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

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**Interventional** 

Radiology

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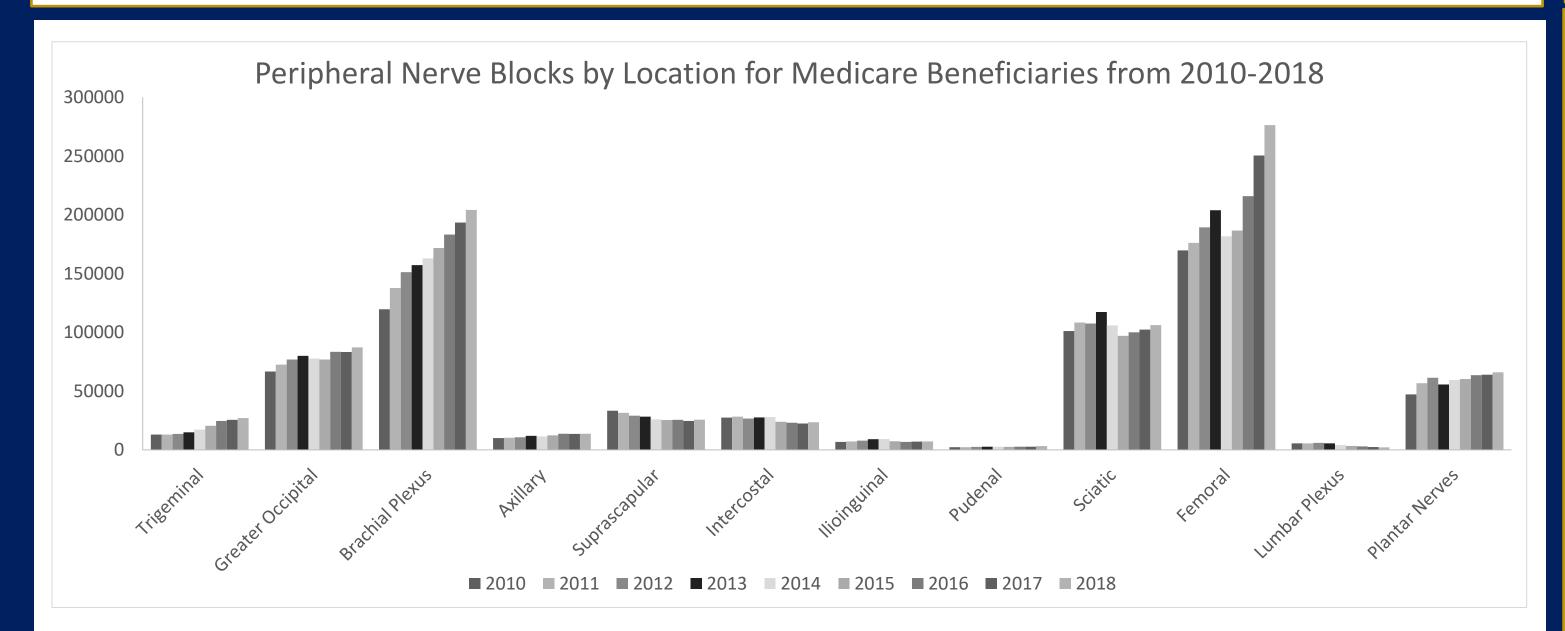
### **INTRODUCTION**

- Peripheral nerve blocks (PNBs) confer multiple benefits including reduced postprocedural pain and more rapid post-procedural recovery.
- ❖ While traditionally used for surgical procedures, they offer potential benefits for Interventional Radiology (IR) patients.
- ❖ No current data exists regarding the number and type of peripheral nerve blocks performed for Medicare patients by providers in total and by specialty.

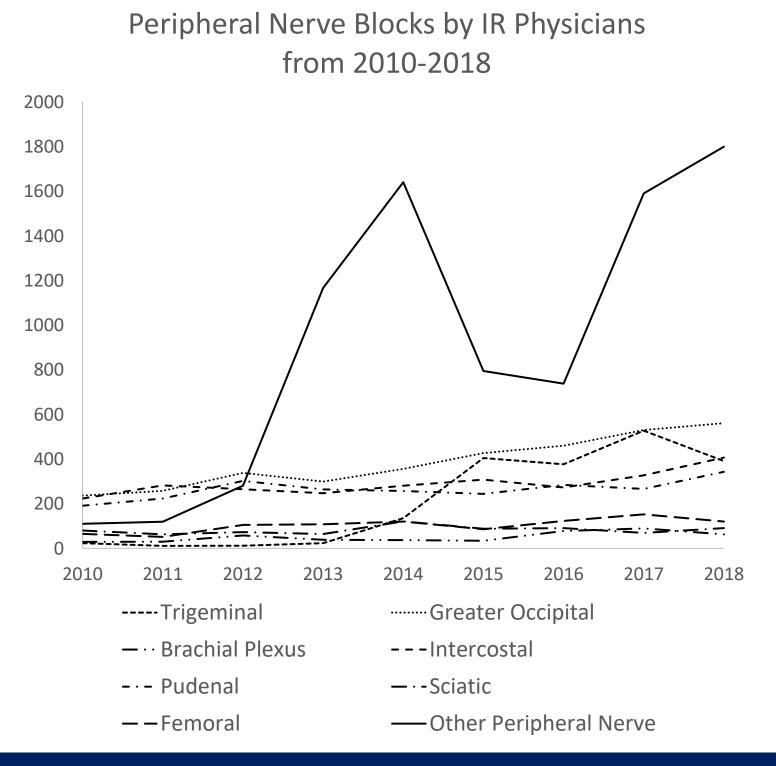
### **METHODS**

- ❖ 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.
- ❖ The number of services was calculated by subtracting the denied service count from the submitted service count

## **RESULTS**



# Peripheral Nerve Blocks by Specialty in 2018 Emergency Medicine Pain Management Rheumatology **Service** Nurse Practitioner Plastic Surgery Sports Medicine Orthopedic Surgery Neurology Internal Medicine Interventional Pain Family Practice Cardiology 50000 100000 150000



### **DISCUSSION**

- Review of the data shows that peripheral nerve blocks are being performed in increasing numbers (856,230 in 2010 to 1,233,917 in 2018) and by a wide variety of specialties with both family medicine and neurology performing over 40,000 PNBs in 2018.
- ❖ IR physicians also performed an increasing number of peripheral nerve blocks (1,176 in 2010 to 4,110 in 2018) throughout the study period but had a surprisingly lower procedure volume than most specialties.
- Femoral, brachial plexus, greater occipital, and sciatic nerve blocks were most common among all specialties. IR physicians most commonly performed greater occipital, trigeminal, pudendal, and intercostal nerve blocks outside of other (non-categorized) nerve blocks.
- Limited research currently exists on the utilization of PNB's for IR patients including on patient selection, procedural efficiency, and outcomes within Interventional Radiology.

### **CONCLUSIONS**

- Current literature supports the benefit of PNBs in a variety of clinical settings which is consistent with the increased utilization of PNBs for Medicare Beneficiaries across multiple specialties.
- More research is needed to assess feasibility, demand, benefits, and potential training options for incorporating PNBs into IR practice.

#### **REFERENCES**

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