eFigure1. The distribution of diagnoses in all visits to Neurologists

Dementia, 10.0%

Epilepsy, 9.4%

Peripheral neuropathy, 9.3%

Parkinson's disease, 8.8%

Back pain, 8.7%

Headache/Migraine, 6.9%

Stroke, 6.8%

Chronic pain/abnormality of gait, 6.2%

Tremor/RLS/ALS, 5.6%

Sleep disorders, 4.2%

Multiple sclerosis, 3.3%

Other central NS disorders, 3.0%

Dizziness/Vertigo, 2.1%

Syncope, 0.8%

ªOthers, 15.0%
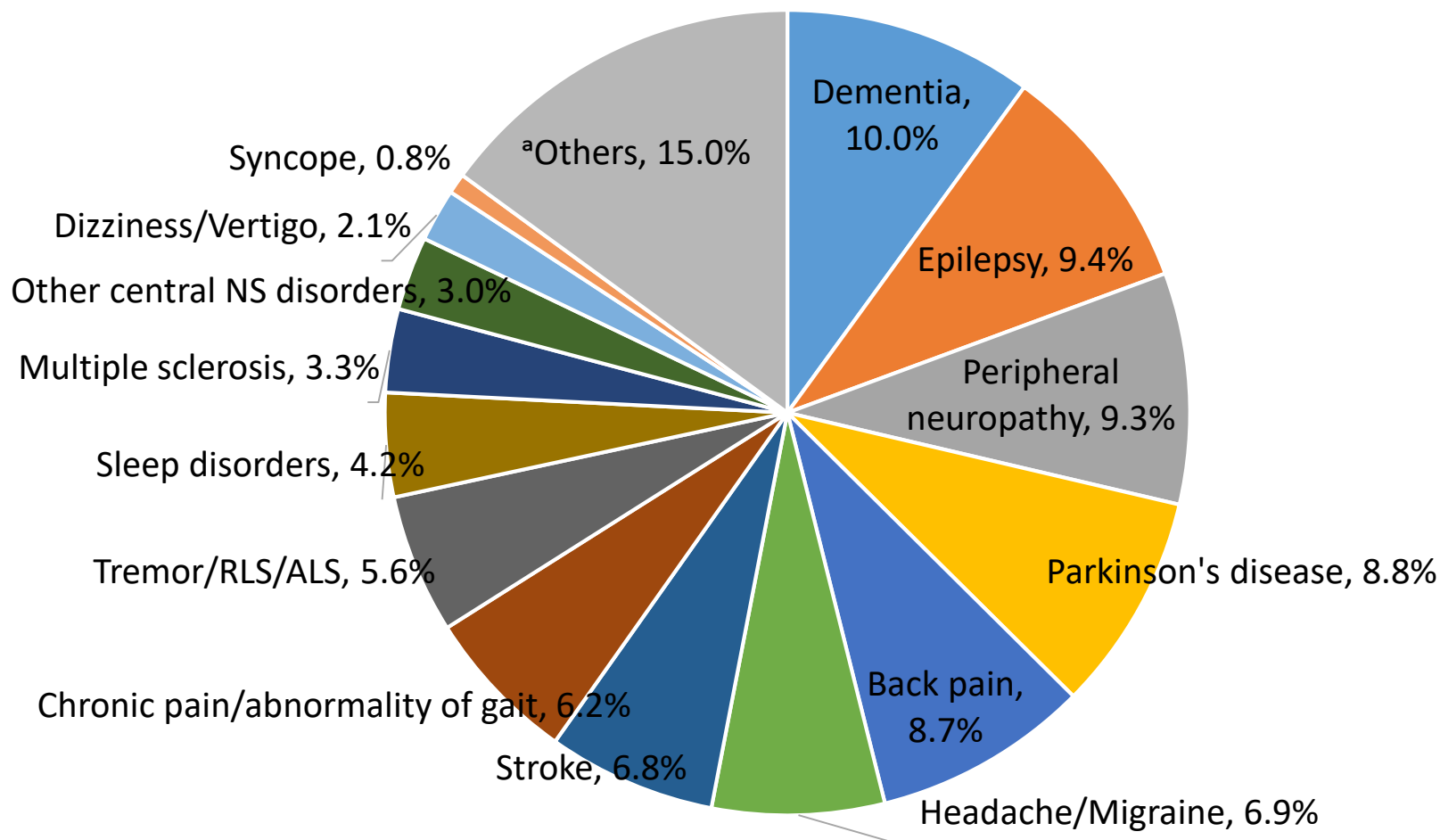
ªOthers-included over 200 CCS diagnostic categories (e.g. other connective tissue disease, other CNS infection and myelitis, encephalitis, blindness and vision defects, diabetes mellitus with complications)
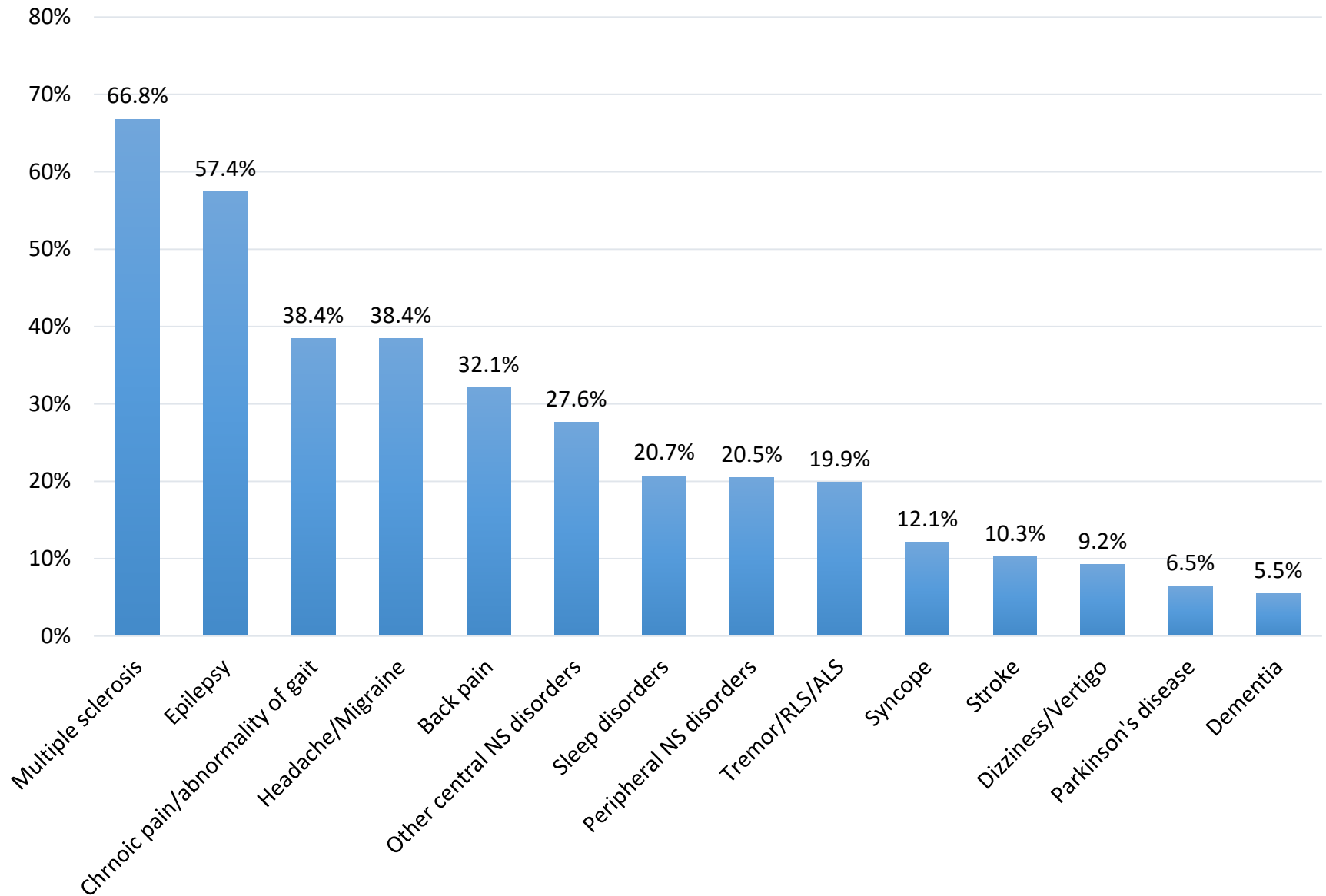
eFigure2. Practice patterns of nurse practitioner and physician assistant in neurologic care
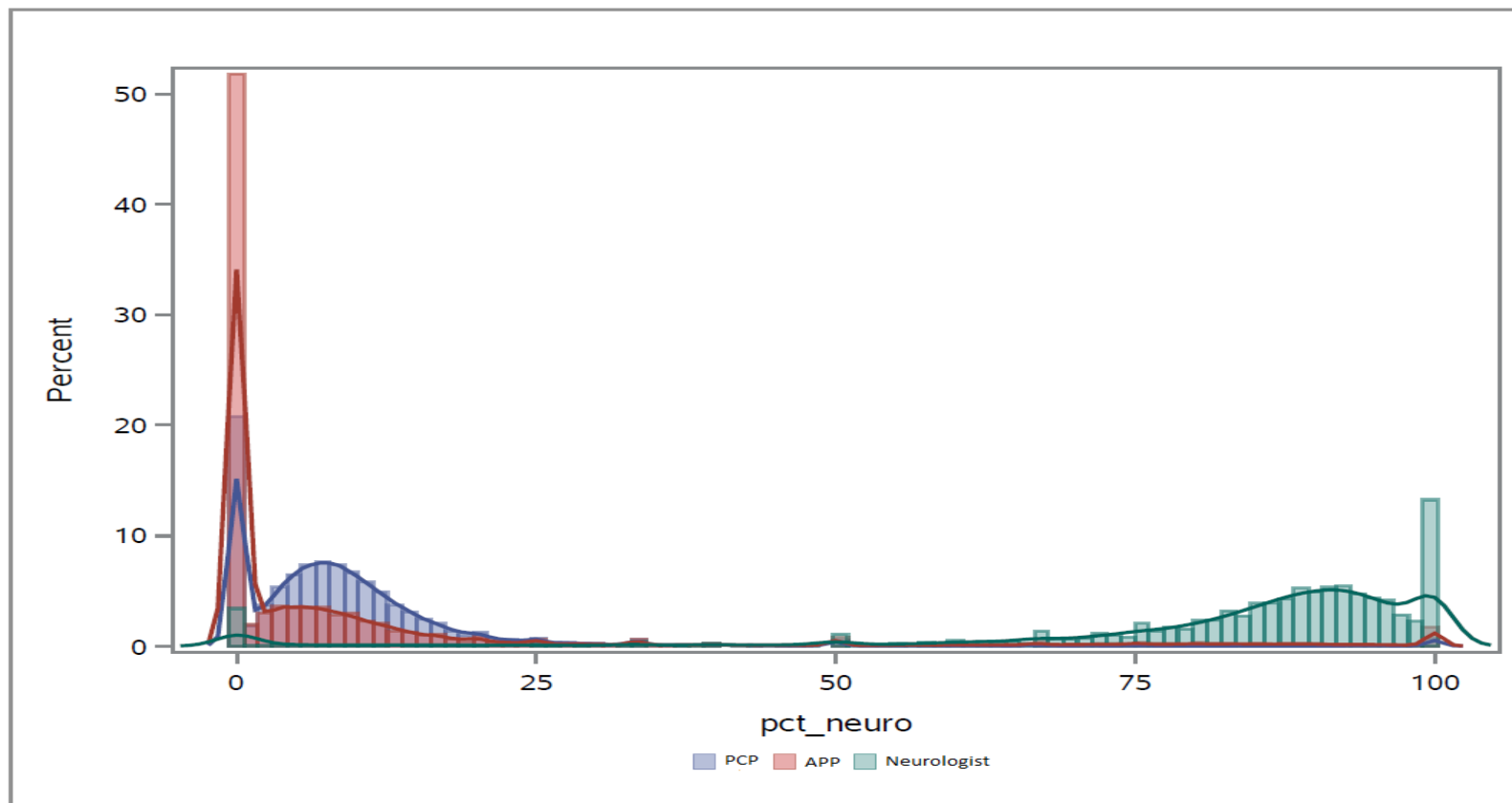
PCP: Primary care physicians; APP: Nurse practitioner and physician assistant
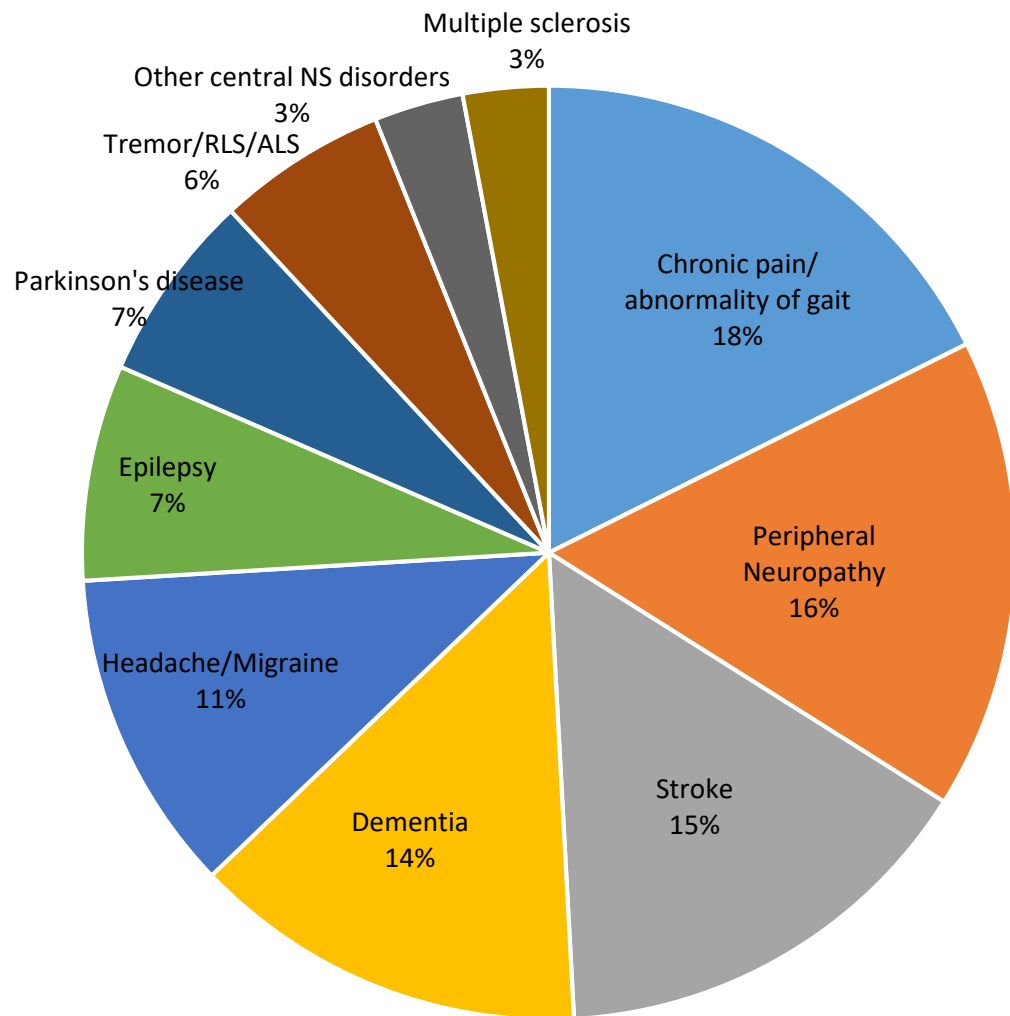
*The histogram shows the distribution of the proportion of visits with a primary diagnosis for the most common neurology diagnostic categories by provider type (PCP-purple color; APP-red color; Neurologist-green color). We can see considerable overlap between APP and PCP while the neurologist histogram stood alone in the other end of spectrum.

eFigure 3. Proportion of visits from Medicare beneficiaries aged <65

Category	Percentage
Multiple sclerosis	66.8%
Epilepsy	57.4%
Chrnoic pain/abnormality of gait	38.4%
Headache/Migraine	38.4%
Back pain	32.1%
Other central NS disorders	27.6%
Sleep disorders	20.7%
Peripheral NS disorders	20.5%
Tremor/RLS/ALS	19.9%
Syncope	12.1%
Stroke	10.3%
Dizziness/Vertigo	9.2%
Parkinson's disease	6.5%
Dementia	5.5%

eFigure 4. Distribution of visits for the most common neurologic conditions excluding back pain, sleep disorders, syncope, and dizziness/vertigo

(A) Neurologic conditions

(B) Medical provider types