

Synagis Utilization and Trending Analysis

October 15, 2007 – March 31, 2008

Introduction

Per Mississippi Division of Medicaid (DOM) policy, Synagis[®] (palvizumab) coverage requires prior authorization for all beneficiaries. The approval criteria are based on manufacturer labeling and closely parallel the American Academy of Pediatrics recommendations. All requests for prior authorization of Synagis[®] are reviewed by the clinical staff of Health Information Designs (HID).

The purpose of this analysis is to provide an overview of the recent RSV season in terms of utilization of the product and cost to DOM. We will also provide trending information over several recent years.

As reported by the CDC on the National Respiratory and Enteric Virus Surveillance System (NREVSS) Website, RSV activity in Mississippi peaked during November and December and has steadily declined through subsequent months. This information supports DOM's policy of limiting the time frame for approval of prior authorizations.

Overall Utilization and Cost

The following chart details Synagis[®] claims billed to the Division of Medicaid during the RSV season.

Label Name	NDC	Total Claims	Total Reimbursement Amount
SYNAGIS 50 MG/0.5 ML VIAL	60574411401	2513	\$2,092,024.74
SYNAGIS 100 MG/1 ML VIAL	60574411301	4595	\$8,030,556.67
Total		7108	\$10,122,581.41

Trending

Comparative annual data is presented in an effort to identify and evaluate trends related to Synagis use among DOM beneficiaries over several years. To fully understand the trending information, it is important to keep in mind several DOM policy changes regarding the approval and use of this product in recent years. For example, in 2005, the clinical eligibility prior authorization criteria were customized to reflect American Academy of Pediatrics guidelines. Also, beginning in 2006, the number of doses approved per RSV season was limited to five, with a sixth dose available by committee consult. In 2007, this sixth dose was completely removed, reflecting accepted treatment recommendations.

DOM is sensitive to the fragile condition of the children treated with this medication. DOM's emphasis regarding policies related to Synagis[®] coverage are clinically based and are intended to ensure that the medication is available to all children who meet the criteria.

In order to compare utilization and cost trends, the following chart details several parameters related to approval and utilization of the product.

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Number of Beneficiaries	1169	1209	1403	1349	1411	1535
Number of Claims	6271	6328	8207	7114	6488	7108
Average Cost per Claim	\$1,075.16	\$1,070.97	\$1,194.19	\$1,232.23	\$1,275.92	\$1,424.11
Average claims per Bene	5.364	5.234	5.850	5.274	4.598	4.631
Total Cost to DOM	\$6,742,334.86	\$6,777,081.86	\$9,800,681.36	\$8,766,067.66	\$8,278,178.24	\$10,122,581.41
Average Cost per Bene	\$5,767.61	\$5,605.53	\$6,985.52	\$6,498.20	\$5,866.89	\$6,594.52
Total Number of Doses	n/a	n/a	n/a	n/a	5403	5307
Average Doses per Bene	n/a	n/a	n/a	n/a	3.8	3.6
Average Cost per Dose	n/a	n/a	n/a	n/a	\$1,532.14	\$1,613.06
Total PAs Requested	1700	2571	2858	2446	3236	8612*
Number of PAs Approved	1440	2077	2188	1958	2503	7840*
Number of PAs Denied	260	494	670	488	733	772
% of PAs approved	84.7%	80.8%	76.6%	80.0%	77.3%	91.0%

*In 2007, the PA process was improved by creating a new PA each month, as opposed to one PA for the entire season that was updated each month with dose changes, etc. This resulted in a larger number of PAs for the 2007-2008 season.

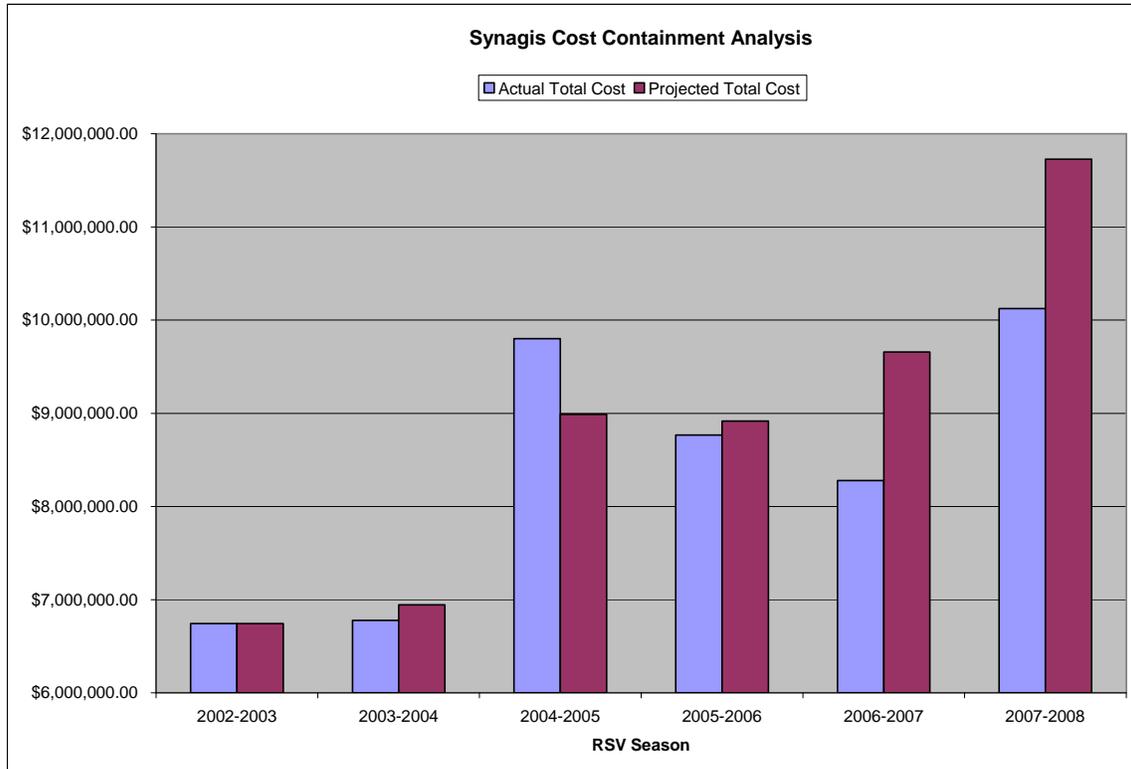
Although the number of beneficiaries and the cost of the product have generally increased over the past several years, it should be noted that the number of claims per beneficiary has decreased. This trend can be directly correlated with the implementation of a five injection per RSV season policy.

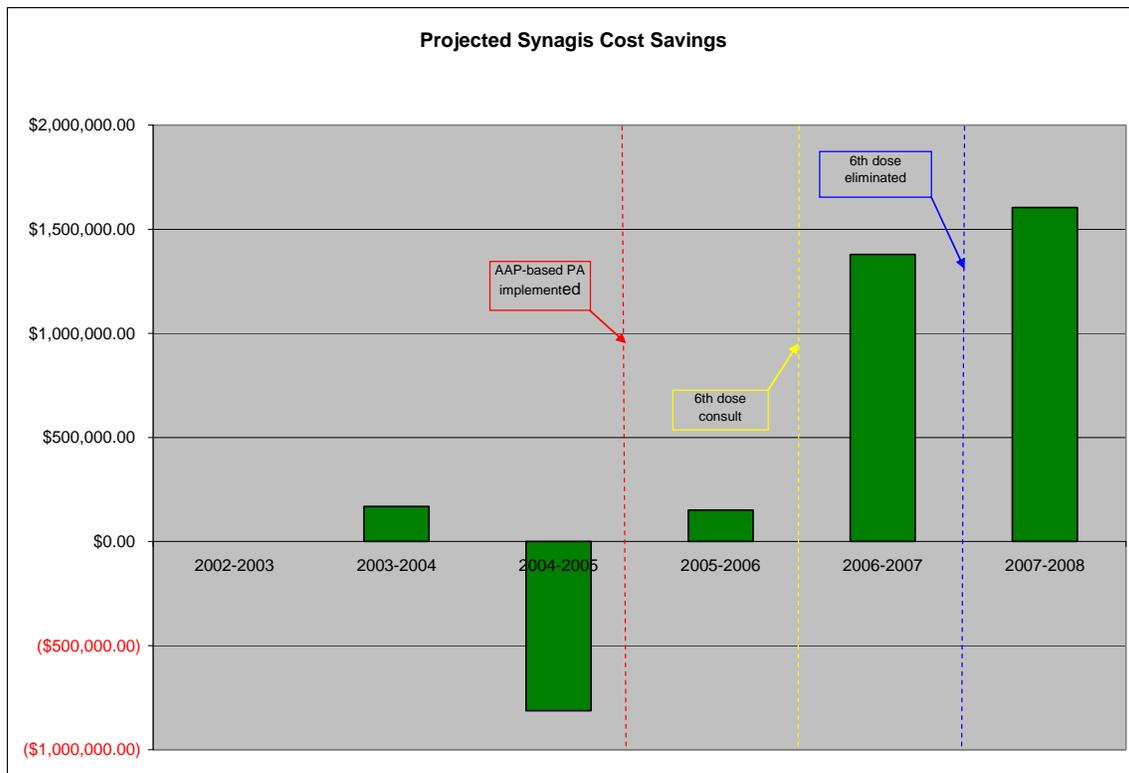
The American Academy of Pediatrics recommends only five doses, and as a result DOM reduced the number of paid doses during the 2007-2008 season from six to five. Another important note is the high rate of approval for Synagis[®] prior authorizations. This is a direct result of the close relationship of the HID Clinical Nurse with the providers and pharmacies administering Synagis[®]. She communicates with these providers and pharmacists on a near-daily basis making sure they understand the prior authorization criteria for Synagis[®] and addressing any problems they encounter.

In order to evaluate the impact of limiting the number of injections to five, we have calculated the projected cost per season based on the average number of claims per beneficiary *prior* to implementation of DOM's policies. The following chart and graphs summarize these calculations and the cost avoidance attributable to these policies.

Cost Impact							
Season	Benes	Avg Claims per Beneficiary	Avg Cost per Claim	ACTUAL Total Cost	PROJECTED Total Cost	Projected - Actual Total Cost	Cumulative Projected - Actual Cost
2002-2003	1169	5.364	\$1,075.16	\$6,742,328.36	\$6,742,328.36	\$0.00	\$0.00
2003-2004	1209	5.234	\$1,070.97	\$6,777,098.16	\$6,945,857.93	\$168,759.77	\$168,759.77
2004-2005	1403	5.850	\$1,194.19	\$9,800,717.33	\$8,987,799.81	(\$812,917.52)	(\$644,157.75)
2005-2006	1349	5.274	\$1,232.23	\$8,766,084.22	\$8,917,148.87	\$151,064.65	(\$493,093.09)
2006-2007	1411	4.598	\$1,275.92	\$8,278,168.96	\$9,657,678.60	\$1,379,509.64	\$886,416.55
2007-2008	1535	4.631	\$1,424.11	\$10,122,573.88	\$11,726,656.54	\$1,604,082.66	\$2,490,499.21

As this information illustrates, while maintaining and encouraging appropriate utilization of this medication among fragile beneficiaries, the criteria and dose limits have resulted in a leveling of the average number of claims per beneficiary. Had these policies not been implemented, the costs of this medication to DOM would have been significantly greater. The following charts detail the actual versus projected cost for each season.





Conclusion

As during the previous season, a concerted effort has been made to reconcile prior authorizations, paid claims and administration dates. The goals of this effort are to ensure appropriate utilization of the agent, to encourage consistent compliance with the administration regimen, and to minimize waste. We contend that these goals have been accomplished. In addition, as shown above, implementation of clinically sound coverage policies for Synagis[®] has resulted in an estimated cost avoidance of almost \$2.5 million.

Recommendation

The HID clinical staff recommends no changes to the prior authorization process and season duration. As we have stated in the past, it is imperative that children in this population visit their primary care physician regularly and the current policies encourage this.

HID has been able to discourage waste of this very expensive product by requiring documentation of the previous injection date for prior authorization approval. We acknowledge, however, that some opportunity for waste continues to exist. Best efforts by the administering physician notwithstanding, some children do not receive every injection. We would recommend that DOM consider a policy to give incentive to physicians to work with the dispensing pharmacy to re-assign these doses to other beneficiaries. Such a policy may result in further control of DOM's costs related to this medication.

