



Utilization of Peripheral Nerve Blocks by Interventional Radiologists for Medicare Beneficiaries from 2010-2018

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Purpose: Peripheral nerve blocks (PNBs) confer multiple benefits including reduced postprocedural pain and more rapid recovery. While traditionally used for surgical procedures they offer potential benefits for Interventional Radiology patients. Not current data exists regarding the number and type of nerve blocks performed by IR physicians among Medicare patents.

Methods:

This study utilized data derived from publicly available databases provided by the Center for Medicare and Medicaid Services (CMS). Billing data from the CMS Physicians/Supplier Procedure Summary (PSPS) Master Files from 2010 to 2018 were obtained. The following cpt codes were utilized: 64400-64405, 64415-64418, 64420-64421, 64425, 64430, 64445-64450, 64454, 64455, 64624.

Results: The number of peripheral nerve blocks increased among all specialties from 856,230 in 2010 to 1,233,917 in 2018 (+44.1%). In 2018, the majority of peripheral nerve blocks were performed by Anesthesia and Interventional Pain accounting for 54% of the total. Interventional Radiologists performed 4,110 peripheral nerve blocks in 2018 (0.3%) increased from 1,176 in 2010. The five most common nerve blocks performed by IR physicians in 2018 were other (nonspecified), greater occipital, trigeminal, pudendal, and intercostal. The five least common were sciatic, ilio-inguinal, brachial plexus, suprascapular, and axillary nerve blocks. Utilization of peripheral nerve blocks spans a broad range of specialties with family medicine and neurology both performing over 40,000 PNBs in 2018.

Conclusions: Interventional Radiologists are performing an increasing number of peripheral nerve blocks which offer additional pain management options for patients with poor pain tolerance or those that are poor sedation candidates. Future studies will allow for better characterization of the types of blocks being performed by IR physicians as new cpt codes are generated. Dedicated training including rotations with anesthesia/interventional pain service may be beneficial to Interventional Radiology residents.

