



## ARTICLE BRIEF – #2

### **Physicians' Prescribing Responses to a Restricted Formulary: The Impact of Medicaid Preferred Drug Lists in Illinois and Louisiana**

Virabhak S, Shinogle JA. *Am J Manag Care*. 2005;11(special issue):SP14-SP20.

#### **Key Points:**

- **Medicaid preferred drug lists (PDLs) cause significant spillover to non-Medicaid patients**
- **Stricter PDLs have a greater impact on non-PDL drug prescribing**
- **The higher the proportion of patients covered by Medicaid in a particular physician's practice, the more influenced that physician's entire practice is by Medicaid coverage decisions**
- **Patients not covered by Medicaid in high Medicaid practices are significantly less likely to receive medicines not favored by their state's Medicaid program**
- **Given the minority composition of some Medicaid practices, PDLs can be expected to have a significant impact on minorities**

#### **Discussion:**

Medicaid PDLs have been shown to cause changes in physician prescribing habits toward Medicaid patients that spill over to non-Medicaid patients within those practices in the order of 1.4% to 1.8% for each 10% increase in the physician's Medicaid share. The opportunity to evaluate the impact of Medicaid PDLs on prescribing behavior and resulting spillover arose when 2 states, Illinois and Louisiana, enacted PDLs of differing strictness for similar classes of cardiovascular agents.

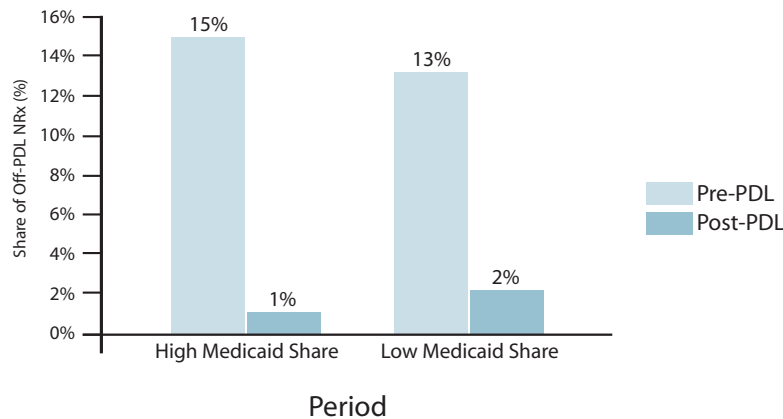
Between mid-2002 and early 2003, Illinois and Louisiana each introduced PDLs for calcium channel blockers (CCBs), ACE inhibitors (ACEIs), angiotensin receptor blockers (ARBs), beta blockers (BBs), and alpha blockers (ABs). When prescribing an agent not covered by the PDL, physicians in Illinois were required to document that the drug was necessary to prevent a life-threatening situation for which drugs on the PDL were not effective. In contrast, Medicaid PDL requirements in Louisiana were less strict, requiring only that physicians submit prior authorization requests. A quasi-experimental design was used to assess the impact of PDLs on prescribing behaviors in these 2 states.

Before the state implemented a PDL, the average Medicaid prescription share for CCBs, ACEIs, ARBs, BBs, and ABs, collectively, was 13.5% in Illinois and 15.3% in Louisiana. After implementing the PDL, the average Medicaid prescription share for these agents fell by 9 percentage points (a 67.7% decrease) in Illinois, and by 6.2 percentage points (a 40.5% decrease) in Louisiana. While the change from levels

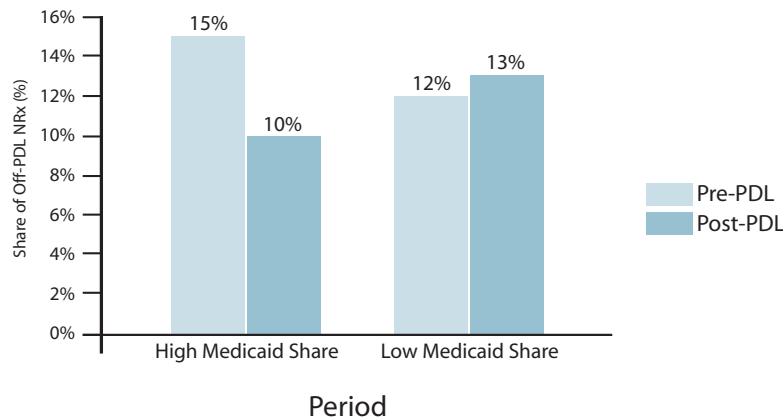
prior to implementation was significant in both states, the statistically significant 7% difference between the 2 states suggests that stricter requirements lead to greater reductions in nonpreferred Medicaid prescriptions.

PDLs also had a greater negative impact on practices with large Medicaid populations. Physicians in Illinois who were high Medicaid prescribers wrote 80% fewer prescriptions for nonpreferred drugs, and physicians in Louisiana wrote 60% fewer nonpreferred prescriptions. Furthermore, practices with >50% Medicaid patients experienced a 37.5% reduction in the use of medicines restricted in Medicaid for non-Medicaid patients, indicating that non-Medicaid patients are significantly less likely to receive nonpreferred medicines.

### Share of Nonpreferred Medicaid New Prescriptions by Physician Type in Illinois



### Share of Medicaid Nonpreferred Medicines for Non-Medicaid Patients, by Physician Type in Illinois



These results show that Medicaid PDLs impact both Medicaid and non-Medicaid patients, and that stricter requirements lead to greater changes in prescribing habits. Given the high minority composition of Medicaid practices as detailed by Headen and Masia, PDLs can be expected to have a significant impact on minorities.