1142122008 Antidromic atrioventricular reciprocating tachycardia using accessory pathway with bidirectional conduction (disorder) 1142122008 Drthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder) 114204001 Atrioventricular junctional rhythm (disorder) 11849007 Eusion beats (disorder) 13640000 Supraventricular tachycardia following acute myocardial infarction (disorder) 1641508100011910 Atrioventricular excitation (disorder) 17866009 Anomalous atrioventricular excitation (disorder) 195060002 Paroxysmal atrial tachycardia (disorder) 195060002 Paroxysmal nodal tachycardia (disorder) 195072008 Ventricular fibrillation and flutter (disorder) 23891009 Ectopic atrial tachycardia (disorder) 23892002 Re-entrant atrial tachycardia (disorder)	Scar mediated right atrial non-cavotricuspid isthmus dependent macro re-entrant atrial tachycardia (disorder)	1142114001
Atypical fast slow atrioventricular nodal re-entry tachycardia (disorder) 1142119006 Atypical fast slow atrioventricular neciprocating tachycardia using manifest accessory pathway (disorder) 114212000 Atrioventricular nodal re-entry tachycardia using manifest disorder) 1142121001 Atrioventricular nodal re-entry tachycardia using accessory pathway (disorder) 1142122008 Antidromic atrioventricular reciprocating tachycardia using accessory pathway with bidirectional conduction (disorder) 1142122008 Orthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder) 1142000 Atrioventricular junctional rhythm (disorder) 11849007 Eusion beats (disorder) 13640000 Supraventricular tachycardia following acute myocardial infarction (disorder) 1641508100011910 Atrial arrhythmia (disorder) 17866009 Anomalous atrioventricular excitation (disorder) 17869006 Withdrawal arrhythmia (disorder) 195060002 Paroxysmal atrial tachycardia (disorder) 195071001 Paroxysmal odal tachycardia (disorder) 195072008 Ventricular fibrillation and flutter (disorder) 233891009 Ectopic atrial tachycardia (disorder) 233891009 Ectopic atrial tachycardia (disorder)<	Atypical slow slow atrioventricular nodal re-entry tachycardia (disorder)	1142117008
Drithodromic atrioventricular reciprocating tachycardia using manifest114212000Accessory pathway (disorder)1142121001Atrioventricular nodal reentry tachycardia with twin atrioventricular nodes1142121001Antidromic atrioventricular reciprocating tachycardia using accessory pathway with bidirectional conduction (disorder)1142122008Orthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder)1142204001Atrioventricular junctional rhythm (disorder)11849007Fusion beats (disorder)13640000Supraventricular tachycardia following acute myocardial infarction (disorder)1641508100011910-Antial arrhythmia (disorder)17866009Anomalous atrioventricular excitation (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233893007Re-entrant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233894005	Atypical atrioventricular nodal re-entry tachycardia (disorder)	1142118003
accessory pathway (disorder)1Atrioventricular nodal reentry tachycardia with twin atrioventricular nodes (disorder)1142121001Antidromic atrioventricular reciprocating tachycardia using accessory pathway with bidirectional conduction (disorder)1142122008Orthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder)1142204001Atrioventricular junctional rhythm (disorder)11849007Fusion beats (disorder)13640000Supraventricular tachycardia following acute myocardial infarction (disorder)1641508100011910-Anomalous atrioventricular excitation (disorder)17869006Withdrawal arrhythmia (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233894005	Atypical fast slow atrioventricular nodal re-entry tachycardia (disorder)	1142119006
disorder)1142122008Antidromic atrioventricular reciprocating tachycardia using accessory bathway with bidirectional conduction (disorder)1142204001Orthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder)1142204001Atrioventricular junctional rhythm (disorder)11849007Fusion beats (disorder)13640000Supraventricular tachycardia following acute myocardial infarction (disorder)1641508100011910Atrial arrhythmia (disorder)17366009Anomalous atrioventricular excitation (disorder)17869006Withdrawal arrhythmia (disorder)195060002Paroxysmal atrial tachycardia (disorder)195060002Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)233891009Ectopic atrial tachycardia (disorder)233893007Re-entrant atrial tachycardia (disorder)233893007Re-entrant atrial tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233895000	Orthodromic atrioventricular reciprocating tachycardia using manifest accessory pathway (disorder)	1142120000
bathway with bidirectional conduction (disorder)1Drthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder)1142204001Atrioventricular junctional rhythm (disorder)11849007Fusion beats (disorder)13640000Supraventricular tachycardia following acute myocardial infarction (disorder)1641508100011910Atrial arrhythmia (disorder)17366009Anomalous atrioventricular excitation (disorder)17869006Withdrawal arrhythmia (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195071001Paroxysmal junctional tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233894001	Atrioventricular nodal reentry tachycardia with twin atrioventricular nodes (disorder)	1142121001
accessory pathway (disorder)11849007Atrioventricular junctional rhythm (disorder)13640000Eusion beats (disorder)13640000Supraventricular tachycardia following acute myocardial infarction (disorder)16415081000119100Atrial arrhythmia (disorder)17366009Anomalous atrioventricular excitation (disorder)17869006Withdrawal arrhythmia (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195069001Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233895000	Antidromic atrioventricular reciprocating tachycardia using accessory pathway with bidirectional conduction (disorder)	1142122008
Fusion beats (disorder)13640000Supraventricular tachycardia following acute myocardial infarction (disorder)16415081000119104Atrial arrhythmia (disorder)17366009Anomalous atrioventricular excitation (disorder)17869006Withdrawal arrhythmia (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195069001Paroxysmal atrial tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233895000	Orthodromic atrioventricular reciprocating tachycardia using concealed accessory pathway (disorder)	1142204001
Supraventricular tachycardia following acute myocardial infarction (disorder)16415081000119104Atrial arrhythmia (disorder)17366009Anomalous atrioventricular excitation (disorder)17869006Withdrawal arrhythmia (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195069001Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007nccessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Atrioventricular junctional rhythm (disorder)	11849007
Atrial arrhythmia (disorder)17366009Anomalous atrioventricular excitation (disorder)17869006Withdrawal arrhythmia (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195069001Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Fusion beats (disorder)	13640000
Anomalous atrioventricular excitation (disorder)17869006Withdrawal arrhythmia (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195069001Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Supraventricular tachycardia following acute myocardial infarction (disorder)	16415081000119104
Withdrawal arrhythmia (disorder)184004Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195069001Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Atrial arrhythmia (disorder)	17366009
Ventricular pre-excitation (disorder)195060002Paroxysmal atrial tachycardia (disorder)195069001Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Anomalous atrioventricular excitation (disorder)	17869006
Paroxysmal atrial tachycardia (disorder)195069001Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Withdrawal arrhythmia (disorder)	184004
Paroxysmal junctional tachycardia (disorder)195071001Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Ventricular pre-excitation (disorder)	195060002
Paroxysmal nodal tachycardia (disorder)195072008Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Paroxysmal atrial tachycardia (disorder)	195069001
Ventricular fibrillation and flutter (disorder)195083004Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Paroxysmal junctional tachycardia (disorder)	195071001
Sinoatrial node tachycardia (disorder)233891009Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Paroxysmal nodal tachycardia (disorder)	195072008
Ectopic atrial tachycardia (disorder)233892002Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Ventricular fibrillation and flutter (disorder)	195083004
Re-entrant atrial tachycardia (disorder)233893007ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Sinoatrial node tachycardia (disorder)	233891009
ncessant atrial tachycardia (disorder)233894001Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Ectopic atrial tachycardia (disorder)	233892002
Ectopic atrioventricular node tachycardia (disorder)233895000Permanent junctional reciprocating tachycardia (disorder)233904005	Re-entrant atrial tachycardia (disorder)	233893007
Permanent junctional reciprocating tachycardia (disorder) 233904005	Incessant atrial tachycardia (disorder)	233894001
	Ectopic atrioventricular node tachycardia (disorder)	233895000
Paroxysmal familial ventricular fibrillation (disorder) 233915000	Permanent junctional reciprocating tachycardia (disorder)	233904005
	Paroxysmal familial ventricular fibrillation (disorder)	233915000

Description	Code
Concealed accessory pathway (disorder)	233922008
Unidirectional retrograde accessory pathway (disorder)	233923003
Electromechanical dissociation (disorder)	234172002
Slow ventricular response (disorder)	251161003
Atrio-ventricular-junctional (nodal) bradycardia (disorder)	251162005
Atrio-ventricular junctional (nodal) arrest (disorder)	251163000
Junctional premature complex (disorder)	251164006
Atrioventricular junctional (nodal) tachycardia (disorder)	251165007
Aberrant premature complexes (disorder)	251167004
Supraventricular bigeminy (disorder)	251168009
Blocked premature atrial contraction (disorder)	251170000
Run of atrial premature complexes (disorder)	251172008
Atrial bigeminy (disorder)	251173003
Atrial trigeminy (disorder)	251174009
Ventricular premature complex (disorder)	251175005
Multiple premature ventricular complexes (disorder)	251176006
Run of ventricular premature complexes (disorder)	251177002
Multiple ventricular interpolated complexes (disorder)	251179004
Ventricular trigeminy (disorder)	251180001
Ventricular quadrigeminy (disorder)	251181002
Paired ventricular premature complexes (disorder)	251182009
Ventricular escape complex (disorder)	251186007
Atrial escape complex (disorder)	251187003
Atrial parasystole (disorder)	251188008
Chronic ectopic atrial tachycardia (disorder)	26950008
Unifocal premature ventricular complexes (disorder)	27337007
Atrial tachycardia (disorder)	276796006
Premature atrial contraction (disorder)	284470004
Atrial premature complex (disorder)	287057009
Ectopic rhythm (disorder)	29320008
Electromechanical dissociation with successful resuscitation (disorder)	309809007

List of Arrhythmia SNOMED Codes	0 - 1-
Description	Code 33413000
Ectopic beats (disorder)	
Sick sinus syndrome (disorder)	36083008
Interpolated ventricular premature complexes (disorder)	38274001
Nonparoxysmal atrioventricular nodal tachycardia (disorder)	39260000
Paroxysmal atrial tachycardia with block (disorder)	39357005
Fibrillation (disorder)	40593004
Ectopic atrial beats (disorder)	406461004
Atrioventricular conduction disorder (disorder)	418341009
Brugada syndrome (disorder)	418818005
Sinoatrial nodal reentrant tachycardia (disorder)	419752005
Bradyarrhythmia (disorder)	421869004
Andersen Tawil syndrome (disorder)	422348008
Sustained ventricular fibrillation (disorder)	429243003
Conduction disorder of the heart (disorder)	44808001
Junctional escape beats (disorder)	47830009
Multifocal atrial tachycardia (disorder)	49982000
Lown-Ganong-Levine syndrome (disorder)	55475008
Ventricular parasystole (disorder)	59272004
Sinus node dysfunction (disorder)	60423000
Accelerated idioventricular rhythm (disorder)	61277005
Multifocal premature beats (disorder)	63232000
Supraventricular premature beats (disorder)	63593006
Idiojunctional tachycardia (disorder)	69730002
Ventricular fibrillation (disorder)	71908006
Supraventricular arrhythmia (disorder)	72654001
Wolff-Parkinson-White pattern (disorder)	74390002
Tachycardia-bradycardia (disorder)	74615001
Ventricular escape beat (disorder)	75532003
Supraventricular bradyarrhythmia (disorder)	762534000
Junctional premature beats (disorder)	81681009
Ventricular escape rhythm (disorder)	81898007

List of Arrhythmia SNOMED Codes			
Description	Code		
Atrio-ventricular node arrhythmia (disorder)	88412007		
Pacemaker mediated tachycardia (disorder)	1208832006		
Regular wide QRS complex tachycardia (disorder)	1220643007		

List of Asthma S	List of Asthma SNOMED Codes				
11641008	12428000	13151001	195949008	195967001	
195977004	225057002	233672007	233678006	233679003	
233683003	233688007	266361008	281239006	782520007	
31387002	370218001	370219009	370220003	370221004	
389145006	405944004	407674008	409663006	423889005	
424643009	425969006	426656000	426979002	427295004	
427603009	427679007	442025000	55570000	56968009	
59786004	63088003	707445000	707446004	707447008	
708090002	708093000	708094006	708095007	708096008	
762521001	85761009	92807009	93432008	10674791000119 101	
10676271000119 104					

List of Atrioventricular Block SNOMED Codes			
102451000119107	195042002	204383001	233917008
233918003	251114004	27885002	28189009
283645003	284941000119107	54016002	733125004

List of Bradycardia SNOMED Codes				
1142110005	1142111009	251162005	29894000	397841007
444605001	44602002	49044005	49710005	

List of Cardiac Pacer SNOMED Codes				
Description	Code			
Repair of cardiac pacemaker pocket in skin AND/OR subcutaneous tissue (procedure)	1279006			
Implantation of leadless cardiac pacemaker (procedure)	1231779006			
Replacement of leadless cardiac pacemaker (procedure)	1234788003			
Introduction of cardiac pacemaker system via vein (procedure)	175135009			

Γ

List of Cardiac Pacer SNOMED Codes			
Description	Code		
Implantation of permanent intravenous cardiac pacemaker (procedure)	175142009		
Implantation of intravenous fixed-rate cardiac pacemaker (procedure)	175143004		
Implantation of intravenous triggered cardiac pacemaker (procedure)	175144005		
Relocation of cardiac pacemaker pocket to new site in subcutaneous tissue (procedure)	20453006		
Reposition of cardiac pacemaker pocket (procedure)	230588002		
Cardiac pacemaker procedure (procedure)	233174007		
Temporary cardiac pacemaker procedure (procedure)	233175008		
Permanent cardiac pacemaker procedure (procedure)	233182007		
Insertion of permanent epicardial cardiac pacemaker system (procedure)	233183002		
Repair of cardiac pacemaker (procedure)	23325006		
Implantation of rate-responsive cardiac single-chamber device (procedure)	23999003		
Insertion of intracardiac pacemaker (procedure)	25267002		
Implantation of emergency intravenous cardiac pacemaker (procedure)	265482008		
Implantation of cardiac pacemaker (procedure)	307280005		
Reimplantation of cardiac pacemaker electrode (procedure)	308805008		
Implantation of simple one wire intravenous cardiac pacemaker (procedure)	309405007		
Implantation of complex one wire intravenous cardiac pacemaker (procedure)	309407004		
Implantation of complex two wire intravenous cardiac pacemaker (procedure)	309408009		
Implantation of temporary intravenous cardiac pacemaker (procedure)	309471004		
Implantation of intravenous dual chamber permanent cardiac pacemaker (procedure)	310582005		
Replacement of cardiac pacemaker device with dual-chamber device (procedure)	384683008		
Implantation of biventricular cardiac pacemaker system (procedure)	429064006		
Implantation of intravenous single chamber cardiac pacemaker system (procedure)	429528001		
Implantation of intravenous biventricular cardiac pacemaker system (procedure)	429542009		
Reposition of permanent cardiac pacemaker using fluoroscopic guidance (procedure)	430294007		
Replacement of permanent cardiac pacemaker using fluoroscopic guidance (procedure)	431846007		
Insertion of temporary cardiac pacemaker using fluoroscopic guidance (procedure)	432113002		

Insertion of single chamber cardiac pacemaker pulse generator (procedure) Insertion of dual chamber cardiac pacemaker pulse generator (procedure) Replacement of cardiac pacemaker (procedure) Repositioning of cardiac pacemaker lead using fluoroscopic guidance (procedure) Replacement of cardiac biventricular implantable cardioverter defibrillator using fluoroscopic guidance (procedure) Replacement of cardiac biventricular permanent pacemaker using fluoroscopic guidance (procedure) Insertion of permanent cardiac pacemaker pulse generator and electrode (procedure) Replacement of pulse generator of permanent cardiac pacemaker using fluoroscopic guidance (procedure) Insertion of permanent cardiac dual-chamber device (procedure) Subcutaneous implantation of cardiac pacemaker (procedure) Insertion of programmable cardiac pacemaker (procedure)	443753002 444179007 444566006 448242007 448841009 448869001 449397007 450820006 58863009 65219008			
Replacement of cardiac pacemaker (procedure) Repositioning of cardiac pacemaker lead using fluoroscopic guidance (procedure) Replacement of cardiac biventricular implantable cardioverter defibrillator using fluoroscopic guidance (procedure) Replacement of cardiac biventricular permanent pacemaker using fluoroscopic guidance (procedure) Insertion of permanent cardiac pacemaker pulse generator and electrode (procedure) Replacement of pulse generator of permanent cardiac pacemaker using fluoroscopic guidance (procedure) Initial implantation of cardiac dual-chamber device (procedure) Subcutaneous implantation of cardiac pacemaker (procedure) Insertion of programmable cardiac pacemaker (procedure)	444566006 448242007 448841009 448869001 449397007 450820006 58863009 65219008			
Repositioning of cardiac pacemaker lead using fluoroscopic guidance (procedure) Replacement of cardiac biventricular implantable cardioverter defibrillator using fluoroscopic guidance (procedure) Replacement of cardiac biventricular permanent pacemaker using fluoroscopic guidance (procedure) Insertion of permanent cardiac pacemaker pulse generator and electrode (procedure) Replacement of pulse generator of permanent cardiac pacemaker using fluoroscopic guidance (procedure) Initial implantation of cardiac dual-chamber device (procedure) Subcutaneous implantation of cardiac pacemaker (procedure)	448242007 448841009 448869001 449397007 450820006 58863009 65219008			
(procedure) Replacement of cardiac biventricular implantable cardioverter defibrillator using fluoroscopic guidance (procedure) Replacement of cardiac biventricular permanent pacemaker using fluoroscopic guidance (procedure) Insertion of permanent cardiac pacemaker pulse generator and electrode (procedure) Replacement of pulse generator of permanent cardiac pacemaker using fluoroscopic guidance (procedure) Initial implantation of cardiac dual-chamber device (procedure) Subcutaneous implantation of cardiac pacemaker (procedure) Insertion of programmable cardiac pacemaker (procedure)	448841009 448869001 449397007 450820006 58863009 65219008			
fluoroscopic guidance (procedure) Replacement of cardiac biventricular permanent pacemaker using fluoroscopic guidance (procedure) Insertion of permanent cardiac pacemaker pulse generator and electrode (procedure) Replacement of pulse generator of permanent cardiac pacemaker using fluoroscopic guidance (procedure) Initial implantation of cardiac dual-chamber device (procedure) Subcutaneous implantation of cardiac pacemaker (procedure) Insertion of programmable cardiac pacemaker (procedure)	448869001 449397007 450820006 58863009 65219008			
guidance (procedure) Insertion of permanent cardiac pacemaker pulse generator and electrode (procedure) Replacement of pulse generator of permanent cardiac pacemaker using fluoroscopic guidance (procedure) Initial implantation of cardiac dual-chamber device (procedure) Subcutaneous implantation of cardiac pacemaker (procedure) Insertion of programmable cardiac pacemaker (procedure)	449397007 450820006 58863009 65219008			
(procedure) Replacement of pulse generator of permanent cardiac pacemaker using fluoroscopic guidance (procedure) Initial implantation of cardiac dual-chamber device (procedure) Subcutaneous implantation of cardiac pacemaker (procedure) Insertion of programmable cardiac pacemaker (procedure)	450820006 58863009 65219008			
fluoroscopic guidance (procedure) Initial implantation of cardiac dual-chamber device (procedure) Subcutaneous implantation of cardiac pacemaker (procedure) Insertion of programmable cardiac pacemaker (procedure)	58863009 65219008			
Subcutaneous implantation of cardiac pacemaker (procedure)	65219008			
Insertion of programmable cardiac pacemaker (procedure)	+			
Implantation of cardiac defibrillator lead (procedure)	699125007			
Implantation of cardiac defibrillator lead (procedure)				
Cardiac pacemaker procedure using fluoroscopic guidance (procedure)	703073006			
Revision of cardiac pacemaker electrode using fluoroscopic guidance (procedure)	704115002			
Revision of internal cardiac defibrillator lead using fluoroscopic guidance (procedure)	736700005			
Revision of cardiac biventricular implantable cardioverter defibrillator lead using fluoroscopic guidance (procedure)	737011002			
Replacement of cardiac biventricular implantable cardioverter defibrillator (procedure)				
Revision of permanent cardiac pacemaker device (procedure)				
Replacement of cardiac pacemaker with single chamber pacemaker not specified as rate responsive (procedure)	8072003			

441509002		443325000	
	441769002	703396000	
	86041000119107		

List of Hypotension SNOMED Codes				
195506001	200113008	200114002	230664009	234171009
271870002	286963007	371073003	408667000	408668005
429561008	45007003	61933008	70247006	75181005
77545000	88887003			

List of Intolerance to Beta Blocker Therapy SNOMED Codes				
292419005	292420004	292421000	292424008	292425009
292426005	292427001	292428006	292430008	418370000
292431007	292432000	292433005	292434004	292435003
292436002	292437006	292438001	292439009	292440006
292441005	292442003	772020009		

List of Medical Reason SNOMED Codes	
Description	Code
Procedure contraindicated (situation)	183932001
Treatment not indicated (situation)	183964008
Drug treatment not indicated (situation)	183966005
Absent response to treatment (situation)	266721009
Late effect of medical and surgical care complication (disorder)	269191009
Drug resistance (disorder)	31438003
Complication of medical care (disorder)	35688006
Treatment not tolerated (situation)	407563006
Not indicated (qualifier value)	410534003
Contraindicated (qualifier value)	410536001
Drug allergy (disorder)	416098002
Procedure not indicated (situation)	428119001
Drug intolerance (disorder)	59037007
Adverse reaction to drug (disorder)	62014003
Drug interaction (finding)	79899007
List of Patient Reason SNOMED Codes	
Description	Code
Refusal of treatment by patient (situation)	105480006

Financial problem (finding)

п

160932005

List of Patient Reason SNOMED Codes		
Description	Code	
Financial circumstances change (finding)	160934006	
Patient requests alternative treatment (finding)	182890002	
Drug declined by patient (situation)	182895007	
Drug declined by patient - side effects (situation)	182897004	
Drug declined by patient - patient beliefs (situation)	182900006	
Drug declined by patient - cannot pay script (situation)	182902003	
Procedure refused for religious reason (situation)	183945002	
Patient has moved away (finding)	184081006	
Patient dissatisfied with result (finding)	185479006	
Dissatisfied with doctor (finding)	185481008	
Variable income (finding)	224187001	
Patient self-discharge against medical advice (procedure)	225928004	
Drugs not taken/completed (situation)	266710000	
Family illness (situation)	266966009	
Patient defaulted from follow-up (finding)	275694009	
Patient noncompliance - general (situation)	275936005	
Did not attend (finding)	281399006	
Further opinion sought (finding)	310343007	
Treatment delay - patient choice (finding)	373787003	
Medication refused (situation)	406149000	
Patient forgets to take medication (finding)	408367005	
Patient non-compliant - refused intervention / support (situation)	413311005	
Procedure not wanted (situation)	416432009	
Income insufficient to buy necessities (finding)	423656007	
Income sufficient to buy only necessities (finding)	424739004	
Refused (qualifier value)	443390004	
Procedure discontinued by patient (situation)	713247000	

List of Substance with Beta Adrenergic Receptor Antagonist Mechanism of Action Direct Reference SNOMED Codes

373254001

Initial Population: Analysis of Specification

NextGen Healthcare Analysis	Mapping	Values
Patients age 18 years or older at the start date of the measurement period	Person Table	DOB/Age List of Values
AND		
At LEAST TWO qualifying Encounters: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, Outpatient Consultation, or Patient Provider Interaction during the measurement period	Procedures module, SNOMED Visit Type window	List of Values
AND		
Heart Failure Outpatient Encount	er:	
Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period	Procedures module, SNOMED Visit Type window	<u>List of Values</u>
AND		
ACTIVE Diagnosis of Heart Failure prior to or during Heart Failure Outpatient Encounter: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Diagnosis of HF must be ACTIVE during qualifying Heart Failure Outpatient Encounter Note: A diagnosis of heart failure on or before at least one qualifying encounter	Diagnosis module, Problems module	List of Values

See Also

• List of Values for Initial Population

Denominator: Analysis of Specification

NextGen Healthcare Analysis	Mapping	Values
Includes Initial Population		
AND		
Heart Failure Outpatient Encount	er with History of Moderate or Seve	ere LVSD:
Ejection Fraction documented with results < = 40% prior to OR during Heart Failure Outpatient Encounter: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period	ECHO Result Wizard window, MPI Result Wizard window, Cath Result Wizardwindow Orders module Echo GS Echocardiogram Stress Nuclear Stress Test-Card	List of Values
OR		
ACTIVE Diagnosis of Moderate or Severe LVSD prior to OR during Heart Failure Outpatient Encounter: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period	Problems module	List of Values

See Also

• List of Values for Denominator

Denominator Exclusion: Analysis of Specification

NextGen Healthcare Analysis	Mapping	Values
Patient with a history of heart transplant documented prior to the end of Heart Failure Outpatient encounter with History of Moderate or Severe LVSD	CARD CH CHF CMwindow Procedure module MRcoded results Problem module Past Medical History module	List of Values
OR		
Patient with a Diagnosis of Heart Transplant Complications documented prior to the end of Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD	Diagnosis Module MRcoded results Problem module Past Medical History module	List of Values
OR		
Patient with a Left Ventricular Assist Device (LVAD) prior to the end of Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD	VAD Test Result Wiz window Procedure module MRcoded results Problem module Past Medical History module	<u>List of Values</u>
OR		
Patient with a Diagnosis of Left Ventricular Assist Device Complications prior to the end Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD	MRcoded results Problem module Past Medical History module	List of Values

See Also

• List of Values for Denominator Exclusion

Numerator: Analysis of Specification

NextGen Healthcare Analysis	Mapping	Values
Beta Blocker Therapy for LVSD prescribed during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period	Medications module	List of Values
OR		
Beta Blocker Therapy for LVSD starts prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period	Medications module	List of Values

See Also

• List of Values for Numerator

Denominator Exception: Analysis of Specification

NextGen Healthcare Analysis	Mapping	Values
MOST RECENT Occurrence B Heart Rate performed prior to Occurrence A Heart Rate	Vital Signs window	List of Values
AND		
BOTH Occurrence A and Occurrence B Heart Rate result < 50 bpm during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Occurrence A and occurrence B Heart rate should be considered as consecutive heart rate.		
OR	1	
Documentation of Medical or Patient Reasons for not prescribing Medication Beta Blocker Therapy for LVSD during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period	Exceptions/ Measures window	List of Values
OR		
ACTIVE Arrhythmia Diagnosis prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in	Problems module, Diagnosis module	<u>List of Values</u>

NextGen Healthcare Analysis	Mapping	Values
Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Diagnosis of Arrhythmia MUST be ACTIVE during Heart Failure Outpatient encounter		
OR		
ACTIVE Hypotension Diagnosis prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Diagnosis of Hypotension MUST be ACTIVE during Heart Failure Outpatient encounter	Problems module, Diagnosis module	<u>List of Values</u>
OR		
ACTIVE Asthma Diagnosis prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Diagnosis of Asthma MUST be ACTIVE during Heart Failure Outpatient encounter	Problems module, Diagnosis module	<u>List of Values</u>
OR		
ACTIVE Allergy to Beta Blocker Therapy Ingredient Diagnosis prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility,	Allergies module, Problems module	List of Values

NextGen Healthcare Analysis	Mapping	Values
Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Diagnosis of Allergy to Beta Blocker Therapy MUST be ACTIVE during Heart Failure		
Outpatient encounter		
OR	ſ	
Medication Intolerance to Beta Blocker Therapy Diagnosis prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Intolerance Beta Blocker Therapy Allergy MUST be ACTIVE during Heart Failure Outpatient encounter	Allergies module	List of Values
OR		
ACTIVE Intolerance to Beta Blocker Therapy Diagnosis prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Diagnosis of Intolerance to Beta Blocker Therapy MUST	Problems module	List of Values
be ACTIVE during Heart Failure Outpatient encounter		
OR		

NextGen Healthcare	Mapping	Values
Analysis		
ACTIVE Bradycardia Diagnosis prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period * Diagnosis of Bradycardia MUST be ACTIVE during Heart Failure Outpatient encounter	Problems module, Diagnosis module	List of Values
OR	,	
Medication, Allergy or Intolerance to Beta Blocker Therapy Ingredient prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Medication, Allergy to Beta Blocker Therapy Ingredient MUST be ACTIVE during Heart Failure Outpatient encounter	Allergies module	List of Values
OR	1	
ACTIVE Atrioventricular Block Diagnosis prior to or Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Diagnosis of Atrioventricular Block MUST be ACTIVE during Heart Failure Outpatient encounter	Problems module, Diagnosis module	List of Values

NextGen Healthcare Analysis	Mapping	Values
AND NOT		
ACTIVE Cardiac Pacer in Situ Diagnosis or Cardiac Pacer Implant Procedure performed prior to or during Heart Failure Outpatient Encounter with History of Moderate or Severe LVSD: Care Services in Long-Term Residential Facility, Home Healthcare Services, Nursing Facility Visit, Office Visit, or Outpatient Consultation during the measurement period Diagnosis of Cardiac Pacer in Situ MUST be ACTIVE during Heart Failure Outpatient encounter	Problems module, Diagnosis module, Device Result Wiz window, Manage Past Medical/Surgical History window Procedure module	List of Values

See Also

• List of Values for Denominator Exceptions

Special Considerations

Denominator Exceptions criteria for all CQM measures are excluded from the Numerator. Please see below for CMS definition:

• Denominator Exceptions (DException): A subset of the Denominator. Only those members of the Denominator that are considered for Numerator membership and are not included are considered for membership in the Denominator Exceptions.

This measure reports on patients.

This measure will be incremented across the enterprise if enterprise chart is enabled.

Note:

Due to NextGen Adaptive Content Engine limitations, the Denominator Exceptions criteria:

- Medication, Order not done: Medical Reason for Beta Blocker Therapy for LVSD
- Medication, Order not done: Patient Reason for Beta Blocker Therapy for LVSD
- Medication, Order not done: System Reason for Beta Blocker Therapy for LVSD

cannot be captured in version 8.4.x. These enhancements can be found in NextGen® Enterprise Spring '21 (v6.2021.1) and higher.

Assumptions

For more information on NextGen HQM Assumptions, refer to the following link:<u>https://www.community.nextgen.com/articles/White_Papers/Assumptions-for-Health-Quality-Measures-Portal-Measures-Papers</u>

References: Configure Medical, Surgical, Family Hx System Template

Links to White Paper instructions: <u>https://www.community.nextgen.com/articles/</u> <u>White_Papers/Configure-Medical-Surgical-Family-Hx-System-Template-White-Paper-for-NextGen-KBM-Version-8-4</u>

or <u>https://www.community.nextgen.com/articles/UserGuides/Configure-Medical-Surgical-Family-Hx-System-Template-for-NextGen-Adaptive-Content-Engine-8-4-2</u>

		Panel Control: 💿 To	ggle 💿 🕈 Cycle	J
ondition and M	anagement Configuration			۲
•Туре: 🔿 РМН Ме	dical @ PAtH Management C Family History			
	Surgical Negative	_		
*Condition/Manag	ement:	*Code: Co	ide N/A	
Total colectomy		26390003		
Characters left: 215				
		Add Up	pdate) (Clear	
Iter: Type:	Show only removed items			
ype Sub Typ	Condition/Management	Code System	Code Value	T-
PMHMG	tocolytic agent	SNOMED	262212007	-
PMHMG PMHS	Tonsillectomy	SNOMED	173422009	
	Tonsilitis	SNOMED	90176007	
PMHM	10111111111			
	Topical form tacrolimus (product)	SNOMED	395431000	
PMHMG	Topical form tacrolimus (product)	SNOMED		
PMHMG PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure)	SNOMED	392237008	ċ
PMHMG PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total anthroplasty of knee, geomedic or polycentric (procedure) Total colectomy	SNOMED SNOMED SNOMED	392237008 26390003	i
PMHMG PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total arcottactic replacement of knee joint not using cement (procedure)	SNOMED SNOMED SNOMED SNOMED	392237008 26390003 265172001	l
PMHMG PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total acolectomy Total prosthetic replacement of knee joint not using cement (procedure) Total prosthetic replacement of knee joint using cement (procedure)	SNOMED SNOMED SNOMED SNOMED SNOMED	392237008 26390003 265172001 265170009	
PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total arcottactic replacement of knee joint not using cement (procedure)	SNOMED SNOMED SNOMED SNOMED	392237008 26390003 265172001 265170009 443681002	
PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total arosthetic replacement of knee joint not using cement (procedure) Total prosthetic replacement of knee joint using cement (procedure)	SNOMED SNOMED SNOMED SNOMED SNOMED SNOMED	392237008 26390003 265172001 265170009 443681002	
PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total arosthetic replacement of knee joint not using cement (procedure) Total prosthetic replacement of knee joint using cement (procedure)	SNOMED SNOMED SNOMED SNOMED SNOMED SNOMED	392237008 26390003 265172001 265170009 443681002	1
PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total arosthetic replacement of knee joint not using cement (procedure) Total prosthetic replacement of knee joint using cement (procedure)	SNOMED SNOMED SNOMED SNOMED SNOMED SNOMED	392237008 26390003 265172001 265170009 443681002	1
PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total arosthetic replacement of knee joint not using cement (procedure) Total prosthetic replacement of knee joint using cement (procedure)	SNOMED SNOMED SNOMED SNOMED SNOMED SNOMED	392237008 26390003 265172001 26517009 443681002 Remov	ve
PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total arcothetic replacement of knee joint not using cement (procedure) Total prosthetic replacement of knee joint using cement (procedure) Total replacement of left knee joint (procedure) Total replacement of left knee joint (procedure)	SNOMED SNOMED SNOMED SNOMED SNOMED SNOMED	392237008 26590003 265172001 265170009 443651002 Remov	ve
PMHMG PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS PMHMG PMHS	Topical form tacrolimus (product) Total arthroplasty of knee, geomedic or polycentric (procedure) Total arcothetic replacement of knee joint not using cement (procedure) Total prosthetic replacement of knee joint using cement (procedure) Total replacement of left knee joint (procedure) Total replacement of left knee joint (procedure)	SNOMED SNOMED SNOMED SNOMED SNOMED SNOMED	992237008 26390003 265172001 265170009 443681002 Remov	ve

CRS 2.0 Configuration

Links to white paper instructions:

https://www.community.nextgen.com/articles/UserGuides/Coded-Results-Mapping-User-Guide-for-NextGen-Adaptive-Content-Engine-5-9-2020-1

https://www.community.nextgen.com/articles/UserGuides/Coded-Results-Mapping-User-Guide-for-NextGen-Adaptive-Content-Engine-6-2021-1

https://www.community.nextgen.com/articles/Knowledge/Coded-Results-Mapping-User-Guide-for-NextGen-Adaptive-Content-Engine-Enterprise-8

4 Coded Results Mapping x		
How to use this template Copy records to pradice: Copy	Save & C	lose
Add/Update Coded Results Mapping Source Table: Source Field: Field Value: [Card, Friend, Etho, J), Et, ebo, gretionIna]	Map any Code System: Code Value:	
Canaverte: Canaverte: added to text loanc code for Ejection Fraction		nove
Show removed Filter by C Show all C Source table/field C Code value [8006-2	Search 2 re	cords
Source Table Source Field Field Value	Any Value Code System Code Value Comments	
Card_Testing_Echo_MRDaf_bt_echo_sjectionfraction_	Y LOINC 8806-2 added to test k	inc coc

For more information on NextGen HQM, refer to the following links:

- NextGen Healthcare
- HQM Documentation
- <u>CMS</u>

NextGen HQM Data Assumptions

The following list outlines some of the NextGen HQM data assumptions:

- Qualifying data from NextGen Adaptive Content Engine
- Diagnosis and Diagnosis Date
- Lab Results and Lab Results Date
- Age
- Demographic Data
- Medication Dates
- Medications
- Order_table
- Window templates
- Visit Type
- Vital Signs

Document Revision History

Program Year	Program Name	Date	Document Version	Summary of Changes
2025	CMS	12/13/2024	1.0	Initial Release