

Antiepileptic Prescribing to Persons Living with Dementia Residing in Nursing Homes:

A Tale of Two Indications

Supplemental Appendix

Supplementary Table S1. Generic Drug Names Used to Construct Drug Classes

Class	AHFS code	Generic names
Antiepileptics	28.12.XX except benzodiazepines	28:12.04: Phenobarbital, Primidone, Methohexital 28:12.12: Ethotoin, Fosphenytoin, Phenytoin 28:12.16: Ethadione, Paramethadione, Trimethadione 28:12.20: Ethosuximide, Methsuximide 28:12.92: Brivaracetam, Carbamazepine, Eslicarbazepine, Felbamate, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Magnesium Sulfate, Oxcarbazepine, Perampanel, Pregabalin, Rufinamide, Sultiame, Tiagabine, Topiramate, Valproate/Divalproex/Valproic Acid, Vigabatrin, Zonisamide, Acetazolamide
Antipsychotics	28.16.08.XX	28:16.08.04: Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Clozapine, Iloperidone, Lurasidone, Olanzapine, Paliperidone, Pimavanserin, Quetiapine, Risperidone, Ziprasidone 28:16.08.08: Haloperidol 28:16.08.24: Chlorpromazine, Fluphenazine, Perphenazine, Prochlorperazine, Thioridazine, Trifluoperazine 28:16.08.32: Thiothixene 28:16.08.92: Loxapine, Molindone, Pimozide
Opioids	28:08.08 and 28:08.12	Codeine, Fentanyl, Hydrocodone, Hydromorphone, Levorphanol, Meperidine, Methadone, Morphine, Opium, Oxycodone, Oxymorphone, Remifentanyl, Sufentanyl, Tapentadol, Tramadol, Buprenorphine, Butorphanol, Nalbuphine, Pentazocine, Dihydrocodeine

Supplementary Table S2. Top Antiepileptic Prescriptions Among Medicare Beneficiaries with Age-Related Dementia in Nursing Homes, 2015-2019

	2015		2016		2017		2018		2019	
	All antiepileptic	N=2,630,473	All antiepileptic	N=2,791,605	All antiepileptic	N=2,840,895	All antiepileptic	N=2,844,971	All antiepileptic	N=2,803,445
	<i>Generic name</i>	%	<i>Generic name</i>	%	<i>Generic name</i>	%	<i>Generic name</i>	%	<i>Generic name</i>	%
1	Valproate ^a	29.43	Valproate ^a	29.68	Gabapentin	29.87	Gabapentin	30.85	Gabapentin	31.71
2	Gabapentin	28.06	Gabapentin	28.79	Valproate ^a	29.49	Valproate ^a	29.16	Valproate ^a	29.02
3	Levetiracetam	13.67	Levetiracetam	13.91	Levetiracetam	13.96	Levetiracetam	14.24	Levetiracetam	14.40
4	Phenytoin	6.99	Phenytoin	6.00	Pregabalin	5.44	Pregabalin	5.07	Pregabalin	4.50
5	Pregabalin	5.94	Pregabalin	5.76	Phenytoin	5.24	Phenytoin	4.57	Phenytoin	3.94
6	Lamotrigine	3.69	Lamotrigine	3.75	Lamotrigine	3.82	Lamotrigine	3.86	Lamotrigine	3.85
7	Carbamazepine	3.02	Carbamazepine	2.83	Carbamazepine	2.69	Carbamazepine	2.51	Carbamazepine	2.39
8	Oxcarbazepine	2.02	Oxcarbazepine	2.08	Oxcarbazepine	2.04	Oxcarbazepine	2.11	Lacosamide	2.32
9	Primidone	1.95	Primidone	1.91	Primidone	1.92	Lacosamide	1.98	Oxcarbazepine	2.14
10	Topiramate	1.71	Topiramate	1.76	Topiramate	1.79	Primidone	1.87	Topiramate	1.88