



August 15, 2023

Joseph Hutter, M.D.  
Lead Medical Officer  
Centers for Medicare and Medicaid Services

Electronically Submitted: [CMS\\_caginquiries@cms.hhs.gov](mailto:CMS_caginquiries@cms.hhs.gov)

Re: Public Comment on NCA for Beta Amyloid Positron Emission Tomography in Dementia and Neurodegenerative Disease (CAG-00431R)

Dear Dr. Hutter:

The American College of Radiology (ACR) representing more than 41,000 diagnostic radiologists, radiation oncologists, interventional radiologists, nuclear medicine physicians, and medical physicists, appreciates the opportunity to submit public comments in response to the Centers for Medicare and Medicaid Services (CMS) National Coverage Analysis (NCA) for Beta Amyloid Positron Emission Tomography (PET) in Dementia and Neurodegenerative Disease. Our organization fully supports CMS' process to remove the national coverage determination ([NCD](#)) 220.6.20, ending coverage with evidence development (CED). We strongly support broader coverage of beta-amyloid PET imaging by removing the current CED and limit of one scan per patient. This change in coverage will allow patients greater access to amyloid PET scans for Alzheimer's disease diagnosis, management, and evaluation of newly approved therapies.

Medicare coverage of amyloid PET scans fulfills CMS' commitment to allow broader coverage of this diagnostic test, Administrator Chiquita Brooks-LaSure said in a statement. "We know there is significant interest in the medical community about new treatments that may be effective in slowing the development of Alzheimer's disease. PET scans are an important part of diagnosis and treatment of Alzheimer's disease, and this decision is an important part of CMS' mission to help improve the lives of Americans we serve."

The ACR submitted comments to CMS in July 2022 regarding its reconsideration of NCD 220.6.20. We believe the evidence is sufficient to end the CED and allow national coverage of beta-amyloid PET. Additionally, CMS should require post-treatment beta-amyloid PET to be performed as needed to document the removal of beta-amyloid from the brain. While we support the removal of CED, we hold concerns about the proposed decision to permit coverage determinations for A $\beta$  PET imaging to be made by the Medicare Administrative Contractors (MACs) under 1862(a)(1)(A) of the Social Security Act.

**ACR strongly urges CMS to reconsider leaving coverage determinations to the discretion of the local MACs and instead implement a national coverage ruling.** If left to local determination, a final ruling for coverage of A $\beta$  PET could be significantly delayed and highly

variable across geographic regions, further exacerbate existing inequities to access. Swift and broad coverage of A $\beta$  PET is imperative at this time when anti-amyloid therapies are being approved by the Food and Drug Administration (FDA) and highly sought after by patients and their families.

Since Sept. 27, 2013, CMS has covered beta-amyloid PET imaging under CED, the ACR has worked with CMS over the last decade to generate the evidence necessary to expand coverage and access to this critical diagnostic tool for patients suffering from cognitive decline. The hallmark molecular biomarker of Alzheimer's disease, beta-amyloid protein, can be non-invasively detected by PET. The ACR serves as the sponsor and operating center for the Imaging Dementia – Evidence for Amyloid Scanning (IDEAS) Study and subsequent New IDEAS study. These studies were developed to address the CED requirements of CMS's 2013 NCD 220.6.20. **ACR requests CMS incorporate updates on the New IDEAS study in the final decision memo as the proposed decision lists this study as inactive.** Building upon the momentum of the IDEAS Study, the research team launched the New IDEAS study in December 2020 to analyze the clinical utility of beta-amyloid PET imaging of the brain in a diverse cohort of individuals diagnosed with mild cognitive impairment (MCI) or dementia. Without the insights provided by a diverse cohort, the clinical utility and effectiveness of beta-amyloid PET is less likely to be fully understood. For example, genetic, medical, and lifestyle factors are known risks for dementia, although the evidence has been developed from mostly white cohorts. In contrast, racial adversity, vascular disease, education disparities, and inequitable health care access, all play important roles in the excess risk of AD in African Americans.<sup>1</sup> Hence, the inclusion of New IDEAS data is critical to ensure representativeness of the subject population, effective clinical management, and advancement of health equity within the cohort. As of July 27<sup>th</sup>, the study has enrolled a total of 4,414 participants, of whom over 3,539 have already received their beta-amyloid PET scan. The national site network for the study includes 146 dementia practices and 126 PET imaging facilities. Contrary to what was stated in the proposed decision memo, New IDEAS is still active and accepting applications to become a participating PET imaging facility or dementia practice.

In 2021, the Alzheimer's Association, the ACR, the American Society of Neuroradiology, and the Department of Biostatistics at Brown University School of Public Health, along with other dementia and clinical research experts, launched the Alzheimer's Network for Treatment and Diagnostics (ALZ-NET).<sup>2</sup> ALZ-NET is a voluntary provider-enrolled patient registry that collects longitudinal real-world clinical, safety, and imaging data about patients being evaluated for or treated with novel FDA-approved Alzheimer's therapies. ALZ-NET is sponsored by the

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<sup>1</sup> Barnes LL. Alzheimer disease in African American individuals: increased incidence or not enough data? *Nat Rev Neurol.* 2022 Jan;18(1):56-62. doi: 10.1038/s41582-021-00589-3. Epub 2021 Dec 6. PMID: 34873310; PMCID: PMC8647782.

<sup>2</sup> <https://www.alz.org/professionals/health-systems-medical-professionals/management/alzheimers-network-for-treatment-diagnostics>

Alzheimer's Association and managed by the ACR. This national registry is an FDA-approved, agent-agnostic approach to gathering routine clinical practice data and outcomes for sharing quickly and transparently with all stakeholders. The registry is designed to continuously collect routine clinical practice data over time from healthcare providers caring for patients diagnosed with Alzheimer's who are taking an FDA-approved treatment for Alzheimer's disease. The registry is designed to grow with scientific and medical advancements. As new drugs are approved and implemented in care, these will also be captured by the registry. ALZ-NET is also a platform for patients and providers to access resources about Alzheimer's, including locating ALZ-NET participating sites and educational resources applicable to the usage and monitoring of novel therapies. Recently, ALZ-NET registry was submitted to CMS for consideration of CED approval in July 2023.

Clinical research is currently focused on new treatments directed against amyloid, which requires confirmation of the presence and extent of brain amyloid. Recent treatment trials requiring biomarker evidence of amyloid pathology for patient enrollment generally have used PET scans. We concur with CMS' analysis that appropriate patient selection is key to ensuring benefits outweigh the potential harms of newly developed drugs targeting amyloid. By including useful diagnostic tests that can detect beta-amyloid in the brain, some of the harms of anti-amyloid treatments would be avoided because the drug would not be given to patients who do not have brain amyloid and potentially stopped when brain amyloid was completely removed. It is essential that CMS consider practice guidelines in determining the use and frequency of amyloid PET scans. CMS may also consider referencing the appropriate use recommendations that outline safety monitoring schedules for the two currently FDA-approved treatments, Aduhelm and Leqembi.<sup>3,4</sup> ACR encourages the use of evidence-based and physician-developed guidelines to decrease inappropriate imaging use and ensure Medicare patients receive the right imaging tests at the right time. We recommend the ACR Appropriateness Criteria<sup>®</sup> (AC) and the ACR—ACNM—ASNR—SNMMI Practice Parameter for Brain PET/CT Imaging in Dementia topic, which discuss the use of MRI head, CT head, FDG PET/CT, and amyloid PET/CT brain. The AC provide evidence-based guidance to assist referring physicians and other providers in making the most appropriate imaging or treatment decision for a specific clinical condition. Employing this guidance helps providers enhance quality of care and contribute to the most efficacious use of radiology. The AC are not intended to be used as coding guidance for radiologic procedures.<sup>5</sup>

For initial imaging in patients with cognitive decline or suspected Alzheimer's disease the ACR Appropriateness Criteria Dementia topic developed in 2019 recommends the following:

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<sup>3</sup> Cummings J, Rabinovici GD, Atri A, Aisen P, Apostolova LG, Hendrix S, Sabbagh M, Selkoe D, Weiner M, Salloway S. Aducanumab: Appropriate Use Recommendations Update. *J Prev Alzheimers Dis.* 2022;9(2):221-230. doi: 10.14283/jpad.2022.34. PMID: 35542993; PMCID: PMC9169517.

<sup>4</sup> Cummings, J., Apostolova, L., Rabinovici, G.D. et al. Lecanemab: Appropriate Use Recommendations. *J Prev Alzheimers Dis* 10, 362–377 (2023). <https://doi.org/10.14283/jpad.2023.30>

<sup>5</sup> <https://www.acr.org/Clinical-Resources/ACR-Appropriateness-Criteria>

**Variant 1: Cognitive decline. Suspected Alzheimer disease. Initial imaging.**

Procedure	Appropriateness Category	Relative Radiation Level
MRI head without IV contrast	Usually Appropriate	○
CT head without IV contrast	Usually Appropriate	☼☼☼
Amyloid PET/CT brain	May Be Appropriate	☼☼☼
FDG-PET/CT brain	May Be Appropriate	☼☼☼
MRI head without and with IV contrast	Usually Not Appropriate	○
HMPAO SPECT or SPECT/CT brain	Usually Not Appropriate	☼☼☼☼
MR spectroscopy head without IV contrast	Usually Not Appropriate	○
MRI functional (fMRI) head without IV contrast	Usually Not Appropriate	○
CT head with IV contrast	Usually Not Appropriate	☼☼☼
CT head without and with IV contrast	Usually Not Appropriate	☼☼☼

We encourage CMS to review the latest Practice Parameter for Brain PET-CT Imaging in Dementia, which was revised and approved by the ACR Council in 2020 with an effective date of October 2021 (Resolution 41).<sup>6</sup> This guidance document was authored by ACR in collaboration with other medical specialty societies (ACNM, ASNR, and SNMMI) and includes indications for beta-amyloid PET, personnel qualifications and responsibilities, and specifications for the examination. Amyloid PET studies should be performed at the request of physicians knowledgeable in the clinical diagnosis and management of dementia and under circumstances in which the results of the examination are likely to impact patient care. Work has already begun to review and update this document to reflect new evidence and literature by the scheduled date of 2025. All guidance documents are subject to final review and approval before available to the public.

During the 30-day comment period following the release of the tracking sheet in June 2022, CMS received 36 comments. Many comments expressed the opinion that the scope of the reconsideration should be broader and provide national coverage of PET beta-amyloid imaging, or have coverage determined by Medicare administrative contractors (MACs). Most of these commenters also believed that the current limit of one PET scan per patient should be removed if CED were to remain. An important consideration in this proposed coverage decision memorandum is to allow Medicare coverage determinations to be made by the MACs. From our experience working with CMS and the MACs, we understand once the final decision is rendered, CMS will notify the MACs of its decision. CMS will issue guidance through transmittals and change requests advising the MACs on the effective and implementation dates, and subsequently update the NCD manual text and claims processing instructions. From this, MACs will

<sup>6</sup> <https://www.acr.org/-/media/ACR/Files/Practice-Parameters/Brain-PET-CT-Dementia.pdf>

determine what is necessary to ensure Medicare payment for reasonable and medically necessary beta-amyloid PETs for dementia and neurodegenerative diseases. These options include:

- 1) Claim-by-claim adjudication,
- 2) Issuance of a billing or coding local coverage article, or
- 3) Development of an explicit local coverage determination (LCD) policy

We acknowledge that the MACs have experience with extending coverage for PET scans for non-oncologic indications; however, given the importance of the findings from beta-amyloid PET imaging studies, ACR is concerned about the potential delay in coverage decisions by MACs and variations in local coverage that may result in health equity-related access differences due to different coverage decisions by each MAC. A NCD allowing full coverage without CED would ensure swift and consistent coverage for all Medicare beneficiaries.

Additionally, as CMS explicitly stated, PET images obtained with amyloid-targeting radiopharmaceuticals should be interpreted only by readers who successfully complete a special training program, which is provided by the manufacturers of each of these radiopharmaceuticals. The U.S. Nuclear Regulatory Commission (NRC) also maintains training and experience requirements under 10 CFR Part 35 for physician-experts (i.e., Authorized Users) responsible for safe medical use of these agents.<sup>7</sup>

**To expedite access to PET scans for patients with cognitive decline, the ACR requests that CMS ensures coverage for the use of beta-amyloid PET scans as both an initial diagnostic test in patients who are being evaluated for Alzheimer’s disease and other causes of cognitive decline, as well as a test to monitor/follow-up (as appropriate) in adult patients who are being treated with either existing or experimental new Alzheimer’s disease therapies.**

The ACR appreciates the opportunity to submit recommendations to CMS on diagnostic imaging for MCI and Alzheimer’s Dementia. If you have any questions or comments on our letter, please do not hesitate to contact Alicia Blakey MS, Principal Economic Policy Analyst, at [ablakey@acr.org](mailto:ablakey@acr.org).

Respectfully submitted,



William T. Thorwarth, Jr. MD, FACR  
Chief Executive Officer

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<sup>7</sup> <https://www.nrc.gov/reading-rm/doc-collections/cfr/part035/full-text.html>