Prevalence of Crohn’s Disease (CD) and Ulcerative Colitis (UC), Biologic Therapy Use, and Total Medical and Pharmacy Claims Expense Associated with CD and UC in a Population of 15 Million Commercially Insured Members

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Results

Objectives

1. To determine CD and UC prevalence, percentage treated with biologic therapy, and total medical and pharmacy claims expense per member, incurred between July 2017 and June 2018, compared to members with matched members without UC or CD.

Methods

1. From 15 million commercially insured members, we identified individuals continuously enrolled July 1, 2017 to June 30, 2018, and age ≤65 years.

2. Based on published criteria, CD or UC were defined as a primary diagnosis code or a majority of the most recent coded claims with a diagnosis code.

3. We selected matched sample members—both CD/UC and matched members without any claims for CD/UC, matched 1:1 with UC and UC, age, sex, and plan.

4. All pharmacy claims were categorized by National Drug Code (NDC) and divided into medical claims and pharmacy claims.

Results

1. Among 1.2 million continuously eligible members, 816 (0.21 percent) members were classified as CD or UC, and 1,276 (0.04 percent) members were identified as UC. Of 816 members classified as CD, 264 (32.5 percent) had UC.

2. Diagnoses were verified by pharmacy claims on at least 50 percent of the most recent two years. The remaining 50 percent were verified by medical claims. Among the remaining 50 percent, 586 (0.01 percent) members were identified as CD and 264 (0.01 percent) were classified as UC.

3. Therefore, the prevalence of CD among members who were also classified as UC was 32.5 percent.

4. Of the 816 members classified as CD, 380 (46.6 percent) were classified as UC.

Table 1: Members identified with CD or UC, prevalence, and medical or pharmacy claims expense associated with CD or UC in a population of 15 million commercially insured members.

<table>
<thead>
<tr>
<th>Expense Category</th>
<th>CD UC Claims</th>
<th>CD Claims Only</th>
<th>UC Claims Only</th>
<th>Total Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>1,335,799</td>
<td>1,335,799</td>
<td>0</td>
<td>1,335,799</td>
</tr>
<tr>
<td>Medical</td>
<td>2,108,014</td>
<td>2,108,014</td>
<td>0</td>
<td>2,108,014</td>
</tr>
<tr>
<td>Pharmacy + medical</td>
<td>2,443,813</td>
<td>2,443,813</td>
<td>0</td>
<td>2,443,813</td>
</tr>
<tr>
<td>Total</td>
<td>2,443,813</td>
<td>2,443,813</td>
<td>0</td>
<td>2,443,813</td>
</tr>
</tbody>
</table>

Inpatient

1. Of the 816 members classified as CD, 7,740 (92.0 percent) members had an inpatient hospitalization for CD or UC, and 4,258 (52.2 percent) members had an inpatient hospitalization for UC.

2. Mean total cost of care for CD was $19,620, compared to a mean total cost of care for UC of $2,307.

3. Compared to members without CD or UC, members with CD or UC and those with only CD had higher costs.

Table 2: Medical outpatient, pharmacy, and total medical and pharmacy claims expense associated with CD or UC in a population of 15 million commercially insured members.

<table>
<thead>
<tr>
<th>Expense Category</th>
<th>No CD or UC</th>
<th>No CD</th>
<th>No UC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>10,885</td>
<td>10,885</td>
<td>0</td>
<td>10,885</td>
</tr>
<tr>
<td>Medical</td>
<td>2,850</td>
<td>2,850</td>
<td>0</td>
<td>2,850</td>
</tr>
<tr>
<td>Pharmacy + medical</td>
<td>11,276</td>
<td>11,276</td>
<td>0</td>
<td>11,276</td>
</tr>
<tr>
<td>Total</td>
<td>11,276</td>
<td>11,276</td>
<td>0</td>
<td>11,276</td>
</tr>
</tbody>
</table>

Conclusions

1. Using real-world, integrated medical and pharmacy claims data, from a large commercial population, CD and UC have a presence of 0.1 percent.

2. Treatment with biologic therapy (BT) was more common among members with CD or UC (74.5 percent) than among UC (11.2 percent).

3. Members hospitalized for CD or UC account for a disproportionate share of BT costs.

4. BT accounted for 70.7 percent of the annual CD or UC total costs, therefore it is not possible to obtain a direct medical care offset return on investment.

5. BT value needs to be assessed from a societal perspective and with a long time horizon.

6. Although BT was used to treat CD or UC, payer-value-based contracting manufactured should be considered to ensure BT value to cost is obtained.

Limitations

1. This study uses information from administrative claims to determine which members have CD or UC. Some study members may be misclassified.

2. The study may have limited extrapolation to non-commercial populations.

3. This study only uses the direct insurance claims claims data from members with at least five medical claims with a diagnosis code for CD or UC.

4. Members without CD or UC were selected based on the age group, sex, and plan.

References


