

**Consensus Core Set: Cardiovascular Measures
Version 1.0**

Chronic Cardiovascular Condition Measures				
NQF #	Measure	Measure Steward	Level of Analysis	Consensus Agreement / Notes
<i>Congestive Heart Failure</i>				
0330	Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following heart failure hospitalization	CMS	Facility	Consensus reached to include measure in core set; measure to be used at the facility level only.
0229	Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following heart failure (HF) hospitalization for patients 18 and older	CMS	Facility	Consensus reached to include measure in core set; measure to be used at the facility level only.
0081	Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	AMA-PCPI	Clinician	Consensus reached to include measure in core set.
0083	Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	AMA-PCPI	Clinician	Consensus reached to include measure in core set.

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<i>Hypertension</i>				
0018	<p>Controlling High Blood Pressure</p> <p>Description: The percentage of patients 18 to 85 years of age who had a diagnosis of hypertension (HTN) and whose blood pressure (BP) was adequately controlled (<140/90) during the measurement year.</p>	NCQA	Clinician	<p>Consensus to include either #0018 or "N/A - Controlling High Blood Pressure" HEDIS measure in the core set.</p> <p><i>Note:</i> Both blood pressure control measures are included in the core set with the choice being an "either/or" due to controversyⁱ regarding the 2014 JAMA paperⁱⁱ sometimes referred to as "JNC 8", which recommends relaxing systolic blood pressure (SBP) targets to 150 mmHg for patients aged 60 and older without diabetes mellitus or chronic kidney disease (CKD).</p> <p>Revised ACC/AHA hypertension guidelines are expected to be released later this year. Until these revised guidelines are available, a number of organizations continue to recognize the 2004 Joint National Committee (JNC 7) hypertension guidelines, which recommend a SBP target of 140 mmHg, as the national standard. Given the changing nature of these guidelines, the Collaborative will revisit this measure topic when the revised guidelines are available to determine which blood pressure control measure aligns with the updated evidence base.</p> <p><i>Note:</i> #0018 is specified for physician-level use.</p>

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N/A	<p>Controlling High Blood Pressure (HEDIS 2016)</p> <p>Measure Description: The percentage of members 18-85 years of age who had a diagnosis of hypertension and whose BP was adequately controlled during the measurement year based on the following criteria:</p> <ul style="list-style-type: none"> • 18-59 = <140/90 mm Hg • 60-85 w/ diabetes = <140/90 mm Hg • 60-85 w/o diabetes = <150/90 mm Hg 	NCQA	Health Plan/Integrated Delivery System	<p>Consensus to include either #0018 or "N/A - Controlling High Blood Pressure" HEDIS measure in the core set.</p> <p><i>Note:</i> Both blood pressure control measures are included in the core set with the choice being an "either/or" due to controversyⁱⁱⁱ regarding the 2014 JAMA paper^{iv} sometimes referred to as "JNC 8", which recommends relaxing systolic blood pressure (SBP) targets to 150 mmHg for patients aged 60 and older without diabetes mellitus or chronic kidney disease (CKD).</p> <p>Revised ACC/AHA hypertension guidelines are expected to be released later this year. Until these revised guidelines are available, a number of organizations continue to recognize the 2004 Joint National Committee (JNC 7) hypertension guidelines, which recommend a SBP target of 140 mmHg, as the national standard. Given the changing nature of these guidelines, the Collaborative will revisit this measure topic when the revised guidelines are available to determine which blood pressure control measure aligns with the updated evidence base.</p> <p><i>Note:</i> Please refer to 2016 HEDIS specifications which align with the recommendations in the 2014 JAMA paper^v.</p> <p><i>Note:</i> "N/A - Controlling High Blood Pressure" HEDIS measure is specified for the health plan or integrated delivery network level use.</p>

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<i>Ischemic Heart Disease / Coronary Heart Disease</i>				
0066	Chronic Stable Coronary Artery Disease: ACE Inhibitor or ARB Therapy--Diabetes or Left Ventricular Systolic Dysfunction (LVEF <40%)	American College of Cardiology	Clinician	Consensus reached to include measure in core set.
0067	Chronic Stable Coronary Artery Disease: Antiplatelet Therapy	American College of Cardiology	Clinician	Consensus reached to include measure in core set.
0070	Chronic Stable Coronary Artery Disease: Beta-Blocker Therapy--Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	AMA-PCPI	Clinician	Consensus reached to include measure in core set. <i>Note:</i> Measure also listed under Acute MI.
2558	Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Coronary Artery Bypass Graft (CABG) Surgery	CMS	Facility	Consensus reached to include measure in core set; report either #2558 or #0019; measure to be used at the facility level only.
0119	Risk-Adjusted Operative Mortality for CABG	The Society of Thoracic Surgeons	Clinician and Facility	Consensus reached to include measure in core set; report either #2558 or #0019; measure to be calculated at both the physician and facility level.
2515	Hospital 30-day, all-cause, unplanned, risk-standardized readmission rate (RSRR) following coronary artery bypass graft (CABG) surgery	CMS	Facility	Consensus reached to include measure in core set; report either #2515 or #2514.

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2514	Risk-Adjusted Coronary Artery Bypass Graft (CABG) Readmission Rate (30-days)	The Society of Thoracic Surgeons	Facility	Consensus reached to include measure in core set; report either #2515 or #2514.
<i>Atrial fibrillation</i>				
1525	Chronic Anticoagulation Therapy	American College of Cardiology	Clinician	Consensus reached to include measure in core set.
<i>Prevention</i>				
0028	Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention	AMA-PCPI	Clinician	Consensus reached to include measure in core set. <i>Note:</i> Included in ACO and PMCH / Primary Care core set.

Acute Cardiovascular Condition Measures				
NQF #	Measure	Measure Steward	Level of Analysis	Notes & Comments
<i>Acute Myocardial Infarction</i>				
0505	Hospital 30-day all-cause risk-standardized readmission rate (RSRR) following acute myocardial infarction (AMI) hospitalization	CMS	Facility	Consensus reached to include measure in core set; measure to be used at the facility level only.
0163	Primary PCI received within 90	CMS	Facility	Consensus reached to include measure in core set.

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Acute Cardiovascular Condition Measures				
NQF #	Measure	Measure Steward	Level of Analysis	Notes & Comments
	minutes of hospital arrival			
0070	Coronary Artery Disease (CAD): Beta-Blocker Therapy—Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVEF <40%)	AMA-PCPI	Clinician	Consensus reached to include measure in core set. <i>Note:</i> Measure also listed under chronic CAD section.
0230	Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute myocardial infarction (AMI) hospitalization for patients 18 and older	CMS	Facility	Consensus reached to include measure in core set.
0536	30-day all-cause risk-standardized mortality rate following Percutaneous Coronary Intervention (PCI) for patients with ST segment elevation myocardial infarction (STEMI) or cardiogenic shock	American College of Cardiology	Facility	Consensus reached to include measure in core set. <i>Note:</i> #0536 is always to be reported with the complementary measure #0535.
0535	30-day all-cause risk-standardized mortality rate following percutaneous coronary intervention (PCI) for patients without ST segment elevation myocardial infarction (STEMI) and without cardiogenic shock	American College of Cardiology	Facility	Consensus reached to include measure in core set. <i>Note:</i> #0535 is always to be reported with the complementary measure #0536.

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<i>Angioplasty and Stents</i>				
0964	Therapy with aspirin, P2Y12 inhibitor, and statin at discharge following PCI in eligible patients	American College of Cardiology	Facility	Consensus reached to include measure in core set.
2459	In-hospital Risk Adjusted Rate of Bleeding Events for Patients Undergoing PCI	American College of Cardiology	Facility	Consensus reached to include measure in core set; measure to be used at the facility level only.
<i>Implantable Cardiac Defibrillators</i>				
0694	Hospital Risk-Standardized Complication Rate following Implantation of Implantable Cardioverter-Defibrillator (ICD)	American College of Cardiology	Facility	Consensus reached to include measure in core set.
<i>Cardiac Catheterization</i>				
0715	Standardized adverse event ratio for children < 18 years of age undergoing cardiac catheterization	Boston Children's Hospital	Facility	Consensus to include in core set however measure may be subject to small numbers so should be implemented only when there is adequate sample size.
<i>Pediatric Heart Surgery</i>				
0733	Operative Mortality Stratified by the Five STS-EACTS Mortality Categories	Society of Thoracic Surgeons	Clinician	Consensus to include in core set however measure may be subject to small numbers so should be implemented only when there is adequate sample size.

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Future Measure for Cardiovascular Care Measure Set Inclusion			
NQF #	Measure	Measure Steward	Notes & Comments
0541	Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category	PQA	Consensus to include in the future pending better availability of data. <i>Rationale:</i> It may be difficult to accurately calculate this measure for some providers because of the way their EMRs track medications and their refills. Additionally, this measure may not be appropriate for all hypertension patients as not all are prescribed medications for diabetes. Measure aligns with CMS Stars and health plans collect measure data; Population is important to monitor.
2377	Defect Free Care for AMI (Composite Measure)	American College of Cardiology	
N/A	Clinician Level Companion Measure to (0694) Hospital Risk-Standardized Complication Rate following Implantation of Implantable Cardioverter-Defibrillator (ICD)	ACC	Submitted to NQF for endorsement. Review in July, 2015.
2439	Post-Discharge Appointment for Heart Failure Patients	TJC	Data collection is currently challenging. Reconsider measure upon measure updates.
0671	Cardiac Stress Imaging Not Meeting Appropriate Use Criteria: Routine Testing after Percutaneous Coronary Intervention	American College of Cardiology	

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Future Areas for Cardiovascular Care Measure Development

Heart Failure:

- Evidence-based anticoagulation status -- ACC note: Not all HF patients are on anticoagulants
- Outpatient – symptom control or change in symptoms
- Functional status or quality of life measure for patients with heart failure.
 - Seattle Angina Questionnaire. Update is slow but can consider in work group
- Goals of care (does not need to be specific to heart failure)
- Follow-up visit after hospitalization by PCP
- End of life measures for heart failure
- Management of women with peripartum cardiomyopathy
- Proportion of days covered for beta blocker therapy: Heart Failure patients

Hypertension:

- Renal function measures (e.g., creatinine measures)

Other:

- Lipid measure based on new guidelines. With changes in guidelines and pending evidence, not yet comfortable adding lipid measures until medical consensus is reached. New data coming out which push levels back towards previous guidelines.
- Additional cost and over-utilization measures.
- Rehabilitation measures
- Mental health measures following cardiovascular events
- Symptom Management measures
- Disparities in cardiovascular care
- ICD counseling and appropriate use of ICDs measure. Article in JAMA noting severe underutilizations of ICDs in women and elderly.

ⁱ Wright JT Jr, Fine LJ, Lackland DT, Ogedegbe G, Dennison Himmelfarb CR. Evidence supporting a systolic blood pressure goal of less than 150 mm Hg in patients aged 60 years or older: the minority view. *Ann Intern Med.* 2014 Apr 1;160(7):499-503.

ⁱⁱ James PA, Oparil S, Carter BL, et al. 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). *JAMA* 2014; 311: 507–20.

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^{iv} James PA, Oparil S, Carter BL, et al. 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). *JAMA* 2014; 311: 507–20.

^v Wright JT Jr, Fine LJ, Lackland DT, Ogedegbe G, Dennison Himmelfarb CR. Evidence supporting a systolic blood pressure goal of less than 150 mm Hg in patients aged 60 years or older: the minority view. *Ann Intern Med.* 2014 Apr 1;160(7):499-503.