

Brand-Name Epilepsy Drug Costs Jump — Prices climbed 277% over 11-year period

by [Michal Ruprecht](#), Editorial Intern, MedPage Today

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Prices for brand-name epilepsy drugs rose by 277% from 2008 through 2018, a retrospective cohort study of Medicare beneficiaries found.

In the same period, generic epilepsy drug prices fell by 42%, reported Samuel Waller Terman, MD, MS, of the University of Michigan in Ann Arbor, and colleagues in *Neurology*.

Nearly 80% of antiseizure medication (ASM) costs came from brand-name drugs. Notably, brand-name ASMs represented only 14% of pill days in 2018 -- a decrease from 56% in 2008 -- possibly due to [more generic equivalents](#), the researchers said.

In a [corresponding editorial](#), Wyatt Bensken, BS, of Case Western Reserve University in Cleveland, Ohio, and Iván Sánchez Fernández, MD, MPH, MBI, of Boston University, argued that providers should prescribe generic drugs instead of higher-cost brand-name ASMs.

"Despite the decreasing cost and wider availability of generic ASMs, the overall picture remains one of rapidly growing costs," Bensken and Fernández observed. "If a generic is available, is much cheaper, and does not cause unreliable serum levels, it should be considered."

"When there are several ASMs with a similar mechanism of action, similar efficacy, similar safety and tolerability profile, and different costs, it would be unwise to choose the more expensive alternative just because it is newer," they added.

Compared with 2008, costs for brand-name ASMs rose from approximately \$2,800 to \$10,700 per year in 2018, while costs for generic brand ASMs dropped \$800 to \$460. As a result, many generic ASMs cost about 10 times less than their brand-name counterparts.

For example, generic levetiracetam cost \$540 per year, while brand-name levetiracetam (Keppra) was \$6,900. Likewise, a 1-year supply of generic lamotrigine was \$600, but a 1-year supply of brand-name lamotrigine (Lamictal) was \$9,000.

"Clinicians must remain cognizant of this societal cost magnitude when judging whether the 10-fold increased expense per pill for brand name medications is worth the possible benefits," Terman and co-authors emphasized.

During the study period, the most common ASM shifted from phenytoin (Dilantin) in 2008 to levetiracetam in 2018.

Lacosamide (Vimpat) contributed to 45% of the increase in brand-name ASM costs, followed by clobazam (Onfi; 16%) and pregabalin (Lyrica; 10%), the researchers estimated.

"Previous [studies](#) have shown that drugs are the most expensive part of neurologic care, and antiseizure drugs were the second-highest category of costs among drugs prescribed by neurologists," Terman said in a press release.

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Drug prices are unaffordable for about [one in four Americans](#), the editorialists pointed out.

"Most neurologists are familiar with the most obvious form of access challenges for a patient with epilepsy: they are unable to afford a medication," Bensken and Fernández wrote. "Commonly, health plans exclude newer ASMs or cover them only after the patient has tried and failed several other ASMs which the health plan considers first line."

The investigators also discovered that first-generation enzyme-inducing drugs -- known to initiate drug-drug interactions and [side effects](#) -- were used less frequently in 2018 compared with 2008. The authors noted that this group of drugs was "notably" less expensive.

"Doctors should consider the societal cost when judging whether the increased expense of brand-name drugs is worth the possible benefits," Terman said. "While newer generation drugs have potential advantages such as limited drug interactions and different side effect profiles, there have been conflicting studies on whether they are cost-effective."

Terman and co-authors used Medicare Part D data from a random sample of 20% of beneficiaries insured between 2008 and 2018. They estimated there were about 77,000 to 133,000 Medicare beneficiaries with epilepsy per year. ASM costs were adjusted to 2018 dollars.

A limitation of the study was the study population, which is not generalizable to younger epilepsy patients with private insurance.

"Medicare Part D tends to lag several years behind private plans regarding deciding to cover generic medications, and tends to pass greater cost-sharing to the beneficiary for generics than do private plans in light of the Coverage Gap Discount Program," the researchers wrote.

"Medicare also is not allowed to directly negotiate with pharmaceutical companies which could be another source of increased costs," they added.

Prescribing practices also may have changed since 2018, the researchers acknowledged: some patents have expired or will expire soon and generic counterparts may enter the market.

"Thus, our work could be updated in the future to reflect such changes," Terman and colleagues wrote.

"Nonetheless, while the exact brand versus generic medications mixture may thus change over time, our work reveals important trends about common newer ASMs and Medicare over the last decade."



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Disclosures

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Bensken received research funding from the National Institute on Minority Health and Health Disparities of National Institutes of Health and serves on the editorial board of Neurology.

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