Chronic obstructive pulmonary disease (COPD) is estimated to impact over 12.1 million Americans over the age of 18, primarily

Each algorithm category was described with respect to demographics, clinical characteristics, healthcare costs, and medication usage in order to understand the manner in which the algorithm grouped patients and the most commonly used COPD related-ICD codes have been validated using chart review (491, 492, and 496). There is a potential for research that captures those exacerbations resulting in only outpatient physician visits or managed联动 with pharmacists.

The objective of the present study was to develop and refine an algorithm, using both medical and pharmaceutical claims, that identifies patients likely to experience an exacerbation in the inpatient and outpatient settings. The algorithm could be used to target appropriate patients for interventions to potentially improve patient care and prevent recurrences.

Methods

1. Statistical analysis was performed by using the following hierarchical system of classification:
   • Hospitalization for COPD* with respiratory failure
   • Hospitalization for COPD* without respiratory failure
   • Outpatient visit for COPD* with concurrent antibiotic and/or oral corticosteroid (OCS) use within 7 days of diagnosis
   • Outpatient visit/OCS
   • No Outpatient visit/OCS

Results (continued)

Table 1. Use of long-term controller medications by patients with and without apparent exacerbations

<table>
<thead>
<tr>
<th>Medication Usage</th>
<th>No apparent exacerbation</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICS/LABA</td>
<td>58.1%</td>
<td>0.0001</td>
</tr>
<tr>
<td>LABA</td>
<td>34.8%</td>
<td></td>
</tr>
<tr>
<td>Methylxanthines</td>
<td>6.4%</td>
<td></td>
</tr>
</tbody>
</table>

Conclusions

The study provides a method for classifying COPD exacerbations via healthcare claims, but also illustrates an opportunity for further research to identify and target appropriate patients for interventions to potentially improve patient care and prevent recurrences.

Disclosures

Disclosure}

The authors report no conflicts of interest.

References


