

CORONARY ARTERY DISEASE (CAD) Algorithm for Measures Calculation-EHRS

PATIENT SELECTION CRITERIA

Include if **ALL** the following criteria are met:

- At least two **face-to-face office visits** with the physician, physicians' assistant, or nurse practitioner during the sampling period with a **documented diagnosis** of coronary artery disease (CAD)
- Is **18 years or older** at the beginning of the sampling period

➤ *List of Data Elements located in Appendix A*

Physician Performance Measures (Measures) and related data specifications, developed by the Physician Consortium for Performance Improvement™ (the Consortium), are intended to facilitate quality improvement activities by physicians.

These Measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance Measures are not clinical guidelines and do not establish a standard of medical care. The Consortium has not tested its Measures for all potential applications. The Consortium encourages the testing and evaluation of its Measures.

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Measure Owner Designation
♣ AMA/PCPI is the measure owner
▲ CMS is the measure owner
■ NCQA is the measure owner

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

At least two face-to-face office visits with physician, physicians' assistant, or nurse practitioner occurring during the sampling period:

ENCOUNTER CODE** (C4)
99201-99205, 99212-99215,
99241-99245,
99385-99387, 99395-99397

AND

Patient is 18 years or older at the beginning of the sampling period
[DATEOFBIRTH]* ≥ 18

AND

Patient has a documented diagnosis of CAD

DX CODE (I9)	PROC CODE (C4)
410.00-410.92, 411.0-411.89,	33140, 33510-33514, 33516-33519,
412, 413.0-413.9,	33521-33523, 33533-33536,
414.00-414.07, 414.8, 414.9,	92980-92982, 92984, 92995,
V45.81, V45.82	92996

[CADCONFIRMED]*=1

* Bracketed element names reflect MCMP-PAT element names

** Encounter Code box will not be repeated for every measure, but it is a required element for every measure

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

Antiplatelet Therapy (*CAD-1): Percentage of patients with CAD who were prescribed antiplatelet therapy

Denominator: All patients with CAD ≥ 18 years of age

Denominator Inclusions

All patients with a documented diagnosis of CAD and patient is 18 years or older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) and CPT (C4) codes for inclusion:

[CADCONFIRMED]=1	DX CODE (I9)	PROC CODE (C4)
		410.00-410.92, 411.0-411.89,
	412, 413.0-413.9,	33521-33523, 33533-33536,
	414.00-414.07, 414.8, 414.9,	92980-92982, 92984, 92995,
	V45.81, V45.82	92996

Numerator: Patients who were prescribed antiplatelet therapy (aspirin, clopidogrel or combination of aspirin and dipyridamole)

Numerator Inclusion Option #1

TOPIC_DRUG_CODES Table lists applicable drug codes for patients who were prescribed aspirin, clopidogrel or a combination of aspirin and dipyridamole therapy during the measurement period and DRUG_EXCLUSION = N.

[CADANTIPLATDRUG]=1

OR

Numerator Inclusion Option #2

TOPIC_EVALUATION_CODES Table lists an applicable CPT Category II (C4) code for patients who were prescribed antiplatelet therapy during the measurement period.

ANTIPLATELET THERAPY CODE (C4)
4011F

[CADANTIPLATDRUG]=1

CORONARY ARTERY DISEASE (CAD)

Algorithm for Measures Calculation-EHRS

Denominator Exclusions (*Exclusions only applied if the patient did not receive antiplatelet therapy*)

TOPIC_MEDICAL_EXCLUSION Table lists an applicable SNOMED (SNM) code for medical reason exclusion:

EXCLUSION CODE (SNM)
64779008

OR

TOPIC_MEDICAL_EXCLUSION Table lists applicable ICD-9 (I9) codes for adverse effects exclusion where ADVERSE_EFFECT_1 codes must be accompanied by an ADVERSE_EFFECT_2 code:

ADVERSE EFFECT 1 CODE (I9)	ADVERSE EFFECT 2 CODE (I9)
995.0, 995.1, 995.27, 995.29	E934.8, E935.3

[CADANTIPLATDRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists applicable SNOMED (SNM) codes for allergy or intolerance to antiplatelet therapy:

ALLERGY CODE (SNM)
292044008, 293586001, 407592005

[CADANTIPLATDRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for medical reason for exclusion:

MEDICAL REASON (C4)
4011F-1P

[CADANTIPLATDRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for patient reason for exclusion:

PATIENT REASON (C4)
4011F-2P

[CADANTIPLATDRUG]=4

OR

CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for system reason for exclusion:

SYSTEM REASON (C4)
4011F-3P

[CADANTIPLATDRUG]=5

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

Drug Therapy for Lowering LDL Cholesterol (*CAD-2): Percentage of patients who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines)

Denominator: All patients with CAD ≥ 18 years of age

Denominator Inclusions

All patients with a documented diagnosis of CAD and patient is 18 years or older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) and CPT (C4) codes for inclusion:

[CADCONFIRMED]=1	DX CODE (I9)	PROC CODE (C4)
		410.00-410.92, 411.0-411.89,
	412, 413.0-413.9,	33521-33523, 33533-33536,
	414.00-414.07, 414.8, 414.9,	92980-92982, 92984, 92995,
	V45.81, V45.82	92996

Numerator: Patients who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines)

Numerator Inclusion Option #1

TOPIC_DRUG_CODES Table lists applicable drug codes for patients who were prescribed a lipid-lowering drug during the measurement period and DRUG_EXCLUSION = N.

[CADLDCRUG]=1

OR

Numerator Inclusion Option #2

TOPIC_EVALUATION_CODES Table lists an applicable CPT Category II (C4) code for patients who were prescribed a lipid-lowering drug during the measurement period.

STATIN THERAPY CODE (C4)
4002F

[CADLDCRUG]=1

CORONARY ARTERY DISEASE (CAD) Algorithm for Measures Calculation-EHRS

Denominator Exclusions (*Exclusions only applied if the patient did not receive lipid lowering therapy*)

TOPIC_MEDICAL_EXCLUSION Table lists applicable ICD-9 (I9) codes for adverse effects exclusion where ADVERSE_EFFECT_1 codes must be accompanied by an ADVERSE_EFFECT_2 code:

ADVERSE EFFECT 1 CODE (I9)	ADVERSE EFFECT 2 CODE (I9)
995.0, 995.1, 995.27, 995.29	E942.2

[CADLDCRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists applicable LOINC (LN) and CPT (C4) exclusion codes with associated LDL values < 130:

LDL CODE (LN)	LDL CODE (C4)
2089-1, 12773-8, 13457-7, 18261-8,	80061, 83700, 83701,
18262-6, 22748-8,	83704, 83721
24331-1, 39469-2	
AND value of LDL-C < 130	

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for LDL-C < 130 mg/dl:

LDL < 130 CODE (C4)
3048F, 3049F

[CADLDCRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for medical reason exclusion:

MEDICAL REASON (C4)
4002F-1P

[CADLDCRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for patient reason exclusion:

PATIENT REASON (C4)
4002F-2P

[CADLDCRUG]=4

OR

CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for system reason exclusion:

SYSTEM REASON (C4)
4002F-3P

[CADLDCRUG]=5

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

Beta-Blocker Therapy – Prior Myocardial Infarction (MI) (*CAD-3): Percentage of patients with prior MI at any time who were prescribed beta-blocker therapy

Denominator: All patients with CAD who also have prior MI at any time \geq 18 years of age

Denominator Inclusions

All patients with a documented diagnosis of CAD and patient is 18 years or older at the beginning of the measurement period and with prior MI.

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) and CPT (C4) codes for inclusion:

[CADCONFIRMED]=1

DX CODE (I9)	PROC CODE (C4)
410.00-410.92, 411.0-411.89,	33140, 33510-33514, 33516-33519,
412, 413.0-413.9,	33521-33523, 33533-33536,
414.00-414.07, 414.8, 414.9,	92980-92982, 92984, 92995,
V45.81, V45.82	92996

AND

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) codes for inclusion:

[CADMI]=1

MI DX CODE (I9)
410.00-410.92, 412

Numerator: Patients who were prescribed beta-blocker therapy

Numerator Inclusion Option #1

TOPIC_DRUG_CODES Table lists applicable drug codes for patients who were prescribed beta-blocker therapy during the measurement period and DRUG_EXCLUSION = N.

[CADBLOCKDRUG]=1

OR

Numerator Inclusion Option #2

TOPIC_EVALUATION_CODES Table lists an applicable CPT Category II (C4) code for patients who were prescribed beta-blocker therapy during the measurement period:

BETA BLOCKER THERAPY CODE (C4)
4006F

[CADBLOCKDRUG]=1

CORONARY ARTERY DISEASE (CAD) Algorithm for Measures Calculation-EHRS

Denominator Exclusions (*Exclusions only applied if the patient did not receive beta-blocker therapy*)

TOPIC_MEDICAL_EXCLUSION Table lists applicable ICD-9 (I9) and SNOMED (SNM) codes for exclusion:

EXCLUSION CODE (I9)	EXCLUSION CODE (SNM)
427.81, 427.89,	293962009, 372661004, 42177007,
458.0-458.1, 458.21, 458.29,	44602002, 48867003,
458.8, 458.9,	49044005, 49710005,
493.00-493.92	293963004, 407577009, 36083008

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable SNOMED (SNM) code for documentation of bradycardia as defined by two consecutive heart rate readings < 50 bpm that occur during the measurement period:

HEART RATE CODE (SNM)
364075005

OR

TOPIC_MEDICAL_EXCLUSION Table lists applicable ICD-9 (I9) codes for history of 2nd or 3rd degree AV block without permanent pacemaker. An AV_BLOCK_CODE must be present without a PERM_PACEMAKER_CODE:

AV BLOCK CODE (I9)
426.0, 426.12, 426.13

AND

PERM PACEMAKER CODE (I9)
V45.01

[CADBLOCKDRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for medical reason exclusion:

MEDICAL REASON (C4)
4006F-1P

[CADBLOCKDRUG]=3

OR

CORONARY ARTERY DISEASE (CAD) Algorithm for Measures Calculation-EHRS

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for patient reason exclusion:

PATIENT REASON (C4)
4006F-2P

[CADBLOCKDRUG]=4

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for system reason exclusion:

SYSTEM REASON (C4)
4006F-3P

[CADBLOCKDRUG]=5

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

Lipid Profile (*CAD-5): Percentage of patients who received at least one lipid profile (or ALL component tests)

Denominator: All patients with CAD \geq 18 years of age

Denominator Inclusions

All patients with a documented diagnosis of CAD and patient is 18 years or older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) and CPT (C4) codes for inclusion:

[CADCONFIRMED]=1	DX CODE	PROC CODE
	(I9)	(C4)
	410.00-410.92, 411.0-411.89,	33140, 33510-33514, 33516-33519,
	412, 413.0-413.9,	33521-33523, 33533-33536,
	414.00-414.07, 414.8, 414.9,	92980-92982, 92984, 92995,
	V45.81, V45.82	92996

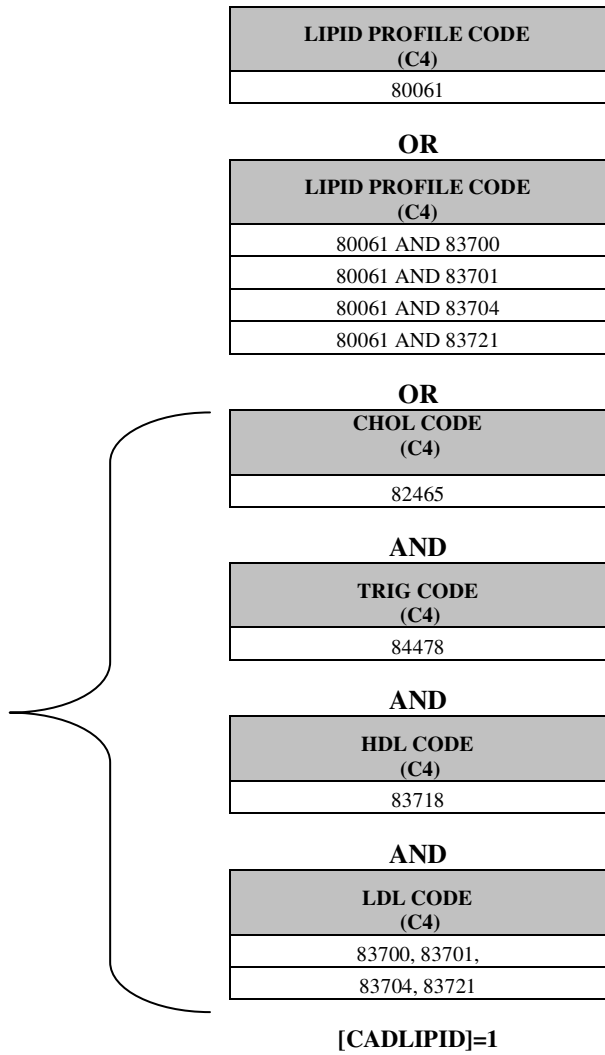
**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

Numerator: Patients who received at least one lipid profile (or ALL component tests)

Numerator Inclusion Option #1

Patients who receive at least one lipid profile.
TOPIC_EVALUATION_CODES Table lists applicable CPT (C4) codes for inclusion: Patients who received ALL components tests (CHOL_CODE, TRIG_CODE, HDL_CODE, and LDL_CODE) during the measurement period.

(If a lipid profile test is done and the LDL value was a calculated result, then only code 80061 would be required, otherwise, allow the combination (C4) codes).



OR

CORONARY ARTERY DISEASE (CAD) Algorithm for Measures Calculation-EHRS

Numerator Inclusion Option #2

TOPIC_EVALUATION_CODES Table lists applicable LOINC (LN) codes for inclusion:

Patients who receive ALL components of the test (CHOL_CODE, TRIG_CODE, HDL_CODE, and LDL_CODE) during the measurement period.

LIPID PROFILE CODE (LN)
2569-2, 2570-0, 12912-2, 24331-1,

OR

CHOL CODE (LN)
2093-3, 14646-4,
14647-2, 22748-8

AND

TRIG CODE (LN)
1644-4, 2571-8,
3043-7, 3048-6,
14927-8, 30524-3

AND

HDL CODE (LN)
2085-9, 18263-4

AND

LDL CODE (LN)
2089-1, 12773-8, 13457-7, 18261-8,
18262-6, 22748-8,
24331-1, 39469-2

[CADLIPID]=1

OR

Numerator Inclusion Option #3

Patients who receive at least one lipid profile (or ALL component tests) during the measurement period.

TOPIC_EVALUATION_CODES Table lists an applicable CPT Category II (C4) code for inclusion:

LIPID PROFILE CODE (C4)
3011F

[CADLIPID]=1

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

LDL Cholesterol Level ([^]CAD-6): Percentage of patients with most recent LDL cholesterol < 100 mg/dL

Denominator: All patients with CAD ≥ 18 years of age with at least one LDL cholesterol test

Denominator Inclusions

All patients with a documented diagnosis of CAD and patient is 18 years or older at the beginning of the measurement period and had at least one LDL cholesterol test performed during the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) and CPT (C4) codes for inclusion:

[CADCONFIRMED]=1

DX CODE (I9)	PROC CODE (C4)
410.00-410.92, 411.0-411.89,	33140, 33510-33514, 33516-33519,
412, 413.0-413.9,	33521-33523, 33533-33536,
414.00-414.07, 414.8, 414.9,	92980-92982, 92984, 92995,
V45.81, V45.82	92996

AND

TOPIC_EVALUATION_CODES Table lists applicable LOINC (LN) and CPT (C4) codes for inclusion:

[CADLDLCTEST]=1

LDL CODE (LN)	LDL CODE (C4)
2089-1, 12773-8, 13457-7	80061, 83700,
18261-8, 18262-6, 22748-8,	83701, 83704, 83721
24331-1, 39469-2	

Numerator: Patients with most recent LDL cholesterol < 100 mg/dL

Numerator Inclusion

TOPIC_EVALUATION_CODES Table lists an applicable CPT Category II (C4) code for inclusion:
Record the most recent date and numeric value for LDL-C code. If value is null record as 0 (zero).

**[CADLDLDATE]
WITH**

LDL-C CODE (C4)
3048F

**[CADLDLCVALUE] =numeric result for LDL-C value.
If value = null, record as 0**

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

ACE Inhibitor or ARB Therapy (*CAD-7): Percentage of patients who also have diabetes and/or LVSD who were prescribed ACE inhibitor or ARB therapy

Denominator: All patients with CAD ≥ 18 years of age who also have diabetes and/or LVSD

Denominator Inclusions

All patients with a documented diagnosis of CAD and patient is 18 years or older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) and CPT (C4) codes for inclusion:

[CADCONFIRMED]=1	DX CODE (I9)	PROC CODE (C4)
		410.00-410.92, 411.0-411.89,
	412, 413.0-413.9,	33521-33523, 33533-33536,
	414.00-414.07, 414.8, 414.9,	92980-92982, 92984, 92995,
	V45.81, V45.82	92996

AND

Denominator Inclusion Option #1

Patients, who also have diabetes, evidenced either through an ICD-9 diagnosis code (I9) or who were prescribed an active anti-diabetic medication.

DM DX CODE (I9)
250.00-250.93, 357.2,
362.01-362.07, 366.41,
648.00-648.04

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) codes for inclusion:

OR

TOPIC_DRUG_CODES Table lists applicable drug codes for patients who were prescribed an active anti-diabetic medication and DRUG_EXCLUSION = N.

[CADDIABETES]=1

OR

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

Denominator Inclusion Option #2

All patients with a documented diagnosis of CAD, patient is 18 years or older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable ICD-9 (I9) and CPT (C4) codes for inclusion:

DX CODE (I9)	PROC CODE (C4)
410.00-410.92, 411.0-411.89,	33140, 33510-33514, 33516-33519,
412, 413.0-413.9,	33521-33523, 33533-33536,
414.00-414.07, 414.8, 414.9,	92980-92982, 92984, 92995,
V45.81, V45.82	92996

[CADCONFIRMED]=1

AND

Patients with documentation LVSD (defined as ejection fraction (LVEF) < 40% - use most recent value) during the measurement period.

TOPIC_EVALUATION_CODES Table below lists applicable SNOMED (SNM) for inclusion and CPT (C4) codes for inclusion with documentation of LVEF <40%:

LVF ASSESS CODE (C4)	LVF ASSESS CODE (SNM)
78414, 78451, 78452, 78453, 78454, 78468,	250907009, 366188009
78483, 78494, 93303, 93304, 93306,	
93307, 93308, 93312, 93314,	
93315, 93317, 93350, 93351, 93352, 93543	

AND

EJEC FRAC CODE (SNM)
250908004, 41466009, 46258004,
70822001,
AND documentation of LVEF<40%

OR

TOPIC_EVALUATION_CODES Table below lists an applicable CPT Category II (C4) code for inclusion:

EJEC FRAC CODE (C4)
3021F

[HFCADLVSD]=1

CORONARY ARTERY DISEASE (CAD) Algorithm for Measures Calculation-EHRS

Numerator: Patients who were prescribed ACE inhibitor or ARB therapy

Numerator Inclusion Option #1

TOPIC_DRUG_CODES Table lists applicable drug codes for patients who were prescribed ACE/ARB therapy during the measurement period and DRUG_EXCLUSION = N.

[CADACEARBDRUG]=1

OR

Numerator Inclusion Option #2

TOPIC_EVALUATION_CODES Table lists an applicable CPT Category II (C4) code for patients who were prescribed ACE inhibitor or ARB therapy during the measurement period:

ACE ARB THERAPY CODE (C4)
4009F

[CADACEARBDRUG]=1

Denominator Exclusions (*Exclusions only applied if the patient did not receive ACE inhibitor or ARB therapy*)

TOPIC_MEDICAL_EXCLUSION Table lists applicable ICD-9 (I9) codes for exclusion. The EXCLUSION code can occur anytime before the end of the measurement period while the PREGNANCY codes must occur during the measurement period:

EXCLUSION CODE (I9)	PREGNANCY CODE (I9)
249.00, 249.01, 249.10, 249.11, 249.20, 249.21, 249.30, 249.31, 249.41, 249.41, 249.51, 249.51, 249.60, 249.61, 249.50, 249.51, 249.60, 249.61, 249.70, 249.71, 249.80, 249.81, 249.90, 249.91,	V22.0-V22.2, V23.0-V23.3, V23.41,
277.6, 395.0, 395.2, 396.0, 396.2, 396.8,	
403.01, 403.11, 403.91, 404.02,	V23.49, V23.5, V23.7,
404.03, 404.12, 404.13, 404.92,	V23.81-V23.86, V23.89, V23.9
404.93, 425.1, 440.1, 584.5-584.9,	
585.5, 585.6, 586, 747.22, 788.5,	
V56.0, V56.8, 39.95, 54.98	

[CADACEARBDRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists applicable SNOMED (SNM) codes for allergy intolerance to ACE inhibitor AND ARB therapy:

ACE ALLERGY CODE (SNM)	ARB ALLERGY CODE (SNM)
293500009, 295036000	407579007, 407590002

[CADACEARBDRUG]=3

OR

**CORONARY ARTERY DISEASE (CAD)
Algorithm for Measures Calculation-EHRS**

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for medical reason exclusion:

MEDICAL REASON (C4)
4009F-1P

[CADACEARBDRUG]=3

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for patient reason exclusion:

PATIENT REASON (C4)
4009F-2P

[CADACEARBDRUG]=4

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for system reason exclusion:

SYSTEM REASON (C4)
4009F-3P

[CADACEARBDRUG]=5

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
CAD-1 Antiplatelet Therapy		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	PROC CODING SYSTEM	Coding system applicable to a procedure code (CPT4)
	PROC CODE	Procedure code
	PROC DATE	Date of procedure
	DRUG CODING SYSTEM	Coding system applicable for antiplatelet or clopidogrel therapy (NDC)
	DRUG CODE	Antiplatelet or clopidogrel drug codes
	ORDER DATE	Date antiplatelet or clopidogrel therapy was prescribed
	DRUG EXCLUSION	Is drug used as an exclusion to the measure (Yes or No)
	ANTIPLATELET THERAPY CODING SYSTEM	Coding system applicable for antiplatelet therapy (CPT Category II)
	ANTIPLATELET THERAPY CODE	Antiplatelet therapy code
	ANTIPLATELET THERAPY DATE	Date antiplatelet therapy was prescribed
	EXCLUSION CODING SYSTEM	Coding system applicable to a medical exclusion (SNOMED)
	EXCLUSION CODE	Code used for exclusion
	EXCLUSION DATE	Date exclusion was identified
	ADVERSE EFFECT 1 CODING SYSTEM	Coding system applicable to adverse effect 1 code (ICD9)
	ADVERSE EFFECT 1 CODE	Code used for adverse effect 1
	ADVERSE EFFECT 1 DATE	Date an adverse effect 1 was identified
	ADVERSE EFFECT 2 CODING SYSTEM	Coding system applicable for a adverse effect 2 (ICD9)
	ADVERSE EFFECT 2 CODE	Code used for adverse effect 2
	ADVERSE EFFECT 2 DATE	Date an adverse effect 2 was identified
	ALLERGY CODING SYSTEM	Coding system applicable for an allergy (SNOMED)
	ALLERGY CODE	Allergy code used for exclusion
	ALLERGY CODE DATE	Date allergy was identified

Shaded data elements apply to each measure

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
CAD-1 Antiplatelet Therapy		
	MEDICAL REASON CODING SYSTEM	Type of coding system applicable for a medical reason (CPT Category II)
	MEDICAL REASON CODE	Code used for medical reason
	MEDICAL REASON DATE	Date medical reason was identified
	PATIENT REASON CODING SYSTEM	Type of coding system applicable for a patient reason (CPT Category II)
	PATIENT REASON CODE	Code used for patient reason
	PATIENT REASON DATE	Date patient reason was identified
	SYSTEM REASON CODING SYSTEM	Type of coding system applicable for a system reason (CPT Category II)
	SYSTEM REASON CODE	Code use for system reason
	SYSTEM REASON DATE	Date system reason was identified

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
CAD-2 Drug Therapy for Lowering LDL Cholesterol		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	PROC CODING SYSTEM	Coding system applicable to a procedure code (CPT4)
	PROC CODE	Procedure code
	PROC DATE	Date of procedure
	DRUG CODING SYSTEM	Coding system applicable for lipid lowering therapy drugs (NDC)
	DRUG CODE	Lipid lowering drug codes
	ORDER DATE	Date the drug was prescribed
	DRUG EXCLUSION	Is drug used as an exclusion to the measure (Yes or No)
	STATIN THERAPY CODING SYSTEM	Coding system applicable for statin therapy (CPT Category II)
	STATIN THERAPY CODE	Statin therapy code
	STATIN THERAPY DATE	Date statin therapy was prescribed
	LDL CODING SYSTEM	Coding system applicable for LDL testing (LOINC, CPT4)
	LDL CODE	LDL test code
	LDL DATE	Date LDL test was performed
	LDL VALUE < 130	Numeric lab value for LDL < 130
	LDL RESULT CODING SYSTEM	Coding system applicable for LDL result < 130 (CPT Category II)
	LDL < 130 CODE	LDL result < 130 code
	LDL RESULT DATE	Date the LDL result < 130 was documented
	ADVERSE EFFECT 1 CODING SYSTEM	Coding system applicable for a adverse effect 1(ICD9)
	ADVERSE EFFECT 1 CODE	Code for adverse effect 1
	ADVERSE EFFECT 1 DATE	Date an adverse effect 1 was identified

Shaded data elements apply to each measure

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
CAD-2 Drug Therapy for Lowering LDL Cholesterol		
	ADVERSE EFFECT 2 CODING SYSTEM	Coding system applicable for adverse effect 2 (ICD9)
	ADVERSE EFFECT 2 CODE	Code for adverse effect 2
	ADVERSE EFFECT 2 DATE	Date an adverse effect 2 was identified
	MEDICAL REASON CODING SYSTEM	Coding system applicable for a medical reason (CPT Category II)
	MEDICAL REASON CODE	Code for medical reason
	MEDICAL REASON DATE	Date medical reason was identified
	PATIENT REASON CODING SYSTEM	Coding system applicable for a patient reason (CPT Category II)
	PATIENT REASON CODE	Code for patient reason
	PATIENT REASON DATE	Date patient reason was identified
	SYSTEM REASON CODING SYSTEM	Coding system applicable for a system reason (CPT Category II)
	SYSTEM REASON CODE	Code used for system reason
	SYSTEM REASON DATE	Date system reason was identified

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
CAD-3 Beta-Blocker Therapy- Prior MI		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	PROC CODING SYSTEM	Coding system applicable to a procedure code (CPT4)
	PROC CODE	Procedure code
	PROC DATE	Date of procedure
	MI DX CODING SYSTEM	Coding system applicable for a diagnosis code for myocardial infarction (ICD9, CPT4)
	MI DX CODE	Myocardial infarction diagnosis code
	MI DX DATE	Date myocardial infarction diagnosis documented
	DRUG CODING SYSTEM	Coding system applicable to beta blocker drugs (NDC)
	DRUG CODE	Beta blocker drug codes
	ORDER DATE	Date the drug was prescribed
	DRUG EXCLUSION	Is drug used as an exclusion to the measure (Yes or No)
	BETA BLOCKER THERAPY CODING SYSTEM	Coding system applicable to beta blocker therapy (CPT Category II)
	BETA BLOCKER THERAPY CODE	Beta blocker therapy code
	BETA BLOCKER THERAPY DATE	Date beta blocker therapy was prescribed
	EXCLUSION CODING SYSTEM	Coding system applicable for a medical exclusion (ICD9, SNOMED)
	EXCLUSION CODE	Code used for medical exclusion
	EXCLUSION DATE	Date medical exclusion was identified
	HEARTRATE CODING SYSTEM	Coding system applicable for a heart rate code (SNOMED)
	HEARTRATE CODE	Code used for heart rate
	HEARTRATE DATE	Date of heart rate measurement

Shaded data elements apply to each measure

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
*CAD-3 Beta-Blocker Therapy- Prior MI		
	AV BLOCK CODING SYSTEM	Coding system applicable for a AV block diagnosis (ICD9)
	AV BLOCK CODE	Diagnosis code for AV block
	AV BLOCK DATE	Date of AV block diagnosis
	PERM PACEMAKER CODING SYSTEM	Coding system applicable for a permanent pacemaker (ICD9)
	PERM PACEMAKER CODE	Permanent pacemaker code
	PERM PACEMAKER DATE	Date of placement for permanent pacemaker
	MEDICAL REASON CODING SYSTEM	Coding system applicable for a medical reason (CPT Category II)
	MEDICAL REASON CODE	Code used for medical reason
	MEDICAL REASON DATE	Date medical reason was identified
	PATIENT REASON CODING SYSTEM	Type of coding system applicable for a patient reason (CPT Category II)
	PATIENT REASON CODE	Code used for patient reason
	PATIENT REASON DATE	Date patient reason was identified
	SYSTEM REASON CODING SYSTEM	Type of coding system applicable for a system reason (CPT Category II)
	SYSTEM REASON CODE	Code used for system reason
	SYSTEM REASON DATE	Date system reason was identified

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
CAD-5 Lipid Profile		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	PROC CODING SYSTEM	Coding system applicable to a procedure code (CPT4)
	PROC CODE	Procedure code
	PROC DATE	Date of procedure
	LIPID PROFILE CODING SYSTEM	Coding system applicable to a lipid profile test code (CPT4, LOINC)
	LIPID PROFILE CODE	Code used for lipid profile testing
	LIPID PROFILE DATE	Date lipid profile test was performed
	LIPID CODING SYSTEM	Coding system applicable to lipid test code (CPT4, LOINC)
	LIPID CODE	Code used for lipid testing
	LIPID DATE	Date lipid test was performed
	CHOL CODING SYSTEM	Coding system applicable for cholesterol testing (CPT4, LOINC)
	CHOL CODE	Code used for cholesterol testing
	CHOL DATE	Date cholesterol test was performed
	TRIG CODING SYSTEM	Coding system applicable for triglyceride testing (CPT4, LOINC)
	TRIG CODE	Code used for triglyceride testing
	TRIG DATE	Date triglyceride test was performed
	HDL CODING SYSTEM	Coding system applicable for HDL testing (CPT4, LOINC)
	HDL CODE	Code used for HDL testing
	HDL DATE	Date HDL test was performed
	LDL CODING SYSTEM	Coding system applicable for LDL testing (CPT4, LOINC)
	LDL CODE	Code used for LDL testing
	LDL DATE	Date LDL test was performed
	LIPID PROFILE CODING SYSTEM	Coding system applicable for lipid profile testing (CPT Category II)
	LIPID PROFILE CODE	Code used for lipid profile test
	LIPID PROFILE DATE	Date lipid profile test was performed

Shaded data elements apply to each measure

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
▲ CAD-6 LDL Cholesterol Level		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	PROC CODING SYSTEM	Coding system applicable to a procedure code (CPT4)
	PROC CODE	Procedure code
	PROC DATE	Date of procedure
	LDL CODING SYSTEM	Coding system applicable for LDL testing (LOINC, CPT4)
	LDL CODE	Code used for LDL test
	LDL DATE	Date LDL testing was performed
	LDL-C CODING SYSTEM	Coding system applicable for a LDL-C < 100 result (CPT Category II)
	LDL-C CODE	Code used for LDL-C < 100
	LDL-C DATE	Date LCL-C < 100 result documented
	LDL-C RESULT	Numeric LDL-C < 100 value documented

Shaded data elements apply to each measure

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
CAD-7 ACE Inhibitor/ARB Therapy		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	PROC CODING SYSTEM	Coding system applicable to the procedure code (CPT4)
	PROC CODE	Procedure code
	PROC DATE	Date of procedure
	DM DX CODING SYSTEM	Coding system applicable for a diagnosis code of diabetes (ICD9)
	DM DX CODE	Diagnosis code for diabetes
	DM DX DATE	Date diabetes diagnosis documented
	ACE ARB CODING SYSTEM	Coding system applicable for ACE or ARB therapy (CPT Category II)
	ACE ARB CODE	ACE or ARB therapy code
	ACE ARB DATE	Date ACE or ARB therapy was prescribed
	EJEC FRAC CODING SYSTEM	Coding system applicable for ejection fraction testing (SNOMED)
	EJEC FRAC CODE	Ejection fraction code
	EJEC FRAC DATE	Date of ejection fraction testing
	EJEC FRAC RESULT	Numeric result of ejection fraction percentage
	LVF ASSESS CODING SYSTEM	Coding system applicable for a LVF assessment (CPT4)
	LVF ASSESS CODE	LVF assessment code
	LVF ASSESS DATE	Date LVF was documented
	LVEF CODING SYSTEM	Coding system applicable for an LVEF (CPT Category II)
	LVEF CODE	LVEF < 40% code
	LVEF DATE	Date a LVEF result < 40% was documented

Shaded data elements apply to each measure

Appendix A
CAD MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
CAD-7 ACE Inhibitor/ARB Therapy		
	DRUG CODING SYSTEM	Coding system applicable to ACE/ARB or Anti-Diabetic drugs (NDC)
	DRUG CODE	ACE/ARB or Anti-Diabetic drug codes
	ORDER DATE	Date ACE/ARB or Anti-Diabetic medication was prescribed
	DRUG EXCLUSION	Are drugs used as an exclusion to the measure (Yes or No)
	EXCLUSION CODING SYSTEM	Coding system applicable to the medical reasons for exclusion (ICD9)
	EXCLUSION CODE	Code used for exclusion
	EXCLUSION DATE	Date of medical exclusion
	PREGNANCY CODING SYSTEM	Coding system applicable to a pregnancy diagnosis (ICD9)
	PREGNANCY CODE	Code used for pregnancy diagnosis
	PREGNANCY DATE	Date of pregnancy diagnosis
	ACE ALLERGY CODING SYSTEM	Coding system applicable for an ACE allergy (SNOMED)
	ACE ALLERGY CODE	Allergy code used for exclusion
	ACE ALLERGY CODE DATE	Date an ACE allergy was identified
	ARB ALLERGY CODING SYSTEM	Coding system applicable for an ARB allergy (SNOMED)
	ARB ALLERGY CODE	ARB allergy code used for exclusion
	ARB ALLERGY CODE DATE	Date an ARB allergy was identified
	MEDICAL REASON CODING SYSTEM	Type of coding system used for a medical reason (CPT Category II)
	MEDICAL REASON CODE	Code used for medical reason
	MEDICAL REASON DATE	Date medical reason was identified
	PATIENT REASON CODING SYSTEM	Type of coding system used for a patient reason (CPT Category II)
	PATIENT REASON CODE	Code used for patient reason
	PATIENT REASON DATE	Date patient reason was identified
	SYSTEM REASON CODING SYSTEM	Type of coding system used for a system reason (CPT Category II)
	SYSTEM REASON CODE	Code used for system reason
	SYSTEM REASON DATE	Date system reason was identified

Shaded data elements apply to each measure