Outcomes of an opioid overutilization pharmacist consultation program

**Objective & Purpose**

Identify members potentially inappropriate overutilizing CS and measure the pre and post impact of a pharmacist consultation program.

**Methods**

### Pharmacists

- A Medicare Part D administrative pharmacy claims dataset with $1.1 million eligible members was used for the analysis.
- Members were required to be continuously enrolled from 12/1/12 through 9/29/13 (end of pre-intervention period).
- Members for prescriber interventions were identified using an internally defined CS score and a daily morphine equivalent dose (MED) calculation. MED was calculated by multiplying number of dosage units per day (i.e., quantity dispensed divided by days supply) X mg of opioid in each dose X conversion factor. MED is calculated for the measurement period and added if claims overlap.

### Controlled Substance Claims

- The **CS Score** (Table 1) was calculated using three months of pharmacy claims data from 3/1/13 to 5/31/13 and the formula:
  
  ![Calculation of CS Score](https://www.prime.com/content/uploads/2013/08/CS-Score-Calculation.png)

### Prescriber-Directed Changes

- Out of approximately 1.3 million Medicare Part D enrollees, 229,785 were identified in the pre-period (9/20/12 through 9/29/12) and high and high MED at least one day.
- A 10% (of 8,090 CS enrollees who met the intervention criteria) pre and post period (both 90 days) opioid and CS measures included:
  
  - Opioid claims
  - Controlled substance claims
  - Member demographic data
  - Member condition data
  - Prescription drug use data
  - Prescriber-directed changes

### Prescriber-Directed Changes to Controlled Substances

- Prescribers verified therapy if 50+ CS claims were filled with no change in therapy when was warranted.

### Challenges

- The CS score
- Single dose
- Three months
- CS (e.g., controlled substance)
- Inappropriately overutilizing CS

### Results

- **Table 1. Controlled Substance Score Calculation**

<table>
<thead>
<tr>
<th>Outcome measure per member</th>
<th>Three months pre (n=229,785)</th>
<th>Three months post (n=229,785)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlled substance score</td>
<td>19.7 (9.7)</td>
<td>16.5 (6.5)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Controlled substance claims</td>
<td>19.7 (9.7)</td>
<td>16.5 (6.5)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Opioid claims</td>
<td>10.7 (7.1)</td>
<td>6.1 (3.9)</td>
<td>&lt;.0001</td>
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<tr>
<td>Prescriber-directed changes</td>
<td>10.2 (7.1)</td>
<td>4.6 (4.0)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Controlled substance claims</td>
<td>3.1 (4.5)</td>
<td>2.1 (3.9)</td>
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<tr>
<td>Controlled substance claims</td>
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<td>1.3 (0.8)</td>
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**Conclusion**

- The average number of pharmacy claims was not significantly different for the post-period in the CS claims or opioid claims.

**Limitations**

- Administrative pharmacy claims have the potential for recoding and include assumptions of member smoking status and medication adherence that are negative or positive.
- Outcomes for members were not continuous and terminated post consultation intervention.
- Data are limited to Medicare Part D members, therefore the findings may not be generalizable to commercial populations.

**References**

1. Jones, C.M., K.A. Mack and L.J. Paulozzi. Pharmaceutical overdose deaths, NSDUH/2k10Results.htm#2.16