



# **Inpatient Quality Indicator 12 (IQI 12) Coronary Artery Bypass Graft (CABG) Mortality Rate**

## **June 2018**

### **Provider-Level Indicator**

#### **Type of Score: Rate**

#### **Prepared by:**

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

[www.qualityindicators.ahrq.gov](http://www.qualityindicators.ahrq.gov)

#### **DESCRIPTION**

In-hospital deaths per 1,000 discharges with coronary artery bypass graft (CABG), ages 40 years and older. Excludes obstetric discharges and transfers to another hospital.

*[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report in-hospital deaths per 1,000 hospital discharges.]*

#### **NUMERATOR**

Number of deaths (DISP=20) among cases meeting the inclusion and exclusion rules for the denominator.

#### **DENOMINATOR**

Discharges, for patients ages 40 years and older, with any-listed ICD-10-PCS procedure code for CABG (*PRCABGP*\*).

#### **DENOMINATOR EXCLUSIONS**

Exclude cases:

- transferring to another short-term hospital (DISP=2)
- MDC 14 (pregnancy, childbirth, and puerperium)
- with missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

\* See below for code list

***Coronary artery bypass graft (CABG) procedure codes: (PRCABGP)***

0210083	Bypass Coronary Artery, One Artery from Coronary Artery with Zooplastic Tissue, Open Approach	0212083	Bypass Coronary Artery, Three Arteries from Coronary Artery with Zooplastic Tissue, Open Approach
0210088	Bypass Coronary Artery, One Artery from Right Internal Mammary with Zooplastic Tissue, Open Approach	0212088	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach
0210089	Bypass Coronary Artery, One Artery from Left Internal Mammary with Zooplastic Tissue, Open Approach	0212089	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach
021008C	Bypass Coronary Artery, One Artery from Thoracic Artery with Zooplastic Tissue, Open Approach	021208C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach
021008F	Bypass Coronary Artery, One Artery from Abdominal Artery with Zooplastic Tissue, Open Approach	021208F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach
021008W	Bypass Coronary Artery, One Artery from Aorta with Zooplastic Tissue, Open Approach	021208W	Bypass Coronary Artery, Three Arteries from Aorta with Zooplastic Tissue, Open Approach
0210093	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Venous Tissue, Open Approach	0212093	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach
0210098	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Venous Tissue, Open Approach	0212098	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach
0210099	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Venous Tissue, Open Approach	0212099	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach
021009C	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Venous Tissue, Open Approach	021209C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach
021009F	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Venous Tissue, Open Approach	021209F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach

021009W	Bypass Coronary Artery, One Artery from Aorta with Autologous Venous Tissue, Open Approach	021209W	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Venous Tissue, Open Approach
02100A3	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Arterial Tissue, Open Approach	02120A3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach
02100A8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	02120A8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach
02100A9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	02120A9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach
02100AC	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Arterial Tissue, Open Approach	02120AC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach
02100AF	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Arterial Tissue, Open Approach	02120AF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach
02100AW	Bypass Coronary Artery, One Artery from Aorta with Autologous Arterial Tissue, Open Approach	02120AW	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Arterial Tissue, Open Approach
02100J3	Bypass Coronary Artery, One Artery from Coronary Artery with Synthetic Substitute, Open Approach	02120J3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Synthetic Substitute, Open Approach
02100J8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Synthetic Substitute, Open Approach	02120J8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach
02100J9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Synthetic Substitute, Open Approach	02120J9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach
02100JC	Bypass Coronary Artery, One Artery from Thoracic Artery with Synthetic Substitute, Open Approach	02120JC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Synthetic Substitute, Open Approach
02100JF	Bypass Coronary Artery, One Artery from Abdominal Artery with Synthetic Substitute, Open Approach	02120JF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Synthetic Substitute, Open Approach

02100JW	Bypass Coronary Artery, One Artery from Aorta with Synthetic Substitute, Open Approach	02120JW	Bypass Coronary Artery, Three Arteries from Aorta with Synthetic Substitute, Open Approach
02100K3	Bypass Coronary Artery, One Artery from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	02120K3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach
02100K8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	02120K8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach
02100K9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	02120K9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach
02100KC	Bypass Coronary Artery, One Artery from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	02120KC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach
02100KF	Bypass Coronary Artery, One Artery from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	02120KF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach
02100KW	Bypass Coronary Artery, One Artery from Aorta with Nonautologous Tissue Substitute, Open Approach	02120KW	Bypass Coronary Artery, Three Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach
02100Z3	Bypass Coronary Artery, One Artery from Coronary Artery, Open Approach	02120Z3	Bypass Coronary Artery, Three Arteries from Coronary Artery, Open Approach
02100Z8	Bypass Coronary Artery, One Artery from Right Internal Mammary, Open Approach	02120Z8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary, Open Approach
02100Z9	Bypass Coronary Artery, One Artery from Left Internal Mammary, Open Approach	02120Z9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary, Open Approach
02100ZC	Bypass Coronary Artery, One Artery from Thoracic Artery, Open Approach	02120ZC	Bypass Coronary Artery, Three Arteries from Thoracic Artery, Open Approach
02100ZF	Bypass Coronary Artery, One Artery from Abdominal Artery, Open Approach	02120ZF	Bypass Coronary Artery, Three Arteries from Abdominal Artery, Open Approach

0211083	Bypass Coronary Artery, Two Arteries from Coronary Artery with Zooplastic Tissue, Open Approach	0213083	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Zooplastic Tissue, Open Approach
0211088	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach	0213088	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach
0211089	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach	0213089	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach
021108C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach	021308C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach
021108F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach	021308F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach
021108W	Bypass Coronary Artery, Two Arteries from Aorta with Zooplastic Tissue, Open Approach	021308W	Bypass Coronary Artery, Four or More Arteries from Aorta with Zooplastic Tissue, Open Approach
0211093	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach	0213093	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach
0211098	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach	0213098	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach
0211099	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach	0213099	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach
021109C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach	021309C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach
021109F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach	021309F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach

021109W	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Venous Tissue, Open Approach	021309W	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Venous Tissue, Open Approach
02110A3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach	02130A3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach
02110A8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	02130A8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach
02110A9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	02130A9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach
02110AC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach	02130AC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach
02110AF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach	02130AF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach
02110AW	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Arterial Tissue, Open Approach	02130AW	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Arterial Tissue, Open Approach
02110J3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Synthetic Substitute, Open Approach	02130J3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Synthetic Substitute, Open Approach
02110J8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach	02130J8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach
02110J9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach	02130J9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach
02110JC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Synthetic Substitute, Open Approach	02130JC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Synthetic Substitute, Open Approach

02110JF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Synthetic Substitute, Open Approach	02130JF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Synthetic Substitute, Open Approach
02110JW	Bypass Coronary Artery, Two Arteries from Aorta with Synthetic Substitute, Open Approach	02130JW	Bypass Coronary Artery, Four or More Arteries from Aorta with Synthetic Substitute, Open Approach
02110K3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	02130K3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach
02110K8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	02130K8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach
02110K9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	02130K9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach
02110KC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	02130KC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach
02110KF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	02130KF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach
02110KW	Bypass Coronary Artery, Two Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach	02130KW	Bypass Coronary Artery, Four or More Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach
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02110Z8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary, Open Approach	02130Z8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary, Open Approach
02110Z9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary, Open Approach	02130Z9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary, Open Approach
02110ZC	Bypass Coronary Artery, Two Arteries from Thoracic Artery, Open Approach	02130ZC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery, Open Approach

02110ZF Bypass Coronary Artery, Two Arteries  
from Abdominal Artery, Open Approach

02130ZF Bypass Coronary Artery, Four or More  
Arteries from Abdominal Artery, Open  
Approach