



## ARTICLE BRIEF – #1

### The Effect of Access Restrictions on the Vintage of Drugs Used by Medicaid Enrollees

Lichtenberg FR. *Am J Manag Care*. 2005;11(special issue):SP7-SP13.

#### Key Points:

- Previous research has shown that drug “vintage” (date of approval) can impact patient survival rates and hospitalization costs
- Preferred drug lists (PDLs) significantly increase drug vintage in 6 key therapeutic areas for Medicaid versus non-Medicaid patients (ie, PDLs tend to favor older medicines)
- The average increase in drug vintage among Medicaid patients was 2 months to 1.2 years, but could increase to over 2 years if all states were to adopt stricter policies
- Increased drug vintage disproportionately affects blacks and Hispanics, and therefore may increase disparities in access to the latest treatments

#### Discussion:

The key underlying rationale for introducing a medication access restriction in Medicaid is to save money, and, in general, newer medicines cost more money than older ones. It has therefore been suggested that PDLs may affect the vintage of drugs prescribed to Medicaid patients—that is, the year in which the FDA first approved a drug’s active ingredient. In previous research, older drugs have been shown to negatively impact survival rates and hospitalization costs compared to newer drugs. An analysis of pharmacy claims data was performed to examine the extent to which Medicaid PDLs have impacted the vintage of 6 important classes of drugs used by Medicaid patients: antidepressants, antihypertensives, cholesterol-lowering drugs, diabetic drugs, osteoporosis/menopause drugs, and pain management drugs.

This study encompassed nationwide claims for Medicaid and non-Medicaid patients from January 2001 to December 2003. A *differences-in-differences* approach was used to estimate the relationship across states between the extent of medication access restrictions and the Medicaid versus non-Medicaid *difference* between the pre- and post-PDL *change* in drug vintage.

The mean vintage of drugs prescribed to Medicaid patients in states with PDLs increased significantly during the study period for every drug type studied, compared to drugs prescribed to non-Medicaid patients. The difference in mean vintages of Medicaid versus non-Medicaid prescriptions also increased significantly in states with Medicaid PDLs.

The difference in the increase of drug vintage was less than 2 months for 5 of the 6 drug types studied, but increased more than 7-fold to 1.2 years for pain management drugs. If all states were to adopt the most restrictive policies, the difference between the mean vintages of drugs prescribed to Medicaid versus non-Medicaid patients would have increased by almost a year for antihypertensives, by over a year for antidepressants and cholesterol-lowering drugs, and by 2.26 years for pain management drugs.

These results indicate that Medicaid PDLs increase drug vintage to Medicaid patients versus non-Medicaid patients. Given that the percentage of Medicaid patients who are black or Hispanic is almost twice that in the general population, Medicaid PDLs can be expected to disproportionately increase the vintage of drugs used by blacks and Hispanics as compared to the rest of the population, thus increasing the disparity in access to the latest treatments.