Utilization of Benzodiazepines and Barbiturates after Medicare Part D Coverage
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INTRODUCTION
Benzodiazepines (BZD) and barbiturates (BARB) were excluded from Medicare Part D covered drugs from 2006 to 2012. Starting in 2013, the Part D program began to cover BZD for all Part D medically accepted indications and BARB when used in the treatment of epilepsy, cancer, or chronic cognitive disorders.

The study objective was to examine the cost and use of these drugs in Medicare beneficiaries since most of these drugs are included by Beers’ criteria.

METHODS

• Excluded drugs that were previously covered by Medicare Part D program (e.g., Primidone and Butalbital combination drugs for BARB and Chlordiazepoxide combination drugs for BZD)

• Final list of drugs included for BZD and BARB

Data Source from Chronic Condition Warehouse (CCW)

• 2013 Prescription Drug Event (PDE) - 2013 Beneficiary Summary

2013 Drug Characteristics

Study Population

• Study beneficiaries who had at least one 2013 PDE

RESULTS

Table 1. Utilization and Total Prescription Cost for BARB and BZD among 2013 PDEs

<table>
<thead>
<tr>
<th>Data Type</th>
<th>2013 PDEs</th>
<th>BZD</th>
<th>BARB</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>Number of PDEs</td>
<td>1,079,103,621</td>
<td>349,339,166</td>
</tr>
<tr>
<td></td>
<td>Total prescription cost (millions)</td>
<td>833,757,180</td>
<td>42,139,130</td>
</tr>
<tr>
<td></td>
<td>Number of users</td>
<td>100,199,239</td>
<td>8,773,232</td>
</tr>
<tr>
<td>Ages 65+</td>
<td>Number of PDEs</td>
<td>397,068,532</td>
<td>175,039,484</td>
</tr>
<tr>
<td></td>
<td>Total prescription cost (millions)</td>
<td>147,927,012</td>
<td>6,732,103</td>
</tr>
<tr>
<td></td>
<td>Number of users</td>
<td>46,253,611</td>
<td>34,023,344</td>
</tr>
</tbody>
</table>

Analysis

• Overall BARB and BZD PDE use and by gender (age ≥ 65 vs. 65 and older), gender (low income subsidy [LIS] status) based on positive low income cost sharing summary amount), primary pharmacy dispensing type (Retail), Other, Primary pharmacy dispensing type (Retail, Long-Term Care [LTC]), Other), Medical specialty (Physician/Physician's Assistant)

• Prescriptions of BARB and BZD by age

4. Total prescription cost of BZD and BARB

5. Total prescription cost of BZD and BARB

6. Total prescription cost of BZD and BARB

7. Total prescription cost of BZD and BARB

CONCLUSIONS

• BZD and BARB constituted almost 3% of all PDEs with the majority being BZD. These PDEs were used by 7 million Medicare beneficiaries, of whom almost 5 million were beneficiaries 65 and older.

• Phenobarbital was the most prevalent barbiturate with butabarbital and secobarbital accounted for the remaining PDEs.

• The mean ± SD number of PDE per BARB user was 8.7 ± 5.9.

• A total of 46.8% and 72.9% of the BZD PDEs were short- or intermediate-acting (SA/IA) BZD in all users and the subset of 86.6% of all BZD users (older users), respectively.

• A total of 86.6% of all BZD users only had one unique drug and 86.6% of all the users.

• The prevalence of only SA/IA and LA BZD use was 64.0% and 27.9%, respectively, while 80% of all BZD users compared 5% of all users or 6-year users had SA/IA only (BZD) 6-year users vs. 60% of all BZD users (24.4%).

REFERENCE


Funding source: Genentech/Medimmune and Biogen Idec

Limitation of findings: Source data is an aggregate.

Figure 1. Characteristics of BARB and BZD PDEs

Figure 2. Benzodiazepines by Pharmacy Dispensing Type and Prescriber Specialty

Figure 3. Characteristics of BARB and BZD PDEs

Figure 4. Benzodiazepines by Pharmacy Dispensing Type and Prescriber Specialty

Figure 5. Prevalence of BARB and BZD among 2013 PDEs

Figure 6. Prevalence of BARB and BZD among 2013 PDEs

Figure 7. Prevalence of BARB and BZD among 2013 PDEs

Figure 8. Prevalence of BARB and BZD among 2013 PDEs