

Supplementary Online Content

Guduguntla V, Syrjamaki JD, Ellimoottil C, et al. Drivers of payment variation in 90-day coronary artery bypass grafting episodes. *JAMA Surg*. Published online August 23, 2017. doi:10.1001/jamasurg.2017.2881

eAppendix. CABG Episode Definition

This supplementary material has been provided by the authors to give readers additional information about their work.

eAppendix. CABG Episode Definition

Rule Type	Descriptor	Code Type	Number / Range	Full Description*
Inclusion	Inpatient	POS Codes	1	Inpatient
Inclusion	Operations On The Cardiovascular System	ICD_9_Proc_Codes	36.1	Aortocoronary bypass for heart revascularization, not otherwise specified
Inclusion		ICD_9_Proc_Codes	36.11	(Aorto)coronary bypass of one coronary artery
Inclusion		ICD_9_Proc_Codes	36.12	(Aorto)coronary bypass of two coronary arteries
Inclusion		ICD_9_Proc_Codes	36.13	(Aorto)coronary bypass of three coronary arteries
Inclusion		ICD_9_Proc_Codes	36.14	(Aorto)coronary bypass of four or more coronary arteries
Inclusion		ICD_9_Proc_Codes	36.15	Single internal mammary-coronary artery bypass
Inclusion		ICD_9_Proc_Codes	36.16	Double internal mammary-coronary artery bypass
Inclusion		ICD_9_Proc_Codes	36.17	Abdominal-coronary artery bypass
Inclusion		ICD_9_Proc_Codes	36.19	Other bypass anastomosis for heart revascularization
Inclusion		ICD_9_Proc_Codes	36.2	Heart revascularization by arterial implant
Inclusion	Surgery: Cardiovascular System	CPT Codes	33510—33516	Coronary artery bypass, vein only; single coronary venous graft

Inclusion		CPT Codes	33533—33536	Coronary artery bypass, using arterial graft(s); single arterial graft
Exclusion	Diseases Of The Circulatory System	ICD_9_DX_Codes	410	Acute myocardial infarction of anterolateral wall, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.01	Acute myocardial infarction of anterolateral wall, initial episode of care
Exclusion		ICD_9_DX_Codes	410.1	Acute myocardial infarction of other anterior wall, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.11	Acute myocardial infarction of other anterior wall, initial episode of care

Exclusion		ICD_9_DX_Codes	410.2	Acute myocardial infarction of inferolateral wall, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.21	Acute myocardial infarction of inferolateral wall, initial episode of care
Exclusion		ICD_9_DX_Codes	410.3	Acute myocardial infarction of inferoposterior wall, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care
Exclusion		ICD_9_DX_Codes	410.4	Acute myocardial infarction of other inferior wall, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.41	Acute myocardial infarction of other inferior wall, initial episode of care
Exclusion		ICD_9_DX_Codes	410.5	Acute myocardial infarction of other lateral wall, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.51	Acute myocardial infarction of other lateral

				wall, initial episode of care
Exclusion		ICD_9_DX_Codes	410.6	True posterior wall infarction, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.61	True posterior wall infarction, initial episode of care
Exclusion		ICD_9_DX_Codes	410.7	Subendocardial infarction, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.71	Subendocardial infarction, initial episode of care
Exclusion		ICD_9_DX_Codes	410.8	Acute myocardial infarction of other specified sites, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.81	Acute myocardial infarction of other specified sites, initial episode of care

Exclusion		ICD_9_DX_Codes	410.9	Acute myocardial infarction of unspecified site, episode of care unspecified
Exclusion		ICD_9_DX_Codes	410.91	Acute myocardial infarction of unspecified site, initial episode of care
Exclusion	Operations On The Cardiovascular System	ICD_9_Proc_Codes	35.00—35.28	Closed heart valvotomy, unspecified valve
Exclusion		ICD_9_Proc_Codes	35.31—35.42	Operations on papillary muscle
Exclusion		ICD_9_Proc_Codes	35.50—35.84	Repair of unspecified septal defect of heart with prosthesis
Exclusion		ICD_9_Proc_Codes	35.91—35.99	Interatrial transposition of venous return
Exclusion		ICD_9_Proc_Codes	37.51	Heart transplantation
Exclusion	Surgery: Cardiovascular System	CPT Codes	33400—33478	Valvuloplasty, aortic valve; open, with cardiopulmonary bypass
Exclusion		CPT Codes	33400—33417	Valvuloplasty, aortic valve; open, with cardiopulmonary bypass
Exclusion		CPT Codes	33420—33430	Valvotomy, mitral valve; closed heart

Exclusion		CPT Codes	33460—33478	Valvectomy, tricuspid valve, with cardiopulmonary bypass
Exclusion		CPT Codes	33600—33853	Closure of atrioventricular valve (mitral or tricuspid) by suture or patch
Exclusion		CPT Codes	33935	Heart-lung transplant with recipient cardiectomy-pneumectomy
Exclusion		CPT Codes	33945	Heart transplant, with or without recipient cardiectomy
Risk Adjustor	Surgery: Cardiovascular System	CPT Codes	33530	Reoperation, coronary artery bypass procedure or valve procedure, more than 1 month after original operation (List separately in addition to code for primary procedure)
Risk Adjustor		CPT Codes	33533—33536	Coronary artery bypass, using arterial graft(s); single arterial graft

* If a code range is listed, the description refers to the first code in the series.