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 respondent commercial health plans attribute almost half of specialty drug costs to the medical benefit (45%) with the remainder attributed to the pharmacy benefit (55%).

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 infused medications to less costly sites of administration.

While the cost-savings associated with SOC programs are documented in the literature for commercial insurers, data is lacking on their impact in Medicaid programs.

The Massachusetts Medical Fee-for-Service (FFS) and Primary Care Clinician (PCC) 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 PCC plans populations.

METHODS

This retrospective analysis included pharmacy and medical claims data for select high-cost infused medications between April 1, 2017 and September 30, 2017. Parke-Davis claims for atorvastatin, bivalirudin, enalapril, gemfibrozil, gemcitabine, infliximab, ibuprofen, intravenous immune globulins (IVIG), labetalol, losartan (non-onioning, indomethacin), tocoliumum, and valproic acid were included.

All paid claims with third-party liability coverage (regardless of SOC) and 340B claims in the member home and physician office SOCs were excluded. Claims for immune globulins administered subcutaneously in the member home or physician office SOCs were included. These claims could not be excluded in the hospital outpatient SOC.

The average cost per claim (ACPC) and median cost per claim (MCPC) were calculated for each medication in each SOC as follows:

- Member home SOC = medication cost (from pharmacy claims or physician office claims) + allowed home administration fee
- Physician office SOC = medication cost (from pharmacy claims or physician office claims) + allowed physician administration fee
- Two separate calculations were performed for each SOC with the higher of the ACPC and MCPC results included for analysis.

Hospital outpatient SOC = adjudicated payment per episode of care (APEC) + allowed professional service fees.

The per member per month (PMPM) cost for each medication in each SOC was calculated using the following methodology:

PMPM = total amount paid + number of unique utilizers ÷ six months

Statistical analysis:

- Descriptive statistics (including box and whisker plots) were used to report ACPCs and MCPCs for IVIG and immunomodulators by SOC

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>APEC</th>
<th>SOC</th>
<th>Charges with an Outlier*</th>
<th>Uniquely Utilizers</th>
<th>Claims</th>
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<tbody>
<tr>
<td>IVIG</td>
<td>Gammagard® S/D</td>
<td>$4,962</td>
<td>$7,974</td>
<td>$6,169</td>
<td>Pending</td>
<td>$7,032</td>
<td>139</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>Gammagard® S/D</td>
<td>$4,962</td>
<td>$7,974</td>
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<td>139</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>Gamunex-C®</td>
<td>$2,672</td>
<td>$3,784</td>
<td>$7,672</td>
<td>Pending</td>
<td>$7,672</td>
<td>146</td>
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<td>$7,672</td>
<td>146</td>
<td>1,208</td>
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<td>Immunomodulators</td>
<td>Atorvastatin® (intravenous)</td>
<td>$1,570</td>
<td>$2,192</td>
<td>$3,972</td>
<td>Pending</td>
<td>$7,032</td>
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<tr>
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<td>Bevacizumab®</td>
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<td>$6,435</td>
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<td>Pending</td>
<td>$7,677</td>
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<td></td>
<td>Eculizumab®</td>
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<td>$3,972</td>
<td>$7,677</td>
<td>Pending</td>
<td>$7,677</td>
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<td>1,208</td>
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<tr>
<td>Others</td>
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<td>$13,351</td>
<td>$16,587</td>
<td>$11,756</td>
<td>Pending</td>
<td>$11,756</td>
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<td>$11,756</td>
<td>106</td>
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</table>

Figure 1: ACPC and MCPC for IVIG by SOC

Figure 2: ACPC and MCPC for Immunomodulators by SOC

Figure 3: PMPM Cost for IVIG by SOC

Figure 4: PMPM Cost for Immunomodulators by SOC

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 APEC system uses LC-10 codes and Healthcare Common Procedure Coding System (HCPCS) coding (if applicable) to code groups similar services for reimbursement.

- Medications are grouped into one of 22 EAPGs drug categories based on cost, clinical similarity, and variability, 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 billing 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 (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.

- Medications selected for this analysis may not be representative of all medications in terms of overall SOC cost trends.

- 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 time frame during which there was no reutilization for some medications in inpatient hospital settings.

- 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 PCC plans, the costs associated with the administration of the select 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 APEC 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 22 EAPG drug categories in each SOC. This review will allow for overall conclusions regarding SOC cost trends.

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7. Massachusetts Medicaid reimburses for hospital outpatient services using APEC, an episode-specific, all-inclusive payment for each episode. 2017
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