



ARTICLE BRIEF – #5

Exploration of the Impact of Preferred Drug Lists on Hospital and Physician Visits and the Costs to Medicaid

Murawski MM, Abdelgawad T. *Am J Manag Care*. 2005;11(special issue):SP35-SP42.

Key Points:

- Medicaid preferred drug lists (PDLs), implemented to lower costs, may actually raise costs by increasing rates of hospitalizations and physician office visits
- Given the high adoption rate of PDLs, the resulting impact on Medicaid costs nationwide could be substantial
- After implementation of a PDL, inpatient hospital visits increased 37% to 42%, outpatient hospital visits increased 35% to 41%, and physician visits increased 66% to 78%; the hospital outpatient and physician visit increases were statistically significant in the first 6 months
- A rough estimate of the resulting increases in nonprescription medical costs ranged from \$219 to \$242 per patient per year post-PDL

State Medicaid PDLs have been widely implemented to reduce drug spending growth, but evidence suggests such restrictions may result in cost-shifting that could offset the savings or result in cost increases. Given the high rate of PDL adoption, the unintended impact on Medicaid costs could be substantial.

This regression-based *differences-in-differences* retrospective analysis used anonymous patient-level data on cardiovascular-related inpatient and outpatient hospital and physician visits and procedures to assess the effects of PDL implementation on the number of patient visits, medical procedures, and related costs. Data included in this analysis were for the 6-month baseline period prior to PDL implementation (December 2001 to May 2002) and the two 6-month periods following PDL implementation (June 2002). Overall, a sizeable increase in inpatient and outpatient hospital visits was observed for Medicaid patients after PDL implementation that was statistically significant during the first 6-month post-PDL period for outpatient and physician office visits.

This study compared the rate of change in use of medical services for patients in Medicaid compared to other patients after the PDL was implemented in one state. Inpatient hospital visits increased 37% to 42% in the year after PDL implementation for Medicaid patients versus non-Medicaid patients; and outpatient hospital visits increased 35% to 41%. A similar trend was observed in physician visits, which increased 66% to 78% for Medicaid patients versus non-Medicaid patients during the post-PDL period.

This study also estimated the increase in nonprescription medical costs after PDL implementation to be \$219 to \$242 per patient per year. While it was difficult to compute the cost savings accrued by this PDL, the potential added nonprescription costs for a representative state with 100,000 cardiovascular patients on Medicaid would exceed \$20 million annually. If implementation costs of a PDL or other access restriction are added to that amount, it seems possible that the cost of adopting a PDL may exceed any potential savings. Because the savings and the costs occur in different parts of the Medicaid budget, they may be difficult to detect.

Summary of Net Increases in Visits and Costs for Medicaid Relative to Non-Medicaid Patients in Post-PDL Year

Visit Type	Average Visits		Average \$ Cost	
	Increase	% Increase	Increase	% Increase
Inpatient	0.022 - 0.025	37% to 42%	\$162 - \$185	37% to 42%
Outpatient	0.067 - 0.077	35% to 41%	\$20	61%
Physician	0.188 - 0.223	66% to 78%	\$37	151%