Medicare and Medicaid Drug Expenditures for Medicare and Medicaid Dual Eligible Enrolees
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INTRODUCTION
Since 2006, Medicare has covered prescription drugs although Medicaid continues to pay billions of dollars per year for medications for Medicare-Medicaid dual eligible beneficiaries. In 2010, Medicare covered 29% of total drug costs while accounting for 25% of the population. Linkage of Medicare and Medicaid data in the Medicare-Medicaid Linked Eligible Analytic Data Source (MMLEADS) allows for accurate evaluation of drug cost and utilization for Medicare-Medicaid eligible beneficiaries. MMLEADS is a suite of analytic files designed to serve as a tool for research of Medicare and Medicaid enrollees in addition to individuals who only receive Medicaid coverage. It allows for investigation of eligibility, enrollment, cost and utilization, and 49 common health conditions for individuals enrolled in Medicare and/or Medicaid. Cost and utilization has been summarized into therapeutic classes within Medicare Part D and Medicaid drug categories.

The objectives of this study were: 1) to identify a population with high-drug costs and 2) to characterize the drug use in terms of specific therapeutic classes of medications.

METHODS
Study Design: The 2010 MMLEADS was used to calculate total per person Medicare, Medicaid, and total combined drug costs. We identified a high drug cost population as those in the 95\(^{th}\) percentile and described cohort characteristics including dual status, age, long-term care use, and 49 condition indications. The drug classifications were the VA National Drug File class headers. A 1% sample (n=561,171) was used for logistic regression analysis to determine specific risk factors for high drug costs.

RESULTS
Total drug costs for 2010 were $53.7 Billion; Medicare only enrollees accounted for 28% of total drug costs, Medicare-Medicaid eligible accounted for 65% and Medicaid only with disability accounted for 12% (Figure 1).

The drug classification with the highest annual per user costs for each Medicare-Medicaid group was Antineoplastic drugs for each group (Table 1). Medicare-Medicaid enrollees had a higher average per user cost for Antineoplastic agents in 2010.

States with the highest per user drug payments in 2010 included the District of Columbia ($3,817), New York ($3,531), Massachusetts ($3,351), and Alaska ($2,872) (Figure 2). The drug classification with the highest annual per user costs for each state were Antineoplastic drugs as a group and Antineoplastic agents as a group.

States with the highest percentage of high cost drug payments in 2010 included the District of Columbia (28\%), New York (18\%), and Alaska (18\%) (Figure 3). The likelihood of having high drug costs in 2010 indicated that Medicare enrollees were more likely compared to Medicaid enrollees and these individuals have a higher rate of mental health disorders resulting in high cost for CNS drugs.

CONCLUSIONS
Individuals with high annual drug cost are largely Full Benefit Medicare-Medicaid enrollees and these individuals have a higher rate of mental health disorders resulting in high cost for CNS drugs. Interventions designed to improve care for people with mental health conditions may reduce drug costs for Medicare and Medicaid.

Table 1: Medication Expenditures for Medicare and Medicaid Dual Eligible Enrolees

<table>
<thead>
<tr>
<th>Drug Classification</th>
<th>CMS Only</th>
<th>Medicaid Only</th>
<th>Medicare Only</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antineoplastic agents</td>
<td>$3,817</td>
<td>$2,872</td>
<td>$3,351</td>
<td>$3,531</td>
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</tbody>
</table>

Table 2: Total Drug Costs Per User Summary Statistics, 2010

<table>
<thead>
<tr>
<th>Drug Classification</th>
<th>Mean</th>
<th>Variance</th>
<th>Std. Deviation</th>
</tr>
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<tbody>
<tr>
<td>Antineoplastic agents</td>
<td>$3,817</td>
<td>$1,038</td>
<td>$32</td>
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</table>

Figure 1: Percentage of Total Drug Payments, 2010

Figure 2: Per User Total Drug Payments by State, 2010

Figure 3: Condition Prevalence by High Cost Group Association

Figure 4: High Cost Group Percentage by State, 2010

Table 3: Likelihood of High Cost Drug Payments, 2010

<table>
<thead>
<tr>
<th>Condition</th>
<th>CMS Only</th>
<th>Medicaid Only</th>
<th>Medicare Only</th>
<th>Combined</th>
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<tbody>
<tr>
<td>Depression</td>
<td>0.34</td>
<td>0.31</td>
<td>0.37</td>
<td>0.35</td>
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<tr>
<td>Schizophrenia</td>
<td>0.18</td>
<td>0.15</td>
<td>0.13</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Funding Source: Centers for Medicare and Medicaid Services