



ARTICLE BRIEF – #4

Medicaid Prescription Drug Access Restrictions: Exploring the Effect on Patient Persistence With Hypertension Medications

Wilson J, Axelsen K, Tang S. *Am J Manag Care*. 2005;11(special issue):SP27-SP34.

Key Points:

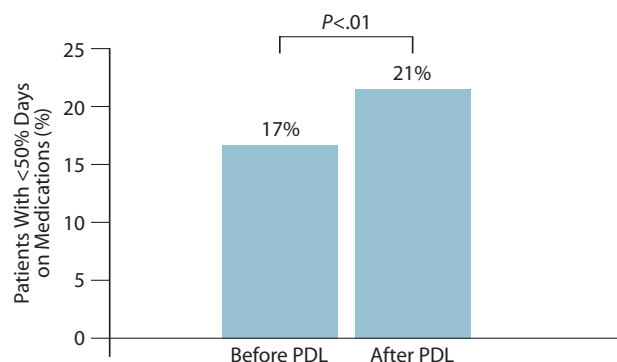
- **Antihypertensives are among the most frequently prescribed drugs and highest payment categories**
- **Implementation of a preferred drug list (PDL) for hypertensive medications in one state led to a statistically significant increase in the likelihood of patients discontinuing therapy—after controlling for other important factors. The chance of discontinuation is estimated to have increased 39% after PDL adoption**
- **Medicaid patients were also significantly more likely to switch from restricted to unrestricted medications, and were significantly less likely to have a restricted drug added to their treatment regimen**
- **African Americans have a higher prevalence of hypertension and may be impacted most by an antihypertensive PDL**

Direct medical costs in the United States for treating cardiovascular diseases including hypertension are estimated at \$21 billion annually and may be high, in part, due to patient nonadherence and nonpersistence with antihypertensive medications. Antihypertensives are among the most frequently prescribed drugs and highest payment drug categories in Medicaid. State Medicaid programs have implemented PDLs in an effort to constrain drug spending growth. Restricting the range of available hypertension treatments may, however, bring unexpected consequences for patients. This retrospective, cross-sectional, cohort study of a pharmacy claims database examined the prescription refill behavior of Medicaid patients in a large state that restricted several classes of antihypertensive medications. The study also examined the limitations on add-on therapy following implementation of the restrictions.

Electronic pharmacy records were obtained for a number of antihypertensive agents listed, and were selected from 12 months before and 12 months after PDL implementation. A total of 3136 patients were included in the AFTER-PDL group, and 2662 patients were included in the BEFORE-PDL group (1501 patients were in both groups). The primary outcome measure was discontinuation measured in terms of the proportion of days when hypertension medication was available to the patient during the year following implementation of the PDL. A patient was classified as discontinued if they had therapy available less than 50% of the time during the 12-month study period. Switching and medication add-on were also evaluated. At baseline, Medicaid covered 98% of prescriptions in both groups.

The discontinuation rate in the AFTER-PDL group was 21% versus 17% in the BEFORE-PDL group. After controlling for important influencing factors including previous time on therapy, sociodemographic data, and medication category, the authors found that after implementation of the PDL, patients were 39% more likely to discontinue their antihypertensive therapy than before PDL implementation, and the increase was statistically significant.

Discontinuation of Antihypertensive Therapy



There was also a significantly higher rate of switching from restricted (nonpreferred) to unrestricted (preferred) medications in the AFTER-PDL group versus the BEFORE-PDL group (36% versus 8%, respectively). Medicaid patients were also less likely to have a restricted drug added to their regimen.

Switching and Adding On Medications

	BEFORE-PDL n=2662	AFTER-PDL n=3136	P Value
Switching From Restricted to Unrestricted Medications			
All Switching	8%	36%	<.01
Within Same Category	1%	29%	<.01
Adding On Restricted Medications			
Patients With Restricted Medication Added to Regimen	9%	3%	<.01

The study cannot determine why the discontinuation rate increased after implementing the PDL, and the authors suggest that further research is required before drawing any strong conclusions. Restricting the range of therapeutic options available to patients or requiring physicians to take additional steps to prescribe certain drugs possibly may lead to frustration on the part of patients, especially if the medications selected as “preferred” are less tolerable than previously unrestricted treatments. The authors did not study outcome measures, but an increase in discontinuation and switching could impact patient health, which in turn could increase overall Medicaid costs. African Americans may be at particular risk due to the higher prevalence of hypertension in such populations.