The Impact of Immunoglobulin Utilization Management and Dose Optimization in a Regional Health Plan

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Purpose

• To measure the impact of a comprehensive utilization management program and dose optimization program on overall immunoglobulin (Ig) utilization and spend in a regional health plan.

Background

• Due to the lack of consensus guidelines and the use of Ig therapy in several disease states, the economic burden is significant for managed care organizations.
• As the utilization of Ig therapy expands without external funding, the economic burden is likely to increase.

Methods

• The program was executed in a regional health plan with approximately 700,000 covered lives.
• It consisted of implementing a comprehensive medical criteria with steps through alternative therapies when clinically appropriate, along with pharmacist-led interventions to recommend dose optimization based on adjusted body weight (ABW) instead of actual body weight in obese adults.
• Impact of dose optimization was assessed for the first year of program implementation, from April 1, 2014 to March 31, 2015, based on data collected from prior authorization (PA) reviews.
• Medical claims were also analyzed to compare the last quarter of the implementation period (intervention period) to the same time period prior to program implementation (baseline period) to assess the impact on general Ig utilization and cost. Associated ICD-9 codes with each medical claim were determined to be either appropriate or inappropriate after pharmacist review of either inclusion in current medical policy and/or presence of evidence-based literature to support Ig use.

Disclosures

• This research was conducted by Magellan Rx Management, Newport, RI, without external funding.

Results

ABW Dosing Recommendations

<table>
<thead>
<tr>
<th>Reason for Dose Optimization</th>
<th>% of Unique Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly Based on ABW</td>
<td>45%</td>
</tr>
<tr>
<td>Yes</td>
<td>53%</td>
</tr>
<tr>
<td>No</td>
<td>22%</td>
</tr>
</tbody>
</table>

Net Savings by LOB per Quarter, Approved Requests

<table>
<thead>
<tr>
<th>LOB</th>
<th>Total Paid Amount</th>
<th>% Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>$120,000</td>
<td>25%</td>
</tr>
<tr>
<td>Medicare</td>
<td>$147,026</td>
<td>20%</td>
</tr>
<tr>
<td>Commercial</td>
<td>$226,828</td>
<td>18%</td>
</tr>
</tbody>
</table>

Discussion

• Dose optimization led to a savings of 8% or $606,235 over a one year time frame.
• The majority of this savings can be attributed to dose adjustments in obese patients.
• Medical claims analysis demonstrated that utilization and overall costs associated with Ig were consistently inappropriate after pharmacist review. Reasons for dose optimization included that utilization and overall costs associated with Ig were consistently inappropriate after pharmacist review (post-implementation) compared to the first quarter 2014 (pre-implementation).
• Cost per claim: Decreased by 11%
• Number of units: Decreased by 9%
• Paid amount for inappropriate indications: Decreased by 77%

Conclusion

• Following the initiation of the Ig utilization and dose optimization management program on 4/1/2014, a reduction in total spend, claims, units, members, average cost per claim, and inappropriate utilization was observed.
• Medical claims analysis revealed that the utilization management and dose optimization program on 4/1/2014, a reduction in total spend, claims, units, members, average cost per claim, and inappropriate utilization was observed.
• A large proportion of these savings can be attributed to ABW dose optimization. The remaining savings are likely attributable to a reduction in inappropriate use, as well as possible changes in prescribing behavior that occurred as a result of provider outreach and education by pharmacists.

References

• Ravizza SP et al. Considerations for the Optimal Use of Intravenous Immunoglobulin. The American Journal of Managed Care 18(4) (2012) 567-569
• Siegel C et al. Safety of IVIG Therapy: Titer to Individual Patient Considerations for Pharmacy Practice. Pharmacy Practice News. 3 June 2007, vol. 18, no. 6