

Fusion Imaging for Noncancer Indications



INDEPENDENT CARE HEALTH PLAN

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Medicare Advantage Medical Coverage Policy

Table of Contents

[Related Medicare Advantage Medical/Pharmacy Coverage Policies](#)

[Related Documents](#)

[Description](#)

[Coverage Determination](#)

[Coverage Limitations](#)

[Coding Information](#)

[References](#)

[Appendix](#)

[Change Summary](#)

Disclaimer

The Coverage Summaries are reviewed by the iCare Medicare Utilization Management Committee. Policies in this document may be modified by a member's coverage document. Clinical policy is not intended to preempt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test, or procedure over another. Clinical technology is constantly evolving, and we reserve the right to review and update this policy periodically. References to CPT® codes or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee of claims payment. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any shape or form or by any means, electronic, mechanical, photocopying or otherwise, without permission from iCare.

Related Medicare Advantage Medical/Pharmacy Coverage Policies

Fusion Imaging for Cancer Indications

Cardiac Single-Photon Emission Computed Tomography

Related Documents

Please refer to [CMS website](#) for the most current applicable CMS Online Manual System (IOMs)/National Coverage Determination (NCD)/ Local Coverage Determination (LCD)/Local Coverage Article (LCA)/ Transmittals.

Type	Title	ID Number	Jurisdiction Medicare Administrative Contractors (MACs)	Applicable States/Territories
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<p>Internet-Only Manuals (IOMs)</p>	<p>Pub. 100-02, Medicare Benefit Policy Manual, Chapter 15 – Covered Medical and Other Health Services</p> <p>Pub. 100-03, Medicare National Coverage Determinations (NCD) Manual, Chapter 1, Part 4</p> <p>Pub. 100-04, Medicare Claims Processing Manual, Chapter 1 (General Billing Requirements) & 35 (Independent Diagnostic Testing Facility [IDTF])</p> <p>Pub. 100-08, Medicare Program Integrity Manual, Chapter 3 (Verifying Potential Errors and Taking Corrective Actions), 10 (Medicare Enrollment) & 13 (Local Coverage Determination)</p>	<p>§80 - Requirements for Diagnostic X-Ray, Diagnostic Laboratory, and Other Diagnostic Tests</p> <p>§220 - Radiology</p> <p>§30 - Provider Participation</p> <p>§10 - General Coverage and Payment Policies</p> <p>§3.2 - Overview of Prepayment and Postpayment Reviews</p> <p>§10.2.4 - Other Medicare Part B Services</p> <p>§13.2 LCD Process</p>		
<p>NCD</p>	<p>PET for Perfusion of the Heart</p>	<p>220.6.1</p>		
<p>NCD</p>	<p>FDG PET for Myocardial Viability</p>	<p>220.6.8</p>		
<p>NCD</p>	<p>FDG PET for Refractory Seizures</p>	<p>220.6.9</p>		

NCD	FDG PET for Dementia and Neurodegenerative Diseases	220.6.13		
LCA	Independent Diagnostic Testing Facilities- physician supervision and technician requirements	A54953	J5 - Wisconsin Physicians Service J8 - Wisconsin Physicians Service Insurance Corporation	IA, KS, MO, NE IN, MI
LCD LCA	Positron Emission Tomography (PET) Scan for Inflammation and Infection	L39521 A59318	J15 - CGS Administrators, LLC (Part A/B MAC)	KY, OH
LCA	Billing and Coding: Positron Emission Tomography Scans Coverage	A54666	JE - Noridian Healthcare Solutions, LLC	CA, HI, NV, American Samoa, Guam, Northern Mariana Islands
LCA	Billing and Coding: Positron Emission Tomography Scans Coverage	A54668	JF - Noridian Healthcare Solutions, LLC	AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY
LCD LCA	Cardiology Non-emergent Outpatient Stress Testing	L35083 A56423	JH - Novitas Solutions, Inc. (Part A/B MAC) JL - Novitas Solutions, Inc. (Part A/B MAC)	AR, CO, NM, OK, TX, LA, MS DE, D.C., MD, NJ, PA
LCD LCA	Independent Diagnostic Testing Facility (IDTF)	L35448 A53252	JH - Novitas Solutions, Inc. (Part A/B MAC)	AR, CO, NM, OK, TX, LA, MS
LCA	Billing and Coding: NCD Coding Article for Positron Emission Tomography (PET) Scans Used for Non-Oncologic Conditions	A53134	JH - Novitas Solutions, Inc. (Part A/B MAC) JL - Novitas Solutions, Inc. (Part A/B MAC)	AR, CO, NM, OK, TX, LA, MS DE, D.C., MD, NJ, PA
LCA	Billing and Coding: Independent Diagnostic Testing Facilities (IDTF)	A58559	JJ - Palmetto GBA (Part A/B MAC)	AL, GA, TN NC, SC, VA, WV

			JM - Palmetto GBA (Part A/B MAC)	
LCD LCA	Cardiac Radionuclide Imaging	L33457 A56476	JJ - Palmetto GBA (Part A/B MAC)	AL, GA, TN
LCD LCA	Independent Diagnostic Testing Facility (IDTF)	L33910 A57807	JN - First Coast Service Options, Inc. (Part A/B MAC)	FL, PR, U.S. VI
LCD LCA	Cardiology Non-emergent Outpatient Stress Testing	L38396 A56952	JN - First Coast Service Options, Inc. (Part A/B MAC)	FL, PR, U.S. VI
LCA	Billing and Coding: NCD Coding Article for Positron Emission Tomography (PET) Scans Used for Non-Oncologic Conditions	A59049	JN - First Coast Service Options, Inc. (Part A/B MAC)	FL, PR, U.S. VI

Description

Fusion imaging combines two different imaging scans to create a more detailed picture for screening or diagnosis than either individual scan. The following are examples of fusion imaging for noncancer indications:

Positron emission tomography with concurrent computed tomography (PET/CT) – PET assesses the function of tissues and organs by monitoring the metabolic or biochemical activity while tracking the movement and concentration of a radioactive contrast agent. The technique uses special computerized imaging equipment and rings of detectors surrounding the individual to record gamma radiation produced when positrons (positively charged particles) emitted by the radioactive agent collide with electrons. CT combines digital computing with a rotating x-ray device to generate detailed cross-sectional pictures of the imaged body area. Integrated PET/CT imaging is a technique in which both PET and CT are performed during a single visit on a hybrid PET/CT scanner (eg, Biograph mCT). The CT and PET images are then co-registered using fusion software, enabling the physiologic data obtained on PET to be localized according to the anatomic CT images. When PET/CT is performed, a low radiation dose CT without contrast is typically used to keep the radiation dose as low as possible and to limit adverse events. A higher resolution CT requires a higher dose of radiation and intravenous (IV) contrast.

PET/CT is used in myocardial viability or myocardial perfusion studies to determine problems in the heart such as reduced blood flow or ineffective heart muscle activity. During cardiac testing, the CT provides attenuation correction which clarifies certain small errors in the image. **Absolute quantitation of myocardial blood flow** is an adjunct to PET myocardial perfusion imaging that aids in analyzing coronary artery disease.

Neurological uses for PET/CT scanning include evaluation of seizure activity prior to surgery. It is also proposed for diagnosing and distinguishing between Alzheimer's and other types of dementia.

Magnetic resonance imaging/computed tomography (MRI/CT) – MRI uses nuclear magnetic resonance to detect atomic nuclei or electron particle energy absorption when exposed to electromagnetic radiation. The images produced are used to diagnose disorders of body structures (eg, soft tissues) that are not easily visualized on standard x-rays. Fusing MRI with CT generates detailed cross-sectional images of the targeted body areas.

PET/MRI – PET/MRI combines PET functional imaging simultaneously with MRI soft-tissue morphological imaging to reportedly produce enhanced image quality with a reduced radiation dose and prevention of fusion software image mismatch. A PET/MRI using a hybrid imaging system is suggested for imaging anatomical, biochemical and functional characteristics of disease. The Biograph mMR is an example of a PET/MRI device.

High-definition 3D volumetric imaging (HDVI) – See Factor CT3 is a platform that uses HDVI CT, fluoroscopy and digital radiography. It is proposed for diagnostic, interventional and intraoperative imaging of the head, neck, upper spine, upper and lower extremities.

Single-photon emission computed tomography with concurrently acquired MRI (SPECT/MRI) – Simultaneous SPECT and MRI images are fused by software which is suggested to provide improved views of anatomical structures.

Coverage Determination

iCare follows the CMS requirements that only allows coverage and payment for services that are reasonable and necessary for the diagnosis and treatment of illness or injury or to improve the functioning of a malformed body member except as specifically allowed by Medicare.

Please refer to the above CMS guidance for **fusion imaging for noncancer indications**.

In interpreting or supplementing the criteria above and in order to determine medical necessity consistently, iCare may consider the following criteria.

Fusion Imaging for Noncancer Indications

The use of the criteria in this Medicare Advantage Medical Coverage Policy provides clinical benefits highly likely to outweigh any clinical harms. Services that do not meet the criteria above are not medically necessary and thus do not provide a clinical benefit. Medically unnecessary services carry risks of adverse outcomes and may interfere with the pursuit of other treatments which have demonstrated efficacy.

Coverage Limitations

[US Government Publishing Office. Electronic code of federal regulations: part 411 – 42 CFR § 411.15 - Particular services excluded from coverage](#)

Coding Information

Any codes listed on this policy are for informational purposes only. Do not rely on the accuracy and inclusion of specific codes. Inclusion of a code does not guarantee coverage and/or reimbursement for a service or procedure.

CPT® Code(s)	Description	Comments
70450	Computed tomography, head or brain; without contrast material	
70460	Computed tomography, head or brain; with contrast material(s)	
70470	Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections	
70480	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; without contrast material	
70481	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; with contrast material(s)	
70482	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; without contrast material, followed by contrast material(s) and further sections	
70486	Computed tomography, maxillofacial area; without contrast material	
70487	Computed tomography, maxillofacial area; with contrast material(s)	
70488	Computed tomography, maxillofacial area; without contrast material, followed by contrast material(s) and further sections	
70490	Computed tomography, soft tissue neck; without contrast material	
70491	Computed tomography, soft tissue neck; with contrast material(s)	
70492	Computed tomography, soft tissue neck; without contrast material followed by contrast material(s) and further sections	
71250	Computed tomography, thorax, diagnostic; without contrast material	
71260	Computed tomography, thorax, diagnostic; with contrast material(s)	
71270	Computed tomography, thorax, diagnostic; without contrast material, followed by contrast material(s) and further sections	

72125	Computed tomography, cervical spine; without contrast material	
72126	Computed tomography, cervical spine; with contrast material	
72127	Computed tomography, cervical spine; without contrast material, followed by contrast material(s) and further sections	
72128	Computed tomography, thoracic spine; without contrast material	
72129	Computed tomography, thoracic spine; with contrast material	
72130	Computed tomography, thoracic spine; without contrast material, followed by contrast material(s) and further sections	
72131	Computed tomography, lumbar spine; without contrast material	
72132	Computed tomography, lumbar spine; with contrast material	
72133	Computed tomography, lumbar spine; without contrast material, followed by contrast material(s) and further sections	
72192	Computed tomography, pelvis; without contrast material	
72193	Computed tomography, pelvis; with contrast material(s)	
72194	Computed tomography, pelvis; without contrast material, followed by contrast material(s) and further sections	
73200	Computed tomography, upper extremity; without contrast material	
73201	Computed tomography, upper extremity; with contrast material(s)	
73202	Computed tomography, upper extremity; without contrast material, followed by contrast material(s) and further sections	
73700	Computed tomography, lower extremity; without contrast material	
73701	Computed tomography, lower extremity; with contrast material(s)	
73702	Computed tomography, lower extremity; without contrast material, followed by contrast material(s) and further sections	
74150	Computed tomography, abdomen; without contrast material	
74160	Computed tomography, abdomen; with contrast material(s)	
74170	Computed tomography, abdomen; without contrast material, followed by contrast material(s) and further sections	
74176	Computed tomography, abdomen and pelvis; without contrast material	
74177	Computed tomography, abdomen and pelvis; with contrast material(s)	

74178	Computed tomography, abdomen and pelvis; without contrast material in one or both body regions, followed by contrast material(s) and further sections in one or both body regions	
76380	Computed tomography, limited or localized follow-up study	
76497	Unlisted computed tomography procedure (eg, diagnostic, interventional)	
76498	Unlisted magnetic resonance procedure (eg, diagnostic, interventional)	
76999	Unlisted ultrasound procedure (eg, diagnostic, interventional)	
78429	Myocardial imaging, positron emission tomography (PET), metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), single study; with concurrently acquired computed tomography transmission scan	
78430	Myocardial imaging, positron emission tomography (PET), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); single study, at rest or stress (exercise or pharmacologic), with concurrently acquired computed tomography transmission scan	
78431	Myocardial imaging, positron emission tomography (PET), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); multiple studies at rest and stress (exercise or pharmacologic), with concurrently acquired computed tomography transmission scan	
78433	Myocardial imaging, positron emission tomography (PET), combined perfusion with metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), dual radiotracer (eg, myocardial viability); with concurrently acquired computed tomography transmission scan	
78434	Absolute quantitation of myocardial blood flow (AQMBF), positron emission tomography (PET), rest and pharmacologic stress (List separately in addition to code for primary procedure)	
78814	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; limited area (eg, chest, head/neck)	
78815	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; skull base to mid-thigh	

78816	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; whole body	
78999	Unlisted miscellaneous procedure, diagnostic nuclear medicine	
CPT® Category III Code(s)	Description	Comments
No code(s) identified		
HCPCS Code(s)	Description	Comments
No code(s) identified		

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Change Summary

- 01/01/2024 New Policy.
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