CMS Manual System	Department of Health & Human Services (DHHS)
Pub 100-04 Medicare Claims Processing	Centers for Medicare & Medicaid Services (CMS)
Transmittal 2915	Date: March 27, 2014
	Change Request 8526

Transmittal 2871, dated February 6, 2014 is being rescinded and replaced by Transmittal 2915, dated March 27, 2014 to update the reference to the correct CPM, chapter 13 on the transmittal. All other information remains the same.

SUBJECT: Medicare National Coverage Determination (NCD) for Beta Amyloid Positron Emission Tomography (PET) in Dementia and Neurodegenerative Disease

I. SUMMARY OF CHANGES: The purpose of this Change Request (CR) is that effective for claims with dates of service on or after, September 27, 2013, Medicare will only allow coverage for PET A β imaging (one PET A β scan per patient) through coverage with evidence development (CED) to: (1) develop better treatments or prevention strategies for AD, or, as a strategy to identify subpopulations at risk for developing AD, or (2) resolve clinically difficult differential diagnoses (e.g., frontotemporal dementia (FTD) versus AD) where the use of PET A β imaging appears to improve health outcomes, when the patient is enrolled in an approved clinical study under CED.

EFFECTIVE DATE: September 27, 2013 IMPLEMENTATION DATE: July 7, 2014

Disclaimer for manual changes only: The revision date and transmittal number apply only to red italicized material. Any other material was previously published and remains unchanged. However, if this revision contains a table of contents, you will receive the new/revised information only, and not the entire table of contents.

II. CHANGES IN MANUAL INSTRUCTIONS: (N/A if manual is not updated) R=REVISED, N=NEW, D=DELETED-*Only One Per Row.*

R/N/D CHAPTER / SECTION / SUBSECTION / TITLE	
R	13/60.12/ Coverage for PET Scans for Dementia and Neurodegenerative Diseases

III. FUNDING:

For Medicare Administrative Contractors (MACs):

The Medicare Administrative Contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS does not construe this as a change to the MAC statement of Work. The contractor is not obliged to incur costs in excess of the amounts allotted in your contract unless and until specifically authorized by the Contracting Officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the Contracting Officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.

IV. ATTACHMENTS:

Business Requirements Manual Instruction

*Unless otherwise specified, the effective date is the date of service.

Attachment - Business Requirements

Pub. 100-04	Transmittal: 2915	Date: March 27, 2014	Change Request: 8526
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SUBJECT: Medicare National Coverage Determination (NCD) for Beta Amyloid Positron Emission Tomography (PET) in Dementia and Neurodegenerative Disease

EFFECTIVE DATE: September 27, 2013 IMPLEMENTATION DATE: July 7, 2014

I. GENERAL INFORMATION

A. Background: CMS does not currently cover Positron Emission Tomography (PET) beta amyloid (also referred to as PET amyloid-beta $(A\beta)$) imaging, based on a longstanding general non-coverage of PET except where specifically covered nationally. Another radiopharmaceutical used in PET neuroimaging, fluoro-D-glucose F18 (FDG) PET, is nationally covered for either the differential diagnosis of frontotemporal dementia (FTD) versus Alzheimer's disease (AD) under specific requirements; or, its use in a CMS-approved practical clinical trial focused on the utility of FDG PET in the diagnosis or treatment of dementing neurodegenerative diseases.

Lilly USA, LLC, manufacturer of the radiopharmaceutical florbetapir (AmyvidTM) that was approved by the Food and Drug Administration (FDA) in April 2012, requested that CMS reconsider its non-coverage decision of PET A β imaging. Lilly asked that CMS provide coverage of PET A β imaging as a diagnostic test to "estimate amyloid neuritic plaque density in adult patients with documented cognitive impairment who are being evaluated for AD and other causes of cognitive impairment" (quoting the AmyvidTM FDA-approved label). The label states that a negative florbetapir scan "is inconsistent with a neuropathological diagnosis of AD," and "reduces the likelihood that a patient's cognitive impairment is due to AD." However, a positive scan "does not establish a diagnosis of AD or other cognitive disorder." A Medicare Evidence Development and Coverage Advisory Committee (MEDCAC) meeting was convened on the role of PET A β imaging in dementia and neurodegenerative disease on January 30, 2013. The MEDCAC highlighted the paucity of evidence on the actual impact of PET A β scanning on patients.

B. Policy: After careful consideration, effective for claims with dates of service on or after, September 27, 2013, CMS believes that the evidence is insufficient to conclude that the use of PET A β imaging improves health outcomes for Medicare beneficiaries with dementia or neurodegenerative disease. However, there is sufficient evidence that the use of PET A β imaging could be promising in certain scenarios. Therefore, Medicare will only allow coverage for PET A β imaging (one PET A β scan per patient) through coverage with evidence development (CED) to: (1) develop better treatments or prevention strategies for AD, or, as a strategy to identify subpopulations at risk for developing AD, or (2) resolve clinically difficult differential diagnoses (e.g., frontotemporal dementia (FTD) versus AD) where the use of PET A β imaging appears to improve health outcomes, when the patient is enrolled in an approved clinical study under CED.

Health outcomes may include: avoidance of unnecessary or potentially harmful treatment or tests; improving, or slowing the decline of, quality of life (to include maintenance of independence) and cognitive and functional status; and survival. Outcomes may be short term (e.g., related to meaningful changes in clinical management) or long term (e.g., related to dementia outcomes).

NOTE: Please note each new beta amyloid radiopharmaceutical will require a separate code. Therefore, for the interim period, HCPCS code (A9599) - Radiopharmaceutical for beta-amyloid positron emission

tomography (PET) imaging, diagnostic, per study dose shall be used with an effective date of January 1, 2014. After a new beta amyloid radiopharmaceutical is approved for a separate, individual HCPCS code, a subsequent CR will be issued to update this NCD policy.

NOTE: Contractors should refer to the business requirements below as well as general clinical trial billing requirements at Pub. 100-03, chapter 1, section 310, and Pub. 100-04, chapter 32, section 69. See Pub. 100-03, NCD Manual, chapter 1, section 220.6.20, for the coverage of Beta Amyloid PET in Neurodegenerative Disease and Dementia, and Pub. 100-04, Claims Processing Manual, chapter 13, section 60.12, for claims processing instructions.

II. BUSINESS REQUIREMENTS TABLE

"Shall" denotes a mandatory requirement, and "should" denotes an optional requirement.

Number	Requirement	Re	espo	onsi	bilit	ty																				
		A/B MAC																				[tred- stem taine	ı	Other
		A	B	H H H	Μ	FI	M C S	V	C																	
8526-04.1	Effective for claims with dates of service on and after September 27, 2013, Medicare will only allow coverage with evidence development (CED) for Positron Emission Tomography (PET) beta amyloid (also referred to as amyloid-beta (A β)) imaging (HCPCS A9586) or (HCPCS A9599) (one PET A β scan per patient). Note: Please note that effective January 1, 2014 the following code A9599 will be updated in the IOCE and HCPCS update. This code will be contractor priced.	X	X			X				IOCE																
8526-04.2	 Effective for claims with dates of service on or after September 27, 2013, contractors shall return to provider/return as unprocessable claims for PET Aβ imaging, through CED during a clinical trial, not containing the following: Condition code 30, (for institutional claims only) Modifier Q0 and/or modifier Q1 as appropriate ICD-9 dx code V70.7/ICD-10 dx code Z00.6 (on either the primary/secondary position) A PET HCPCS code (78811 or 78814), Dx codes (see Attachment A), and 	X	X			X	X																			

Number	Requirement	Responsibility														
Tumber	Acquirement	1	A/B D Shared-							Other						
										Other						
		N	MAC						-	vstem						
			[_]											aintainers		
		Α	В	Η		F	Μ		C							
				Η		-	C		W							
				Η		S	S	S	F							
					C	S										
	Aβ HCPCS code A9586 or A9599															
8526-04.2.1	Contractors shall return as unprocessable claims		Х				Х									
	for PET A β imaging using the following messages:															
	-Claim Adjustment Reason Code 4 – the procedure															
	code is inconsistent with the modifier used or a															
	required modifier is missing.															
	Note: Refer to the 835 Healthcare Policy															
	Identification Segment (loop 2110 Service Payment															
	Information REF), if present.															
	-Remittance Advice Remark Code N517 -															
	Resubmit a new claim with the requested															
	information.															
	-Remittance Advice Remark Code N519 -															
	Invalid combination of HCPCS modifiers.															
8526-04.3	For claims with dates of service on or after	Х	X			Х	Х		Х							
	September 27, 2013, CWF shall deny/reject claims															
	for more than one PET A β scan, HCPCS code															
	A9586 or A9599, in a patient's lifetime.															
	Note: This edit shall be overridable															
8526-04.3.1	Contractors shall line-item deny claims for PET	Х	X													
0020 0	A β , HCPCS code A9586 or A9599 , where a															
	previous PET A β , HCPCS code A9586 or A9599 is															
	paid in history using the following messages:															
	para in instory using the forto thing incoorders.															
	• CARC 149: "Lifetime benefit maximum has															
	been reached for this service/benefit															
	category."															
	• RARC N587: "Policy benefits have been															
	exhausted".															
	• MSN 20.12: "This service was denied															
	because Medicare only covers this service															
	occause incurcare only covers uns service	I	I	I	I		I	I	I							

Number	Requirement	Re	espo	onsi	bilit	y									
		A/B MAC		MAC N									Other		
		A	В	H H H	Μ	F	M C S	V	C						
	 once a lifetime." Spanish Version: "Este servicio fue negado porque Medicare sólo cubre este servicio una vez en la vida." Group Code: PR, if a claim is received with a GA modifier. Group Code: CO, if a claim is received with a GZ modifier. 														
8526-04.4	CWF shall identify claims with TOB 85X when revenue code is 096X, 097X, or 098X as professional claims.	X							X						
8526-04.5	For PET A β claims with dates of service on or after September 27, 2013, contractors shall not search their files. However, contractors shall adjust claims brought to their attention.	X	X												

III. PROVIDER EDUCATION TABLE

Number	Requirement	Re	spo	nsib	ility	
			A/B MAC		D M E	C E D
		A	В	H H H	M A C	Ι
8526-04.6	MLN Article : A provider education article related to this instruction will be available at http://www.cms.gov/Outreach-and-Education/Medicare-Learning- Network-MLN/MLNMattersArticles/ shortly after the CR is released. You will receive notification of the article release via the established "MLN Matters" listserv. Contractors shall post this article, or a direct link to this article, on their Web sites and include information about it in a listserv message within one week of the availability of the provider education article. In addition, the provider education article shall be included in the contractor's next regularly scheduled bulletin. Contractors are free to supplement MLN Matters articles with localized information that would benefit their provider community in billing and administering the Medicare program correctly.	X	X			

IV. SUPPORTING INFORMATION

Section A: Recommendations and supporting information associated with listed requirements: N/A

"Should" denotes a recommendation.

X-Ref	Recommendations or other supporting information:
Requirement	
Number	

Section B: All other recommendations and supporting information: N/A

V. CONTACTS

Pre-Implementation Contact(s): Patricia Brocato-Simons, 410-786-0261 or patricia.brocatosimons@cms.hhs.gov (Coverage), William Ruiz, 410-786-9283 or william.ruiz@cms.hhs.gov (Institutional claims processing), William Ruiz, 410-786-9283 or william.ruiz@cms.hhs.gov (Institutional claims processing), Chanelle Jones, 410-786-9668 or chanelle.jones@cms.hhs.go (practitioner claims processing), Brijet Burton, 410-786-7364 or brijet.burtoncoachman@cms.hhs.gov (Coverage)

Post-Implementation Contact(s): Contact your Contracting Officer's Representative (COR) or Contractor Manager, as applicable.

VI. FUNDING

Section A: For Medicare Administrative Contractors (MACs):

The Medicare Administrative Contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS do not construe this as a change to the MAC Statement of Work. The contractor is not obligated to incur costs in excess of the amounts allotted in your contract unless and until specifically authorized by the Contracting Officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the Contracting Officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.

60.12 - Coverage for PET Scans for Dementia and Neurodegenerative Diseases (*Rev.2915, Issued: 03-27-14, Effective: 09-27-13, Implementation: 07-07-14*)

Effective for dates of service on or after September 15, 2004, Medicare will cover FDG PET scans for a differential diagnosis of fronto-temporal dementia (FTD) and Alzheimer's disease OR; its use in a CMS-approved practical clinical trial focused on the utility of FDG-PET in the diagnosis or treatment of dementing neurodegenerative diseases. Refer to Pub. 100-03, NCD Manual, section 220.6.13, for complete coverage conditions and clinical trial requirements and section 60.15 of this manual for claims processing information.

A. Carrier and FI Billing Requirements for PET Scan Claims for FDG-PET for the Differential Diagnosis of Fronto-temporal Dementia and Alzheimer's Disease:

- CPT Code for PET Scans for Dementia and Neurodegenerative Diseases

Contractors shall advise providers to use the appropriate CPT code from section 60.3.1 for dementia and neurodegenerative diseases for services performed on or after January 28, 2005.

- Diagnosis Codes for PET Scans for Dementia and Neurodegenerative Diseases

The contractor shall ensure one of the following appropriate diagnosis codes is present on claims for PET Scans for AD:

 $-\ 290.0,\ 290.10\ -\ 290.13,\ 290.20\ -\ 290,\ 21,\ 290.3,\ 331.0,\ 331.11,\ 331.19,\ 331.2,\ 331.9,\ 780.93$

Medicare contractors shall use an appropriate Medicare Summary Notice (MSN) message such as 16.48, "Medicare does not pay for this item or service for this condition" to deny claims when submitted with an appropriate CPT code from section 60.3.1 and with a diagnosis code other than the range of codes listed above. Also, contractors shall use an appropriate Remittance Advice (RA) such as 11, "The diagnosis is inconsistent with the procedure."

Medicare contractors shall instruct providers to issue an Advanced Beneficiary Notice to beneficiaries advising them of potential financial liability prior to delivering the service if one of the appropriate diagnosis codes will not be present on the claim.

- Provider Documentation Required with the PET Scan Claim

Medicare contractors shall inform providers to ensure the conditions mentioned in the NCD Manual, section 220.6.13, have been met. The information must also be maintained in the beneficiary's medical record:

- Date of onset of symptoms;

- Diagnosis of clinical syndrome (normal aging, mild cognitive impairment or MCI: mild, moderate, or severe dementia);

- Mini mental status exam (MMSE) or similar test score;
- Presumptive cause (possible, probably, uncertain AD);
- Any neuropsychological testing performed;
- Results of any structural imaging (MRI, CT) performed;
- Relevant laboratory tests (B12, thyroid hormone); and,
- Number and name of prescribed medications.

B. Billing Requirements for Beta Amyloid Positron Emission Tomography (PET) in Dementia and Neurodegenerative Disease:

Effective for claims with dates of service on and after September 27, 2013, Medicare will only allow coverage with evidence development (CED) for Positron Emission Tomography (PET) beta amyloid (also referred to as amyloid-beta ($A\beta$)) imaging (HCPCS A9586)or (HCPCS A9599) (one PET $A\beta$ scan per patient).

Note: Please note that effective January 1, 2014 the following code A9599 will be updated in the IOCE and HCPCS update. This code will be contractor priced.

Medicare Summary Notices, Remittance Advice Remark Codes, and Claim Adjustment Reason Codes

Effective for dates of service on or after September 27, 2013, contractors shall **return as** unprocessable/return to provider claims for PET $A\beta$ imaging, through CED during a clinical trial, not containing the following:

- Condition code 30, (FI only)
- *Modifier Q0 and/or modifier Q1 as appropriate*
- *ICD-9 dx code V70.7/ICD-10 dx code Z00.6 (on either the primary/secondary position)*
- *A PET HCPCS code* (78811 or 78814)
- At least, one Dx code from the table below,

ICD-9 Codes	Corresponding ICD-10 Codes
290.0 Senile dementia, uncomplicated	F03.90 Unspecified dementia without behavioral
-	disturbance
290.10 Presenile dementia,	F03.90
uncomplicated	Unspecified dementia without behavioral
1	disturbance
290.11 Presenile dementia with delirium	F03.90
	Unspecified dementia without behavioral
	disturbance
290.12 Presenile dementia with	F03.90
delusional features	Unspecified dementia without behavioral
actustertal jeann es	disturbance
290.13 Presenile dementia with	F03.90
depressive features	Unspecified dementia without behavioral
uepressive jeutures	disturbance
290.20 Senile dementia with delusional	F03.90
features	Unspecified dementia without behavioral
200.21.6.11	disturbance
290.21 Senile dementia with depressive	F03.90
features	Unspecified dementia without behavioral
	disturbance
290.3 Senile dementia with delirium	F03.90
	Unspecified dementia without behavioral
	disturbance
290.40 Vascular dementia, uncomplicated	F01.50
	Vascular dementia without behavioral
	disturbance
290.41 Vascular dementia with delirium	F01.51
	Vascular dementia with behavioral disturbance
290.42 Vascular dementia with delusions	F01.51
	Vascular dementia with behavioral disturbance
290.43 Vascular dementia with depressed	F01.51
mood	Vascular dementia with behavioral disturbance
294.10 Dementia in conditions classified	F02.80
elsewhere without behavioral disturbance	Dementia in other diseases classified elsewhere
	without behavioral disturbance
294.11 Dementia in conditions classified	F02.81
elsewhere with behavioral disturbance	Dementia in other diseases classified elsewhere
	with behavioral disturbance
294.20 Dementia, unspecified, without	F03.90
behavioral disturbance	Unspecified dementia without behavioral
	disturbance
201 21 Domentia unspecified with	F03.91
294.21 Dementia, unspecified, with behavioral disturbance	
σεπανισται αιδιατυαποε	Unspecified dementia with behavioral disturbance
221 11 D:-L'- D:	
331.11 Pick's Disease	G31.01 Pick's disease

331.19 Other Frontotemporal dementia	G31.09 Other frontotemporal dementia
331.6 Corticobasal degeneration	G31.85 Corticobasal degeneration
331.82 Dementia with Lewy Bodies	G31.83 Dementia with Lewy bodies
331.83 Mild cognitive impairment, so	G31.84 Mild cognitive impairment, so stated
stated	
780.93 Memory Loss	R41.1 Anterograde amnesia
	R41.2 Retrograde amnesia
	R41.3 Other amnesia (Amnesia NOS, Memory
	loss NOS)
V70.7 Examination for normal	Z00.6
comparison or control in clinical	Encounter for examination for normal
	comparison and control in clinical research
	program

and

• *Aβ HCPCS code* A9586 or A9599

Contractors shall return as unprocessable claims for PET $A\beta$ imaging using the following messages: -Claim Adjustment Reason Code 4 – the procedure code is inconsistent with the modifier used or a required modifier is missing.

Note: Refer to the 835 Healthcare Policy Identification Segment (loop 2110 Service Payment Information REF), if present.

- Remittance Advice Remark Code N517 - Resubmit a new claim with the requested information.

- Remittance Advice Remark Code N519 - Invalid combination of HCPCS modifiers.

Contractors shall line-item **deny** claims for PET $A\beta$, HCPCS code A9586 or A9599, where a previous PET $A\beta$, HCPCS code A9586 or A9599 is paid in history using the following messages:

- CARC 149: "Lifetime benefit maximum has been reached for this service/benefit category."
- RARC N587: "Policy benefits have been exhausted".
- MSN 20.12: "This service was denied because Medicare only covers this service once a lifetime."
- Spanish Version: "Este servicio fue negado porque Medicare sólo cubre este servicio una vez en la vida."
- *Group Code: PR, if a claim is received with a GA modifier*
- Group Code: CO, if a claim is received with a GZ modifier

	Attachment A
Beta Amyloid for	Dementia and Neurodegenerative Diseases
29	Corresponding ICD-10 Codes

ICD-9 Codes	Corresponding ICD-10 Codes
290.0 Senile dementia, uncomplicated	F03.90 Unspecified dementia without behavioral
290.0 Senne dementia, uncomplicated	disturbance
200 10 Presenile dementie uncomplicated	F03.90
290.10 Presenile dementia, uncomplicated	
	Unspecified dementia without behavioral disturbance
200 11 Decessile demonstie mid-delinious	
290.11 Presenile dementia with delirium	F03.90
	Unspecified dementia without behavioral
	disturbance
290.12 Presenile dementia with delusional	F03.90
features	Unspecified dementia without behavioral
200.12 D 11.1	disturbance
290.13 Presenile dementia with	F03.90
depressive features	Unspecified dementia without behavioral
	disturbance
290.20 Senile dementia with delusional	F03.90
features	Unspecified dementia without behavioral
	disturbance
290.21 Senile dementia with depressive	F03.90
features	Unspecified dementia without behavioral
	disturbance
290.3 Senile dementia with delirium	F03.90
	Unspecified dementia without behavioral
	disturbance
290.40 Vascular dementia, uncomplicated	F01.50
	Vascular dementia without behavioral
	disturbance
290.41 Vascular dementia with delirium	F01.51
	Vascular dementia with behavioral disturbance
290.42 Vascular dementia with delusions	F01.51
	Vascular dementia with behavioral disturbance
290.43 Vascular dementia with depressed	F01.51
mood	Vascular dementia with behavioral disturbance
294.10 Dementia in conditions classified	F02.80
elsewhere without behavioral disturbance	Dementia in other diseases classified elsewhere
	without behavioral disturbance
294.11 Dementia in conditions classified	F02.81
elsewhere with behavioral disturbance	Dementia in other diseases classified elsewhere
	with behavioral disturbance
294.20 Dementia, unspecified, without	F03.90
behavioral disturbance	Unspecified dementia without behavioral
	disturbance
294.21 Dementia, unspecified, with	F03.91
behavioral disturbance	Unspecified dementia with behavioral
	disturbance
331.11 Pick's Disease	G31.01 Pick's disease
331.19 Other Frontotemporal dementia	G31.09 Other frontotemporal dementia
331.6 Corticobasal degeneration	G31.85 Corticobasal degeneration
331.82 Dementia with Lewy Bodies	G31.83 Dementia with Lewy bodies
331.83 Mild cognitive impairment, so	G31.84 Mild cognitive impairment, so stated
stated	
780.93 Memory Loss	R41.1 Anterograde amnesia

	R41.2 Retrograde amnesia
	R41.3 Other amnesia (Amnesia NOS, Memory
	loss NOS)
V70.7 Examination for normal	Z00.6
comparison or control in clinical	Encounter for examination for normal
	comparison and control in clinical research
	program