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| 1 | reangina | At any time during the hospitalization, did the patient have recurrent angina? | 1,2 | Recurrent angina is defined as: chest pain or severe epigastric pain, non-traumatic in origin; central/substernal compression or crushing chest pain; pressure, tightness, heaviness, cramping, burning or aching sensation; unexplained indigestion, belching, epigastric pain; radiating pain in neck, jaw, shoulders, back, 1 or both arms; dyspnea; nausea and/or vomiting; diaphoresis |
| 2 | advrsent1advrsent2advrsent3advrsent4advrsent5advrsent6advrsent7advrsent8advrsent9advrsent10advrsent99 | At any time during this episode of care, did any of the following events occur?**Enter dates for all that apply:**1. reinfarction/AMI patient
2. cardiogenic shock
3. left ventricular failure requiring use of intra-aortic balloon pump (IABP)
4. life-threatening arrhythmia requiring synchronized cardioversion
5. ventricular tachycardia or ventricular fibrillation requiring defibrillation (emergent cardioversion)
6. High-risk bradycardia requiring transvenous pacemaker insertion
7. cardiac arrest
8. atrial fibrillation
9. blood transfusion (whole blood or packed red cells only)
10. Platelet transfusion
11. none of these events
 | 1,2,3,4,5,6,7,8,9,10,99mm/dd/yyyymm/dd/yyyymm/dd/yyyymm/dd/yyyy

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| > = acutedt and < = dcdate |

 | Reinfarction/AMI patient: occurrence of further vessel occlusion and cardiac muscle damage in patient admitted and treated for AMICardiogenic shock is characterized by a low blood pressure (generally less than 90 mm/Hg) with signs of hypoperfusion such as cool clammy skin, oliguria, or altered sensorium.The abstractor may not make this determination. **The diagnosis of** **cardiogenic shock must be documented by a clinician.**Intra-aortic balloon pump is placed within the patient’s descending aorta. The balloon inflates and deflates with each cardiac cycle. The purpose of the IABP is to allow the heart muscle to rest and improve perfusion to the coronary arteries. Cardioversion=the process of restoring the heart's normal rhythm by applying a controlled electric shock to the exterior of the chest. Synchronized cardioversion=the delivery of a synchronized external electrical impulse via the chest wall in order to revert an arrhythmia to sinus rhythm. The current is delivered at a pre-determined point in the cardiac cycle. Patient is prepared and anesthetized.Emergent=unsynchronized/defibrillation indicated by ventricular tachycardia or ventricular fibrillationAtrial fibrillation refers to an acute episode occurring during the episode of care for ACS and not to a chronic condition. |

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| 3 | stroksym1stroksym2stroksym3stroksym4stroksym5stroksym6stroksym99 | At any time during this episode of care, did the patient have any of the following neurological symptoms?**Indicate all that apply:**1. disturbances of consciousness
2. loss of limb movement or speech
3. lethargy

unresponsiveness1. slurred speech
2. other
3. no documented neurological symptoms
 | 1,2,3,4,5,6,99 | Neurological symptoms must be documented by a physician, APN, or PA. Do not take information from nurses notes unless there is corroborating information documented in progress notes or elsewhere by a physician, APN, or PA. **If the patient had none of the listed symptoms and no symptoms that could be construed as neurological, enter response #99.** |
| 4 | stroke | At any time during this episode of care, did the patient have a stroke? | 1,2**If 2, auto-fill strokdt as 99/99/9999 and wichtype as 95** | The diagnosis of stroke must be recorded in the medical record by a physician, APN, or PA. |
| 5 | strokdt | Enter the date the stroke occurred. | mm/dd/yyyyIf stroke = 2, will be auto-filled as 99/99/9999

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| > = acutedt and < = dcdate |

 | Enter the exact date. The use of 01 to indicate unknown month or day is not acceptable. |
| 6 | wichtype | Does the record document the type of stroke?1. hemorrhagic
2. thromboembolic (ischemic)
3. thromboembolic with hemorrhagic conversion
4. other/unknown
5. not applicable
6. type of stroke not documented
 | 1,2,3,4,95,99If stroke = 2, will be auto-filled as 95  | Type of stroke must be documented in the record by a physician, APN, or PA. |

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| 7 | testress | Were any of the following non-invasive stress tests for myocardial ischemia performed during this episode of care?1. exercise ECG alone
2. exercise myocardial perfusion thallium imaging
3. exercise myocardial perfusion Sestamibi imaging
4. myocardial perfusion imaging by pharmacologic stress
5. exercise ventricular function imaging by echocardiography
6. resting radionuclide angiography (MUGA, Gated Cardiac Scan, Gated Blood Pool Scan)
7. clinical reason precluding stress test documented by a physician, APN, or PA
8. patient refused stress testing
9. non-invasive stress testing not performed during episode of care
 | 1,2,3,4,5,6,97,98,99**If 97, 98 or 99, auto-fill stressdt as 99/99/9999****If 1,2,3,4,5, or 6, auto–fill stresdc as 95** | Patients with an uncomplicated MI may undergo a non-invasive evaluation for ischemia to identify increased cardiovascular risk prior to discharge from the hospital. Applies to both ST-elevation MI and NSTEMI.Documentation by the physician, APN, or PA in the progress notes that a stress test was done either at the VAMC or elsewhere should be accepted. Documentation of the report in the radiology package is also acceptable.1. Exercise ECG alone: ECG is done while the patient performs physical activity on a treadmill or bicycle.
2. Activity usually performed on a treadmill. Isotope tracer thallium injected one to two minutes before end of exercise or immediately thereafter. Heart is imaged both immediately following exercise and at rest.
3. Same procedure as thallium imaging, with resting images of heart done prior to treadmill exercise
4. For patients unable to exercise, cardiac effects of exercise stress are simulated by administration of coronary dilator dipyridamole, adenosine or dobutamine infusion.
5. Measures the contractile (pumping) function of the heart muscle during exercise
6. Following injection of radioactive medication, recordings of the heart wall at work are synchronized with the EKG. Evaluates the heart’s pumping function and ejection fraction.

If the patient is a transfer-in from a community hospital, and the clinician documents that cardiac cath, PCI, or CABG was performed at the community hospital, option #97 may be used. |
| 8 | stressdt | Enter the date the stress test was performed | mm/dd/yyyyIf testress = 97, 98 or 99, will be auto-filled as 99/99/9999

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| > = acutedt and < = dcdate |

 | Enter the exact date. The use of 01 to indicate unknown month or day is not acceptable. |

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| 9 | stresdc | Does the record document a plan for post-discharge stress testing?1. yes
2. no
3. documented plan considered stress test but patient deemed not a candidate
4. not applicable
5. patient refused post-discharge stress test
 | 1,2,3,95,98If testress = 1,2,3,4,5, or 6, will be auto-filled as 95 | There must be documented evidence that a post-discharge non-invasive stress test was planned, although a definitive appointment date is not required. 98 = there must be definitive documentation in the record that a post-discharge stress test was recommended, and the patient refused the test.Response #3: If the clinician documents that the patient is not a candidate for any further testing then it is considered that the care has been considered and that the decision to do nothing more is the PLAN. Do not accept documentation that is anything other than a firm decision that further testing is not appropriate (i.e., not acceptable: no stress test at this time, testing contraindicated at present, too sick to test at this time). |
| 10 | cathdun | Was a diagnostic cardiac catheterization (cath) performed during this episode of care?1. cath done at this VAMC (or patient sent out for cath and returned in 12 hours)
2. transferred to another VAMC for cath
3. transferred to a community hospital for cath or transfer-in had diagnostic cath at VHA or community hospital
4. diagnostic cath not done
 | 1,2,3,99**If 99, auto-fill entrdone as 99/99/9999 and cathrep as 95****If 1,2, or 3, auto-fill nocath as 95 and cathpdc as 95**  | Cardiac cath without treatment of coronary artery blockage is diagnostic. If the patient did not have an emergent PCI, but later during the episode of care, had a cardiac cath in which the degree of blockage was determined but no attempt was made to flatten plaque against the artery wall or otherwise treat the blockage, or no treatment (or only medical treatment) was deemed necessary, answer “1.” Do not count the cath done in conjunction with a PCI done at this facility as a diagnostic cath.If the patient was transferred to another facility on a non-emergent basis later in the stay for a cardiac cath and possible PCI, answer “2” or “3” as applicable. Cardiac catheterization = an invasive procedure in which a thin plastic tube (catheter) is inserted into an artery or vein in the arm or groin. From there it can be advanced into the chambers of the heart or the coronary arteries. The test can measure blood pressure within the heart, how much oxygen is in the blood, and the pumping ability of the heart muscle. When dye is injected into the coronary arteries, the procedure is called coronary angiography or coronary arteriography. The procedure produces special pictures that can reveal if one or more of the coronary arteries are blocked or if the left ventricle is functioning properly. If patient was sent out for a cath and returned in 12 hours, it is considered the same as being done at this VAMC. |

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| 11 | nocath | Did a clinician document a reason for not performing a diagnostic cardiac catheterization during this episode of care?* 1. documentation by cardiology that stress test is more reasonable first approach for this patient
	2. documentation by cardiology of known coronary artery lesion(s) not amenable to revascularization by PCI
	3. physician documentation that patient age, debilitation, or co-morbidities preclude cardiac cath
		1. not applicable
1. patient and/or family refused cardiac cath
2. no reason documented
 | 1,2,3,95,98,99If cathdun = 1,2, or 3, will be auto-filled as 95**If 1 or 2, auto-fill cathpdc as 95** | **Responses #1 and 2 must be documented in the record by a cardiologist, cardiology fellow, or cardiology resident under appropriate supervision by the attending physician.****If it known the patient has coronary artery blockage(s) that cannot be treated by PCI, and a CABG is under consideration or is scheduled, answer “2.”** To enter response #3, there must be an explicit link, documented in the record by a physician, between the patient’s age, debilitation, and/or co-morbid conditions as the reason(s) for not performing a cath. |
| 12 | entrdone | Enter the date the diagnostic cardiac catheterization was performed. | mm/dd/yyyyIf cathdun = 99, will be auto-filled as 99/99/9999

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| If cathdun = 1, > = acutedt and < = dcdateIf cathdun = 2, >= acutedt and < = 3 days after dcdateIf cathdun = 3, < = 3 days prior to or = acutedt and < = 3 days after dcdate  |

 | If more than one diagnostic cardiac cath was performed, use the date of the first cath performed. Do not confuse diagnostic cath with primary emergent cath/PCI done to restore reperfusion.Enter the exact date. Do not use 01 to indicate missing day or month  |
| 13 | cathrep | Enter the result of the cardiac catheterization:1. Evidence of obstructive CAD2. No evidence of obstructive CAD1. not applicable
2. Unable to determine.
 | 1,2,95,99If cathdun = 99, will be auto-filled as 95 | Evidence of obstructive CAD: >50% left main stenosis and/or > 70% stenosis of a major epicardial artery. |
| 14 | cathpdc | Does the record document a plan for cardiac catheterization post-discharge?1. yes
2. no
3. documented plan considered cath but patient deemed not a candidate
4. not applicable
	1. patient refused post-discharge cardiac cath
 | 1,2,3,95,98If cathdun = 1,2, or 3, or if nocath = 1 or 2, will be auto-filled as 95 | There must be documented evidence that a post-discharge cardiac catherization was planned, although a definitive appointment date is not required. 98 = there must be definitive documentation in the record that a post-discharge cardiac cath was recommended, and the patient (or family) refused a cardiac cath following discharge.Response #3: If the clinician documents that the patient is not a candidate for a post-discharge cath, then it is considered that the care has been considered and that the decision to do nothing more is the PLAN. Do not accept documentation that is anything other than a firm decision that a post-discharge cath is not appropriate (i.e., not acceptable: no cath at this time, cath contraindicated at present, too sick to cath at this time). |
| 15 | lvfdoc2 | Is there documentation in the medical record of the patient’s left ventricular systolic function (LVSF)/ejection fraction (EF)? | 1,2**If 2, auto-fill eftstdt as 99/99/9999, and acslowef as 95** | **Left Ventricular Systolic Function (LVSF) assessment: diagnostic measure of left ventricular contractile performance/wall motion. Ejection fraction (EF) is an index of LVSF. EF may be recorded in quantitative (EF=30%) or qualitative (moderate left ventricular systolic dysfunction) terms.** Tests used to determine LVSF/EF **=** echocardiogram, radionuclide ventriculography (MUGA, RNV, nuclear heart scan, nuclear gated blood pool scan), or cardiac cath with left ventriculogram (LV gram). **EF may be taken from any knowledge of past EF or left ventricular systolic dysfunction (LVSD) documented in the record**. **Use the most recent EF found.****Exclude**: akinesis, dyskinesis, or hypokinesis not described as left ventricular; cardiomyopathy **not** described as endstage; contractility/hypocontractility; left ventricular compliance, dilatation/dilation, or hypertrophy; BNP blood test |
| 16 | eftstdt | Enter the date of the most recent test for left ventricular systolic function (EF.) | mm/dd/yyyyIf lvfdoc2 = 2, eftstdt will be auto-filled as 99/99/9999**If lvfdoc2 = 1, but no date available, abstractor can enter 99/99/9999**

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| Warning if test date > 5 years prior to acutedt  |

 | **This question has changed to ask the date the EF was measured.** Year is acceptable at a minimum if the left ventricular systolic function was assessed in the past prior to hospitalization, and this is the only date available. Enter exact day and month if test was recent and dates are available.  |

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| 17 | acslowef | Is the left ventricular systolic function (LVSF) documented as an ejection fraction (EF) less than 40% or narrative description consistent with moderate or severe systolic dysfunction (LVSD)?1. yes
2. no
3. not applicable
 | 1,2,95If lvfdoc2 = 2, will be auto-filled as 95 If lvfdoc2 = 1, 95 cannot be entered. | **LVSD: impairment of LV performance. EF is an index of LVSF. Use the most recent description of EF/LVSF found (test done closest to discharge). EF < 40% select “1”; EF ≥ 40% select “2”.****Guidelines for prioritizing LVSF/EF/LVSD documentation:****1)** LVSF assessment test report findings take precedence over findings documented in other sources (e.g. progress notes) 2) Final report findings take priority over preliminary findings. Assume findings are final unless labeled as preliminary. 3) Conclusion (impression, interpretation, or final diagnosis) section of report takes priority over other sections.**\*\*If test for EF/LVSF was not performed during hospital stay, look for documentation of pre-arrival EF/LVSF test results documented in the record. Apply guidelines 1 – 3 above.** **Priority order for conflicting documentation when there are 2 or more different descriptions of EF/LVSF:**1)Use the lowest calculated EF (e.g. 30%) 2) Use lowest estimated EF. Estimated EFs often use descriptors such as “about,” “approximate,” or “appears.” (e.g. EF appears to be 35%). Estimated EF may be documented as a range (use mid-point) or less than or greater than a given number.3) Use worst narrative description **WITH** severity specified (e.g., LVD/LVSD described as marked, moderate, moderate-severe, severe, significant, substantial, or very severe; EF described as low, poor, or very low)4) Use narrative description **WITHOUT** severity specified (e.g., biventricular dysfunction; LVD, LVSD, systolic dysfunction; LV systolic failure; LVF, LVSF, EF) described as abnormal, compromised, decreased, reduced.**Cont’d next page** |
|  |  |  |  | 5) Disregard the following terminology when reviewing the record for documentation of LVSF/LVSD. If documented, continue reviewing for LVSF/LVSD inclusions outlined in the Inclusion lists, o Diastolic dysfunction, failure, function, or impairment o Ventricular dysfunction not described as left ventricular or systolic o Ventricular failure not described as left ventricular or systolic o Ventricular function not described as left ventricular or systolic E.g., Impression section of echo report states only “diastolic dysfunction”. Findings section states “EF 35%”. Disregard “diastolic dysfunction” in the Impression section and answer “Yes” due to EF 35%.**Include:** * Any terms (biventricular dysfunction; LVD/LVSD/systolic dysfunction; diffuse, generalized or global hypokinesis; LV akinesis/ hypokinesis/dyskinesis; LV systolic failure) described as marked, moderate, moderate-severe, severe, significant, substantial, or very severe; OR where severity is NOT specified
* biventricular heart failure described as moderate or severe
* **e**nd stage cardiomyopathy

**Exclude**: 1Any terms (see above)described as mild-moderate 2) diastolic dysfunction, failure, function or impairment3) ventricular dysfunction, failure, or function not described as **left** ventricular4) Any terms (see above) described using one of the following:* **Negative qualifiers:** cannot exclude, cannot rule out, could be, may have, may have had, may indicate, possible, suggestive of, suspect, or suspicious, OR
* **Negative modifiers**: borderline, insignificant, scant, slight, sub-clinical, subtle, trace, or trivial
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| **If dcdispo =2, 3, 4, 6 or 7 , go out of ACS** |
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