American College of Radiology

CMS Response to Public Comments
Beta Amyloid Positron Emission Tomography in Dementia and Neurodegenerative Disease
Coverage Decision
October 13, 2023

I. Decision Summary

The Centers for Medicare & Medicaid Services (CMS) is removing the national coverage determination (NCD) at § 220.6.20, ending coverage with evidence development (CED) for positron emission tomography (PET) beta-amyloid imaging and permitting Medicare coverage determinations for PET beta-amyloid imaging to be made by the Medicare Administrative Contractors (MACs) under § 1862(a)(1)(A) of the Social Security Act (the Act).

II. History of Medicare Coverage

As of September 27, 2013, CMS has provided coverage for PET Aß imaging under CED. The September 27, 2013, amyloid PET NCD resulted in non-coverage of amyloid PET for dementia and neurodegenerative disease under § 1862(a)(1)(A); however, coverage was made available in the context of clinical studies. There, one amyloid PET scan per patient would be covered through coverage with evidence development (CED) pursuant to section 1862(a)(1)(E) of the Act NCD 200.6.20. The diagnostic test is covered under certain research parameters ''in two scenarios: (1) To exclude Alzheimer's disease (AD) in narrowly defined and clinically difficult differential diagnoses, such as AD versus frontotemporal dementia (FTD); and (2) to enrich clinical trials seeking better treatments or prevention strategies, by allowing for selection of patients on the basis of biological as well as clinical and epidemiological factors'' (CMS 2013, 4). Prior to September 27, 2013, CMS did not previously cover PET Aβ imaging.

A. Current Request

CMS internally generated the opening of this NCD analysis based on stakeholder feedback, including public comments received during the finalization of NCD 200.3 Monoclonal Antibodies Directed Against Amyloid for the Treatment of Alzheimer's Disease, because it is anticipated that clinical study protocols may involve more than one PET Aß scan per patient.

B. Benefit Category

Medicare is a defined benefit program. For an item or service to be covered by the Medicare program, it must fall within one of the statutorily defined benefit categories outlined in the Social Security Act.

PET is considered to be within the following benefit category: other diagnostic tests §1861(s)(3) of the Act. Among other things, diagnostic tests must produce results that the ordering physician can use in the management of a beneficiary's specific medical condition, 42 C.F.R. § 410.32.

III. Timeline of Recent Activities

Date	Actions Taken
June 16, 2022	CMS opens an NCA for Initial 30-day public comment period begins.
July 15, 2022	First public comment period ends. CMS receives 36 comments.
December 15, 2022	CMS did not issue a proposed NCD on Beta Amyloid Positron Emission Tomography in Dementia and Neurodegenerative Disease and said a proposed decision is forthcoming after CMS has reviewed newly published evidence that is relevant to the proposed NCD.
July 17, 2023	CMS posts the proposed decision memorandum.
August 16, 2023	Second public comment period ends. CMS receives 90 comments.

IV. Public Comment

Public comments sometimes cite published clinical evidence and give CMS useful information. Public comments that give information on unpublished evidence such as the results of individual practitioners or patients are less rigorous and therefore less useful for making a coverage determination.

CMS uses the initial public comments to inform its proposed decision. CMS responds in detail to the public comments on a proposed decision when issuing the final decision memorandum.

Second Comment Period: 07/17/2023 – 08/16/2023

During the 30-day comment period following the release of the proposed NCD and decision memorandum, CMS received 90 comments. Most commenters supported CMS's proposal to remove the current CED requirement and the limitation of one PET Aβ scan per patient. These commenters either supported CMS' proposal to remove the current NCD, permitting Medicare coverage determinations for PET Aβ imaging to be made by MACs or expressed their desire for CMS to revise the current NCD or at least work with the MACs to ensure that there would be consistent coverage of PET Aβ imaging if the NCD is removed. Many commenters also expressed general support for PET Aβ imaging, but it was not clear whether they agreed with CMS' proposal to remove the current NCD.

CMS received 40 comments from physicians and other healthcare professionals, and eight comments from medical companies. CMS also received 19 comments on behalf of national associations/professional societies, including the AAN, ACR, AGS, Alliance of Community Health Plans (ACHP), AfPA, America's Health Insurance Plans (AHIP), Alliance for Aging Research, Alzheimer's Association, BIO, Council on Radionuclides and Radiopharmaceuticals, Inc. (CORAR), LEAD, MITA, NDSS, Partnership to Fight Chronic Disease, Personalized Medicine Coalition (PMC), PhRMA, SNMMI, UsAgainstAlzheimer's, Voices of Alzheimer's.

NCD Removal
Comment: Many commenters supported the removal of the NCD, ending CED, as well as removing the current limit of one PET Aβ scan.

Response: CMS appreciates the public comments supporting the proposed decision to remove the NCD, end the CED requirement, and eliminate the current limit of one PET Aβ scan per patient. CMS is finalizing those policies in this final decision.

National Coverage
Comment: Some commenters expressed concern about CMS' proposal to remove the current NCD due to the possibility of inconsistent coverage policies leading to inequitable access across the country and suggested that there was enough evidence for CMS to modify the current NCD to provide national coverage with no CED requirement. A similar comment also suggested a revised NCD with national coverage that considers the appropriate purpose and frequency for use of PET Aβ scans for diagnostic and monitoring purposes.

Response: When the 2013 CED questions were created, advances in the application of amyloid PET scans and the importance of patient selection for promising treatments (such as monoclonal antibodies) were not known. Currently, amyloid PET scans can be used to confirm evidence of brain amyloid pathology to select appropriate patients for proven anti-amyloid treatments depending on individual patient characteristics.

As new treatments directed against amyloid for patients with AD (whether monoclonal antibodies, inhibitor drugs, nanotechnology, or other new technology) are developed and approved by the FDA, the MACs are able to promptly respond to the evidence on proven treatments for individual patients. The MACs can make coverage determinations regarding the use of Aβ PET imaging, which may include covering more than one scan per patient's lifetime.

Comment: Some commenters suggested that CAG should work closely with the MACs to ensure consistent coverage across regions.

Response: While there will not be an NCD, the MACs also use an evidence-based process for making coverage determinations. Based on the evidence, CMS believes there will be consistent coverage across regions for appropriate Medicare patients.

Noncoverage/Continue CED
Comment: One commenter opposed coverage of PET Aβ scans, stating that the evidence is limited and inconclusive on clinical benefits and the potential financial strain for Medicare beneficiaries. The commenter suggested a cost-benefit analysis to balance potential advantages against expenses before deeming coverage reasonable and necessary.

Response: As a policy matter, CMS does not consider cost when making an NCD. As stated in a previous response, when the 2013 CED questions were created, advances in the application of

amyloid PET scans and the importance of patient selection for promising treatments (such as monoclonal antibodies) were not known. Currently, amyloid PET scans can be used to confirm the presence of brain amyloid to select appropriate patients for proven anti-amyloid treatments depending on individual patient characteristics.

Comment: One commenter suggested that CED should continue and that allowing coverage of additional tests per patient could increase the risk of unnecessary testing without appropriate clinical criteria. In addition, the commenter stated that ending CED now would blunt CMS' ability to continue evidence generation that will likely benefit our collective understanding of beta-amyloid plaques as it relates to the treatment of AD. Similarly, another commenter suggested a provision to the NCD that once the presence of amyloid is established in the patient with dementia, no further PET scans will be covered unless part of a clinical trial specifically studying amyloid burden in relationship to treatment.

Response: CMS do not agree with the commenter that removing this NCD would blunt CMS' ability to continue evidence generation regarding the treatment of AD. Since the establishment of the amyloid PET NCD in 2013, there have been a number of advances in medical care and treatments for AD. The advances in medical care and standards of practice and development of proven treatments have altered the use of amyloid PET scans in clinical practice and research. For example, promising anti-amyloid drug treatments to improve health outcomes such as cognition and function would not be expected to have a clinical impact in the absence of brain amyloid. Appropriate patient selection is key to ensuring the benefits outweigh the harms of newly developed drugs targeting amyloid. Diagnostic tests capable of measuring brain beta-amyloid could help avoid harm from unnecessary anti-amyloid treatment by preventing drug use in patients who do not have brain amyloid pathology. They could also be useful for guiding when treatment should taper or stop, by determining if treatment has resulted in sufficient brain amyloid beta plaque clearance.

Advancements in anti-amyloid treatments for AD are accelerating. Isolated PET research separate from treatment trials through this CED NCD is no longer needed and no longer being requested by interested parties. Moreover, interested parties have specifically noted that the once in a lifetime limit on amyloid PET is outdated and not clinically appropriate due to the development of anti-amyloid treatments that are useful for patient selection and the need to confirm the presence of amyloid to start these treatments and to possibly discontinue treatments when brain amyloid has been completely removed to avoid unnecessary treatment harms.

NEW IDEAS

Comment: A couple commenters provided clarity on a statement in the proposed decision that stated the NEW IDEAS study is inactive. These commenters indicated that the NEW IDEAS study is still active, and that the recruitment of non-Hispanic White participants was paused in order to close a gap in the recruitment of Hispanic and African American populations, whose participation is the overall goal of New IDEAS. Recruitment has restarted.

Response: Thank you for bringing this to our attention. The incorrect statement has been removed for the final decision memorandum. CMS appreciates the completed CED studies and the commitment by sponsors and investigators to continue evidence development. The focus of New IDEAS on ethnoracially and clinically diverse Medicare participants is particularly important. While the amyloid PET CED requirement will be ending, coverage of amyloid PET for Medicare patients with MCI due to AD or mild AD dementia will be determined by the MACs.

Payment for PET Radiotracer

Comment: Some commenters specified that the cost of the radiotracer should be separately payable and with reimbursement currently bundled into the price of the PET scan, the service is provided at a loss.

Response: Although NCDs do not address coding and payment issues as described in section 1869(f)(1)(B), CMS are not establishing a new NCD. Payment for PET Aβ scans are consistent with the payment usually received for such a procedure under the applicable Medicare payment system (Ex. Medicare Physician Fee Schedule (PFS), Outpatient Prospective Payment System (OPPS), etc.). Payment for diagnostic radiopharmaceuticals used will also depend on the setting of care and applicable payment system in which they are used. Payment for diagnostic radiopharmaceuticals used in the physician office setting are determined by the Medicare Administrative Contractors (MACs). Typically, diagnostic radiopharmaceuticals receive packaged payment in the Outpatient Prospective Payment system if not on OPPS pass-through status.

Removal of Additional PET NCDs

Comment: One comment, while expressing support for CMS' proposal to remove the current NCD, also urged CMS to remove other PET NCDs that inappropriately limit coverage. The commenter stated that such NCDs are outdated and do not reflect current clinical evidence and practice. In particular, the commenter recommended that CMS retire NCD 220.6.19 (NaF-18 PET), stating coverage of such scans should be left to contractor's discretion.

Response: Although CMS appreciates the supportive comment to remove the current NCD, the additional comments are outside of the scope of our proposal. The scope of the current reconsideration is limited to the NCD for Beta-Amyloid PET in Dementia and Neurodegenerative Disease. The commenter is invited to make a request to reconsider other NCDs by submitting a request(s) consistent with the procedures established at 78 Fed. Reg. 48,164 (August 7, 2013).

Retroactive Effective Date

Comment: One commenter supported CMS' proposed decision but suggested that the final decision have a retroactive effective date to coincide with the effective or implementation dates of NCD 200.3 (Monoclonal Antibodies Directed Against Amyloid for the Treatment of AD), or the effective date of the FDA's approval of Leqembi.

Response: CMS is not accepting the commenters' request to adopt a retroactive policy. As stated in the August 27, 2013, Federal Register Notice, the effective date for an NCD begins with the date the final decision memorandum is published. NCDs are prospective and reflect the

public comments. Making NCDs retroactive would be confusing for beneficiaries, providers and suppliers, and others that rely on NCDs. It would also be impracticable for the Medicare program as it would require reopening and revising prior determinations on Medicare claims. Retroactivity would set aside settled expectations under our prior policies.

Significant Cost Threshold

Comment: One commenter requested that the CMS Office of the Actuary consider the combined costs of treatment and related imaging in its determination of whether an NCD will trigger the requirements of section 1852(a)(5) of the Social Security Act. Under that statutory provision, if CMS determines that an NCD would result in a significant change in costs, Original Medicare is required to assume the costs covered by the NCD for Medicare Advantage (MA) enrollees until the plan year for which the expected costs are appropriately reflected in MA benchmarks.

Response: Thank you for the comment to consider the combined costs of treatment and related imaging. Such consideration is outside the scope of this NCD analysis.

Citation Correction

Comment: One commenter stated that the proposed decision memorandum cites a study, only indicated as "Pillar 2022," related to the beta-amyloid hypothesis. The commenter is unfamiliar with the reference as written and requests that CMS publish the full citation.

Response: The full citation has been added to the bibliography. Thank you for bringing this to our attention.

V. Conclusion

CMS is removing the NCD at § 220.6.20, ending CED for PET beta-amyloid imaging and permitting Medicare coverage determinations for PET beta-amyloid imaging to be made by MACs under § 1862(a)(1)(A) of the Act.