

May 11, 2021

Stephen Boren, M.D., MBA  
Medicare Contractor Medical Director  
National Government Services, Inc.  
P.O. Box 6189  
Indianapolis, IN 46206-6189

RE: Contractor Pricing - Payment for Myocardial PET Imaging January 2020 to Current

Dear Dr. Boren:

We are writing to follow up on previous conversations regarding physician office pricing for myocardial positron emission tomography (PET) procedures. The Society of Nuclear Medicine & Molecular Imaging,<sup>1</sup> the American Society of Nuclear Cardiology,<sup>2</sup> the American College of Cardiology<sup>3</sup> and the American College of Radiology<sup>4</sup> believe it is critical to ensuring continued access to these services that the Medicare payment rate for the myocardial PET codes appropriately reflect the relative difference in the cost of performing different types of procedures (i.e., single vs multiple studies and with and without CT scans). We appreciate the continued willingness of the National Government Services (NGS) medical directors to engage

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<sup>1</sup> The Society of Nuclear Medicine and Molecular Imaging (SNMMI®) is a nonprofit scientific and professional organization that promotes the science, technology, and practical application of nuclear medicine and molecular imaging. SNMMI strives to be a leader in unifying, advancing, and optimizing molecular imaging, with the ultimate goal of improving human health through noninvasive procedures and therapeutic treatments utilizing ionizing radiation. With over 17,000 members worldwide, SNMMI represents nuclear medicine and molecular imaging professionals, including physicians, physicists, pharmacists, and technologists, all of whom are committed to the advancement of the field.

<sup>2</sup> The American Society of Nuclear Cardiology (ASNC®) is a 4,500 member professional medical society, which provides a variety of continuing medical education programs related to nuclear cardiology and cardiovascular computed tomography, develops standards and guidelines for training and practice, promotes accreditation and certification within the nuclear cardiology field, and advocates for furthering research and excellence in nuclear cardiology and cardiovascular computed tomography.

<sup>3</sup> The American College of Cardiology (ACC®) envisions a world where innovation and knowledge optimize cardiovascular care and outcomes. As the professional home for the entire cardiovascular care team, the mission of the College and its more than 54,000 members is to transform cardiovascular care and to improve heart health. The ACC bestows credentials upon cardiovascular professionals who meet stringent qualifications and leads in the formation of health policy, standards and guidelines. The College also provides professional medical education, disseminates cardiovascular research through its world-renowned JACC Journals, operates national registries to measure and improve care and offers cardiovascular accreditation to hospitals and institutions.

<sup>4</sup> The American College of Radiology (ACR®) is a professional organization representing nearly 40,000 radiologists, radiation oncologists, interventional radiologists, nuclear medicine physicians, and medical physicists. The ACR, founded in 1924, is a professional medical society dedicated to serving patients and society by empowering radiology professionals to advance the practice, science, and professions of radiologic care.

with us as stakeholders about this important issue and to consider our concerns and recommendations.

As described in our previous correspondence,<sup>5</sup> we strongly recommend that NGS determine appropriate rates for the myocardial PET procedures by recognizing that within the family of codes, there is a hierarchy in the complexity, time to perform and resource costs of the procedures. The new and revised CPT® codes<sup>6</sup> adopt consistent terminology and generally describe each complete service in a single code, rather than using a base code and add-on code. Because the codes use consistent language and structure, we believe that the rates set for those codes should consistently recognize the difference in resource costs of performing the services described.

The simplest and least costly procedure is a single perfusion study (78491). The cost for the other services can be established relative to this procedure. Below, we describe that relationship between the procedures and our estimate of the difference in the procedure cost.

- A single metabolic evaluation study (78459) is slightly more complex than single perfusion study and the cost is approximately 10 percent greater than the cost of performing a single perfusion study.
- A procedure involving multiple perfusion studies (78942) requires additional time compared to a single perfusion study and therefore has costs that are roughly 70 percent greater.
- A procedure that combines a metabolic evaluation and a perfusion study (78432) has resource costs that are 90 percent greater than the cost of performing a single perfusion study.
- Performing a CT scan concurrent with a PET procedure increases the cost of the base PET procedure 28 percent because of the additional cost of the equipment required to perform the CT scan.

The same general relationship between the costs for these different types of PET studies is maintained when the PET procedure is performed concurrently with a CT scan - that is, a single perfusion study with CT scan is the least costly and a metabolic evaluation study with a CT scan is 10 percent greater, etc. Table 1 summarizes the relative relationship between the different types of studies.

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<sup>5</sup> Letter from SNMMI and ASNC to NGS, December 18, 2020.

<sup>6</sup> CPT® is a registered trademark of the American Medical Association.

**Table 1**  
**Relative Cost of Myocardial PET Procedures**

<b>CPT Code</b>	<b>Descriptor</b>	<b>Ratio</b>	<b>Base Procedure</b>
78459	Metabolic evaluation study	1.10	78491
78491	Perfusion study (single)	1.0	78491
78492	Perfusion study (multiple)	1.70	78491
78432	Combined perfusion with metabolic evaluation study	1.90	78491
78429	Metabolic evaluation study with CT	1.28	78459
78430	Perfusion study (single) with CT	1.28	78491
78431	Perfusion study (multiple) with CT	1.28	78402
78433	Combined perfusion with metabolic evaluation study with CT	1.28	78432

We recommend that NGS use this relationship as the basis for the physician office rates in order to appropriately reflect the work and resources associated with each service in a manner that is both accurate and consistent across the family of codes.

However, for this methodology to produce appropriate rates, it is critical that the rate for the base procedure (78491) be accurately priced. In determining contractor priced rates, CMS instructs the contractors to “make every effort to determine whether the procedure, drug or supply has a pricing history and profile. If there is a pricing history, map the new code to previous customary and prevailing charges or fee schedule amounts to ensure continuity of pricing.”<sup>7</sup> In this instance, the procedure code 78491 has a pricing history. The revised code 78491 replaces the prior code for a single perfusion study (also 78491). The revised descriptor includes parameters that could not be performed when codes for the myocardial PET procedures were first established in 1991 but are now commonly performed with each study. These parameters were not included in the original code descriptor or pricing. Therefore, while the time to perform these services and some of the costs have gone down over time, the amount of time to perform all aspect of the revised service as gone up therefore the entire costs and times have remained consistent over time. Table 2 shows the original and revised descriptors for 78491.

**Table 2**  
**Original and Revised Code Descriptor**

<b>Code</b>	<b>Original Descriptor</b>	<b>Revised Descriptor</b>
78491	Myocardial imaging, positron emission tomography (PET), perfusion; single study at rest or stress	Myocardial imaging, positron emission tomography (PET), perfusion study (including ventricular wall motion(s) and/or ejection

<sup>7</sup> Medicare Claims Processing Manual (Publication 100 -04), Chapter 23, section 30.2.1.

	fraction(s), when performed); single study at rest or stress (exercise or pharmacologic)
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MACs were also instructed to contractor price the technical component of the original PET codes. NGS set a payment rate for 78491 of \$1,135 that was in effect through December 31, 2019. We believe that using this payment rate as the basis for the rates for the revised family of myocardial PET codes is appropriate for two reasons:

- It best incorporates CMS’s instructions to look at a pricing history for new codes in order to maintain consistent pricing; and
- The procedure described by the revised code is more complex than the procedure described by the previous code for which this was the established rate.

However, we also recognize that PET technology has evolved since the original codes were priced and that NGS may feel it is appropriate to reevaluate and adjust the rate previously set for the original codes to reflect improvements and efficiencies and new packaged services of the codes such as wall motion and ejection fraction that have developed as the PET procedures have become more commonly performed in the physician office setting. If that is the case, then NGS should still use the historic rate as the basis for current pricing (as instructed by CMS) and determine what, if any, reduction may be appropriate to that rate, as stated earlier we believe the difference is none or minimal reduction of 1%. Alternatively, the MAC-Noridian recently went through this exercise and decided to compare single MPI PET 78491 to the single study myocardial SPECT code 78451. The relationship was determined by multiplying the 78451 RVWs by 2, as it was a reasonable relationship that single study MPI PET is two times as expensive as providing a single study MPI SPECT service. They then used the societies’ table of relativity for the rest of the code family for relativity.

As we have stated previously, NGS should not use rates that are established under other payment systems, particularly the ambulatory surgical center (ASC) payment system, as the basis for the MPFS rates. MPFS non-facility rates are intended to reflect the relative cost of performing a service in the physician office setting and are based on a building block approach that looks at the input prices for the components required to perform the service. Other Medicare payment systems use different methodologies and pay for a different universe of services than the MPFS. Adopting rates set under those payment systems into the MPFS is not appropriate. In particular, NGS should not use ASC rates to pay for physician office services because those rates do not appropriately reflect the cost of performing a service in the physician office setting. The ASC rates are merely a percentage of OPFS rates and do not in any way reflect the cost of performing a service in a physician office. We reiterate our concerns that myocardial PET procedures would not typically be performed in an ASC and that adopting those rates would produce rank order anomalies in the payment for the code family.<sup>8</sup>

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<sup>8</sup> See December 18, 2020 correspondence for complete discussion.

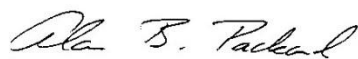
Finally, NGS medical directors have asked questions suggesting that they may have reservations about whether PET procedures can be appropriately performed in the physician office setting. The joint societies signing on to this letter strongly disagree. Myocardial PET procedures can be safely and accurately performed in the physician office. Office-based procedures allow patients to receive services in a more timely manner and in a more accessible setting than is often available for hospital-based services. Such access is particularly important during the COVID-19 public health emergency, when hospitals are often overwhelmed treating COVID patients and when non-COVID patients may be reluctant to obtain services at hospitals for fear of exposure. We note that any questions about the appropriateness of the setting and population for a particular service should be addressed through the coverage determination process and not through the rate-setting methodology.

We are attaching a PDF and the reference to the most recent article “Practical guide for interpreting and reporting cardiac PET measurements of myocardial blood flow: an Information Statement from the American Society of Nuclear Cardiology, and the Society of Nuclear Medicine and Molecular Imaging” During one of our calls Dr. Boren mentioned that you had questions on what should be in a good report for myocardial PET, therefore you may find this of assistance as you work with your providers of these services and for your medical staff as a reference. This article is being jointly published in The Journal of Nuclear Medicine<sup>9</sup> and the Journal of Nuclear Cardiology<sup>10</sup>. We are also prepared to send example reports from our leadership should NGS find that helpful.

One final comment, we hope that NGS can consider retroactive implementation since we have been discussing these relativity issues since the codes were implemented on January 1, 2020.

As noted above, SNMMI, ACC, ACR and ASNC greatly appreciate NGS’s openness in engaging with the provider community about the appropriate MPFS payment rates for the myocardial PET procedures. We would like to continue this dialogue and provide any additional information NGS may need.

Sincerely,



Alan B. Packard, PhD  
President, SNMMI

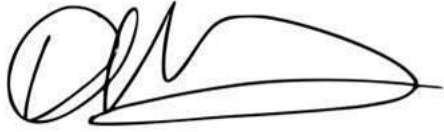


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<sup>9</sup> <https://doi.org/10.2967/jnumed.121.261989>

<sup>10</sup> <https://doi.org/10.1007/s12350-021-02552-7>



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