Introduction

The number of prescriptions drugs paid by Medicaid are expected to increase in upcoming years due to the provisions contained in the 2010 Affordable Care Act that will allow millions of uninsured Americans to be covered by the Medicaid program. The Medicaid expansion is expected to have a significant impact in Medicaid prescription drug utilization and expenditures.

Medicaid programs have implemented a variety of policies aiming to control drug cost. One of the Medicaid state programs use different criteria to set the reimbursement for brand and generic drugs. Medicaid programs do not purchase drugs directly; rather they reimburse outpatient pharmacy for drugs prescribed to eligible patients.

The criteria for reimbursement and the dispensing fee amount vary among states, and each state set its own policies to control drug cost.

The differences among Medicaid state programs highlight the need for a better understanding of the factors that affect drug utilization and expenditures.

Objectives

This study assessed trends in state-level, fee-for-service Medicaid generic and brand drug utilization and expenditures, and pharmacy reimbursement rates in the period 2010-2012.

Methods

Medicaid fee-for-service outpatient pharmacy utilization and expenditures, and reimbursement rates (ingredient cost and dispensing fees) for the years 2010-2012 were extracted from State-level data provided from the Centers for Medicare and Medicaid Services.

Current dollars were converted to 2012 dollars using the U.S. consumer price index. Descriptive analyses were performed for all variables. Confidence intervals (95%) were calculated for continuous variables.

Linear regression analysis was performed to assess the relationship between ingredient cost, dispensing fees and drug utilization. The significance level was set a priori for variables was 0.05.

Results

Table 1. Medicaid Fee-for-Service Drug Utilization and Expenditures (2010-2012)

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claims (million)</td>
<td>351.2</td>
<td>333.3</td>
<td>253.8</td>
</tr>
<tr>
<td>% Brand</td>
<td>29%</td>
<td>28%</td>
<td>25%</td>
</tr>
<tr>
<td>% Generic</td>
<td>71%</td>
<td>72%</td>
<td>75%</td>
</tr>
<tr>
<td>Expenditures ($ billion)</td>
<td>$23.5</td>
<td>$25.0</td>
<td>$18.6</td>
</tr>
<tr>
<td>% Generic</td>
<td>18%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>% Brand</td>
<td>82%</td>
<td>83%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Figure 1: Medicaid Fee-for-Service Drug Utilization by State (2012)

Figure 3: Medicaid Fee-for-Service Percentage of Generic Utilization and Expenditures (2010-2012)

Figure 4: Medicaid Fee-for-Service Average Reimbursement per Claim (2010-2012)

Fee-for-service Medicaid expenditures (n=42 states) decreased from $23.0 billion in 2010 to $18.7 billion in 2012 (14.9% decrease) and drug utilization decreased from 351.2 to 281.4 million claims in the same period (19.9% decrease).

Generic utilization represented 70.6% of total prescriptions in 2010 and 75.4% in 2012, and generic expenditures represented 17.9% of total expenditures in 2010 and 18.0% in 2012. The average reimbursement of generic drugs was $17.89 (95%CI=16.63-$19.14) in 2010 and decreased to $16.91 (95%CI=14.48-$19.34) in 2012, while the average reimbursement of brand drugs increased from $197.34 (95%CI=$184.74-$209.94) to $235.93 (95%CI=$218.07-$253.79).

The average pharmacy dispensing fee increased from $4.34+$1.24 to $4.60+$2.56 for generics and from $4.10+$1.19 to $4.36+$2.58 for brands. We found no statistically significant relationship between the number of claims or the total state expenditures, and the dispensing fee or the average ingredient cost.

Discussion

We found a significant variation in generic utilization across states in the period 2010-2012. On average 75% of all prescription paid by Medicaid were generics.

Nearly 50% of the states had generic utilization rates below the national average (75%).

These findings suggest that additional savings could be achieved by promoting generic drug utilization in Medicaid programs, especially in states with low generic utilization rates.

Conclusions

Pharmacy expenditures decreased in the period 2010-2012 due to a decrease in the volume of prescriptions and the reduction in generic prices.

Differences in dispensing fees and ingredient costs among Medicaid programs were independent of total prescription volume.

Future studies could evaluate dispensing patterns of brand drugs when generic alternatives are available, and potential saving from increasing the utilization of generic drugs.