

Measure #43: Use of Internal Mammary Artery (IMA) in Coronary Artery Bypass Graft (CABG) Surgery

DESCRIPTION:

Percentage of patients aged 18 years and older undergoing isolated coronary artery bypass graft (CABG) surgery using an internal mammary artery (IMA)

INSTRUCTIONS:

This measure is to be reported for patients who undergo an isolated coronary artery bypass graft (CABG) procedure during the reporting period. It is anticipated that clinicians who provide services for isolated CABG will submit this measure. This measure is intended to reflect the quality of the surgical services provided for isolated CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only. Part B claims data will be analyzed to determine "isolated" CABG. This measure does not include patients undergoing repeat CABG surgery.

This measure is reported using CPT Category II codes:

CPT procedure codes and patient demographics (age, gender, etc.) are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting the measure, submit the listed CPT procedure codes and the appropriate CPT Category II code **OR** the CPT Category II code **with** the modifier. The modifiers allowed for this measure are: 1P- medical reasons, 8P- reasons not otherwise specified.

NUMERATOR:

Patient who received an IMA coronary artery bypass graft

Numerator Coding:

IMA Graft Performed

CPT II 4110F: Internal mammary artery graft performed for primary, isolated coronary artery bypass graft procedure

OR

IMA Graft not Performed for Medical Reasons

Append a modifier (1P) to the CPT Category II code 4110F to report documented circumstances that appropriately exclude patients from the denominator.

- **1P:** Documentation of medical reason(s) for not performing an internal mammary artery graft for primary, isolated coronary artery bypass graft procedure

OR

IMA Graft not Performed, Reason not Specified

Append a reporting modifier (8P) to CPT Category II code 4110F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.

- **8P:** Internal mammary artery graft not performed for primary, isolated coronary artery bypass graft procedure, reason not otherwise specified

DENOMINATOR:

Patients with isolated coronary artery bypass graft

Denominator Coding:

A CPT procedure code for isolated coronary artery bypass graft surgery is required to identify patients for denominator inclusion.

CPT procedure codes: 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536

RATIONALE:

A major innovation has been the introduction of off-bypass CABG, which has reduced the post-procedure length of stay in some centers to between 2 and 3 days. In some centers, this has led to a total 3-month cost for single-vessel coronary bypass that is not significantly different from the total 3-month cost for angioplasty of single-vessel disease. Considering the favorable long-term patency of an internal mammary artery (IMA) graft to the LAD, the cost reductions possible with off-bypass CABG may improve the relative cost-effectiveness of coronary bypass compared with either medical therapy or percutaneous techniques, particularly for symptomatic, proximal LAD disease.

CLINICAL RECOMMENDATION STATEMENTS:

Class I

In every patient undergoing CABG, the left internal mammary artery (IMA) should be given primary consideration for revascularization of the left anterior descending (LAD) artery. (*Level of Evidence: B*)