

MEDICAL POLICY

SUBJECT: INTRAVASCULAR ULTRASOUND (IVUS)	EFFECTIVE DATE: 10/18/01 REVISED DATE: 06/20/02 ARCHIVED: 05/21/03 EDITED DATE: 11/10/05, 11/16/06, 12/20/07, 12/18/08, 11/19/09, 06/17/10, 06/16/11, 07/19/12, 07/18/13, 07/17/14, 07/16/15, 07/21/16, 7/20/17, 07/19/18
POLICY NUMBER: 6.01.09 CATEGORY: Technology Assessment	PAGE: 1 OF: 3

- *If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply.*
- *If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit.*
- *If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.*

POLICY STATEMENT:

- I. Based upon our criteria and review of the peer-reviewed literature intravascular ultrasound has been medically proven to be effective and therefore **medically appropriate** for any of the following indications:
 - A. Determination of the appropriate type of revascularization procedure to be done;
 - B. Assessment of abdominal aortic aneurysm;
 - C. Assessment of coronary artery stent deployment and expansion;
 - D. Evaluation of subsequent stenosis after stent replacement;
 - E. Evaluation of the coronary vessels for evidence of post-transplant vasculopathy; or
 - F. Evaluation of vascular stents and intravascular devices.
- II. Based upon our criteria and review of the peer-reviewed literature, the use of intravascular ultrasound for all other indications has not been proven to be medically effective and are therefore considered **investigational**.

Refer to Corporate Medical Policy #11.01.03 regarding Experimental and Investigational Services.

POLICY GUIDELINES:

The Federal Employees Health Benefit Program (FEHBP/FEP) requires that procedures, devices or laboratory tests approved by the U.S. Food and Drug Administration (FDA) may not be considered investigational and thus these procedures, devices or laboratory tests may be assessed only on the basis of their medical necessity.

DESCRIPTION:

Transcatheter intravascular ultrasound (IVUS) imaging is a catheter-based technique which provides real-time, high-resolution tomographic images of the lumen and arterial wall of vascular structure. The technique involves a miniaturized ultrasound transducer, mounted on the tip of a catheter, which is inserted directly into an artery or vein to produce either two-dimensional tomographic images or three-dimensional computer-assisted reconstruction of planar IVUS images.

Intravascular ultrasound is intended to image the internal lining of a vessel prior to, during, and following angioplasty, artherectomy, placement of a stent, post cardiac transplant vasculopathy, assessment of and/or placement of endovascular graft for abdominal aneurysm, and prior, during and after vascular procedures/surgeries.

RATIONALE:

IVUS is a non-invasive evidence-based procedure that can provide high quality images that can help determine if surgery is necessary, the type of surgery best suited to the individual patient, and **whether** further medical treatment in the form of lifestyle changes and medication might benefit the patient.

SUBJECT: INTRAVASCULAR ULTRASOUND (IVUS) POLICY NUMBER: 6.01.09 CATEGORY: Technology Assessment	EFFECTIVE DATE: 10/18/01 REVISED DATE: 06/20/02 ARCHIVED: 05/21/03 EDITED DATE: 11/10/05, 11/16/06, 12/20/07, 12/18/08, 11/19/09, 06/17/10, 06/16/11, 07/19/12, 07/18/13, 07/17/14, 07/16/15, 07/21/16, 7/20/17, 07/19/18 PAGE: 2 OF: 3
--	--

CODES: Number Description

Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.

CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

<u>CPT:</u>	37252	Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; initial noncoronary vessel (List separately in addition to code for primary procedure)
	37253	Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)
	92978	Endoluminal imaging of coronary vessel or graft using intravascular ultrasound (IVUS) or optical coherence tomography (OCT) during diagnostic evaluation and/or therapeutic intervention including imaging supervision, interpretation and report; initial vessel (List separately in addition to code for primary procedure)
	92979	each additional vessel (List separately in addition to code for primary procedure)

Copyright © 2018 American Medical Association, Chicago, IL

HCPCS: No specific code

<u>ICD10:</u>	I25.10-I25.119	Atherosclerotic heart disease of native coronary artery (code range)
	I25.700-I25.812	Atherosclerosis of coronary artery bypass graft(s) and coronary artery of transplanted heart with angina pectoris or other forms of chronic ischemic heart disease (code range)
	I71.4	Abdominal aortic aneurysm, without rupture
	Z48.21	Encounter for aftercare following heart transplant
	Z48.280	Encounter for aftercare following heart-lung transplant
	Z94.1	Heart transplant status
	Z94.3	Heart and lungs transplant status

REFERENCES:

*Blessing E, et al. Intravascular ultrasound and stent implantation: intraobserver and interobserver variability. Amer Heart J 1999 Feb;137(2):368-71.

*Blue Cross Blue Shield Association. Intravascular ultrasound of coronary arteries. Medical Policy Reference Manual Policy #6.01.04. 2010 Sep 16.

Bruining N, et al. Clinical implications of intravascular ultrasound imaging for stenting procedures. Amer Heart J 1999 Feb;137(2):368-71.

Mintz GS, et al. ACC clinical expert consensus document on standards for the acquisition, measurement and reporting of intravascular ultrasound studies: a report of the American College of Cardiology task force on clinical expert consensus

<p>SUBJECT: INTRAVASCULAR ULTRASOUND (IVUS)</p> <p>POLICY NUMBER: 6.01.09 CATEGORY: Technology Assessment</p>	<p>EFFECTIVE DATE: 10/18/01 REVISED DATE: 06/20/02 ARCHIVED: 05/21/03 EDITED DATE: 11/10/05, 11/16/06, 12/20/07, 12/18/08, 11/19/09, 06/17/10, 06/16/11, 07/19/12, 07/18/13, 07/17/14, 07/16/15, 07/21/16, 7/20/17, 07/19/18</p> <p>PAGE: 3 OF: 3</p>
---	---

documents (Committee to develop a clinical expert consensus document on standards for acquisition, measurement and reporting of intravascular ultrasound studies [IVUS]). J Am Coll Cardiol 2001;37:1478–92.

Nissen SE. Who is at risk for atherosclerotic disease? Lessons from intravascular ultrasound. Amer J Med 2002 Jun 3;112(8A):27S–33S.

Nissen SE. Application of intravascular ultrasound to characterize coronary artery disease and assess the progression or regression of atherosclerosis. Amer J Cardiol 2002;89(4A):25B–31B.

Spence DJ. Ultrasound measurement of carotid plaque as a surrogate outcome for coronary artery disease. Amer J Cardiol 2002;89(Suppl):10B–16B.

Stahr PM, et al. Discrimination of early/intermediate and advanced/complicated coronary plaque types by radiofrequency intravascular ultrasound analysis. Amer J Cardiol 2002; 90:19–23.

Tanaka AT, et al. Use of preintervention intravascular ultrasound in patients with acute myocardial infarction. Amer J Cardiol 2002;89:257-61.

Van Essen JA, et al. Intravascular ultrasonography allows accurate assessment of abdominal aortic aneurysm: an in vitro validation study. J Vasc Surg 1998 Feb;27(2):347-53.

KEY WORDS:

Intravascular ultrasound, IVUS.

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently no National Coverage Determination (NCD) or Local Coverage Determination (LCD) for Intravascular Ultrasound.