Hereditary Angioedema: A Comprehensive Integrated Medical and Pharmacy Claims Analysis of Utilization and Costs Among 15 Million Commercially Insured Members

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Background

Hereditary Angioedema (HAE) is a rare genetic disease affecting about 1 in 50,000 people in the United States. 

The HAE population is heterogeneous, with at least 10 subtypes of HAE. 

HAE attacks are unpredictable and can cause significant morbidity and mortality. 

Objective

To identify individuals utilizing HAE drugs and describe their characteristics, health resource use, and cost. 

Methods

Integrated medical and pharmacy claims data from Prime’s commercial book of business were included in the analysis. 

Results

Between Jan. 1, 2016 and June 30, 2016, there were 226 commercially insured members who had an HAE medical or pharmacy claim and had ≥12 months of continuous enrollment. 

The 10 members with over $1 million in HAE expenditures across Prime’s commercial book of business are administered through both the medical and pharmacy benefit. 

Total cost of care for HAE members was $13.3 million (30%) of the total cost of care for all members in 2016. 

Mean cost per patient was $409,925, with a range of 19 years to 71 years, and 75% (83 of 111) were female. 

Table 1. Hereditary Angioedema (HAE) Members by ≥$1 Million HAE Pharmacy and Medical Expenditures Over One Year Follow-up

<table>
<thead>
<tr>
<th></th>
<th>HAE Specialty Drug Expenditures</th>
<th>Hospitalization</th>
<th>Office Visit</th>
<th>ER Visit</th>
<th>All Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>18 months follow-up</td>
<td>6 months prior</td>
<td>12 months</td>
<td>12 months</td>
<td>12 months</td>
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<tr>
<td>Mean</td>
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<td>Median</td>
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Discussion

At least 1 emergency room visit (ER) was observed for 50% (45%) of members. 

Conclusions

Individuals utilizing HAE drugs were extremely rare at 1 in 50,000 in the commercial population, and are not generalizable to the overall population. 

HAE specialty drugs accounted for the majority (97%) of the total cost of care for HAE members. 

Some totals may not sum due to rounding.

References
