

Division of Medicaid

Office of the Governor State of Mississippi

DUR Board Meeting

November 18, 2010

2:00 p.m.

Woolfolk Building, Room 117 Jackson, MS

Drug Utilization Review Board

Frank Wade, M.D. Family Medical Clinic 376A Simpson Highway 149 Magee, MS 39111 Term Expires: June 30, 2011

Jason Strong, Pharm.D.
Canton Discount
726 East Peace Street
Canton, MS 39046
Term Expires: June 30, 2011

Laura Gray, M.D. 905 Garfield Street Tupelo, MS 38801 Term Expires: June 30, 2012

Paul Read, Pharm.D. CVS Pharmacy #5744 3910 Hardy Street Hattiesburg, MS 36402 Term Expires: June 30, 2012

Lee Merritt, R.Ph. Medfusion 2211 5th Street North Columbus, MS 39705 Term expires: June 30, 2013

Mark Reed, M.D. University of Mississippi Medical Center 2500 North State Street, Trailer 16 Jackson, MS 39216 Term Expires: June 30, 2013 Alvin Dixon, R.Ph. 182 Cherry Street Clarksdale, MS 38614 Term expires: June 30, 2011

William Bastian, M.D.
Bastian Center of Pediatric
Endocrinology
1860 Chadwick Drive, Suite 206
Jackson, MS 39204
Term Expires: June 30, 2011

Gera Bynum, R.Ph. Scott Regional Hospital 371 Highway 13S Morton, MS 39117 Term Expires: June 30, 2012

Jason Dees, D.O. New Albany Medical Group 620 West Longview Drive New Albany, MS 38652 Term Expires: June 30, 2012

Edgar Donahoe, M.D. Indianola Family Medical Group 122 Baker Street Indianola, MS 38751 Term expires: June 30, 2013

Vickie Veazey, R.Ph. MS State Hospital at Whitfield Building #50 Whitfield, MS 39193 Term expires: June 30, 2013

DIVISION OF MEDICAID OFFICE OF THE GOVERNOR DRUG UTILIZATION REVIEW BOARD AGENDA

November 18, 2010

Welcome Mark Reed, M.D.

Old Business

Approval of Meeting Minutes Mark Reed, M.D.

Cost Management Analysis Ashleigh Holeman, Pharm.D.

Pharmacy Program Update Judith Clark, R.Ph.

New Business Ashleigh Holeman, Pharm.D.

Lovenox® **Utilization Review**

Utilization Review of Avandia®

Analyzing the Effectiveness of Maximum Age Limits for ADHD Agents

Next Meeting Information Mark Reed, M.D.

Mississippi Division of Medicaid Drug Utilization Review (DUR) Board Minutes of the August 19, 2010 Meeting

Members Attending: William Bastian, M.D.; Gera Bynum, R.Ph; Alvin Dixon, R.Ph; Edgar Donahoe, M.D.; Laura Gray, M.D.; Lee Merritt, R.Ph; Mark Reed, M.D.; Paul Read, Pharm D; Jason Strong, Pharm. D; Vickie Veazey, R. Ph **Members Absent:** Jason, Dees, D.O.; Frank Wade, M.D.

Also Present:

DOM Staff: Judith Clark, R.Ph, DOM Pharmacy Bureau Director; Terri Kirby, R.Ph, DOM Clinical Pharmacist; Delvin Taylor, DOM Pharmacy Bureau; Andrea McNeal, DOM Bureau of Program Integrity

HID Staff: Ashleigh Holeman, Pharm D., Project Manager

Call to Order: Dr. Mark Reed, Chairman of the Board, called the meeting to order at 2:00 p.m. Dr. Reed asked for a motion to accept the minutes from the meeting of May 20, 2010. Lee Merritt made a motion to accept the minutes with a second from Dr. Strong. All voted in favor of the motion.

Dr. Reed continued the meeting by asking Dr. Holeman to review the cost analysis with the Board.

Cost Management Analysis:

Dr. Holeman began the presentation with the Top 15 Therapeutic Classes by total cost of claims from March 2010 through May 2010. She noted that the top four classes consistently remained the antipsychotics, hemostatics, anticonvulsants, and leukotriene modifiers. Dr. Holeman also pointed out that the monoclonal antibodies appeared in the top 15 therapeutic classes in March 2010, which is the last month of Synagis[®] administration for Mississippi Medicaid beneficiaries. Dr. Holeman continued with the Top 25 Drugs based on the number of claims for the same three months, with the top five drugs being hydrocodone- acetaminophen, azithromycin, amoxicillin, cetirizine and Singulair[®] for all three months reviewed. Dr. Holeman concluded with the Top 25 Drugs based on total claims cost report. She noted that the top four medications from these reports were Singulair[®], Abilify[®], Seroquel[®], Adderall XR[®], with the exception of March when Synagis[®] was placed in the fourth position. It was again noted that this was a result of the conclusion of Synagis[®] season for Mississippi Medicaid.

Pharmacy Program Update:

Ms. Clark began by reviewing several documents that had been provided to the DUR Board members. These documents included a revised antihistamine/decongestant cross-reference list, Covered OTC Drug list, Products with Quantity Limits document, and DOM PDL Quick Look document. Ms. Clark went through each of these documents, explaining their purpose and their location on the DOM website. Ms. Clark continued by noting that since the May meeting, Dr. Paige Clayton had resigned from the Division of

Medicaid. She stated that although the Division would miss Dr. Clayton's presence and contributions, they wished her well in all of her future endeavors.

New Business:

Long-Acting Injectable Antipsychotic Use in Long-Term Care Settings

Dr. Holeman continued the meeting with a follow-up discussion from the 2nd quarter meeting. Data was presented at the 2nd quarter 2010 DUR Board meeting related to the use of long-acting injectable antipsychotics in long-term care settings, with the intent of determining if these products should require prior authorization for long-term care beneficiaries. Currently, these products require prior authorization for all beneficiaries except for those in long-term care settings. Dr. Holeman noted that HID was asked at the last meeting to bring back a cost analysis of these products in relation to the oral antipsychotics so that the Board could better determine if requiring prior authorization for the long-acting injectable antipsychotics would be a cost-effective measure for the Division of Medicaid. Dr. Holeman reviewed this cost analysis, noting that if each beneficiary identified in the data analysis from the 2nd quarter meeting was switched from a long-acting injectable antipsychotic to an oral antipsychotic, the Division of Medicaid would realize an average annual cost savings of nearly \$88,000. Dr. Donahoe stated that although this represented a potential cost savings for DOM, these savings may be offset by inpatient admissions for beneficiaries who could not be stabilized on oral antipsychotics. Judy asked Ms. Veazey if her facility uses these products in their longterm care facility. Ms. Veazey replied that she did not feel there was a problem with over usage in the State Hospital, with the most use occurring in acute care beneficiaries who would be discharged into the community. Judy asked Dr. Strong if his pharmacy sees much utilization of these products in the long-term care sector of their business, to which he replied the usage was minimal. It was again noted that the savings that may be realized by an initiative to prior authorize these products could be overshadowed by the expense realized by inpatient or ER admissions. Based on this discussion, it was recommended that DOM consider removing the prior authorization requirement for the long-acting injectable antipsychotics for long-term care beneficiaries. DOM will take this recommendation under advisement.

Evaluating Ondansetron Quantity Limits

Dr. Holeman continued with presentation of data related to the ondansetron quantity limits. In November 2005, DOM implemented quantity limits of 12 tablets or 100mL per every 31 days for all ondansetron products, except for Zofran® 24mg tablets which were limited to 5 tablets per every 31 days. Recent policy changes in local hospitals and stomach virus outbreaks prompted DOM to ask HID to conduct a claims analysis for ondansetron to determine if the quantity limits were still appropriate for the current Mississippi Medicaid population. Dr. Holeman mentioned that for the 6 months reviewed, over 50% of the utilization for ondansetron and promethazine could be attributed to a gastroenteritis diagnosis, while only 2% of ondansetron claims could be attributed to a cancer or cancer-related diagnosis. She also stated that from the data reviewed it appeared that physicians were more comfortable using ondansetron for

nausea and vomiting due to pregnancy, with 30% of claims for ondansetron compared to 13% of promethazine claims possibly credited to this diagnosis. Dr. Holeman continued with a cost-analysis of the ondansetron products. This analysis revealed a significant decrease in price from 2005, with the ondansetron 4mg tablets dropping nearly 96% in cost since the quantity limits were put into place. Even with this price decrease, the ondansetron ODT dosage forms were noted to still be more expensive than the plain tablets, with the 8mg ODT form approximately ten times more expensive than the 8mg plain tablets. For this reason, the ondansetron ODT dosage form was moved to nonpreferred status beginning July 1, 2010, except for beneficiaries ages 0-11 who may be unable to swallow a tablet. Dr. Holeman concluded by mentioning that HID did not recommend a change to the current quantity limits for ondansetron products, which ensure availability for the products but discourage the overutilization of the products for off-label indications. Dr. Donahoe made a motion to increase the quantity limits for the plain tablets only to 30 tablets per every 31 days, while leaving the current limits in place for the ODT, 24mg and oral solution dosage forms. The motion was seconded by Dr. Laura Gray, and all members voted in favor for the motion. DOM will take the Board's recommendation under advisement.

Low-Dose Seroquel[®] Utilization

The next topic presented for discussion was low-dose Seroquel[®] utilization. Dr. Holeman reminded DUR Board members that concerns were raised at the 2nd quarter meeting regarding the possible off-label use of Seroquel® as a sleep and/or anxiety aid. Based on these concerns, HID conducted a claims analysis of Seroquel[®] 25mg and 50mg tablets for prescriptions less than 93 tablets, which would represent sub-therapeutic dosing for this product. It was discovered that 20% of all claims for Seroquel[®] in calendar year 2009 were for sub-therapeutic doses. When these claims were further analyzed on a monthly basis to eliminate those beneficiaries receiving low-dose Seroquel® as part of a titration schedule to a higher, therapeutic dose, it was determined that 46% of beneficiaries receiving low doses of this medication continued to do so on a monthly basis. The results of this analysis appear to have authenticated the concerns voiced at the 2nd quarter 2010 DUR Board meeting. Dr. Holeman finished the report by asking for the DUR Board's counsel to help determine what steps are necessary to discourage the cost-prohibitive use of Seroquel® as a sleep and/or anxiety aid. Dr. Donahoe made a motion to implement a point-of-sale edit that would deny all claims for low-dose Seroquel[®], which could only be overridden with a prior authorization indicating that the beneficiary was being titrated to a therapeutic dose. This motion was seconded by Dr. Laura Gray, with all members voting in favor for the motion. DOM will take the Board's recommendation under advisement.

Appropriate Duration of Therapy with Proton Pump Inhibitors

Dr. Holeman continued with a report regarding the PPIs. She began by noting that the PPIs routinely appear in the cost analysis reports as one of the most utilized categories for Mississippi Medicaid. It was noted that the medications are approved for various diagnoses and differing lengths of therapy depending on whether they are being used for treatment of active disease/symptoms or maintenance therapy. Dr. Holeman reported that HID was asked to conduct a claims analysis to determine if long-term treatment with the

PPIs was an issue within the Mississippi Medicaid population. From the claims reviewed, it was determined that there was a small degree of long-term treatment with these agents occurring, with 16% of the beneficiaries identified receiving treatment for 12 months or more, and 5% of beneficiaries receiving treatment for 2 years or more. Dr. Holeman continued by recognizing several health problems that have been linked to chronic PPI use, such as gastric cancer, Clostridium difficile infection, decreased vitamin B12 absorption, and hip and vertebral fractures. The report was concluded with a look at the cost of treatment with a PPI for one year, which was calculated to be approximately \$1,500 per patient. As a result, HID recommended a duration of therapy edit of 6 months for all PPIs, meaning that PPI claims for beneficiaries who had received any PPI for 6 months or more would deny at the point of sale and require prior authorization. Dr. Reed voiced concern with this recommendation, based on personal clinical practice in which he had observed the benefit of long-term treatment with a PPI. Ms. Clark asked that the topic be tabled until the next meeting, as she would be attending a CMS conference in the coming weeks that would address this class. Dr. Holeman agreed to revisit the topic at the 4th quarter DUR Board meeting.

Other Criteria Recommendations

Dr. Reed asked for the Board to accept the proposed RDUR criteria recommendations as a block vote. All voted in favor of the motion

Dr. Reed called for the meeting to be adjourned at 3:03 p.m. The next meeting will be held at 2:00 p.m. on November 18, 2010.

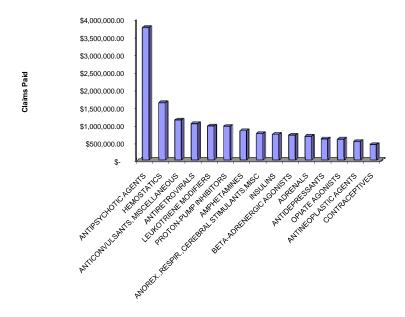
Respectfully Submitted, Health Information Designs, Inc.

TOP 15 THERAPEUTIC CLASSES BY TOTAL COST OF CLAIMS FROM 06/01/10-06/30/10

AHFS Therapeutic Class	Rx	Paid	Р	aid/Rx	% Total Claims
ANTIPSYCHOTIC AGENTS	11,794	\$ 3,751,148.90	\$	318.06	3.06%
HEMOSTATICS	51	\$ 1,628,065.95	\$3	1,922.86	0.01%
ANTICONVULSANTS, MISCELLANEOUS	13,065	\$ 1,142,402.52	\$	87.44	3.39%
ANTIRETROVIRALS	1,223	\$ 1,039,671.07	\$	850.10	0.32%
LEUKOTRIENE MODIFIERS	7,763	\$ 971,976.68	\$	125.21	2.01%
PROTON-PUMP INHIBITORS	8,138	\$ 964,766.18	\$	118.55	2.11%
AMPHETAMINES	5,452	\$ 838,559.24	65	153.81	1.41%
ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	5,086	\$ 756,914.46	\$	148.82	1.32%
INSULINS	4,095	\$ 738,745.88	\$	180.40	1.06%
BETA-ADRENERGIC AGONISTS	10,527	\$ 713,647.75	65	67.79	2.73%
ADRENALS	9,116	\$ 683,603.52	\$	74.99	2.36%
ANTIDEPRESSANTS	15,189	\$ 608,593.48	\$	40.07	3.94%
OPIATE AGONISTS	28,961	\$ 601,588.85	65	20.77	7.51%
ANTINEOPLASTIC AGENTS	930	\$ 537,829.95	\$	578.31	0.24%
CONTRACEPTIVES	9,390	\$ 449,506.09	\$	47.87	2.44%
TOTAL TOP 15	130,780	\$ 15,427,020.52	\$	117.96	33.92%

Total Rx Claims	385,574
From 06/01/10-06/30/10	

Top 15 Therapeutic Classes Based on Total Cost of Claims

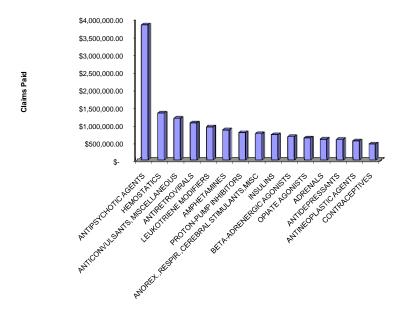


TOP 15 THERAPEUTIC CLASSES BY TOTAL COST OF CLAIMS FROM 07/01/10-07/31/10

AHFS Therapeutic Class	Rx	Paid	F	aid/Rx	% Total Claims
ANTIPSYCHOTIC AGENTS	11,931	\$ 3,823,249.68	\$	320.45	3.14%
HEMOSTATICS	55	\$ 1,334,843.66	\$2	4,269.88	0.01%
ANTICONVULSANTS, MISCELLANEOUS	13,425	\$ 1,189,069.75	\$	88.57	3.53%
ANTIRETROVIRALS	1,254	\$ 1,059,573.19	\$	844.95	0.33%
LEUKOTRIENE MODIFIERS	7,577	\$ 947,226.03	\$	125.01	1.99%
AMPHETAMINES	5,586	\$ 859,938.53	\$	153.95	1.47%
PROTON-PUMP INHIBITORS	7,285	\$ 786,676.56	\$	107.99	1.92%
ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	5,033	\$ 751,787.24	\$	149.37	1.32%
INSULINS	4,095	\$ 727,486.67	\$	177.65	1.08%
BETA-ADRENERGIC AGONISTS	9,619	\$ 670,194.65	\$	69.67	2.53%
OPIATE AGONISTS	30,119	\$ 635,080.11	\$	21.09	7.92%
ADRENALS	8,102	\$ 598,719.40	\$	73.90	2.13%
ANTIDEPRESSANTS	15,401	\$ 592,933.93	\$	38.50	4.05%
ANTINEOPLASTIC AGENTS	910	\$ 550,341.11	\$	604.77	0.24%
CONTRACEPTIVES	9,571	\$ 463,930.46	\$	48.47	2.52%
TOTAL TOP 15	129,963	\$ 14,991,050.97	\$	115.35	34.18%

Total Rx Claims	380,190
From 07/01/10-07/31/10	

Top 15 Therapeutic Classes Based on Total Cost of Claims

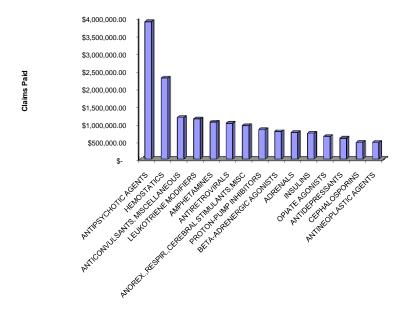


TOP 15 THERAPEUTIC CLASSES BY TOTAL COST OF CLAIMS FROM 08/01/10-08/31/10

AHFS Therapeutic Class	Rx	Paid	Paid/Rx	% Total Claims
ANTIPSYCHOTIC AGENTS	11,982	\$ 3,883,265.27	\$ 324.09	2.88%
HEMOSTATICS	91	\$ 2,292,890.22	\$25,196.60	0.02%
ANTICONVULSANTS, MISCELLANEOUS	13,445	\$ 1,184,395.75	\$ 88.09	3.24%
LEUKOTRIENE MODIFIERS	8,877	\$ 1,144,337.40	\$ 128.91	2.14%
AMPHETAMINES	6,912	\$ 1,054,427.03	\$ 152.55	1.66%
ANTIRETROVIRALS	1,191	\$ 1,021,532.27	\$ 857.71	0.29%
ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	6,553	\$ 960,251.39	\$ 146.54	1.58%
PROTON-PUMP INHIBITORS	7,757	\$ 840,665.05	\$ 108.38	1.87%
BETA-ADRENERGIC AGONISTS	12,686	\$ 789,384.15	\$ 62.22	3.05%
ADRENALS	10,576	\$ 760,131.72	\$ 71.87	2.55%
INSULINS	4,119	\$ 741,818.18	\$ 180.10	0.99%
OPIATE AGONISTS	31,014	\$ 648,832.28	\$ 20.92	7.47%
ANTIDEPRESSANTS	15,539	\$ 599,805.44	\$ 38.60	3.74%
CEPHALOSPORINS	9,437	\$ 482,211.61	\$ 51.10	2.27%
ANTINEOPLASTIC AGENTS	909	\$ 480,923.39	\$ 529.07	0.22%
TOTAL TOP 15	141,088	\$ 16,884,871.15	\$ 119.68	33.97%

Total Rx Claims	415,392
From 08/01/10-08/31/10	

Top 15 Therapeutic Classes Based on Total Cost of Claims



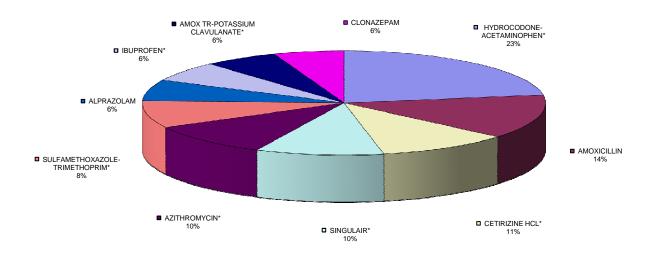
TOP 25 DRUGS BASED ON NUMBER OF CLAIMS FROM 06/01/10-06/30/10

_		_		Top 200
Drug	AHFS Therapeutic Class	Rx	Paid	Rank
HYDROCODONE-ACETAMINOPHEN*	OPIATE AGONISTS	17,104		1
AMOXICILLIN	PENICILLINS	10,352	\$ 93,545.30	5
CETIRIZINE HCL*	SECOND GENERATION ANTIHISTAMINES	7,992	\$ 203,323.16	~
SINGULAIR*	LEUKOTRIENE MODIFIERS	7,753	\$ 969,911.59	4
AZITHROMYCIN*	MACROLIDES	7,637	\$ 227,315.00	6
SULFAMETHOXAZOLE-TRIMETHOPRIM*	SULFONAMIDES (SYSTEMIC)	6,421	\$ 82,310.73	39
ALPRAZOLAM	BENZODIAZEPINES (ANXIOLYTIC, SEDATIV/HYP)	4,941	\$ 34,511.71	8
IBUPROFEN*	NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	4,715	\$ 36,134.42	18
AMOX TR-POTASSIUM CLAVULANATE*	PENICILLINS	4,514	\$ 228,795.97	32
CLONAZEPAM	BENZODIAZEPINES (ANTICONVULSANTS)	4,253	\$ 32,666.99	24
ALBUTEROL SULFATE*	BETA-ADRENERGIC AGONISTS	3,763	\$ 127,872.33	67
RISPERIDONE*	ANTIPSYCHOTIC AGENTS	3,577	\$ 349,855.31	140
ACETAMINOPHEN-CODEINE*	OPIATE AGONISTS	3,396	\$ 28,209.54	43
MUPIROCIN	ANTIBACTERIALS (SKIN & MUCOUS MEMBRANE)	3,199	\$ 120,478.23	107
ED A-HIST	PROPYLAMINE DERIVATIVES	3,178	\$ 26,132.88	~
CEPHALEXIN*	CEPHALOSPORINS	3,129	\$ 46,407.41	22
CEFDINIR	CEPHALOSPORINS	3,036	\$ 219,244.03	68
AMLODIPINE BESYLATE*	DIHYDROPYRIDINES	3,007	\$ 20,737.48	~
PROMETHAZINE HCL	PHENOTHIAZINE DERIVATIVES	2,820	\$ 34,451.35	59
LISINOPRIL*	ANGIOTENSIN-CONVERTING ENZYME INHIBITORS	2,814	\$ 13,254.17	2
OMEPRAZOLE*	PROTON-PUMP INHIBITORS	2,781	\$ 163,649.25	15
CITALOPRAM HBR*	ANTIDEPRESSANTS	2,698	\$ 19,961.88	25
LORAZEPAM	BENZODIAZEPINES (ANXIOLYTIC, SEDATIV/HYP)	2,672	\$ 17,209.22	23
NYSTATIN*	ANTIFUNGALS (SKIN & MUCOUS MEMBRANE)	2,641	\$ 32,517.45	142
PROAIR HFA*	BETA-ADRENERGIC AGONISTS	2,593	\$ 114,922.31	14
TOTAL TOP 25		120,986	\$ 3,489,917.94	

Total Rx Claims	385,574
From 06/01/10-06/30/10	

^{*} Indicates preferred products on Preferred Drug List

Top 10 Drugs Based on Number of Claims



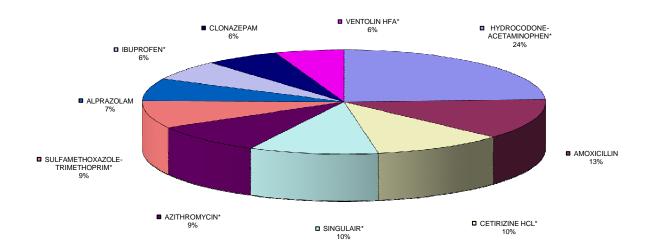
TOP 25 DRUGS BASED ON NUMBER OF CLAIMS FROM 07/01/10-07/31/10

_				Top 200
Drug	AHFS Therapeutic Class	Rx	Paid	Rank
HYDROCODONE-ACETAMINOPHEN*	OPIATE AGONISTS	17,707	\$ 258,211.71	1
AMOXICILLIN	PENICILLINS	9,184	+ -,	5
CETIRIZINE HCL*	SECOND GENERATION ANTIHISTAMINES	7,655	\$ 196,836.95	~
SINGULAIR*	LEUKOTRIENE MODIFIERS	7,569	\$ 946,431.40	4
AZITHROMYCIN*	MACROLIDES	6,703	\$ 194,684.07	6
SULFAMETHOXAZOLE-TRIMETHOPRIM*	SULFONAMIDES (SYSTEMIC)	6,254	\$ 78,619.86	39
ALPRAZOLAM	BENZODIAZEPINES (ANXIOLYTIC, SEDATIV/HYP)	5,062	\$ 35,571.49	8
IBUPROFEN*	NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	4,565	\$ 33,776.37	18
CLONAZEPAM	BENZODIAZEPINES (ANTICONVULSANTS)	4,356	\$ 33,873.53	24
VENTOLIN HFA*	BETA-ADRENERGIC AGONISTS	4,036	\$ 143,877.30	137
AMOX TR-POTASSIUM CLAVULANATE*	PENICILLINS	3,898	\$ 202,893.31	32
OMEPRAZOLE*	PROTON-PUMP INHIBITORS	3,779	\$ 224,006.47	15
RISPERIDONE*	ANTIPSYCHOTIC AGENTS	3,689	\$ 357,977.18	140
ALBUTEROL SULFATE*	BETA-ADRENERGIC AGONISTS	3,391	\$ 111,102.37	67
ACETAMINOPHEN-CODEINE*	OPIATE AGONISTS	3,228	\$ 26,802.42	43
MUPIROCIN	ANTIBACTERIALS (SKIN & MUCOUS MEMBRANE)	3,219	\$ 120,826.57	107
AMLODIPINE BESYLATE*	DIHYDROPYRIDINES	3,137	\$ 21,616.29	~
CEPHALEXIN*	CEPHALOSPORINS	3,074	\$ 44,198.18	22
LISINOPRIL*	ANGIOTENSIN-CONVERTING ENZYME INHIBITORS	2,971	\$ 14,074.84	2
PROMETHAZINE HCL	PHENOTHIAZINE DERIVATIVES	2,831	\$ 33,851.32	59
ED A-HIST*	PROPYLAMINE DERIVATIVES	2,824	\$ 23,562.88	~
CITALOPRAM HBR*	ANTIDEPRESSANTS	2,755	\$ 20,313.35	25
GABAPENTIN*	ANTICONVULSANTS, MISCELLANEOUS	2,709	\$ 102,457.07	27
LORAZEPAM	BENZODIAZEPINES (ANXIOLYTIC,SEDATIV/HYP)	2,693	\$ 17,340.13	23
FERROUS SULFATE	IRON PREPARATIONS	2,664	\$ 11,969.82	119
TOTAL TOP 25		119,953	\$ 3,337,311.13	

Total Rx Claims	380,190
From 07/01/10-07/31/10	

^{*} Indicates preferred products on Preferred Drug List

Top 10 Drugs Based on Number of Claims



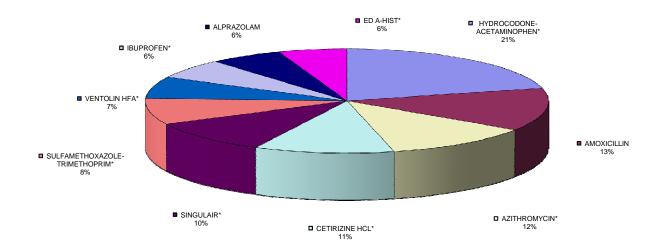
TOP 25 DRUGS BASED ON NUMBER OF CLAIMS FROM 08/01/10-08/31/10

Drug	AHFS Therapeutic Class	Rx	Paid	Top 200 Rank
HYDROCODONE-ACETAMINOPHEN*	OPIATE AGONISTS	18,351	\$ 262,995.40	1
AMOXICILLIN	PENICILLINS	11,607		5
AZITHROMYCIN*	MACROLIDES	10,315	\$ 302,561.39	6
CETIRIZINE HCL*	SECOND GENERATION ANTIHISTAMINES	9,757	\$ 249,105.56	~
SINGULAIR*	LEUKOTRIENE MODIFIERS	8,863	\$ 1,141,845.75	4
SULFAMETHOXAZOLE-TRIMETHOPRIM*	SULFONAMIDES (SYSTEMIC)	7,089	\$ 90,141.28	39
VENTOLIN HFA*	BETA-ADRENERGIC AGONISTS	5,878	\$ 216,023.72	137
IBUPROFEN*	NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	5,347	\$ 40,880.66	18
ALPRAZOLAM	BENZODIAZEPINES (ANXIOLYTIC,SEDATIV/HYP)	5,102	\$ 35,966.29	8
ED A-HIST*	PROPYLAMINE DERIVATIVES	4,779	\$ 39,940.67	~
AMOX TR-POTASSIUM CLAVULANATE*	PENICILLINS	4,707	\$ 246,534.97	32
ALBUTEROL SULFATE*	BETA-ADRENERGIC AGONISTS	4,580	\$ 147,609.24	67
CLONAZEPAM	BENZODIAZEPINES (ANTICONVULSANTS)	4,307	\$ 33,211.63	24
OMEPRAZOLE*	PROTON-PUMP INHIBITORS	3,995	\$ 235,010.61	15
RISPERIDONE*	ANTIPSYCHOTIC AGENTS	3,766	\$ 363,961.08	140
MUPIROCIN	ANTIBACTERIALS (SKIN & MUCOUS MEMBRANE)	3,570	\$ 135,075.63	107
CEPHALEXIN*	CEPHALOSPORINS	3,532	\$ 52,560.86	22
ACETAMINOPHEN-CODEINE*	OPIATE AGONISTS	3,312	\$ 27,044.96	43
PROMETHAZINE HCL	PHENOTHIAZINE DERIVATIVES	3,225	\$ 37,363.93	59
VYVANSE*	AMPHETAMINES	3,086	\$ 446,912.21	96
AMLODIPINE BESYLATE*	DIHYDROPYRIDINES	2,944	\$ 20,289.30	~
CONCERTA*	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	2,943	\$ 487,205.25	33
LISINOPRIL*	ANGIOTENSIN-CONVERTING ENZYME INHIBITORS	2,937	\$ 14,129.87	2
FERROUS SULFATE	IRON PREPARATIONS	2,848	\$ 12,745.01	119
CEFDINIR	CEPHALOSPORINS	2,843	\$ 214,411.75	68
TOTAL TOP 25		139,683	\$ 4,959,586.54	

Total Rx Claims	415,392
From 08/01/10-08/31/10	

^{*} Indicates preferred products on Preferred Drug List

Top 10 Drugs Based on Number of Claims



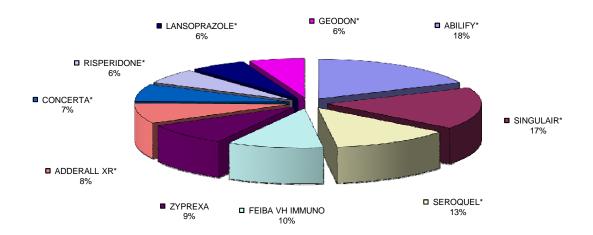
TOP 25 DRUGS BASED ON TOTAL CLAIMS COST FROM 06/01/10-06/30/10

				Top 200
Drug	AHFS Therapeutic Class	Rx	Paid	Rank
ABILIFY*	ANTIPSYCHOTIC AGENTS	1,989	\$1,051,347.83	12
SINGULAIR*	LEUKOTRIENE MODIFIERS	7,753	\$ 969,911.59	7
SEROQUEL*	ANTIPSYCHOTIC AGENTS	1,703	\$ 712,234.11	6
FEIBA VH IMMUNO	HEMOSTATICS	8	\$ 574,566.23	~
ZYPREXA	ANTIPSYCHOTIC AGENTS	798	\$ 516,318.29	15
ADDERALL XR*	AMPHETAMINES	2,166	\$ 465,230.61	23
CONCERTA*	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,M	2,312	\$ 389,434.53	33
RISPERIDONE*	ANTIPSYCHOTIC AGENTS	3,577	\$ 349,855.31	24
LANSOPRAZOLE*	PROTON-PUMP INHIBITORS	2,501	\$ 335,376.53	~
GEODON*	ANTIPSYCHOTIC AGENTS	756	\$ 330,806.87	45
PREVACID*	PROTON-PUMP INHIBITORS	1,762	\$ 313,833.13	5
VYVANSE*	AMPHETAMINES	2,302	\$ 313,678.40	96
BUDESONIDE	ADRENALS	1,160	\$ 298,430.02	~
ADVAIR DISKUS*	BETA-ADRENERGIC AGONISTS	1,417	\$ 294,271.43	4
ATRIPLA	ANTIRETROVIRALS	168	\$ 265,752.50	39
PLAVIX*	PLATELET-AGGREGATION INHIBITORS	1,611	\$ 263,065.16	3
EXJADE	HEAVY METAL ANTAGONISTS	53	\$ 261,180.11	~
HYDROCODONE-ACETAMINOPHEN*	OPIATE AGONISTS	17,104	\$ 246,500.23	1
FOCALIN XR*	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MI	1,579	\$ 232,470.59	113
AMOX TR-POTASSIUM CLAVULANATE*	PENICILLINS	4,514	\$ 228,795.97	10
AZITHROMYCIN*	MACROLIDES	7,637	\$ 227,315.00	3
CEFDINIR*	CEPHALOSPORINS	3,036	\$ 219,244.03	17
HUMATE-P	HEMOSTATICS	7	\$ 204,306.35	~
CETIRIZINE HCL*	SECOND GENERATION ANTIHISTAMINES	7,992	\$ 203,323.16	~
LIPITOR*	HMG-COA REDUCTASE INHIBITORS	1,685	\$ 202,792.76	1
TOTAL TOP 25		75,590	\$9,470,040.74	

Total Rx Claims	385,574
From 06/01/10-06/30/10	

^{*} Indicates preferred products on Preferred Drug List

Top 10 Drugs Based on Total Claims Cost



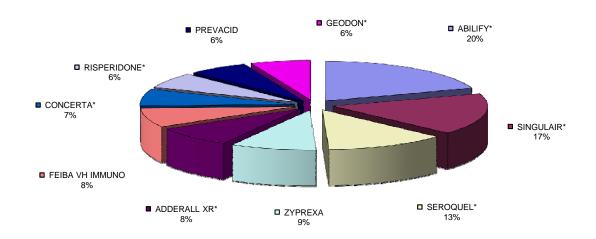
TOP 25 DRUGS BASED ON TOTAL CLAIMS COST FROM 07/01/10-07/31/10

				Top 200
Drug	AHFS Therapeutic Class	Rx	Paid	Rank
ABILIFY*	ANTIPSYCHOTIC AGENTS	2,009	\$ 1,118,259.78	12
SINGULAIR*	LEUKOTRIENE MODIFIERS	7,569	\$ 946,431.40	7
SEROQUEL*	ANTIPSYCHOTIC AGENTS	1,709	\$ 703,039.29	6
ZYPREXA	ANTIPSYCHOTIC AGENTS	777	\$ 502,432.83	15
ADDERALL XR*	AMPHETAMINES	2,218	\$ 463,319.60	23
FEIBA VH IMMUNO	HEMOSTATICS	4	\$ 433,639.23	~
CONCERTA*	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	2,272	\$ 380,951.94	33
RISPERIDONE*	ANTIPSYCHOTIC AGENTS	3,689	\$ 357,977.18	24
PREVACID	PROTON-PUMP INHIBITORS	1,980	\$ 354,656.32	5
GEODON*	ANTIPSYCHOTIC AGENTS	799	\$ 351,361.59	45
VYVANSE*	AMPHETAMINES	2,384	\$ 344,139.63	96
ADVAIR DISKUS*	BETA-ADRENERGIC AGONISTS	1,458	\$ 301,544.01	4
ATRIPLA	ANTIRETROVIRALS	175	\$ 271,235.55	39
PLAVIX*	PLATELET-AGGREGATION INHIBITORS	1,638	\$ 267,853.85	3
EXJADE	HEAVY METAL ANTAGONISTS	51	\$ 264,462.23	~
HYDROCODONE-ACETAMINOPHEN*	OPIATE AGONISTS	17,707	\$ 258,211.71	1
BUDESONIDE*	ADRENALS	985	\$ 252,603.07	~
FOCALIN XR*	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	1,609	\$ 240,505.93	113
OMEPRAZOLE*	PROTON-PUMP INHIBITORS	3,779	\$ 224,006.47	4
HUMATE-P	HEMOSTATICS	8	\$ 223,273.90	~
LIPITOR*	HMG-COA REDUCTASE INHIBITORS	1,714	\$ 214,148.16	1
AMOX TR-POTASSIUM CLAVULANATE*	PENICILLINS	3,898	\$ 202,893.31	10
CETIRIZINE HCL*	SECOND GENERATION ANTIHISTAMINES	7,655	\$ 196,836.95	~
AZITHROMYCIN*	MACROLIDES	6,703	\$ 194,684.07	3
NASONEX*	CORTICOSTEROIDS (EENT)	1,827	\$ 190,286.27	42
TOTAL TOP 25		74,617	\$ 9,258,754.27	

Total Rx Claims	380,190
From 07/01/10-07/31/10	

^{*} Indicates preferred products on Preferred Drug List

Top 10 Drugs Based on Total Claims Cost



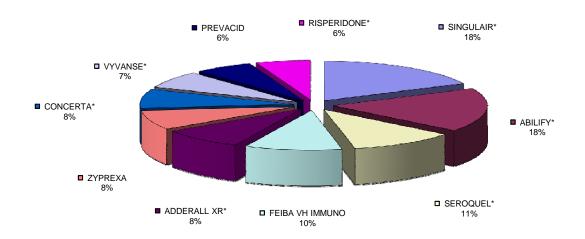
TOP 25 DRUGS BASED ON TOTAL CLAIMS COST FROM 08/01/10-08/31/10

_				Top 200
Drug	AHFS Therapeutic Class	Rx	Paid	Rank
SINGULAIR*	LEUKOTRIENE MODIFIERS	8,863	\$ 1,141,845.75	7
ABILIFY*	ANTIPSYCHOTIC AGENTS	1,998	\$ 1,133,344.74	12
SEROQUEL*	ANTIPSYCHOTIC AGENTS	1,713	\$ 702,946.59	6
FEIBA VH IMMUNO	HEMOSTATICS	7	\$ 647,956.91	~
ADDERALL XR*	AMPHETAMINES	2,673	\$ 548,680.37	23
ZYPREXA	ANTIPSYCHOTIC AGENTS	767	\$ 500,581.58	15
CONCERTA*	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	2,943	\$ 487,205.25	33
VYVANSE*	AMPHETAMINES	3,086	\$ 446,912.21	96
PREVACID	PROTON-PUMP INHIBITORS	2,187	\$ 390,720.25	5
RISPERIDONE*	ANTIPSYCHOTIC AGENTS	3,766	\$ 363,961.08	24
FEIBA NF	HEMOSTATICS	9	\$ 361,863.70	~
GEODON*	ANTIPSYCHOTIC AGENTS	805	\$ 356,709.14	45
EXJADE	HEAVY METAL ANTAGONISTS	71	\$ 347,869.93	~
BUDESONIDE*	ADRENALS	1,297	\$ 332,898.61	~
ADVAIR DISKUS*	BETA-ADRENERGIC AGONISTS	1,563	\$ 322,238.24	4
FOCALIN XR*	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	2,091	\$ 316,299.45	113
AZITHROMYCIN*	MACROLIDES	10,315	\$ 302,561.39	3
ACTHAR H.P.	ADRENOCORTICAL INSUFFICIENCY	4	\$ 294,880.41	4
NASONEX*	CORTICOSTEROIDS (EENT)	2,707	\$ 281,488.62	42
ATRIPLA	ANTIRETROVIRALS	169	\$ 268,044.71	39
PLAVIX*	PLATELET-AGGREGATION INHIBITORS	1,629	\$ 265,613.28	3
HYDROCODONE-ACETAMINOPHEN*	OPIATE AGONISTS	18,351	\$ 262,995.40	1
CETIRIZINE HCL*	SECOND GENERATION ANTIHISTAMINES	9,757	\$ 249,105.56	٠
AMOX TR-POTASSIUM CLAVULANATE*	PENICILLINS	4,707	\$ 246,534.97	10
ADVATE H	HEMOSTATICS	8	\$ 241,433.17	~
TOTAL TOP 25		81,486	\$ 10,814,691.31	

Total Rx Claims	415,392
From 08/01/10-08/31/10	

^{*} Indicates preferred products on Preferred Drug List

Top 10 Drugs Based on Total Claims Cost



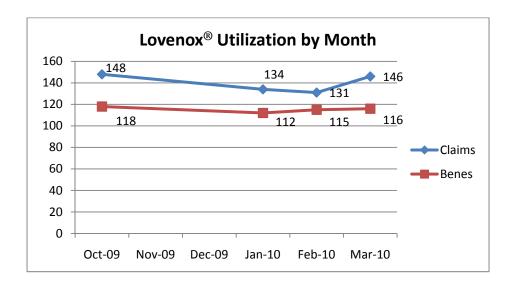
Lovenox® Utilization Review

Lovenox[®] (enoxaparin) is a low-molecular-weight heparin (LMWH) produced through partial depolymerization of porcine mucosal heparin. The low molecular weight heparins produce a more predictable anticoagulant response than unfractionated heparin, reflecting their better bioavailability after subcutaneous injection, longer half-life, and dose-independent clearance. Lovenox[®] was the first LMWH to be approved in the US; it was originally approved by the FDA in March 1993 for prevention of DVT in patients undergoing hip or knee replacement surgery. Since that time, it has gained approval for several other indications, including:

- DVT prophylaxis in patient undergoing abdominal surgery
- Unstable angina and non-Q-wave myocardial infarction
- Inpatient treatment of acute pulmonary embolism (PE) and DVT
- Outpatient treatment of acute DVT not associated with PE when combined with warfarin,
 and
- ST-segment elevation myocardial infarction (STEMI).

According to prescribing information for the product, the longest that Lovenox[®] is approved for outpatient administration is 17 days for acute DVT without PE. Clinical situations that warrant longer therapy with LMWH do exist, however. ACCP guidelines recommend treatment of DVT in cancer patients with LMWH for 3-6 months followed by anticoagulation therapy indefinitely or until the cancer is resolved. Also, treatment of DVT and/or DVT prophylaxis in pregnant females is recommended to continue throughout the pregnancy and at least six weeks postpartum.

HID was recently asked to conduct a utilization review of Lovenox[®] to determine if long-term treatment with the product was an issue in the Mississippi Medicaid population. HID gathered Lovenox[®] claims data for several individual months and then intersected these searches to determine the number of beneficiaries receiving therapy consistently from month to month.



The chart on the previous page shows that the number of claims and beneficiaries receiving Lovenox[®] remains relatively constant from month to month, with claims counts ranging from 130's -150's and beneficiary counts ranging from 110-120.

Months Intersected	Beneficiary Count	Total DOM Cost
January, February	41	\$71,066.21
February, March	50	\$95,261.25
October, January	23	\$45,170.82
October, March	18	\$34,936.31
January, March	42	\$80,675.22
January, February, March	31	\$56,210.62

When the searches were intersected, the results provided indicate that the number of beneficiaries being treated longer than 1 month with Lovenox[®] is not substantial. The largest number identified was 50 beneficiaries who received Lovenox[®] during the months February and March for a total cost of treatment at \$95,261.25.

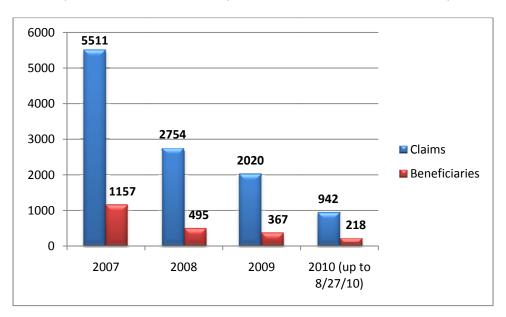
Conclusion

Lovenox[®] is an important tool in the outpatient treatment and prophylaxis of DVT, providing a more consistent therapeutic response than unfractionated heparin. Prescribing information for the product limits outpatient use to 17 days, with national treatment guidelines recommending treatment for specific populations for longer periods. DOM, along with other states, recently received direction from the Centers for Medicare and Medicaid Services that some type of consistent review process for Lovenox[®] should be put into place to promote clinically appropriate utilization of the agent. DOM seeks the DUR Board's counsel to identify the optimal approach for reviewing the utilization of this agent systematically, such as retrospective DUR profile reviews or a prospective prior authorization process.

Utilization Review of Avandia®

Avandia (rosiglitazone) is an oral antidiabetic agent from the thiazolidinedione class. It specifically targets insulin resistance, which is considered to be a central component in the development of type 2 diabetes mellitus, as well as dyslipidemia and hypertension in patients with diabetes mellitus. Avandia was originally approved as an adjunct to diet and exercise to improve glycemic control in patients with type 2 diabetes mellitus either as monotherapy or in combination with metformin or a sulfonylurea. In late September 2010, the FDA announced that access to Avandia will be restricted due to data suggesting an increased risk of cardiovascular events in patients taking the medication. These restrictions follow the addition of black box warnings to the product's label in August and November 2007 regarding heart failure and myocardial infarction, respectively. Under the new restricted access program, patients currently taking Avandia and benefitting from treatment will be allowed to continue to do so, but new patients will only be allowed access to the medication if they are unable to achieve blood glucose control with other diabetes medications, are unable to take Actos (pioglitazone), and are made aware of the drug's considerable risks to the heart.

As a result of this announcement, the Division of Medicaid asked HID to review utilization data for Avandia[®] to determine what the current utilization in the Mississippi Medication population is as well as what the recent trend has been for the product. HID gathered claims data for the last several years, up to 8/27/10, and compared the results to find any identifiable trends. The results are provided below.

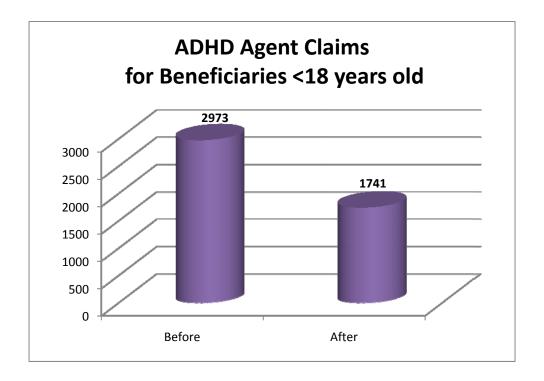


As the chart above illustrates, there was a large decrease (~50%) in utilization of Avandia from 2007 to 2008, from 5,511 claims to 2,754 claims. This drop corresponds with the highly publicized addition of the black box warnings to the product's label in the second half of 2007. Additionally, with each year there has been a steady decline in utilization of the medication, with only 942 claims in 2010 (through 8/27/10). Although the restricted access of Avandia will undoubtedly impact a significant number of Mississippi Medicaid beneficiaries, the results above indicate than many prescribers have already made the decision to employ other measures in the treatment of their diabetic patients.

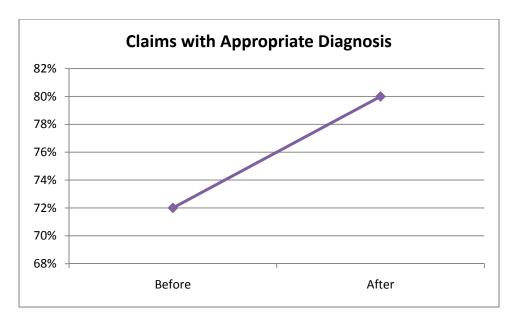
Analyzing the Effectiveness of Maximum Age Limits for ADHD Agents

On January 1, 2010, the Division of Medicaid implemented a maximum age limit of 21 years on all of the ADHD agents. Claims for medications in this class for beneficiaries over the age of 21 deny at the point of sale, requiring documentation through a prior authorization request of a clinically appropriate diagnosis that justifies the need for the requested medication. Due to the abuse potential associated with the ADHD agents, this age limit was implemented to help ensure appropriate utilization of these medications.

HID analyzed claims data pre- and post-implementation of the maximum age limit to determine if the age limit is serving its intended purpose. Claims data for the 6 months prior to (7/1/09 - 12/31/09) and after (1/1/10 - 6/30/10) the age limit implementation were gathered for all of the ADHD agents for beneficiaries over 21 years old. The results are illustrated in the chart below.



According to this chart, there was a 41% decrease in the number of claims for these medications in the target population, from 2,973 claims in the six months prior to the implementation to 1,741 claims in the six months following the implementation. However, since the purpose of the age edit for this class was to ensure appropriate utilization, HID further analyzed claims data based on diagnoses. In addition to attention deficit hyperactivity disorder, other diagnoses accepted on prior authorization requests include narcolepsy and traumatic brain injury, among others. The chart on the next page illustrates the results of the analysis based on diagnosis.



In the six months before the maximum age limit implementation, 72% of all claims for ADHD agents in beneficiaries over 21 years old were for a diagnosis of ADHD, traumatic brain injury, or narcolepsy. In the six months after the implementation, 80% of all claims for ADHD agents in the target population were for the aforementioned diagnoses. Although the increase was slight, it appears that this maximum age limit serves the intended purpose of promoting appropriate utilization of the ADHD agents.

Conclusion

Beginning January 1, 2010, DOM implemented maximum age limits of 21 years on the ADHD agents, with the expectation that holding prescribers accountable by requiring documentation of a clinically appropriate diagnosis via the prior authorization process would foster awareness of the need for careful prescribing of a therapeutic class associated with a high risk of abuse potential. Based on the data presented in this analysis, it appears that this age limit has served as a tool to help ensure that these medications are being used properly in the adult Mississippi Medicaid population.

FDA Updates

The following information is provided to the DUR Board to assist in identifying drug products with potential for concern surrounding safety and appropriate utilization. Most of the safety alert information provided is derived from recent FDA safety alerts. While many of the alerts included are not Black Box Warning additions or updates, they are labeling changes or updates with relevance worthy of action by FDA.

Included for reference, the following is the Code of Federal Regulations definition for Black Box Warnings. (Citation: Title 21 CFR 201.57 Section E)

(e) Warnings. Under this section heading, the labeling shall describe serious adverse reactions and potential safety hazards, limitations in use imposed by them, and steps that should be taken if they occur. The labeling shall be revised to include a warning as soon as there is reasonable evidence of an association of a serious hazard with a drug; a causal relationship need not have been proved. A specific warning relating to a use not provided for under the "Indications and Usage: section of labeling may be required by the Food and Drug Administration if the drug is commonly prescribed for a disease of condition, and there is lack of substantial evidence of effectiveness for that disease or condition, and such usage is associated with serious risk or hazard. Special problems, particularly those that may lead to death or serious risk or hazard. Special problems, particularly those that may lead to death or serious injury, may be required by the Food and Drug Administration to be placed in a prominently displayed box. The boxed warning ordinarily shall be based on clinical data, but serious animal toxicity may also be the basis of a boxed warning in the absence of clinical data. If a boxed warning is required, its location will be specified by the Food and Drug Administration. The frequency of these adverse reactions and, if known, the approximate mortality and morbidity rates for patients sustaining the reaction, which are important to safe and effective used of the drug, shall be expressed as provided under the "Adverse Reactions" section of the labeling.

Lamictal (lamotrigine): Label Change - Risk of Aseptic Meningitis

AUDIENCE: Pediatrics, Neurology, Psychiatry

ISSUE: FDA notified healthcare professionals and patients that Lamictal (lamotrigine), a medication commonly used for seizures in children two years and older, and bipolar disorder in adults, can cause aseptic meningitis. Symptoms of meningitis may include headache, fever, stiff neck, nausea, vomiting, rash, and sensitivity to light. In cases of meningitis, it is important to rapidly diagnose the underlying cause so that treatment can be promptly initiated.

BACKGROUND: The decision to revise the Lamictal label is based on FDA's identification of 40 cases of aseptic meningitis in patients taking Lamictal (from December 1994 to November 2009). See the Data Summary section of the Drug Safety Communication for additional information.

RECOMMENDATION: Patients should be advised to contact their healthcare professional immediately if they experience signs and symptoms of meningitis while taking Lamictal. If meningitis is suspected, patients should be evaluated for other causes of meningitis and treated as indicated. Discontinuation of Lamictal should be considered if no other clear cause of meningitis is identified.

Healthcare professionals and patients are encouraged to report adverse events or side effects related to the use of this product to the FDA's MedWatch Safety Information and Adverse Event Reporting Program.

Midodrine hydrochloride: FDA Proposes Withdrawal of Low Blood Pressure Drug

AUDIENCE: Cardiology and Nephrology

ISSUE: FDA proposed to withdraw approval of the drug midodrine hydrochloride, used to treat the low blood pressure condition, orthostatic hypotension, because required post-approval studies that verify the clinical benefit of the drug have not been done. To date, neither the original manufacturer nor any generic manufacturer has demonstrated the drug's clinical benefit, for example, by showing that use of the drug improved a patient's ability to perform life activities.

BACKGROUND: The drug, marketed as ProAmatine by Shire Development Inc. and as a generic by others, was approved in 1996 under the FDA's accelerated approval regulations for drugs that treat serious or life-threatening diseases. That approval required that the manufacturer verify clinical benefit to patients through post-approval studies.

RECOMMENDATION: Patients who currently take this medication should not stop taking it and should consult their health care professional about other treatment options.

Stalevo (carbidopa/levodopa and entacapone): Ongoing Safety Review: Possible increased cardiovascular risk

Issue: FDA notified healthcare professionals that it is evaluating clinical trial data that suggest patients taking Stalevo (a combination of carbidopa/levodopa and entacapone) may be at an increased risk for cardiovascular events (heart attack, stroke, and cardiovascular death) compared to those taking carbidopa/levodopa (sold as the combination product, Sinemet). FDA's decision to conduct a meta-analysis was based on findings from the Stalevo Reduction In Dyskinesia Evaluation – Parkinson's Disease or STRIDE-PD trial, which reported an imbalance in the number of myocardial infarctions in patients treated with Stalevo compared to those receiving only carbidopa/levodopa. Although myocardial infarction, cardiac irregularities, hypertension, and palpitations have been reported with levodopa, previous clinical trials with Stalevo did not show an imbalance in myocardial infarction, stroke, and cardiovascular death.

Background: Both Stalevo and Sinemet have been shown to be effective treatments for the symptoms of Parkinson's disease. The addition of entacapone to carbidopa/levodopa has been shown to lead to a greater degree of improvement in some of the symptoms of Parkinson's disease than treatment with carbidopa/levodopa alone. Entacapone is also available as a single ingredient product (sold under the brand name Comtan) to be always administered in association with carbidopa/levodopa (entacapone has no antiparkinsonian effect of its own). It is estimated that 154,000 patients were dispensed a prescription for Stalevo from its approval in June 2003 through October 2009.

Recommendations: At this time, FDA's review of the potential cardiovascular risk with Stalevo is ongoing. Healthcare professionals should regularly evaluate the cardiovascular status of patients who are taking Stalevo, especially if they have a history of cardiovascular disease. Patients should not stop taking Stalevo unless told to do so by their healthcare professional. FDA is exploring additional ways to assess whether Stalevo increases the risk of cardiovascular events, and will update the public when this review is complete.

Tygacil (tigecycline): Label Change - Increased Mortality Risk

ISSUE: FDA reminded healthcare professionals of an increased mortality risk associated with the use of the intravenous antibacterial Tygacil (tigecycline) compared to that of other drugs used to treat a variety of serious infections. The increased risk was seen most clearly in patients treated for hospital-acquired pneumonia, especially ventilator-associated pneumonia, but was also seen in patients with complicated skin and skin structure infections, complicated intra-abdominal infections and diabetic foot infections. FDA has updated sections of the Tygacil drug label to include information regarding increased mortality risk of Tygacil.

BACKGROUND: Tygacil is approved by FDA for the treatment of complicated skin and skin structure infections, complicated intra-abdominal infections, and community acquired pneumonia. Tygacil is not approved for the treatment of hospital-acquired pneumonia (including ventilator-associated pneumonia) or diabetic foot infection. The increased risk was determined using a pooled analysis of clinical trials. See the Data Summary section of the FDA Drug Safety Communication for additional details.

RECOMMENDATION: Alternatives to Tygacil should be considered in patients with severe infections. Healthcare professionals and patients are encouraged to report adverse events or side effects related to the use of this product to the FDA's MedWatch Safety Information and Adverse Event Reporting Program.

Valcyte (valganciclovir hydrochloride) Label Change: Possible overdose in pediatric patients

ISSUE: FDA is notifying healthcare professionals of new pediatric dosing recommendations for Valcyte (valganciclovir hydrochloride) oral tablets and oral solution. FDA has determined that adding an upper limit of $150 \, \text{mL/min/1.73} \, \text{m}^2$ to the creatinine clearance calculated using the Schwartz formula for the determination of pediatric doses can help prevent the potential for Valcyte overdosing in children with low body weight, low body surface area, and below normal serum creatinine.

BACKGROUND: Valganciclovir is an antiviral medication that can be effective for the prevention of cytomegalovirus (CMV) disease in children 4 months to 16 years of age who have undergone a kidney or heart transplant. Cytomegalovirus is a member of a group of herpes-type viruses that can cause disease in different parts of the body.

RECOMMENDATION: If the calculated pediatric dose of Valcyte exceeds 900 mg, a dose of 900 mg should be administered to the child. The dosing calculation can be found in the Drug Safety Communication. Be aware of possible valganciclovir overdose in pediatric patients with low body weight, low body surface area, or below normal serum creatinine. Report adverse events involving Valcyte to MedWatch.

Actos (pioglitazone): Ongoing Safety Review - Potential Increased Risk of Bladder Cancer

ISSUE: FDA notified healthcare professionals and patients that the Agency is reviewing data from an ongoing, ten-year epidemiological study designed to evaluate whether Actos (pioglitazone) is associated with an increased risk of bladder cancer. Findings from studies in animals and humans suggest this is a potential safety risk that needs further study. At this time, FDA has not concluded that Actos increases the risk of bladder cancer. Its review is ongoing, and the Agency will update the public when it has additional information.

BACKGROUND: The drug manufacturer, Takeda, conducted a planned analysis of the study data at the five-year mark, and submitted their results to FDA. Overall, there was no statistically significant association between Actos exposure and bladder cancer risk. However, further analyses were also performed looking at how long patients were on Actos and the total amount of the drug they received during that time. An increased risk of bladder cancer was observed among patients with the longest exposure to Actos, as well as in those exposed to the highest cumulative dose of Actos.

RECOMMENDATIONS: Healthcare professionals should continue to follow the recommendations in the drug label when prescribing Actos. Patients should continue taking Actos unless told otherwise by their healthcare professional. Patients who are concerned about the possible risks associated with using Actos should talk to their healthcare professional. Additional Information for Patients, Information for Healthcare Professionals, and a Data Summary are provided in the Drug Safety Communication.

Similac Powder Infant Formulas: Recall

Program.

ISSUE: Possibility of the presence of a small common beetle in the product. The FDA has determined that while the formula containing these beetles poses no immediate health risk, there is a possibility that infants who consume formula containing the beetles or their larvae, could experience symptoms of gastrointestinal discomfort and refusal to eat as a result of small insect parts irritating the GI tract. BACKGROUND: The recall of these powder infant formulas includes certain Similac powder product lines offered in plastic containers, and certain Similac powder product lines offered in sizes such as 8-ounce, 12.4-ounce and 12.9-ounce cans. See the Product Photo page. The recall includes powder infant formulas sold in the U.S., Puerto Rico, Guam and some countries in the Caribbean. No Abbott liquid infant formulas are impacted.

RECOMMENDATION: If symptoms are noted and persist for more than a few days, a physician should be consulted. Products with affected lot numbers should be returned to Abbott at no cost to the consumer. To immediately find out if the product in your possession is included in this recall, parents and caregivers should visit www.similac.com/recall and type in their lot number to determine if their product is affected, or call (800) 986-8850.

Avandia (rosiglitazone): REMS - Risk of Cardiovascular Events

ISSUE: FDA notified healthcare professionals and patients that it will significantly restrict the use of the diabetes drug Avandia (rosiglitazone) to patients with Type 2 diabetes who cannot control their diabetes on other medications. These new restrictions are in response to data that suggest an elevated risk of cardiovascular events, such as heart attack and stroke, in patients treated with Avandia. BACKGROUND: Avandia is in a class of drugs known as thiazolidinediones, or TZDs. It is intended to be used in conjunction with diet and exercise to improve glucose (blood sugar) control in patients with Type 2 diabetes mellitus. Rosiglitazone also is available in combination with other diabetes medications, metformin under the brand name Avandamet or glimepiride under the brand name Avandaryl. RECOMMENDATION: FDA will require that GSK develop a restricted access program for Avandia under a risk evaluation and mitigation strategy, or REMS. Under the REMS, Avandia will be available to new patients only if they are unable to achieve glucose control on other medications and are unable to take Actos (pioglitazone), the only other drug in this class. Current users of Avandia who are benefiting from the drug will be able to continue using the medication if they choose to do so. Doctors will have to attest to and document their patients' eligibility; patients will have to review statements describing the cardiovascular safety concerns associated with this drug and acknowledge they understand the risks. The agency anticipates that the REMS will limit use of Avandia significantly. Healthcare professionals and patients are encouraged to report adverse events or side effects related to the use of these products to the FDA's MedWatch Safety Information and Adverse Event Reporting

Octagam (Immune Globulin Intravenous (human)) 5% Liquid Preparation: Market Withdrawal - Risk of Thromboembolic Events

[UPDATED 09/24/2010] Octapharma USA and FDA notified healthcare professionals that, effective immediately, Octapharma is initiating a voluntary market withdrawal of ALL lots of Octagam currently in the US market. Octapharma has determined, through consultation with the public health authorities at FDA, that until a root cause of the previously reported thromboembolic events can be determined and the problem corrected, the most prudent course of action is to suspend further administration of octagam. Customers are asked to immediately quarantine the use of these lots and to contact Octapharma's Customer Service Department to arrange for product return.

Epogen and Procrit (epoetin alfa): Recall - Particulate Matter in Vials

ISSUE: Amgen and FDA notified healthcare professionals that certain lots of Epogen and Procrit (Epoetin alfa) vials are being recalled as a precaution, because the vials may contain extremely thin glass flakes (lamellae) that are barely visible. The potential serious adverse events resulting from the use of a sterile injectable product with particulates by the intravenous route include embolic, thrombotic and other vascular events (e.g., phlebitis), and by the subcutaneous route include foreign body granuloma, local injection site reactions, and increased immunogenicity.

BACKGROUND: The products are indicated for the treatment of anemia related to HIV therapy, chronic renal failure, and chemotherapy. The lamellae result from the interaction of the formulation with glass vials over the shelf life of the product. The affected product lot numbers and expiration dates are included in the table in the firm press release, linked below.

RECOMMENDATIONS: Amgen has initiated recall letters which include instructions to return the referenced product to the returned goods service provider.

Healthcare professionals and patients are encouraged to report adverse events or side effects related to the use of these products to 1-800-77-AMGEN or to the FDA's MedWatch Safety Information and Adverse Event Reporting Program.

Meridia (sibutramine): Market Withdrawal Due to Risk of Serious Cardiovascular Events

ISSUE: Abbott Laboratories and FDA notified healthcare professionals and patients about the voluntary withdraw of Meridia (sibutramine), an obesity drug, from the U.S. market because of clinical trial data indicating an increased risk of heart attack and stroke.

BACKGROUND: Meridia was approved November 1997 for weight loss and maintenance of weight loss in obese people, as well as in certain overweight people with other risks for heart disease. The approval was based on clinical data showing that more people receiving sibutramine lost at least 5 percent of their body weight than people on placebo who relied on diet and exercise alone. FDA has now requested market withdrawal after reviewing data from the Sibutramine Cardiovascular Outcomes Trial (SCOUT). SCOUT is part of a postmarket requirement to look at cardiovascular safety of sibutramine after the European approval of the drug. The trial demonstrated a 16 percent increase in the risk of serious heart events, including non-fatal heart attack, non-fatal stroke, the need to be resuscitated once the heart stopped, and death, in a group of patients given sibutramine compared with another given placebo. There was a small difference in weight loss between the placebo group and the group that received sibutramine.

RECOMMENDATION: Physicians are advised to stop prescribing Meridia to their patients, and patients should stop taking this medication. Patients should talk to their health care provider about alternative weight loss and weight loss maintenance programs.