A Comparison of the Costs Associated with the Administration of Select High-cost Infused Medications in Three Sites of Care for a State Medicaid Population

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**BACKGROUND**

- According to a nationwide 2017 survey, 58 percent of commercial health plans attribute almost half of specialty drug costs to the medical benefit (46%) with the remainder attributed to the pharmacy benefit (5%).
- Site of care (SOC) programs are one of many strategies used by payers to reduce specialty drug spend. These programs aim to shift utilization of high-cost infusions to less costly sites of administration.
- While the cost-savings associated with SOC programs are described in the literature for commercial insurers, data is lacking on their impact in Medicaid programs.
- The Massachusetts Medicaid fee-for-service (FFS) and Primary Care Clinician (PC) plans do not currently manage drug spend through an SOC program.

**OBJECTIVES**

To evaluate the costs associated with the administration of select high-cost infused medications in three SOCs among the Massachusetts Medicaid FFS and PCP plans populations.

**METHODS**

This retrospective analysis included pharmacy and medical claims data for select high-cost infused medications between April 1, 2015 and September 30, 2017.

- Paid claims for abatacept, belimumab, etanercept, golimumab, inravusimab, infliximab, rituximab, and tocilizumab were included in the analysis.
- All claims were filtered to ensure inclusion of claims only for the pharmacy office SOCs and any home or office claims were excluded.
- Claims for immunomodulators administered subcutaneously in the member home or physician office SOCs were included.

**RESULTS**

### Table 1: ACPC and MCPC for Select High-cost Infused Medications by SOC

<table>
<thead>
<tr>
<th>Medication Class</th>
<th>Medication</th>
<th>ACPC</th>
<th>MCPC</th>
<th>SOC</th>
<th>Acquisitions</th>
<th>Claims with ( \geq \text{4 Claims} )</th>
<th>Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVIG</td>
<td>Gammagard®*</td>
<td>$7,663</td>
<td>$2,669</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>Gammageen®</td>
<td>$6,912</td>
<td>$8,485</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>GammaCryl®</td>
<td>$7,190</td>
<td>$7,190</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>ProportM™</td>
<td>$5,669</td>
<td>$6,003</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Adrenus® (incidental)</td>
<td>$1,357</td>
<td>$1,567</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>Rebif®</td>
<td>$4,003</td>
<td>$1,897</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>Rituxan® (incidental)</td>
<td>$3,437</td>
<td>$2,880</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>Humira® (incidental)</td>
<td>$5,687</td>
<td>$5,687</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>Syskem (incidental)</td>
<td>$13,237</td>
<td>$13,237</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>70%</td>
</tr>
<tr>
<td>Others</td>
<td>UPL®</td>
<td>$6,060</td>
<td>$6,060</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td>110%</td>
</tr>
</tbody>
</table>

**DISCUSSION**

- Massachusetts Medicaid reimburses for hospital outpatient services using APEC, an episode-specific, all-inclusive payment for each episode.
- APEC = Episode Specific Total Enhanced Ambulatory Patient Grouping (EAPG) Payment + Outlier Component (if applicable)
- The EAPG system uses HC-10 codes and Healthcare Common Procedure Coding System (HCPCS) codes to group similar services for reimbursement.
- Medications are grouped into one of 12 EAPG drug categories (based on cost, clinical similarity, and substitutability), with each category assigned a weight to determine reimbursement.
- The initial results for the hospital outpatient SOC did not conform with anticipated findings and given the complexity of the APEC methodology, the final results for the hospital outpatient SOC are pending further review and evaluation.
- The ACPCs and MCPCs were similar in the member home and physician office SOCs for all medications evaluated in Table 1 (Figures 1 and 2).
- The PMPM costs for all IVIG and immunomodulators evaluated were similar in the member home and physician office SOCs (Figures 3 and 4).

**LIMITATIONS**

- With the current EAPG system, hospital outpatient facilities may be reimbursed more than the acquisition cost of some medications and less than the acquisition cost of others.
- The unique payment structure in the hospital outpatient SOC makes it challenging to compare costs across SOCs or extrapolate to other plans.
- This analysis evaluated a short study time frame during which there was no re-utilization for some medications in all study periods.
- There were limited physician claims for medications and, as a result, medication costs through pharmacy claims were used to calculate ACPCs and MCPCs for most medications in the physician office SOC.

**CONCLUSIONS**

- The preliminary analysis suggests that for the Massachusetts Medicaid FFS and FCP plans, the costs associated with the administration of the selected high-cost medications evaluated were similar in the member home and physician office SOCs.
- Based on the initial findings, further study is required to fully evaluate the hospital outpatient EAPG payment system and to make overall conclusions about the least expensive SOC.

**FUTURE STUDIES**

- An expanded analysis will be performed to evaluate the costs associated with the administration of medications from all 12 EAPG drug categories in each SOC. This review will allow for overall conclusions regarding SOC cost trends.

**REFERENCES**

Sage Baumann, PharmD, Thomas C. Pomfret, PharmD, BCPS, Craig Thomas C. Pomfret, PharmD, MPH, BCPS, Tasmina Hydery, PharmD, BCPS, Patricia Leotis, PharmD, MPH, Patricia Leotis, PharmD, MPH, Tasmina Hydery, PharmD, BCPS, Carolina Alper, MD, Kimberly Lentz, PharmD, Paul L. Jeffrey, PharmD

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