Wyoming Drug Utilization Review

Synagis® Expenditures Reduced by $1.5 Million

Wyoming Department of Health, Division of Healthcare Financing

Synagis® is a prescription medication indicated for the prevention of serious lower respiratory tract disease caused by respiratory syncytial virus (RSV) in children at high risk of RSV disease.[1] In 2009, the American Academy of Pediatrics (AAP) released updated practice guidelines for appropriate Synagis utilization. The published AAP recommendation outlines a five (5) dose maximum for children 24 months of age or younger meeting specified clinical criteria.[2]

Wyoming Drug Utilization Review
University of Wyoming
School of Pharmacy
Dept. 3375
1000 E. University Ave
Laramie, WY 82071
307-766-6750

www.uwyo.edu/DUR

Edited by
Aimee Lewis, PharmD, MBA
Laura Miller, MS

Prior to the development of Wyoming's existing criteria for payment authorization, Synagis® was covered by Medicaid without restriction. In conjunction with efforts demonstrated in neighboring states, Wyoming began efforts to better understand Medicaid prescription drug cost drivers. In 2010, a review of Wyoming Medicaid utilization data made available through the Total Health Record (THR) and compiled by Cyberformance reports, demonstrated an increasing trend in physician prescribing and the annual cost of Synagis® statewide. In early 2010, during the peak of RSV season, the average number of Synagis® doses per patient had reached a high of 6.5, with an associated cost of $2,513,000 annually. Further review of available data revealed routine administration of the drug to children older than 24 months of age. Improper drug utilization can expose patients to potentially harmful and unnecessary side effects, resulting in more serious clinical health outcomes.

In an effort to better understand the root cause of the rising trend, Wyoming Medicaid, under the guidance of Dr. J. Bush MD, Medicaid Medical Director, in cooperation with the Drug Utilization Review Program and Pharmacy and Therapeutics Committee, established a prior authorization process that required provider adherence in order to guarantee timely drug dispensing and appropriate reimbursement for prescriptions provided to eligible patients. The new process required physicians prescribing Synagis® to submit documentation of each patient's relevant clinical information and appropriately substantiate the utilization prescribed. Through ongoing collaboration with Wyoming physicians, and their willing participation in the data collection efforts, the State saw a significant decline in the overall utilization of Synagis®. The trend toward clinically validated utilization has been attributed to collaborative provider education opportunities and a focus on overall patient safety. In conjunction with the focus on patient safety, from the peak of its utilization in SFY 2009 through the end of SFY 2012, the State realized an annual expenditure reduction of $1.5 million on Synagis® alone.

In order to fully evaluate the impact of the State's process change on the pertinent clinical health of the targeted population, associated clinical trends were compiled and evaluated. Statistical data analyzed included RSV related inpatient hospitalization rates, average hospital length of stay, RSV related mortality rates, and overall RSV related medical service costs. During a span of time from July 1, 2007 to April 30, 2013, incorporating the implementation of the prior authorization process for Synagis® administration, Medicaid claims data demonstrated no significant increase in RSV diagnosis rates, RSV related hospitalization rates, or RSV related mortality rates. An analysis of the inpatient admission data demonstrated a decrease in the average length of stay from a period of 3.5 days in SFY 2010 to 3.08 days in SFY 2013. Despite a reduction in the administration of Synagis® by 947 doses per year from 2009 to 2013, and a reduction in Synagis® recipients by 51% from the 2009 census, no adverse clinical outcomes were detected.

As a result of the combined efforts between the Wyoming Department of Health and the State's provider community, it has been proven that through detailed analysis of data to identify trends in expenses, coupled with effective enforcement of appropriate clinical rules and practice

continued on page 3

P & T Committee Meeeting Update

The P&T Committee met for its quarterly business meeting on August 22, 2013.

Highlights of this meeting include:

The PDMP has gone online and will soon include information from other states who are involved in an interconnectivity project.

The University of Washington will be contacting psychotropic prescribers to discuss prescribing patterns that fall outside of the parameters set by the P&T Committee.

The following prior authorization was approved:

All ADHD medications will be allowed down to age four. Patients under age 4 will require prior authorization.

Ondansetron solution will only be allowed for patients who are unable to use the ODT formulation.

Imipramine capsules will require prior authorization with the recommendation that the patient move to the tablet formulation.

A three month trial of a secretory agent will be required prior to approval of Amitiza for opioid-induced constipation.

Onfi will be allowed for refractory seizures in patients under age 21. All other uses will require prior authorization.

Diclegis will be allowed for women who are pregnant.

All proposed prior authorization criteria will be posted for public comment at www.uwyo.edu/DUR. Comments may be sent by email to alewis13@uwyo.edu or by mail to: Wyoming Drug Utilization Review Board, Dept. 3375, 1000 E. University Avenue, Laramie, WY 82071. Comments should be received prior to September 30, 2013.

The next P&T Committee meeting will be held November 14, 2013 in Cheyenne. An agenda will be posted approximately two weeks prior to the meeting.

Announcing *WORx* online!

- Monitoring program reports available 24/7: no waiting, no faxing
- Enhancement to the faxed request (which is still available)
- Controlled substances dispensed in Schedules II, III, IV
- User friendly registration
- New report format that eliminates duplicates
- Weekly updates
- More information on reports such as “days supply”
- A tool for use by practitioners and pharmacists
- **Register at WORXPDMP.com**

For more information contact the Wyoming State Board of Pharmacy.

Phone: 307-634-9636

Fax: 307-634-9184

Bop@wyo.gov

David.Wills@wyo.gov

Mary.Walker@wyo.gov

Adverse Effects of Long Term Opioid Use

Ben Van Heule, PharmD Candidate 2014

Long term opioid use is often associated with tolerance and dependence but as more people are chronically taking opioids other adverse effects are being observed. Opioid induced hypogonadism and opioid induced hyperalgesia are two things to consider in patients that use opioids chronically. Opioid induced hyperalgesia is when pain is increased as opioid doses are increased.[1] A case report from the Journal of Clinical Oncology in 2007 describes a cancer patient that is on chronic high doses of opioids that developed generalized burning pain and allodynia.[1] The patient was switched to different opioids and the dose was increased but this only provided short term relief and each time the burning pain and allodynia returned.[1] The patient was eventually put on methadone, ketamine and lorazepam as needed but pain remained around five on a scale from one to ten.[1] This case shows the difficulty in managing opioid induced hyperalgesia. When a practitioner suspects opioid induced hyperalgesia they have multiple options to choose from. They can increase the dose of the opioid and monitor for pain reduction or an increase in pain.[2,3] The practitioner can decrease or eliminate the opioid and evaluate pain perception.[2,3] Another approach is to switch to an opioid that is a partial NMDA receptor antagonist such as Methadone.[2,3] A final approach is to add a cyclooxygenase-2 inhibitor such as celecoxib.[2,3] Opioid induced hyperalgesia isn't a common adverse effect from long term opioid use but it is important for health care workers to monitor for it.

Opioid induced hypogonadism is another adverse effect of taking opioids long term. The study by Rajagopal, Vassilopoulou-Sellin, Palmer, Kaur, & Bruera showed that the testosterone level and luteinizing hormone were statistically significant and lower in the opioid group than the control group.[4] Men can be monitored for low levels of total testosterone, free testosterone, luteinizing hormone, and follicular stimulating hormone, or they can be monitored for signs of hypogonadism, including low energy, decreased strength and decreased libido.[5] Women may also develop hypogonadism resulting in decreased estradiol, testosterone, luteinizing hormone, follicular stimulating hormone and progestin.[5] Tests for low levels of these hormones can be done in women or they can be monitored for signs of hypogonadism which include menstrual irregularities, decreased strength and fatigue.[5] Treatment for opioid induced hypogonadism for men and women is testosterone replacement therapy. Intramuscular injections are only approved for use in men and transdermal patches are approved for use in either gender.[5] Opioid induced hypogonadism is easy to treat but health care workers need to be monitoring patients that are on long term opioids for signs and symptoms.

References

1. Davis, M. P., Shaiova, L. A., & Angst, M. S. (2007). When opioids cause pain. *JOURNAL OF CLINICAL ONCOLOGY*, (25), 4497-4498. doi: 10.1200/JCO.2006.09.1462
2. Lee, M., Silverman, S., Hansen, H., Patel, V., & Manchikanti, L. (2011). A comprehensive review of opioid-induced hyperalgesia. *Pain Physician*, (14), 145-161. Retrieved from www.painphysicianjournal.com
3. Ramasubbu, C., & Gupta, A. (2011). Pharmacological treatment of opioid-induced hyperalgesia: A review of the evidence. *Journal of Pain & Palliative Care Pharmacotherapy*, (25), 219-230. doi: 0.3109/15360288.2011.589490
4. Rajagopal, A., Vassilopoulou-Sellin, R., Palmer, J. L., Kaur, G., & Bruera, E. (2004). Symptomatic hypogonadism in male survivors of cancer with chronic exposure to opioids. *Cancer*, (100), 851-858. doi: 10.1002/cncr.20028
5. Maddalena, C. D., Bellini, M., Berra, M., Meriggiola, M. C., & Aloisi, A. M. (2012). Opioid-induced hypogonadism: Why and how to treat it. *Pain Physician*, (15), 111-118. Retrieved from www.painphysicianjournal.com

Synagis® continued

standards, significant savings can be realized with no adverse clinical effects. With a focus on patient safety and a financial incentive to adopt high quality medical practices, clinical outcomes can be improved while costs decline. The elimination of wasteful spending will allow the State to more effectively utilize its available resources and better serve its residents.

References

1. "Highlights of Prescribing Information": www.medimmune.com
2. American Academy of Pediatrics. Respiratory Syncytial Virus. In: Pickering LK, ed. Red Book: 2009 Report of the Committee on Infectious Disease. 26th ed. Elk Grove Village, IL

Next 2013 P&T Committee Meeting Date

Thursday, November 14, 2013

Meetings are held in Cheyenne at Laramie County Community College from 9 am - 1 pm.

Wyoming Drug Utilization Review
University of Wyoming
School of Pharmacy
Dept. 3375
1000 E. University Avenue
Laramie, WY 82071

Non-Profit Organization
US Postage
Paid
Laramie WY 82070
Permit 75

Return Service Requested

September 2013

Wyoming Drug Utilization Review

In This Issue

Please contact WY-DUR at 307-766-6750 to have your name added or removed from our mailing list, or if you need to update your address. The WY-DUR newsletter is also available on-line at *www.uwyo.edu/DUR/newsletters*.