2015 PRACTICE GUIDELINES
ACUTE MYOCARDIAL INFARCTION (AMI)

OVERVIEW AND PURPOSE

Acute myocardial infarction (AMI) is associated with significant mortality and morbidity. Outcome research has demonstrated that following certain clinical care processes and achieving certain clinical goals during outpatient and inpatient treatment of AMI has profound beneficial effects on these mortalities and morbidities. The processes and goals are often utilized in assessment of hospitals.

BCBSRI adopts the 2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction as published in Circulation 2013; 127:e362-3425 [1].Updates to the 2004 STEMI guideline were published in 2007 and 2009 [2,3].

Particular emphasis of this guideline (from 2013 recommendation) is 1.5 years on advances in reperfusion therapy, organization of regional systems of care, transfer algorithms, evidence-based antithrombotic and medical therapies, and secondary prevention strategies to optimize patient-centered care. By design, the document is narrower in scope than the 2004 STEMI Guideline, in an attempt to provide a more focused tool for practitioners. References related to management guidelines are provided whenever appropriate, including those pertaining to percutaneous coronary intervention (PCI), coronary artery bypass graft (CABG), heart failure (HF), cardiac devices, and secondary prevention.
Although there may be up to three classes of recommendations (Class 1, Class 2, Class 3), only Class 1 are highlighted in this adopted version.

A. Onset Of Myocardial Infarction: Class 1 Recommendations

A.1 Regional Systems of STEMI Care, Reperfusion Therapy, and Time-to-Treatment Goals

- All communities should create and maintain a regional system of STEMI care that includes assessment and continuous quality improvement of emergency medical services and hospital-based activities. Performance can be facilitated by participating in programs such as Mission: Lifeline and the Door-to-Balloon Alliance
- Performance of a 12-lead electrocardiogram (ECG) by emergency medical services personnel at the site of first medical contact (FMC) is recommended in patients with symptoms consistent with STEMI
- Reperfusion therapy should be administered to all eligible patients with STEMI with symptom onset within the prior 12 hours
- Primary PCI is the recommended method of reperfusion when it can be performed in a timely fashion by experienced operators
- Emergency medical services transport directly to a PCI-capable hospital for primary PCI is the recommended triage strategy for patients with STEMI, with an ideal FMC-to-device time system goal of 90 minutes or less. *The proposed time windows are system goals. For any individual patient, every effort should be made to provide reperfusion therapy as rapidly as possible.*

- Immediate transfer to a PCI-capable hospital for primary PCI is the recommended triage strategy for patients with STEMI who initially arrive at or are transported to a non–PCI-capable hospital, with an FMC-to-device time system goal of 120 minutes or less
- In the absence of contraindications, fibrinolytic therapy should be administered to patients with STEMI at non–PCI-capable hospitals when the anticipated FMC-to-device time at a PCI-capable hospital exceeds 120 minutes because of unavoidable delays
- When fibrinolytic therapy is indicated or chosen as the primary reperfusion strategy, it should be administered within 30 minutes of hospital arrival

A.2 Evaluation and Management of Patients With STEMI and Out-of-Hospital Cardiac Arrest

- Therapeutic hypothermia should be started as soon as possible in comatose patients with STEMI and out-of-hospital cardiac arrest caused by ventricular fibrillation or pulseless ventricular tachycardia, including patients who undergo primary PCI
- Immediate angiography and PCI when indicated should be performed in resuscitated out-of-hospital cardiac arrest patients whose initial ECG shows STEMI

B. Reperfusion At A PCI-Capable Hospital: Class 1 Recommendations

B.1 Primary PCI in STEMI

- Primary PCI should be performed in patients with STEMI and ischemic symptoms of less than 12 hours' duration
- Primary PCI should be performed in patients with STEMI and ischemic symptoms of less than 12 hours' duration who have contraindications to fibrinolytic therapy, irrespective of the time delay from FMC
- Primary PCI should be performed in patients with STEMI and cardiogenic shock or acute severe HF, irrespective of time delay from myocardial infarction (MI) onset

B.2 Aspiration Thrombectomy (Class IIa only)

B.3. Use of Stents in Patients With STEMI

- Placement of a stent (bare-metal stent or drug-eluting stent) is useful in primary PCI for patients with STEMI (65,66). (*Level of Evidence: A*)
- Bare-metal stents† should be used in patients with high bleeding risk, inability to comply with 1 year of dual antiplatelet therapy (DAPT), or anticipated invasive or surgical procedures in the next year.† ***†Balloon angioplasty without stent placement may be used in selected patients.***

B.4. Antiplatelet Therapy to Support Primary PCI for STEMI

- Aspirin 162 to 325 mg should be given before primary PCI
- After PCI, aspirin should be continued indefinitely
- A loading dose of a P2Y12receptor inhibitor should be given as early as possible or at time of primary PCI to patients with STEMI. Options include
  - Clopidogrel 600 mg or
  - Prasugrel 60 mg or
  - Ticagrelor 180 mg

- P2Y inhibitor therapy should be given for 1 year to patients with STEMI who receive a stent (bare-metal or drug-eluting) during primary PCI using the following maintenance doses:
  - Clopidogrel 75 mg daily or
  - Prasugrel 10 mg daily or
  - Ticagrelor 90 mg twice a day

    ‡ ‡*The recommended maintenance dose of aspirin to be used with ticagrelor is 81 mg daily.*

B.5 Anticoagulant Therapy to Support Primary PCI\

- For patients with STEMI undergoing primary PCI, the following supportive anticoagulant regimens are recommended:
  - UFH, with additional boluses administered as needed to maintain therapeutic activated clotting time levels, taking into account whether a GP IIb/IIIa receptor antagonist has been administered, or
  - Bivalirudin with or without prior treatment with UFH

C. Reperfusion At A Non–PCI-Capable Hospital: Class 1 Recommendations

C.1 Fibrinolytic Therapy When There Is an Anticipated Delay to Performing Primary PCI Within 120 Minutes of FMC

- In the absence of contraindications, fibrinolytic therapy should be given to patients with STEMI and onset of ischemic symptoms within the previous 12 hours when it is anticipated that primary PCI cannot be performed within 120 minutes of FMC

C.2 Adjunctive Antithrombotic Therapy With Fibrinolysis

C.3 Adjunctive Antiplatelet Therapy With Fibrinolysis

- Aspirin (162- to 325-mg loading dose) and clopidogrel (300-mg loading dose for patients ≤75 years of age, 75-mg dose for patients >75 years of age) should be administered to patients with STEMI who receive fibrinolytic therapy
- Aspirin should be continued indefinitely and clopidogrel (75 mg daily) should be continued for at least 14 days and up to 1 year in patients with STEMI who receive fibrinolytic therapy.

C4. Adjunctive Anticoagulant Therapy With Fibrinolysis

- Patients with STEMI undergoing reperfusion with fibrinolytic therapy should receive anticoagulant therapy for a minimum of 48 hours, and preferably for the duration of the index hospitalization, up to 8 days or until revascularization if performed**.**

C 5. Transfer to a PCI-Capable Hospital After Fibrinolytic Therapy

- Immediate transfer to a PCI-capable hospital for coronary angiography is recommended for suitable patients with STEMI who develop cardiogenic shock or acute severe HF, irrespective of the time delay from MI onset

D. Delayed Invasive Management: Class 1 Recommendations

D.1. Coronary Angiography in Patients Who Initially Were Managed With Fibrinolytic Therapy or Who Did Not Receive Reperfusion

- Cardiac catheterization and coronary angiography with intent to perform revascularization should be performed after STEMI in patients with any of the following:
  - Cardiogenic shock or acute severe HF that develops after initial presentation;
  - Intermediate- or high-risk findings on predischarge noninvasive ischemia testing; or
  - Myocardial ischemia that is spontaneous or provoked by minimal exertion during hospitalization.

D.2 PCI of an Infarct Artery in Patients Who Initially Were Managed With Fibrinolysis or Who Did Not Receive Reperfusion Therapy

- PCI of an anatomically significant stenosis in the infarct artery should be performed in patients with suitable anatomy and any of the following:
  - Cardiogenic shock or acute severe HF;
  - Intermediate- or high-risk findings on predischarge noninvasive ischemia testing; or
  - Myocardial ischemia that is spontaneous or provoked by minimal exertion during hospitalization.

D.3 PCI of a Noninfarct Artery Before Hospital Discharge

- PCI is indicated in a noninfarct artery at a time separate from primary PCI in patients who have spontaneous symptoms of myocardial ischemia

D.4. Adjunctive Antithrombotic Therapy to Support Delayed PCI After Fibrinolytic Therapy

D.4.1 Antiplatelet Therapy to Support PCI After Fibrinolytic Therapy

- After PCI, aspirin should be continued indefinitely
- Clopidogrel should be provided as follows:
  - A 300-mg loading dose should be given before or at the time of PCI to patients who did not receive a previous loading dose and who are undergoing PCI within 24 hours of receiving fibrinolytic therapy:
  - A 600-mg loading dose should be given before or at the time of PCI to patients who did not receive a previous loading dose and who are undergoing PCI more than 24 hours after receiving fibrinolytic therapy; and
  - A dose of 75 mg daily should be given after PCI

D 4.2 Anticoagulant Therapy to Support PCI After Fibrinolytic Therapy

- For patients with STEMI undergoing PCI after receiving fibrinolytic therapy with intravenous UFH, additional boluses of intravenous UFH should be administered as needed to support the procedure, taking into account whether GP IIb/IIIa receptor antagonists have been administered.
- For patients with STEMI undergoing PCI after receiving fibrinolytic therapy with enoxaparin, if the last subcutaneous dose was administered within the prior 8 hours, no additional enoxaparin should be given; if the last subcutaneous dose was administered between 8 and 12 hours earlier, enoxaparin 0.3 mg/kg IV should be given.

E. Coronary Artery Bypass Graft Surgery: Class 1 Recommendations

E.1 CABG in Patients With STEMI

- Urgent CABG is indicated in patients with STEMI and coronary anatomy not amenable to PCI who have ongoing or recurrent ischemia, cardiogenic shock, severe HF, or other high-risk features
- CABG is recommended in patients with STEMI at time of operative repair of mechanical defects

E.2 Timing of Urgent CABG in Patients With STEMI in Relation to Use of Antiplatelet Agents

- Aspirin should not be withheld before urgent CABG
- Clopidogrel or ticagrelor should be discontinued at least 24 hours before urgent on-pump CABG, if possible
- Short-acting intravenous GP IIb/IIIa receptor antagonists (eptifibatide, tirofiban) should be discontinued at least 2 to 4 hours before urgent CABG
- Abciximab should be discontinued at least 12 hours before urgent CABG

F. Routine Medical Therapies: Class 1 Recommendations

F.1 Beta Blockers

- Oral beta blockers should be initiated in the first 24 hours in patients with STEMI who do not have any of the following: signs of HF, evidence of a low-output state, increased risk for cardiogenic shock. ***Risk factors for cardiogenic shock (the greater the number of risk factors present, the higher the risk of developing cardiogenic shock) are age >70 years, systolic blood pressure <120 mmHg, sinus tachycardia >110 bpm or heart rate <60 bpm, and increased time since onset of symptoms of STEMI*** or other contraindications to use of oral beta blockers (PR interval more than 0.24 seconds, second- or third-degree heart block, active asthma, or reactive airways disease)
- Beta blockers should be continued during and after hospitalization for all patients with STEMI and with no contraindications to their use
- Patients with initial contraindications to the use of beta blockers in the first 24 hours after STEMI should be reevaluated to determine their subsequent eligibility.

F.2 Renin-Angiotensin-Aldosterone System Inhibitors

- An angiotensin-converting enzyme inhibitor should be administered within the first 24 hours to all patients with STEMI with anterior location, HF, or ejection fraction less than or equal to 0.40, unless contraindicated
- An angiotensin receptor blocker should be given to patients with STEMI who have indications for but are intolerant of angiotensin-converting enzyme inhibitors
- An aldosterone antagonist should be given to patients with STEMI and no contraindications who are already receiving an angiotensin-converting enzyme inhibitor and beta blocker and who have an ejection fraction less than or equal to 0.40 and either symptomatic HF or diabetes mellitus

F.3 Lipid Management

- High-intensity statin therapy should be initiated or continued in all patients with STEMI and no contraindications to its use.

G. Complications After STEMI: Class 1 Recommendations

G.1 Treatment of Cardiogenic Shock

- Emergency revascularization with either PCI or CABG is recommended in suitable patients with cardiogenic shock due to pump failure after STEMI irrespective of the time delay from MI onset
- In the absence of contraindications, fibrinolytic therapy should be administered to patients with STEMI and cardiogenic shock who are unsuitable candidates for either PCI or CABG.

G.2 Implantable Cardioverter-Defibrillator Therapy Before Discharge

- Implantable cardioverter-defibrillator therapy is indicated before discharge in patients who develop sustained ventricular tachycardia/ventricular fibrillation more than 48 hours after STEMI, provided the arrhythmia is not due to transient or reversible ischemia, reinfarction, or metabolic abnormalities

G.3 Pacing in STEMI

- Temporary pacing is indicated for symptomatic bradyarrhythmias unresponsive to medical treatment

G.4 Management of Pericarditis After STEMI

- Aspirin is recommended for treatment of pericarditis after STEMI

G.5 Anticoagulation

- Anticoagulant therapy with a vitamin K antagonist should be provided to patients with STEMI and atrial fibrillation with CHADS2 ***#CHADS2 (Congestive heart failure, Hypertension, Age ≥75 years, Diabetes mellitus, previous Stroke/transient ischemic attack [doubled risk weight]) score.*** score greater than or equal to 2, mechanical heart valves, venous thromboembolism, or hypercoagulable disorder
- The duration of triple-antithrombotic therapy with a vitamin K antagonist, aspirin, and a P2Y12receptor inhibitor should be minimized to the extent possible to limit the risk of bleeding. ***Individual circumstances will vary and depend on the indications for triple therapy and the type of stent placed during PCI. After this initial treatment period, consider therapy with a vitamin K antagonist plus a single antiplatelet agent. For patients treated with fibrinolysis, consider triple therapy for 14 days, followed by a vitamin K antagonist plus a single antiplatelet agent.***

H. Risk Assessment After STEMI: Class 1 Recommendations

H.1 Use of Noninvasive Testing for Ischemia Before Discharge

- Noninvasive testing for ischemia should be performed before discharge to assess the presence and extent of inducible ischemia in patients with STEMI who have not had coronary

angiography and do not have high-risk clinical features for which coronary angiography would be warranted

H.2 Assessment of LV Function

- LV ejection fraction should be measured in all patients with STEMI

H.3 Assessment of Risk for Sudden Cardiac Death

- Patients with an initially reduced LV ejection fraction who are possible candidates for implantable cardioverter-defibrillator therapy should undergo reevaluation of LV ejection fraction 40 or more days after discharge

I. Posthospitalization Plan Of Care: Class 1 Recommendations

- Posthospital systems of care designed to prevent hospital readmissions should be used to facilitate the transition to effective, coordinated outpatient care for all patients with STEMI
- Exercise-based cardiac rehabilitation/secondary prevention programs are recommended for patients with STEMI
- A clear, detailed, and evidence-based plan of care that promotes medication adherence, timely follow-up with the healthcare team, appropriate dietary and physical activities, and compliance with interventions for secondary think prevention should be provided to patients with STEMI.
- Encouragement and advice to stop smoking and to avoid secondhand smoke should be provided to patients with STEMI

1. Secondary Prevention and Post Hospital Care:

The following information is excerpted from the ACC/AHA 2004 Guidelines for the management of Patients with ST-Elevation Myocardial Infarction as updated by the 2007 and 2009 Updates.. Patients who survive the acute phase of STEMI should have plans initiated for secondary prevention therapies.

Smoking: Goal: complete cessation	1. Status of tobacco use should be asked about at every visit. 2. Every tobacco user and family members who smoke should be advised to quit at every visit. 3. The tobacco user's willingness to quit should be assessed. 4. The tobacco user should be assisted by counseling and developing a plan for quitting. 5. Follow-up, referral to special programs, or pharmacotherapy (including nicotine replacement and pharmacological treatment) should be arranged. 6. Exposure to environmental tobacco smoke at work and home should be avoided.

Blood pressure control: Goal: Less than 140/90 mm Hg or Less than 130/80 mm Hg if chronic kidney disease or diabetes	1. For patients with blood pressure greater than or equal to 140/90 mm Hg (or greater than or equal to 130/80 mm Hg for patients with diabetes or chronic kidney disease), it is recommended to initiate or maintain lifestyle modification – weight control; increased physical activity; alcohol moderation; sodium reduction; and emphasis on increased consumption of fresh fruits, vegetables, and low-fat dairy products.
	2. For patients with blood pressure greater than or equal to 140/90 mm Hg (or greater than or equal to 130/80 Hg for patients with diabetes or chronic kidney disease, it is useful as tolerated, to add blood pressure medication, treating initially with beta blockers and/or ACE inhibitors, with the addition of other drugs such as thiazides as needed to achieve goal blood pressure.
Lipid management: Primary goal LDL-C *substantially* less than 100 mg/dL	1. Starting dietary therapy is recommended in all patients. Reduce intake of saturated fats (to less than 7% of total calories), trans fatty acids, and (cholesterol (to less than 200 mg per day). 2. Adding plant stanol/sterols (2 g per day) and/or viscous fiber (greater than 10 g per day) is reasonable to further lower LDL-C. 3. Promotion of daily physical activity and weight management is recommended. 4. It may be reasonable to encourage increased consumption of omega-3 fatty acids in the form of fish or in capsules (1g per day) for risk reduction. For treatment of elevated triglycerides, higher doses are usually necessary for risk reduction. 5. A fasting lipid profile should be assessed in all patients and within 24 hours of hospitalization for those with an acute cardiovascular or coronary event. For hospitalized patients, initiation of lipid-lowering medication is indicated as recommended below before discharge according to the following schedule: • LDL-C should be less than 100 mg per dL. • Further reduction of LDL-C to less than 70 mg per dL is reasonable. • If baseline LDL-C is greater than or equal to 100 mg per dL, LDL lowering drug therapy should be initiated. • If on treatment, LDL-C is greater than or equal to 100 mg per dL, intensifying LDL-lowering drug therapy (may require LDL-lowering drug combination) is recommended. • If baseline LDL-C is 70 to 100 mg per dL, it is reasonable to treat LDL-C less than 70 mg per dL.

Lipid management: If TG are greater than or equal to 200 mg per dL, non-HDL C should be less than 130 mg per dL	1. If triglycerides are greater than or equal to 150 mg/dL or HDL-C is less than 40 mg/dL emphasize weight management, physical activity, and smoking cessation. 2. If triglycerides are 200 to 499 mg/dL, non HDL-C target should be less than 130 mg per dL.
	3. If triglycerides are 200 to 499 mg per dL further reduction of non-HDL-C to less than 100 mg per dL is reasonable. Therapeutic options to reduce non-HDL-C include: • More intense LDL-C lowering therapy is indicated. • Niacin (after LDL-C lowering therapy) can be beneficial. • Fibrate therapy (after LDL-lowering therapy) can be beneficial.
	4. If triglycerides are greater than or equal to 500 mg/dL therapeutic options indicated and useful to prevent pancreatitis are fibrate or niacin before LDL-lowering therapy; and treat LDL-C to goal after triglyceride-lowering therapy. Achieving non HDL-C less than 130 mg per dL is recommended.

Physical activity: Goal: 30 minutes, 7 days per week (minimum 5 days per week)	1. Advising medically supervised programs (cardiac rehabilitation) for high-risk patients (e.g. recent acute coronary syndrome or revascularizations, HF) is recommended. 2. For all patients, it is recommended that risk be assessed with a physical activity history and/or an exercise test to guide prescription. 3. For all patients, encouraging 30 to 60 minutes of moderate-intensity aerobic activity is recommended, such as brisk walking on most – preferably all- days of the week, supplemented by an increased in daily lifestyle activities (e.g. walking breaks at work,, gardening, and household work). 4. Encouraging resistance training 2 days per week may be reasonable.

Weight management: Goal: BMI 18.5–24.9 kg/m^2 Waist circumference: • Women: Less than 35 inches • Men: Less than 40 inches	1. It is useful to assess BMI and/or waist circumference on each visit and consistently encourage weight maintenance/reduction through an appropriate balance of physical activity, caloric intake, and formal behavioral programs when indicated to maintain/achieve a BMI between 18.5 and 24.9 kg/$m^{2.}$ 2. The initial goal of weight loss therapy should be to reduce body weight by approximately 10% from baseline. With success, further weight loss can be attempted through further assessment. 3. If waist circumference (measured horizontally at the iliac crest) is greater than or equal to 35 inches in women or greater than or equal to 40 inches in men, it is useful to initiate lifestyle changes and treatment strategies for metabolic syndrome as indicated.

Diabetes management: Goal HbA1c less than 7%	1. It is recommended to initiate lifestyle and pharmacotherapy to achieve near-normal HbA1C. 2. Beginning vigorous modification of other risk factors (e.g. physical activity, weight management, blood pressure control, and cholesterol management as recommended above) is beneficial. 3. Coordination of diabetic care with the patient's primary care physician or endocrinologist is beneficial.
Antiplatelet agents/ Anticoagulants:	*Aspirin* 1. For all post-PCI STEMI stented patients without contraindications, 162 mg to 325 mg daily should be given for at least 1 month after bare metal stent (BMS) implantation, 3 months after sirolimus-eluting stent implantation, and 6 months after paclitaxel-eluting stent implantation, after which long-term aspirin use should be continued indefinitely at a dose of 75 mg to 162 mg daily. 2. In patients for whom the physician is concerned about risk of bleeding lower-dose 75 mg to 162 mg of aspirin is reasonable during the initial period after stent implantation. *Thienopyridenes (Clopidogrel and Prasugrel)* The duration of thienopyridine therapy should be as follows: 1. In patients receiving a stent (BMS or drug-eluting stent [DES]) during PCI for ACS, clopidogrel 75 mg daily or prasugrel 10 mg daily should be given for at least 12 months. 2. If the risk of morbidity because of bleeding outweighs the anticipated benefit afforded by thienopyrideine therapy, earlier discontinuation should be considered. For all STEMI patients not undergoing stenting (medical therapy alone or PTCA without stenting), treatment with clopidogrel should continue for at

	least 14 days. *Warfarin* 1. Managing warfarin to INR of 2.0 to 3.0 for paroxysmal or chronic atrial fibrillation or flutter is recommended, and in post-MI patients when clinically indicated (atrial fibrillation, left ventricular thrombus). 2. Use of warfarin in conjunction with aspirin and/or clopidrogel is associated with an increased risk of bleeding and should be monitored closely. 3. In patients requiring warfarin, clopidogrel, and aspirin therapy an INR of 2.0 to 2.5 is recommended with low dose aspirin (75 mg to 81 mg).

Renin-Angiotensin-Aldosterone System Blockers:	*ACE Inhibitors* 1. ACE inhibitors should be started and continued indefinitely in all patients recovering from STEMI with LVEF less than or equal to 40% and for those with hypertension, diabetes, or chronic kidney disease, unless contraindicated. 2. ACE inhibitors should be started and continued indefinitely in patients recovering from STEMI who are not lower risk (lower risk defined as those with normal LVEF in whom cardiovascular risk factors are well controlled and revascularization has been performed), unless ontraindicated. *ARBs* 1. Use of angiotensin receptor blockers is recommended in patients who are intolerant of ACE inhibitors and have HF or have had an MI with LVEF less than or equal to 40%. (Class I, Level of Evidence A). 2. It is beneficial to use angiotensin receptor blocker therapy in other patients who are ACE-inhibitor intolerant and have hypertension. (Class I, Level of evidence B). *Aldosterone Blockade* Use of aldosterone blockade in post-MI patients without significant renal dysfunction or hyperkalemia is recommended in patients who are already receiving therapeutic doses of an ACE inhibitor and beta blocker, have an LVEF of less than or equal to 40%, and have either diabetes or HF.
Beta-Blockers:	It is beneficial to start and continue in all patients who have had MI, acute coronary syndrome, or LV dysfunction with or without HF symptoms, unless contraindicated.
Influenza Vaccination:	Patients with cardiovascular disease should have an annual influenza vaccination.

2. Heart Attack Hospital Process of Care Measures

These measures are available at
http://hospitalcompare.hhs.gov/staticpages/forprofessionals/poc/Technical-Appendix.aspx#POC3
They are consistent with the 2004 ACC/AHA Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction and 2007 Focused Update of those Guidelines.

1. Aspirin at arrival – Acute myocardial infarction patients without aspirin contraindications who received aspirin within 24 hours before or after hospital arrival.

2. Aspirin at discharge – AMI patients without aspirin contraindications who were prescribed aspirin at hospital discharge.

3. ACE inhibitor or ARB for left ventricular systolic dysfunction – AMI patients with left ventricular systolic dysfunction and without angiotensin converting enzyme inhibitor contraindications or angiotensin receptor blocker contraindications who are prescribed an ACE inhibitor or an ARB at hospital discharge.

4. Beta Blocker at discharge – AMI patients without beta-blocker contraindications who were prescribed a beta-blocker at hospital discharge.

5. Fibrinolytic medication received within 30 minutes of hospital arrival – AMI patients receiving fibrinolytic therapy during the hospital stay and having a time from hospital arrival to fibrinolysis of 30 minutes or less.

6. PCI received within 90 minutes of hospital arrival – AMI patients receiving Percutaneous Coronary Intervention (PCI) during the hospital stay with a time from hospital arrival to PCI of 90 minutes or less.

7. Smoking cessation advice/counseling – AMI patients with a history of smoking cigarettes, who are given smoking cessation advice or counseling during a hospital stay.

MONITORING: Two HEDIS measures monitor compliance with these guidelines:

- Cholesterol Management for Patients with Cardiovascular Conditions
- Persistence of Beta-Blocker Treatment After a Heart Attack.

1. The 2013 Guideline is available at http://circ.ahajournals.org/content/127/4/e362.full accessed 01/06/2015.

2. The 2007 Focused Update of the ACC/AHA 2004 Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction, is published in The Journal of the American College of Cardiology, 2008; 51:210-247. It is available at http://circ.ahajournals.org/content/117/2/296.full.pdf (as of 01/03/2013)

3. The 2009 Focused Updates: ACC/AHA Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction (Updating the 2004 Guideline and 2007 Focused Update) and ACC/AHA/SCAI Guidelines on Percutaenous Coronary Intervention (Updating the 2005 Guidelines and 2007 Focused Update: A report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines as published in Circulation 2009;120;2271-2306 available at http://circ.ahajournals.org/content/120/22/2271.full (as of 1/03/2013)

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