

## Division of Medicaid

Office of the Governor State of Mississippi

## DUR Board Meeting

May 18, 2006

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

#### May 18, 2006

Welcome John Mitchell, MD

**Old Business** 

**Approval of Meeting Minutes** 

CNS Update Frankie Rutledge

Updates Dennis Smith, RPh

**Cost Management Analysis** 

**DUR Activity Report** 

Pharmacy Program Update Judith Clark, RPh

New Business Dennis Smith, RPh

**Statins and Diabetes** 

Opioid Utilization – Impact of Hurricane Katrina

**Second Quarter Criteria Recommendations** 

**Boxed Warning Update** 

Next Meeting Information John Mitchell, MD

#### Minutes of the November 17, 2005 Drug Utilization Review (DUR) Board Meeting

**Members Attending:** Harold Blakely, RPh, Montez Carter, RPh, Randy Calvert, RPh, John Mitchell, M.D., Lee Montgomery, M.D., Leigh Anne Ross, PharmD, Rudy Runnels, M.D., Wallace Strickland

Members Absent: Billy Brown, PharmD, Andrea Phillips, M.D., Troy Griffin

**Also Present:** Judith Clark, RPh, Terri Kirby, RPh, Don Thompson, Deputy Director MS Division of Medicaid, Carlos Faler, Bureau Director Program Integrity MS Division of Medicaid, - DOM

Dennis Smith, RPh, Samuel Warman, RPh, Lew Anne Snow, R.N., Kathleen Burns, R.N.-HID Frankie Rutledge, Comprehensive Neuroscience, Inc

Dr. John Mitchell called the meeting to order at 2:07 p.m.

#### Approval of the minutes for the September 29, 2006 meeting:

Dr. Runnels made a motion to accept the minutes as submitted. Randy Calvert seconded the motion. All voted in favor of approval.

#### **CNS Update:**

Ms. Rutledge presented a CNS update regarding the following projected goals:

- 1. Improve continuity of care
- 2. Eliminate redundant treatments
- 3. Coordinate care among providers
- 4. Decrease risks associated with inappropriate use

Ms. Rutledge stated that the prescriber feedback response rate was between 8% and 10% with the most common response being "this is not my patient". The clinical concerns discussed were:

- 1. patients on high numbers of behavioral health drugs
- 2. long-term use of benzodiazepines
- 3. multiple prescribers of anticonvulsants/mood stabilizers
- 4. switching atypical antipsychotics without sufficient trial

With the implementation of MMA Part D as of Jan 1, 2006, BPM will redesign the 2006 enhancement. The focus will include up to 60 indicators being distributed among adults age 64 and younger and children. Indicators for opiates have also been added.

#### **Updates**

#### **Cost management analysis:**

Dennis Smith presented the top 25 drugs based on the number of claims dated 8/01/05 thru 8/31/05. The top drug was hydrocodone w/acetaminophen with 19,428 paid claims. This was in response to a request from the DUR Board to do a month by month report on the top 25 drug in paid claims. Ms. Clark included that Hurricane Katrina may have had an impact on the increase

in mental health prescriptions. She continued that there are many outstanding claims due to Hurricane Katrina from other states.

#### **Osteoporosis:**

Dennis Smith suggested tabling this intervention until after January 1, 2006 in light of the change to the Medicaid beneficiary pool with Medicare Part D.

#### **Narcotic Utilization:**

Mr. Smith presented an overview of narcotic utilization in response to the P & T Committees' request that this data be reviewed by the DUR Board. In the first nine months of 2005, there were over 83,000 claims for hydrocodone-containing products billed to Medicaid. A pharmacy claims search was made to identify all beneficiaries who have received narcotic prescriptions from more than one prescriber within a 30 day time frame. Beneficiaries with any cancer diagnosis were excluded from this search. The analysis yielded the following observations:

- 1. 4, 075 beneficiaries received more than one narcotic within 30 days from more than one prescriber
- 2. 1,864 beneficiaries received three or more narcotics from more than one prescriber during the 90 day search period
- 3. 884 beneficiaries received narcotics from three or more prescribers during the 90 day search.

Due to the national scope of this problem, many state Medicaid programs have responded in various ways. The most common policy is the imposition of monthly quantity limits on these products. Another common action is "lock-in" of high-utilizing beneficiaries to a specific prescriber and pharmacy.

#### **Recommendations:**

- 1. Evaluate and explore a prospective DUR edit in the POS system for any duplicate narcotic prescription from a second prescriber within a 31 day period, excluding beneficiaries with a cancer diagnosis.
- 2. Intensify the quantity limits.
- 3. Encourage a lock-in program which would limit high-utilizing beneficiaries to a specific primary care physician and/or pain management specialist and a specific pharmacy

After much discussion, a motion was made by Randy Calvert to limit all narcotics to two (2) units per day. This motion was seconded by Montez Carter. All voted in favor of the motion. Carlos Faler, Director of Program Integrity for the Division of Medicaid, informed the Board that his department has an ongoing process to deal with the above mentioned problems. He asked that his department be given time to implement certain restrictions they have researched for several months.

#### **Synagis**

Lew Anne Snow presented an overview of the Synagis prior authorization program. Medicaid beneficiaries must obtain prior authorization to receive Synagis. The current Medicaid criteria are based on the American Academy of Pediatrics guidelines. Dr Mitchell commented to the Board that the Synagis PA process appears to be effective, and he concluded that unless the Board had further directions, HID would continue without changes. No recommendations were made.

#### **Pharmacy Program Update:**

Judy Clark introduced Don Thompson, Deputy Director of Health Services. Ms. Clark gave a brief pharmacy program update. She also distributed to the board members a copy of the current Product Quantity Limits which included changes that became effective on November 1, 2005.

#### **New Business**

#### **Marinol Utilization:**

Dennis Smith presented information regarding Marinol utilization. Dronabinol is indicated for the treatment of nausea and vomiting associated with cancer chemotherapy in patients who have failed to respond adequately to conventional treatments. It is also approved to treat appetite loss associated with weight loss in people with AIDS. In July, Megace was re-categorized in terms of its primary therapeutic class. Whereas its therapeutic class was previously steroid antineoplastics, the classification is now appetite stimulants. As a result of this change, megestrol acetate suspension is no longer covered by Medicaid. This has resulted in a search for a substitute agent for the treatment of cachexia. Mr. Smith continued with the study on Marional pointing out dosing and administration with mention of adverse effects and abuse potential. The utilization during the year between 10/01/2004 and 09/30/2005 was 1545 claims for this agent at a cost of over \$760,000. Among these claims, there was only one beneficiary with a diagnosis of HIV or AIDS. HID was unable to associate a cancer diagnosis with any of these beneficiaries. There has been no significant increase in the number of claims for this agent since the recategorization of megestrol acetate suspension.

#### **Conclusion:**

Based on the above information, almost all of the patients receiving treatment with Marinol did not have a diagnosis related to the approved indications for this agent.

#### **Recommendation:**

Dennis Smith recommended that an intervention letter be sent to all prescribers for their patients who have received Marinol without a diagnosis of HIV, AIDS, or cancer. The letter would include information about the approved indications, appropriate use and abuse potential of this agent. Dr Ross made a motion to accept HID's recommendation. Dr. Montgomery seconded the motion. All voted in favor of this motion.

#### **Oxandrin Utilization:**

Data regarding the utilization of Oxandrin was presented by Dennis Smith. Oxandrin is indicated as adjunctive therapy to promote weight gain after weight loss following extensive surgery, chronic infections or severe trauma. It is also indicated to offset the protein catabolism associated with prolonged administration of corticosteroids, as well as for the relief of the bone pain frequently accompanying osteoporosis. The number of claims has not significantly increased since the re-categorization of megestrol acetate suspension.

#### **Conclusion:**

There is no evidence to support inappropriate use of this agent.

#### **Recommendation:**

HID recommended no intervention at this time, but will continue to monitor Oxandrin utilization.

#### **Lyrica Utilization:**

Dennis Smith presented data regarding Lyrica utilization. Pregabalin is indicated for the management of neuropathic pain associated with diabetic peripheral neuropathy and post herpetic neuralgia. It is also indicated as adjunctive therapy for adult patients with partial onset seizures.

#### **Recommendation:**

Mr. Smith recommended that HID continue to monitor the utilization of Lyrica over the coming months to evaluate any changes in utilization trends. Dr. Montgomery made a motion to accept the recommendation. Dr. Runnels seconded the motion. All voted in favor of the motion.

#### **Black Box Warnings:**

Dennis Smith presented black box warnings issued by the FDA concerning the following:

#### Avinza:

Audience: pain specialists, other healthcare professionals and consumers Posted 11/03/2005 Ligand pharmaceuticals and FDA notified healthcare professionals of revisions to BOXED WARNING, WARNINGS, PRECAUTIONS, and CLINICAL PHARMACOLOGY and DOSAGE AND ADMINISTRATION sections of the prescribing information to highlight and strengthen the warning that patients should not consume alcohol while taking Avinza. Additionally, patients must not use prescription or non-prescription medications containing alcohol while on Avinza therapy.

#### **Cylert and generic pemoline products:**

Audience: Neuropsychiatric healthcare professionals, Pediatricians, Pharmacists and consumers. Posted 10/24/2005 FDA has concluded that the overall risk or liver toxicity from Cylert and generic pemoline products outweighs the benefits of this drug. In May 2005, Abbott chose to stop sales and marketing of Cylert in the U.S. All generic companies have also agreed to stop sales and marketing of this product. Health care professionals who prescribe Cylert or any of its generics, should transition their patients to an alternative therapy. Cylert will remain available through pharmacies and wholesalers until supplies are exhausted. No additional product will be available.

#### **Cymbalta:**

Audience: Neuropsychiatric and other healthcare professionals POSTED 10/17/2005 Eli Lilly and FDA notified healthcare professionals of revision to the PRECAUTIONS/Hepatotoxicity section of the prescribing information for Cymbalta. This medication is indicated for treatment of major depressive disorder and diabetic peripheral neuropathic pain. Post marketing reports of hepatic injury suggest that patients with preexisting liver disease who take duloxetine may have an increased risk for further liver damage. The new labeling extends the precaution against using Cymbalta in patients with substantial alcohol use to include those patients with chronic liver disease. It is recommended that Cymbalta not be administered to patients with any hepatic insufficiency.

#### Paxil:

Audience: Neuropsychiatric and other healthcare professionals

Posted 09/27/2005 GlaxoSmithKline Kline and FDA notified healthcare professionals of changed to the pregnancy/PRECAUTIONS sections of the prescribing Information for Paxil and Paxil CR to describe the results of a GSK retrospective epidemiologic study of major congenital malformations for paroxetine as compared to other antidepressants. Healthcare professionals are advised to carefully weigh the potential risks and benefits of using parosetine therapy in women during pregnancy and to discuss these findings as well as treatment alternatives with their patients.

#### Toprol XL

#### **Topamax**

Audience: All healthcare professionals

Posted 09/26/2005 AstraZeneca and FDA notified healthcare professionals with reports of medication dispensing or prescribing errors between Toprol XL indicated for the treatment of hypertension, long-term treatment of angina pectoris and heart failure NYHA Class 11 or 111 and Topamax, a product of Ortho-McNeil Neurologics, Inc, indicated for the treatments of epilepsy and migraine prophylaxis. These reports include instances where Toprol XL was incorrectly administered to patients instead of Topamax, Tegretol or Tegretol XL and vice versa, some of them leading to adverse events.

#### **Election of officers:**

With the conclusion of the meeting being near, Ms Clark reminded the Board that they must elect officers. The following were elected:

- Chairman: Dr. John Mitchell, was nominated by Harold Blakely and seconded by Leigh Ann Ross
- Vice-Chairman: Randy Calvert was nominated by Leigh Anne Ross and seconded by Montez Carter.

All voted in favor of these motions.

Ms. Clark reminded the Board that the dates of the DUR Board for 2006 will be sent out in letter form. She also asked board members to submit topics of interest for the upcoming year and forward them to DOM.

There being no further business, Dr. Mitchell adjourned the meeting at 4:00 p.m.

Respectfully submitted: Health Information Designs

#### Minutes of the February 23, 2006 Drug Utilization Review (DUR) Board Meeting

**Members Attending:** Harold Blakely, RPh, Billy Brown, PharmD, Randy Calvert, RPh, Frank Marascalco, RPh, John Mitchell, M.D., Lee Montgomery, M.D., Rudy Runnels, M.D., Wallace Strickland

Members Absent: Montez Carter, RPh, Andrea Phillips, M.D., Troy Griffin

**Also Present:** Judith Clark, RPh, Terri Kirby, RPh,- DOM, Dennis Smith, RPh, Samuel Warman, RPh, Lew Anne Snow, R.N., Kathleen Burns, R.N. -HID

Dr. John Mitchell called the meeting to order at 2:10 p.m.

#### Approval of the minutes for the November 17, 2005 meeting:

Approval of the November 17, 2005 DUR Board meeting minutes was tabled until May 18, 2006 due to incomplete information in the minutes.

#### **Updates:**

#### **Cost Management Analysis**

Dennis Smith presented a brief cost management analysis report. According to the top fifteen (15) therapeutic classes based on total cost of claims from 11/01/2005 thru 11/30/2005, the antipsychotic agents led with 23,496 prescriptions at a total cost of \$5,868,424.74 or 2.98% of total claims. The antipsychotic agents also led from 12/01/2005 thru 12/31/2005 with 23,972 prescriptions at a cost of \$6,003,338.90 or 3.0% of total claims.

#### **DUR Activity Report:**

Dennis Smith gave a report on RDUR activities from October 2005 thru January 2006. Mr. Smith stated that HID is awaiting responses within the 120 days post-intervention period. With proper responses, solid trends can be identified post-intervention

Bo Bowen from Information and Quality Healthcare (IQH) was introduced to the Board by Ms. Clark. Mr. Bowen presented a brief overview of IQH regarding Medicare patients and their Prescription Drug Plans.

#### **Pharmacy Program Updates**

Ms. Clark introduced Mr. Frank Marascalco, RPh as a new DUR Board member. Ms. Clark presented information regarding a new Hospice edit which became effective February 2006. Ms. Clark stated that additional information regarding this may be found on the Division of Medicaid website. Ms. Clark gave the board members a copy of products with quantity limits and explained that these limits help in the over-utilization of many classes of drugs. In October 2005, a new handheld device was distributed to 225 physicians throughout the state. Ms. Clark announced that Mississippi was only the second state to receive these devices and that with these devices the physician is able to pull up all paid pharmacy claims for their Medicaid

beneficiaries. These PDAs also allow the physician to view the Division of Medicaid preferred drug list as well as submit prescriptions electronically to many pharmacies.

#### **New Business**

#### **DUR Interventions:**

With 70% of the Medicaid population being children, Dennis Smith presented several interventions pertinent to pediatric patients.

#### **Childhood Onset of Type 2 Diabetes**

Mr. Smith reported that it is estimated that as many as 8-45% of new onset childhood diabetes cases in the United States may be Type 2 diabetes. Using the above percentages, it is thought that between 380 and 2,137 of children covered by Mississippi Medicaid have Type 2 diabetes. Two important factors in the development of Type 2 diabetes in children are puberty and obesity. MS leads the nation with the largest number of obese children. Mr. Smith explained that while experience to date in dealing with the treatment of type 2 diabetes in children is limited, some general guidelines have been published to guide providers in the management of this disorder. The American Diabetes Association (ADA) issued a consensus statement on Type 2 Diabetes in Children and Adolescents. According to the ADA, at the time of diagnosis it can be very difficult to determine the correct classification of diabetes in children (Type 1 verses Type2) due to the similarity of symptoms and findings.

#### **Recommendations:**

As pointed out by Dr. Montgomery, it would be a monumental task to try to do any interventions at this time for this childhood disease. No recommendations were made at this time.

#### **Topical Corticosteroid Utilization in Children**

Mr. Smith reported that the use of topical corticosteroid agents in children is a common and necessary mode of treatment in various dermatoses. Due to the risks and warnings associated with these agents, the appropriate use of highly potent topical corticosteroids is very important.

#### **Recommendations:**

After much discussion, Dr. Montgomery suggested placing POS system edits on the superpotent agents. Dr. Mitchell suggested that DOM also impose an edit that is age specific. Dr. Montgomery also agreed that an age edit would useful on these agents. Dr. Montgomery made a motion that the DUR review criteria regarding the use of high potency topical corticosteroids be implemented immediately. Dr. Mitchell seconded the motion. All voted in favor of approval. The board also requested that HID work in conjunction with DOM to create a list of topical corticosteroids agents appropriate for use in children 0 to 2 years of age that could be used as a reference for physicians.

#### **Retrospective DUR Criteria Recommendations:**

Dennis Smith presented the following retrospective DUR criteria recommendations:

- Long-acting Beta Agonists/therapeutic appropriateness- Even though long-acting beta-2 agonists (LABA) decrease the frequency of asthmatic episodes, these medications may make the episodes more severe when they do occur. LABAs should not be the first medicine used to treat asthma. They should be added to the asthma treatment plan only if other medications do not control asthma.
- Rosiglitazone/therapeutic appropriateness- Post-marketing reports suggest that Avandia/Avandamet/Avandaryl (rosiglitazone-containing products) may cause new onset and worsening of diabetic macular edema. Concurrent peripheral edema may also occur in these patients. Macular edema resolved or improved, in some cases, following discontinuation of the drug or dose reduction.
- Avinza/therpeutic appropriateness- Patients must not consume alcoholic beverages
  while on Avinza (morphine extended-release) therapy. Additionally, patients must not
  use prescription or non-prescription medications containing alcohol while on Avinza
  therapy. Consumption of alcohol while taking Avinza may result in the rapid release
  and absorption of a potentially fatal dose of morphine.
- Lindane/therapeutic appropriateness- Lindane can be poisonous if not used properly. Seizures and death have been reported following use with repeat or prolonged application, but also in rare cases following a single application. The medication should only be used by patients who cannot tolerate or have failed first-line treatment with safer medications. Infants, children, the elderly, patients with other skin conditions and those who weigh less than 110 lbs (50 kg) may be at greater risk for serious neurotoxicity.
- Beta Blockers/therapeutic appropriateness- Non-selective beta-blockers should be used with caution in patients with diabetes. These agents may mask the signs and symptoms of hypoglycemia and delay recovery time. Beta blockade also reduces the release of insulin in response to hyperglycemia; it may be necessary to adjust the dose of antidiabetic drugs. Cardioselective beta-blockers are preferred due to the decreased risk of adverse effects on glucose regulation.

Dr. Mitchell made a motion to accept these criteria recommendations with the exception of rosiglitazone/therapeutic appropriateness. The motion was seconded by Dr. Montgomery. All voted in favor of the motion.

#### **Boxed Warning Updates**

#### **Ketek (telithromycin)**

Audience: Infectious Disease, Hepatology and other healthcare professionals [Posted 01/20/2006] Annals of Internal Medicine published an article reporting three patients who experienced serious liver toxicity following administration of Ketek (telithromycin). These cases were also reported to FDA MedWatch. Telithromycin is marketed and used extensively in many other countries, including countries in Europe and Japan. While it is difficult to determine the actual frequency of adverse events from voluntary reporting systems such as the MedWatch program, the FDA is continuing to evaluate the issue of liver problems in association with use of telithromycin in order to determine if labeling changes or other actions are warranted. As a part of this, FDA is continuing to work to understand better the frequency of liver-related adverse events reported for approved antibiotics, including telithromycin.

#### **Elidel Cream (pimecrolimus)**

#### **Protopic Ointment (tacrolimus)**

Audience: Dermatological and other healthcare professionals

[Posted 01/20/2006] The Food and Drug Administration announced the approval of updated labeling for two topical eczema drugs, Elidel Cream (pimecrolimus) and Protopic Ointment (tacrolimus). The labeling will be updated with a boxed warning about a possible risk of cancer and a Medication Guide (FDA-approved patient labeling) will be distributed to help ensure that patients using these prescription medicines are aware of this concern. The new labeling also clarifies that these drugs are recommended for use as second-line treatments. This means that other prescription topical medicines should be tried first. Use of these drugs in children under 2 years of age is not recommended.

#### Clozaril (clozapine) tablets

Audience: Neuropsychiatric healthcare professionals and patients [Posted 01/13/2006] Novartis and FDA notified healthcare professionals of revisions to the BOXED WARNING, WARNINGS, CONTRAINDICATIONS, PRECAUTIONS (Information for Patients and Pharmacokinetic-Related Interactions subsections), and ADVERSE REACTIONS (Postmarketing Clinical Experience subsection) sections of the prescribing information for Clozaril (clozapine) tablets. Recommendations from the FDA's Psychopharmacological Drugs Advisory Committee regarding the white blood cell monitoring schedule, required for all clozapine users, has resulted in modification in the monitoring schedule. Additional labeling changes address safety issues related to dementia-related psychosis, paralytic ileus, hypercholesterolemia and pharmacokinetic interaction with citalopram.

#### Avandia (rosiglitazone maleate)

#### Avandamet (rosiglitazone maleate/metformin HCl)

Audience: Endocrinologists, other healthcare professionals and patients [Posted 01/05/2006] GlaxoSmithKline and FDA notified healthcare professionals about post-marketing reports of new onset and worsening diabetic macular edema for patients receiving rosiglitazone. In the majority of these cases, the patients also reported concurrent peripheral

edema. In some cases, the macular edema resolved or improved following discontinuation of therapy and in one case, macular edema resolved after dose reduction.

#### **Long-acting Beta2-Adrenergic Agonists:**

Advair Diskus (fluticasone propionate & salmeterol inhalation powder) Foradil Aerolizer (formoterol fumarate inhalation powder) Serevent Diskus (salmeterol xinafoate inhalation powder)

Audience: Pulmonologists, other healthcare professionals and consumers [Posted 11/18/2005] FDA notified manufacturers of Advair Diskus, Foradil Aerolizer, and Serevent Diskus to update their existing product labels with new warnings and a Medication Guide for patients to alert health care professionals and patients that these medicines may increase the chance of severe asthma episodes, and death when those episodes occur. All of these products contain long-acting beta2-adrenergic agonists (LABA). Even though LABAs decrease the frequency of asthma episodes, these medicines may make asthma episodes more severe when they occur. A Medication Guide with information about these risks will be given to patients when a prescription for a LABA is filled or refilled.

#### Paroxetine HCl - Paxil and generic paroxetine

Audience: Neuropsychiatric and other healthcare professionals

[Posted 12/08/2005] The FDA has determined that exposure to paroxetine in the first trimester of pregnancy may increase the risk for congenital malformations, particularly cardiac malformations. At the FDA's request, the manufacturer has changed paroxetine pregnancy category from C to D and added new data and recommendations to the WARNINGS section of paroxetine prescribing information. FDA is awaiting the final results of the recent studies and accruing additional data related to the use of paroxetine in pregnancy in order to better characterize the risk for congenital malformations associated with paroxetine.

Physicians who are caring for women receiving paroxetine should alert them to the potential risk to the fetus if they plan to become pregnant or are currently in their first trimester of pregnancy. Discontinuing paroxetine therapy should be considered for these patients. Women who are pregnant, or planning a pregnancy, and currently taking paroxetine should consult with their physician about whether to continue taking it. Women should not stop the drug without discussing the best way to do that with their physician.

Dr. Mitchell then asked for intervention suggestions for the next 90 days. No suggestions were made by the Board at this time, but Ms. Clark requested that board members submit any suggestions to either HID or DOM at a later date. Dr. Mitchell asked if hypnotics had a quantity limit set by DOM. Ms. Clark responded that currently the quantity limit for hypnotics was set at 31 per 31 days. After much discussion, Mr. Strickland made a motion that a limit of 15 per month be set on all hypnotics. Dr. Montgomery seconded the motion. All voted in favor of the motion

Dr. Mitchell adjourned the meeting at 4:05 p.m.

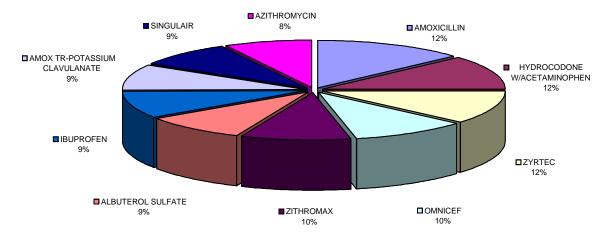
Respectfully submitted: Health Information Designs

#### TOP 25 DRUGS BASED ON NUMBER OF CLAIMS FROM 02/01/06-02/28/06

						% Total
Drug	AHFS Therapeutic Class	Rx	Paid Paid/Rx		Claims	
AMOXICILLIN	PENICILLINS	9,553	\$	83,827.18	\$ 8.77	2.45%
HYDROCODONE W/ACETAMINOPHEN	OPIATE AGONISTS	8,401	\$	84,144.46	\$ 10.02	2.16%
ZYRTEC	SECOND GENERATION ANTIHISTAMINES	8,301	\$	430,256.44	\$ 51.83	2.13%
OMNICEF	CEPHALOSPORINS	7,375	\$	634,642.25	\$ 86.05	1.89%
ZITHROMAX	MACROLIDES	7,044	\$	294,670.25	\$ 41.83	1.81%
ALBUTEROL SULFATE	BETA-ADRENERGIC AGONISTS	6,623	\$	157,432.81	\$ 23.77	1.70%
IBUPROFEN	NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	6,481	\$	56,624.09	\$ 8.74	1.67%
AMOX TR-POTASSIUM CLAVULANATE	PENICILLINS	6,433	\$	352,260.66	\$ 54.76	1.65%
SINGULAIR	MISCELLANEOUS THERAPEUTIC AGENTS	6,353	\$	608,257.94	\$ 95.74	1.63%
AZITHROMYCIN	MACROLIDES	5,538	\$	218,617.26	\$ 39.48	1.42%
ED A-HIST	PROPYLAMINE DERIVATIVES	4,817	\$	46,188.41	\$ 9.59	1.24%
ALBUTEROL	BETA-ADRENERGIC AGONISTS	4,622	\$	45,778.99	\$ 9.90	1.19%
CEPHALEXIN	CEPHALOSPORINS	4,595	\$	76,304.30	\$ 16.61	1.18%
AMOXICILLIN TRIHYDRATE	PENICILLINS	4,425	\$	59,355.54	\$ 13.41	1.14%
HYDRO-TUSSIN CBX	ETHANOLAMINE DERIVATIVES	4,355	\$	52,031.45	\$ 11.95	1.12%
PRILOSEC OTC	PROTON-PUMP INHIBITORS	4,235	\$	92,537.01	\$ 21.85	1.09%
PROMETHAZINE HCL	PHENOTHIAZINE DERIVATIVES	4,007	\$	47,500.74	\$ 11.85	1.03%
TAMIFLU	NEURAMINIDASE INHIBITORS	3,873	\$	241,341.33	\$ 62.31	1.00%
SULFAMETHOXAZOLE/TRIMETHOPRIM	SULFONAMIDES (SYSTEMIC)	3,835	\$	41,444.03	\$ 10.81	0.99%
ALPRAZOLAM	BENZODIAZEPINES (ANXIOLYTIC,SEDATIV/HYP)	3,610	\$	29,787.56	\$ 8.25	0.93%
ACETAMINOPHEN W/CODEINE	OPIATE AGONISTS	3,457	\$	29,770.70	\$ 8.61	0.89%
ADDERALL XR	AMPHETAMINES	2,794	\$	308,869.99	\$ 110.55	0.72%
CONCERTA	AMPHETAMINES	2,758	\$	301,145.61	\$ 109.19	0.71%
CLONAZEPAM	BENZODIAZEPINES (ANTICONVULSANTS)	2,666	\$	51,800.50	\$ 19.43	0.68%
RISPERDAL	ANTIPSYCHOTIC AGENTS	2,537	\$	636,140.92	\$ 250.75	0.65%
TOTAL TOP 25		128,688	\$ 4	4,980,730.42	\$ 38.70	33.06%

Total Rx Claims	389,235
From 02/01/06-02/28/06	

#### Top 10 Drugs Based on Number of Claims

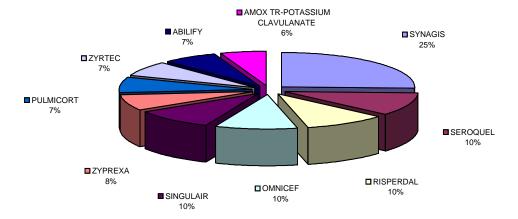


#### TOP 25 DRUGS BASED ON TOTAL CLAIMS COST FROM 02/01/06-02/28/06

					% Total
Drug	AHFS Therapeutic Class	Rx	Paid	Paid/Rx	Claims
SYNAGIS	MONOCLONAL ANTIBODIES	1,297	\$1,612,217.00	\$ 1,243.04	0.33%
SEROQUEL	ANTIPSYCHOTIC AGENTS	2,431	\$ 680,625.18	\$ 279.98	0.62%
RISPERDAL	ANTIPSYCHOTIC AGENTS	2,537	\$ 636,140.92	\$ 250.75	0.65%
OMNICEF	CEPHALOSPORINS	7,375	\$ 634,642.25	\$ 86.05	1.89%
SINGULAIR	MISCELLANEOUS THERAPEUTIC AGENTS	6,353	\$ 608,257.94	\$ 95.74	1.63%
ZYPREXA	ANTIPSYCHOTIC AGENTS	1,162	\$ 481,393.86	\$ 414.28	0.30%
PULMICORT	ADRENALS	2,129	\$ 453,303.59	\$ 212.92	0.55%
ZYRTEC	SECOND GENERATION ANTIHISTAMINES	8,301	\$ 430,256.44	\$ 51.83	2.13%
ABILIFY	ANTIPSYCHOTIC AGENTS	1,148	\$ 428,092.75	\$ 372.90	0.29%
AMOX TR-POTASSIUM CLAVULANATE	PENICILLINS	6,433	\$ 352,260.66	\$ 54.76	1.65%
ADDERALL XR	AMPHETAMINES	2,794	\$ 308,869.99	\$ 110.55	0.72%
CONCERTA	AMPHETAMINES	2,758	\$ 301,145.61	\$ 109.19	0.71%
ZITHROMAX	MACROLIDES	7,044	\$ 294,670.25	\$ 41.83	1.81%
TOPAMAX	ANTICONVULSANTS, MISCELLANEOUS	1,110	\$ 290,914.57	\$ 262.09	0.29%
ADVAIR DISKUS	BETA-ADRENERGIC AGONISTS	1,835	\$ 287,542.49	\$ 156.70	0.47%
FEIBA VH IMMUNO	HEMOSTATICS	6	\$ 258,656.49	\$43,109.42	0.00%
TAMIFLU	NEURAMINIDASE INHIBITORS	3,873	\$ 241,341.33	\$ 62.31	1.00%
GABAPENTIN	ANTICONVULSANTS, MISCELLANEOUS	1,818	\$ 220,065.76	\$ 121.05	0.47%
ZOLOFT	ANTIDEPRESSANTS	2,189	\$ 218,745.13	\$ 99.93	0.56%
AZITHROMYCIN	MACROLIDES	5,538	\$ 218,617.26	\$ 39.48	1.42%
STRATTERA	CENTRAL NERVOUS SYSTEM AGENTS, MISC.	1,631	\$ 216,090.41	\$ 132.49	0.42%
LIPITOR	HMG-COA REDUCTASE INHIBITORS	1,939	\$ 185,121.52	\$ 95.47	0.50%
PLAVIX	PLATELET-AGGREGATION INHIBITORS	1,386	\$ 177,031.02	\$ 127.73	0.36%
GEODON	ANTIPSYCHOTIC AGENTS	543	\$ 164,922.12	\$ 303.72	0.14%
LAMICTAL	ANTICONVULSANTS, MISCELLANEOUS	561	\$ 162,033.15	\$ 288.83	0.14%
TOTAL TOP 25		74,191	\$9,862,957.69	\$ 132.94	19.06%

Total Rx Claims	389,235
From 02/01/06-02/28/06	

#### Top 10 Drugs Based on Total Claims Cost

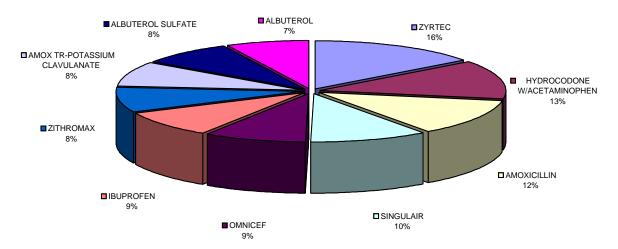


#### TOP 25 DRUGS BASED ON NUMBER OF CLAIMS FROM 03/01/06-03/31/06

						% Total
Drug	AHFS Therapeutic Class	Rx	Paid	Р	aid/Rx	Claims
ZYRTEC	SECOND GENERATION ANTIHISTAMINES	9,797	\$ 507,401.04	\$	51.79	2.53%
HYDROCODONE W/ACETAMINOPHEN	OPIATE AGONISTS	8,886	\$ 83,927.51	\$	9.44	2.29%
AMOXICILLIN	PENICILLINS	8,117	\$ 70,645.56	\$	8.70	2.09%
SINGULAIR	LEUKOTRIENE MODIFIERS	6,893	\$ 668,256.82	\$	96.95	1.78%
OMNICEF	CEPHALOSPORINS	6,106	\$ 526,698.04	\$	86.26	1.57%
IBUPROFEN	NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	5,801	\$ 48,789.74	69	8.41	1.50%
ZITHROMAX	MACROLIDES	5,604	\$ 234,915.56	69	41.92	1.45%
AMOX TR-POTASSIUM CLAVULANATE	PENICILLINS	5,576	\$ 302,487.39	\$	54.25	1.44%
ALBUTEROL SULFATE	BETA-ADRENERGIC AGONISTS	5,435	\$ 132,107.28	\$	24.31	1.40%
ALBUTEROL	BETA-ADRENERGIC AGONISTS	4,912	\$ 48,447.44	\$	9.86	1.27%
AZITHROMYCIN	MACROLIDES	4,422	\$ 175,269.03	\$	39.64	1.14%
CEPHALEXIN	CEPHALOSPORINS	4,311	\$ 71,894.18	\$	16.68	1.11%
PRILOSEC OTC	PROTON-PUMP INHIBITORS	4,116	\$ 90,776.00	\$	22.05	1.06%
SULFAMETHOXAZOLE/TRIMETHOPRIM	SULFONAMIDES (SYSTEMIC)	4,088	\$ 42,746.82	\$	10.46	1.05%
ALPRAZOLAM	BENZODIAZEPINES (ANXIOLYTIC,SEDATIV/HYP)	3,991	\$ 32,762.81	\$	8.21	1.03%
ED A-HIST	PROPYLAMINE DERIVATIVES	3,968	\$ 37,670.62	\$	9.49	1.02%
PROMETHAZINE HCL	PHENOTHIAZINE DERIVATIVES	3,748	\$ 44,485.98	\$	11.87	0.97%
ACETAMINOPHEN W/CODEINE	OPIATE AGONISTS	3,607	\$ 31,113.73	\$	8.63	0.93%
AMOXICILLIN TRIHYDRATE	PENICILLINS	3,596	\$ 48,010.46	\$	13.35	0.93%
HYDRO-TUSSIN CBX	ETHANOLAMINE DERIVATIVES	3,249	\$ 38,313.93	\$	11.79	0.84%
ADDERALL XR	AMPHETAMINES	3,114	\$ 347,160.18	\$	111.48	0.80%
CLONAZEPAM	BENZODIAZEPINES (ANTICONVULSANTS)	2,951	\$ 57,054.62	\$	19.33	0.76%
CONCERTA	AMPHETAMINES	2,868	\$ 311,103.99	\$	108.47	0.74%
RISPERDAL	ANTIPSYCHOTIC AGENTS	2,773	\$ 706,583.26	\$	254.81	0.72%
SEROQUEL	ANTIPSYCHOTIC AGENTS	2,626	\$ 734,448.90	\$	279.68	0.68%
TOTAL TOP 25		120,555	\$ 5,393,070.89	\$	44.74	31.09%

Total Rx Claims	387,734
From 03/01/06-03/31/06	

Top 10 Drugs Based on Number of Claims

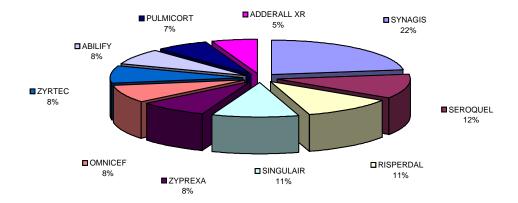


#### TOP 25 DRUGS BASED ON TOTAL CLAIMS COST FROM 03/01/06-03/31/06

					% Total
Drug	AHFS Therapeutic Class	Rx	Paid	Paid/Rx	Claims
SYNAGIS	MONOCLONAL ANTIBODIES	1,156	\$ 1,443,029.11	\$ 1,248.30	0.30%
SEROQUEL	ANTIPSYCHOTIC AGENTS	2,626	\$ 734,448.90	\$ 279.68	0.68%
RISPERDAL	ANTIPSYCHOTIC AGENTS	2,773	\$ 706,583.26	\$ 254.81	0.72%
SINGULAIR	LEUKOTRIENE MODIFIERS	6,893	\$ 668,256.82	\$ 96.95	1.78%
ZYPREXA	ANTIPSYCHOTIC AGENTS	1,241	\$ 528,146.00	\$ 425.58	0.32%
OMNICEF	CEPHALOSPORINS	6,106	\$ 526,698.04	\$ 86.26	1.57%
ZYRTEC	SECOND GENERATION ANTIHISTAMINES	9,797	\$ 507,401.04	\$ 51.79	2.53%
ABILIFY	ANTIPSYCHOTIC AGENTS	1,275	\$ 479,226.24	\$ 375.86	0.33%
PULMICORT	ADRENALS	1,955	\$ 419,111.99	\$ 214.38	0.50%
ADDERALL XR	AMPHETAMINES	3,114	\$ 347,160.18	\$ 111.48	0.80%
TOPAMAX	ANTICONVULSANTS, MISCELLANEOUS	1,184	\$ 313,426.66	\$ 264.72	0.31%
CONCERTA	AMPHETAMINES	2,868	\$ 311,103.99	\$ 108.47	0.74%
AMOX TR-POTASSIUM CLAVULANATE	PENICILLINS	5,576	\$ 302,487.39	\$ 54.25	1.44%
ADVAIR DISKUS	BETA-ADRENERGIC AGONISTS	1,859	\$ 290,204.05	\$ 156.11	0.48%
FEIBA VH IMMUNO	HEMOSTATICS	7	\$ 289,922.43	\$ 41,417.49	0.00%
ADVATE	HEMOSTATICS	9	\$ 285,812.31	\$ 31,756.92	0.00%
RECOMBINATE	HEMOSTATICS	9	\$ 253,207.42	\$ 28,134.16	0.00%
STRATTERA	CENTRAL NERVOUS SYSTEM AGENTS, MISC.	1,703	\$ 235,782.95	\$ 138.45	0.44%
ZITHROMAX	MACROLIDES	5,604	\$ 234,915.56	\$ 41.92	1.45%
ZOLOFT	ANTIDEPRESSANTS	2,273	\$ 229,539.06	\$ 100.99	0.59%
GABAPENTIN	ANTICONVULSANTS, MISCELLANEOUS	1,902	\$ 229,235.69	\$ 120.52	0.49%
LIPITOR	HMG-COA REDUCTASE INHIBITORS	1,995	\$ 189,728.02	\$ 95.10	0.51%
PLAVIX	PLATELET-AGGREGATION INHIBITORS	1,408	\$ 179,717.53	\$ 127.64	0.36%
LAMICTAL	ANTICONVULSANTS, MISCELLANEOUS	619	\$ 178,624.62	\$ 288.57	0.16%
GEODON	ANTIPSYCHOTIC AGENTS	560	\$ 178,547.00	\$ 318.83	0.14%
TOTAL TOP 25		64,512	\$ 10,062,316.26	\$ 155.98	16.64%

Total Rx Claims	387,734
From 03/01/06-03/31/06	

#### Top 10 Drugs Based on Total Claims Cost



### **Retrospective Drug Utilization Review Activities**

#### October-December 2005

#541- Diabetes/Proteinuria/Negating ACEI & ARB

- 785 beneficiaries
- Tabulating responses and outcomes-Report available August 24, 2006

#### #1536- Diabetes/Hypertension/Negating Cardiovascular Drugs

- 1,780 beneficiaries identified by Initial Criteria Exception Report
- Tabulating responses and outcomes-Report available August 24, 2006

### #1607-Certain Antihypertensive Agents/Post MI/Beta-blockers, ACEI and Aldosterone Antagonists

- 112 beneficiaries identified by Initial Criteria Exception Report
- Tabulating responses and outcomes-Report available August 24, 2006

#### #1608-Certain Antihypertensive Agents/Stroke/Thiazide diuretics & ACEI

- 325 beneficiaries identified by Initial Criteria Exception Report
- Tabulating responses and outcomes-Report available August 24, 2006

#### #1609-Certain Antihypertensive Agents/Chronic Kidney Disease/ACEI & ARB

- 3,285 beneficiaries identified by Initial Criteria Exception Report
- Tabulating responses and outcomes-Report available August 24, 2006

#### November 2005-January 2006

#2150-Narcotic (opioids)/Sickle cell anemia/absence of hydroxyurea use

- 220 beneficiaries identified by Initial Criteria Exception Report
- Tabulating responses and outcomes-Report available August 24, 2006

#### **April 2006-ongoing**

#322- Topical corticosteroid use in pediatric patients

• 159 beneficiaries identified

#### **Pediatric Use of Potent Topical Corticosteroids**

The following information is provided in response to the previous decision by the DUR Board to implement retro-DUR criteria to examine the use of potent and super-potent topical corticosteroids in children. The Board recommended a retro-DUR approach initially with the possibility of age limits for specific products once necessary system changes are made. The claim information below illustrates the prevalence of this issue.

amcinonide					
No pedi	No pediatric indication				
Ages	Cases				
<1	4				
1	2				
2	1				
3	1				
4	2				
6	1				
7	1				
8	1				
9	1				
10	1				
14	2				
15	1				

betamethasone dipropionate			
Indica	ited for > 12 yrs		
Age	Cases		
<1	1		
1	9		
2	<u>3</u>		
3	7		
4	8		
5	6		
6	6		
7	2		
8	3		
9	3		
10	4		
11	2		

desoximethasone			
No pediatric indication			
Age	Cases		
<1	4		
1	3 3 2		
2	3		
3	2		
4	5		
5	3		
6	1		
7	1		
8	2		
9	4		
10	1		
11	1		
12	4		
13	1		
14	1		
15	1 2		
18	1		

clobetasol					
Indicat	Indicated for >12 yrs				
Age	Cases				
1	1				
2	2				
3	2				
5	2				
6	2				
7	3				
8	1				
9	2				
10	1				

diflorasone				
No pediatric indication				
Age	Cases			
6	1			
9	1			
11	1			
13	2			

#### Statin Utilization in Diabetic Beneficiaries with Hypercholesterolemia

In 2002, the DUR Board examined rates of statin utilization in patients with diabetes and hypercholesterolemia. As a result, a criterion and intervention was approved to encourage appropriate use of these agents. This review revisits this subject by assessing the same set of parameters based on data from the entire year of 2005.

Race	Total beneficiaries with hypercholesterolemia and diabetes diagnoses and taking a statin	Total beneficiaries with hypercholesterolemia and diabetes diagnoses
African	3,333	7,738
American Caucasian	2,112	5,038
Unknown	592	1,391
Asian/Pacific Islander	20	41
Hispanic	15	37
American Indian	4	38
TOTAL	6,076	14,283

#### **Summary**

- In 2005, 43% of beneficiaries with both diagnoses were on statin therapy. In 2002, only 32% with both diagnoses were on statin therapy.
- In 2005, 57% of beneficiaries with both diagnoses were not on statin therapy as opposed to 68% in 2002.

#### Beneficiaries with both diagnoses and NOT on a statin

Race	Total Beneficiaries	Total medical costs for hypercholesterolemia diagnosis only	Total medical costs for all diagnoses	# of hospitalizations for all diagnoses
African American	4,405	\$1,585,471.73	\$12,610,297.75	2,409
Caucasian	2,926	\$1,031,225.75	\$7,011,612.42	1,577
Unknown	799	\$275,092.02	\$2,379,365.05	427
American Indian	34	\$9,535.75	\$133,165.55	25
Hispanic	22	\$6,774.91	\$63,961.80	19
Asian/Pacific Islander	21	\$3,251.33	\$32,705.91	4
TOTAL	8,207	\$2,911,351.49	\$22,231,108.48	4,461

#### Beneficiaries with both diagnoses and ON a statin

Race	Total Beneficiaries	Total medical costs for hypercholesterolemia diagnosis only	Total medical costs for all diagnoses	# of hospitalizations for all diagnoses
African American	3,333	\$1,230,585.60	\$10,785,083.16	1,298
Caucasian	2,112	\$1,124,676.04	\$7,884,676.70	842
Unknown	592	\$197,054.45	\$2,235,180.29	281
Asian/Pacific Islander	20	\$8,618.93	\$133,825.57	20
Hispanic	15	\$4,212.92	\$26,942.22	13
American Indian	4	\$218.13	\$3,751.62	0
TOTAL	6,076	\$2,565,366.07	\$21,069,459.56	2,454

#### **Summary**

- Beneficiaries not on statin therapy had total hospitalization medical costs for all diagnoses averaging \$2,708.80 per beneficiary. In 2002, the average per beneficiary was \$8,066.85.
- Beneficiaries on a statin had total hospitalization medical costs for all diagnoses averaging \$3,467.52 per beneficiary. In 2002, the average per beneficiary was \$10,029.78.
- Beneficiaries ON a statin averaged 0.40 hospitalizations per beneficiary compared to 0.68 in 2002.
- Beneficiaries NOT on a statin averaged .54 hospitalizations per beneficiary compared to 0.93 in 2002.

NOTE: This report DOES NOT include beneficiaries ≥65 years of age in order to more accurately reflect the current beneficiary pool. The drop in total hospitalization medical costs, therefore, may be reflective of the exclusion of these beneficiaries, subsequent to their move to Medicare Part D.

#### **Conclusion/Recommendations**

Overall, the number of beneficiaries with both diagnoses and on statin therapy increased 46% since the inception of the criterion edit implemented in 2003. Additionally, the number of hospitalizations per beneficiary decreased from 2002. The goals of this criterion were to reduce hospitalizations with subsequent improvement in the quality of life and reduced work days. Results indicate that this criterion is meeting its goals and should continue to be monitored.

#### Opioid Analgesic Utilization Patterns Implications of Hurricane Katrina

The impact of Hurricane Katrina on the health care system of Mississippi, especially along the coast, was impacted and stressed in extreme ways. Among the many concerns resulting from this catastrophe is the opportunity for some patients to take advantage of the chaos in order to obtain controlled substances illicitly. The review explores the utilization patterns of narcotic pain medications among Mississippi Medicaid providers and beneficiaries before and after the storm.

While the data used in this analysis is accurate, it is important to point out several possible limitations.

- 1. Due to the disruption of power supply and communications in the wake of the storm, the billing of many claims was delayed significantly.
- 2. During this period of disruption, pro-DUR edits that would normally alert pharmacists to duplicate claims were not in place.
- 3. The availability of many medical records, both electronic and paper, was disrupted after the storm, which diminished the ability of prescribers to determine patients' medical history.
- 4. Displacement of both beneficiaries and providers to other states or other parts of Mississippi affected the delivery of all health care services.
- 5. Many manual claims from this time period, as well as claims billed as part of the recent Uncompensated Care Program are not necessarily included in this data.

#### **Utilization by Time Period**

The following chart compares the utilization of various narcotic analgesics during the six month period surrounding Hurricane Katrina. Both the number of prescriptions (Rx Num) and the unit quantity dispensed (Qty Dispensed) are noted.

In terms of both individual drugs and the entire class, this data does not show a significant change in utilization between the two time periods.

	6/1/05-8/29/05		8/30/05	-11/30/05
Generic Name	Rx Num	Qty Dispensed	Rx Num	Qty Dispensed
BUPRENORPHINE HCI	0	0	2	90
CODEINE PHOS/APAP/CAFF/BUTALBITAL	5	440	0	0
CODEINE PHOS/ASA/CAFF/BUTALBITAL	4	160	2	180
CODEINE PHOS/CARISOPRODOL/ASA	31	1,283	30	1,492
CODEINE PHOSPHATE	2	120	3	105
CODEINE PHOSPHATE/APAP	7,790	650,612	7,729	626,677
CODEINE PHOSPHATE/ASPIRIN	2	90	17	1,182
CODEINE SULFATE	21	1,256	0	0
DIHY-COD TT/APAP/CAFFEINE	1,841	58,858	1,485	48,705
FENTANYL	85	969	6	90
FENTANYL CITRATE	1	120	0	0
HYDROCODONE BITARTRATE/APAP	31,297	1,807,652	30,933	1,760,253
HYDROMORPHONE HCL	224	17,869	262	19,310
MEPERIDINE HCL	468	17,910	414	15,316
MEPERIDINE HCL/PROMETH HCL	47	1,443	43	1,446
METHADONE HCL	925	104,215	933	102,272
MORPHINE SULFATE	1,352	105,868	1,352	117,835
NALBUPHINE HCL	19	508	10	208
OPIUM	6	712	7	830
OPIUM/BELLADONNA ALKALOIDS	10	146	10	163
OXYCODONE HCL	954	74,104	263	28,756
OXYCODONE HCL/ACETAMINOPHEN	4,670	200,021	4,299	186,556
OXYCODONE/ASPIRIN	137	5,756	89	3,639
PENTAZOCINE HCL/NALOXONE HCL	2	112	0	0
PROPOXYPHENE HCL	526	33,420	482	30,794
PROPOXYPHENE HCL/ACETAMINOPHEN	107	5,007	87	4,387

	6/1/05	5-8/29/05	8/30/05-11/30/05	
Generic Name	Rx Num	Qty Dispensed	Rx Num	Qty Dispensed
PROPOXYPHENE HCL/ASA/CAFFEINE	1	120	0	0
PROPOXYPHENE NAPSYLATE	2	60	0	0
PROPOXYPHENE NAPSYLATE/APAP	19,479	961,080	19,262	966,092
TRAMADOL HCL	10	930	7	620
TOTAL	70,018	4,050,840	67,727	3,916,998

#### **Utilization by County**

In an effort to observe geographic changes in utilization, claims were examined by county. The following chart shows the same claims data as above, grouped by county of residence of the beneficiary on each claim. The six southernmost coastal counties are shaded to ease identification.

	6/1/0	5-8/29/05	9/05 8/30/05-11/30/05		Change by clair post-K	
County	Claims Count	Qty Dispensed	Claims Count	Qty Dispensed	% by Unit	% by Claims
Unavailable	77	5,466	106	7,086	29.64%	37.66%
Adams	1,286	75,924	1,282	70,444	-7.22%	-0.31%
Alcorn	2,007	113,951	1,875	113,700	-0.22%	-6.58%
Amite	271	15,485	315	17,329	11.91%	16.24%
Attala	463	25,064	551	27,652	10.33%	19.01%
Benton	334	17,287	356	17,423	0.79%	6.59%
Bolivar, East	1,021	51,530	1,059	57,367	11.33%	3.72%
Calhoun	361	20,800	402	22,613	8.72%	11.36%
Carroll	281	12,882	328	15,067	16.96%	16.73%
Chickasaw, East	538	33,216	501	30,966	-6.77%	-6.88%
Choctaw	233	13,511	242	11,980	-11.33%	3.86%
Claiborne	271	14,120	304	19,109	35.33%	12.18%
Clarke	445	27,172	371	20,962	-22.85%	-16.63%
Clay	428	23,358	433	22,055	-5.58%	1.17%
Coahoma	1,062	52,300	1,148	58,532	11.92%	8.10%
Copiah	636	42,034	671	42,757	1.72%	5.50%
Covington	433	23,915	476	25,327	5.90%	9.93%
Desoto	1,029	51,562	1,046	54,284	5.28%	1.65%
Forrest	2,467	134,493	2,293	125,428	-6.74%	-7.05%
Franklin	264	18,297	274	19,099	4.38%	3.79%
George	893	55,013	832	48,385	-12.05%	-6.83%
Greene	462	27,125	419	21,204	-21.83%	-9.31%
Grenada	1,046	57,805	1,039	60,232	4.20%	-0.67%
Hancock	1,116	66,490	842	45,551	-31.49%	-24.55%
Harrison	4,710	270,342	3,859	223,551	-17.31%	-18.07%
Hinds	2,935	170,239	2,722	153,789	-9.66%	-7.26%
Holmes	660	37,795	700	40,601	7.42%	6.06%
Humphreys	262	19,167	295	18,494	-3.51%	12.60%
Issaquena	33	2,201	21	1,371	-37.71%	-36.36%
Itawamba	712	48,534	677	48,495	-0.08%	-4.92%
Jackson	2,540	144,659	2,125	122,751	-15.14%	-16.34%
Jasper	466	25,798	448	22,133	-14.21%	-3.86%
Jefferson	243	14,407	268	15,588	8.20%	10.29%
Jefferson Davis	246	15,921	248	14,218	-10.70%	0.81%

	6/1/0	5-8/29/05	5 8/30/05-11/30/05		Change by claim post-Ka	
County	Claims Count	Qty Dispensed	Claims Count	Qty Dispensed	% by Unit	% by Claims
Jones	1,827	116,934	1,799	115,589	-1.15%	-1.53%
Kemper	209	14,026	240	15,368	9.57%	14.83%
Lafayette	370	23,073	398	26,212	13.60%	7.57%
Lamar	1,048	58,207	953	54,144	-6.98%	-9.06%
Lauderdale	1,748	111,909	1,564	94,904	-15.20%	-10.53%
Lawrence	305	17,778	278	15,303	-13.92%	-8.85%
Leake	411	22,267	357	19,015	-14.60%	-13.14%
Lee	1,777	104,915	1,754	107,079	2.06%	-1.29%
Leflore	808	39,662	909	42,651	7.54%	12.50%
Lincoln	968	48,098	854	45,580	-5.24%	-11.78%
Lowndes	1,349	83,548	1,285	78,865	-5.61%	-4.74%
Madison	841	49,164	915	50,769	3.26%	8.80%
Marion	1,086	64,300	977	60,557	-5.82%	-10.04%
Marshall	756	40,737	706	34,316	-15.76%	-6.61%
Monroe	865	48,534	825	44,246	-8.84%	-4.62%
Montgomery	345	17,539	352	16,905	-3.61%	2.03%
Neshoba	686	36,889	724	35,468	-3.85%	5.54%
Newton	664	37,549	691	41,936	11.68%	4.07%
Noxubee	478	23,709	536	26,844	13.22%	12.13%
Oktibbeha	649	45,968	654	47,675	3.71%	0.77%
Panola	1,112	59,830	1,303	71,390	19.32%	17.18%
Pearl River	1,623	92,160	1,374	72,311	-21.54%	-15.34%
Perry	561	35,294	531	33,621	-4.74%	-5.35%
Pike	1,570	94,420	1,428	91,414	-3.18%	-9.04%
Pontotoc	630	37,466	656	37,979	1.37%	4.13%
Prentiss	952	48,491	1,038	55,556	14.57%	9.03%
Quitman	412	16,901	418	18,166	7.48%	1.46%
Rankin	1,674	94,367	1,608	90,749	-3.83%	-3.94%
Scott	635	33,942	655	36,739	8.24%	3.15%
Sharkey	175	9,317	174	8,913	-4.34%	-0.57%
Simpson	715	56,631	803	65,531	15.72%	12.31%
Smith	386	27,237	372	26,194	-3.83%	-3.63%
Stone	352	22,300	380	27,655	24.01%	7.95%
Sunflower	710	53,352	715	56,606	6.10%	0.70%
Tallahatchie	408	20,364	472	22,948	12.69%	15.69%
Tate	555	30,382	571	30,462	0.26%	2.88%
Tippah	959	61,135	969	56,298	-7.91%	1.04%
Tishomingo	1,121	76,188	1,145	80,137	5.18%	2.14%
Tunica	255	12,081	283	16,099	33.26%	10.98%
Union	712	43,150	717	38,263	-11.33%	0.70%

	6/1/0	6/1/05-8/29/05 8/30/05-11/30/05		Change by claims from pre- to post-Katrina		
County	Claims Count	Qty Dispensed	Claims Count	Qty Dispensed	% by Unit	% by Claims
Walthall	380	22,442	379	24,610	9.66%	-0.26%
Warren	1,233	61,841	1,208	60,864	-1.58%	-2.03%
Washington	1,576	83,993	1,396	78,809	-6.17%	-11.42%
Wayne	675	39,856	662	40,800	2.37%	-1.93%
Webster	450	21,457	499	25,947	20.93%	10.89%
Wilkinson	286	17,376	236	12,356	-28.89%	-17.48%
Winston	437	23,482	443	21,897	-6.75%	1.37%
Yalobusha	394	20,318	405	19,814	-2.48%	2.79%
Yazoo	757	46,806	739	55,143	17.81%	-2.38%
Bolivar West	1	20	0	0	-100.00%	-100.00%
Chickasaw, West	3	21	1	18	-14.29%	-66.67%
Unassigned	542	31,970	506	27,410	-14.26%	-6.64%
Foster Children	0	0	40	2,712	n/a	n/a

#### Conclusion

Based on the data examined for this analysis, there were no significant changes in prescribing or dispensing trends between the three month time periods prior to and following Hurricane Katrina. This analysis does not indicate a problematic increase in inappropriate prescribing or dispensing of opioid agents in the Mississippi Medicaid population following the disaster.

# MISSISSIPPI MEDICAID RETROSPECTIVE DRUG UTILIZATION REVIEW CRITERIA RECOMMENDATIONS MAY 2006

#### Criteria Recommendations

Approved Rejected

#### 1. Stimulants / Sedatives

Alert Message: Sleep disturbances are common in patients with attention deficit hyperactivity disorder (ADHD). Stimulant therapy may exacerbate or directly cause sleep disturbances. If disturbances persist during stimulant therapy, adjusting the dosing schedule of the stimulant may reduce/alleviate the need for the sedative. The last daily dose may be given earlier in the day, or, a trial of low-dose stimulant in the evening may be useful. Practicing good sleep hygiene is also an important intervention in these patients.

Conflict Code: TA - Therapeutic Appropriateness

Drugs/Disease:

Util A Util B Util C

Dextroamphetamine Temazepam Chloral Hydrate Methamphetamine Phenobarbital Estazolam **Amphetamine Mixtures** Triazolam Secobarbital Dexmethylphenidate Pentobarbital Flurazepam Methylphenidate Zaleplon Mephobarbital Pemoline Zolpidem Amobarbital Eszopiclone Butabarbital

Ramelteon

References:

Facts & Comparisons, 2005 Updates.

Barnett SR, Labellarte MJ, Practical assessment and treatment of attention-deficit/hyperactivity disorder. Adolescent Psychiatry, 2002; 26: 181-214.

Greydanus DE, Psychopharmacology for ADHD in Adolescents: Quo Vadis?, Psychiatric Times, May 2003, Vol. XX, Issue 5.

#### 2. Ranolazine / High Dose

Alert Message: Ranexa (ranolazine) may be over-utilized. The maximum recommended daily dose of ranolazine is 2000 mg (1000 mg b.i.d.). Ranolazine has been shown to prolong the QTc interval in a dose-related manner. Baseline and follow-up ECGs should be obtained to evaluate effects on QT interval.

Conflict Code: HD - High Dose

Severity: Major Drugs/Disease

Util A Util B Util C

Ranolazine

References:

#### 3. Ranolazine / QT Prolongation

Alert Message: Ranexa (ranolazine) may have an additive effect on the QT interval and is contraindicated in patients with known QT prolongation (including congenital long QT syndrome, uncorrected hypokalemia), known history of ventricular tachycardia and in patients receiving drugs that prolong the QTc interval (e.g. Class Ia and III antiarrhythmics and antipsychotics).

Conflict Code: DB – Drug-Drug Marker and/or Diagnosis

Severity: Major Drugs/Disease

Util A Util B Util C

Ranolazine

Quinidine QT Prolongation Levofloxacin Procainamide Ventricular Arrhythmia Moxifloxacin Disopyramide Hypokalemia Gemifloxacin Dofetilide Thioridazine Norfloxacin Sotalol Ziprasidone Sparfloxacin Amiodarone Pimozide Clarithromycin Flecainide Erythromycin Tocainide Propafenone Mexiletine Gatifloxacin

Voriconazole

References:

Ranexa Prescribing Information, Feb. 2006, CV Therapeutics, Inc.

4. Ranolazine / Hepatic Impairment

Alert Message: Ranexa (ranolazine) is contraindicated in patients with mild, moderate or severe liver disease. Ranolazine is extensively metabolized by the liver, as well as intestine, and hepatic dysfunction may increase the QTc-prolonging effect approximately 3-fold.

Conflict Code: MC - Drug (Actual) Disease Precaution

Drugs/Disease

Util A Util B Util C

Ranolazine Hepatic Impairment

References:

Ranexa Prescribing Information, Feb. 2006, CV Therapeutics, Inc.

5. Ranolazine / Potent CYP3A4

Alert Message: Ranexa (ranolazine) is contraindicated in patients taking potent or moderately potent CYP3A inhibitors (e.g. diltiazem, azole antifungals, verapamil, macrolides, and protease inhibitors). Ranolazine is primarily metabolized by the CYP3A pathway and inhibition will increase ranolazine plasma levels and QTc prolongation.

Conflict Code: DD – Drug/Drug Interaction

Drugs/Disease

References:

<u>Util A</u> <u>Util B</u> <u>Util C</u>

Ranolazine Diltiazem Ervthromycin Indinavir Verapamil Clarithromycin **Tipranavir** Ketoconazole Azithromycin Nelfinavir Itraconazole Dirithromycin Fosamprenavir Fluconazole Ritonavir Amprenavir Voriconazole Saquinavir Atazanavir

#### 6. Ranolazine / / Amlodipine, Beta Blockers & Nitrates

Alert Message: Ranexa should only be used in combination with amlodipine, beta blockers

or nitrates.

Conflict Code: TA Therapeutic Appropriateness

Drugs/Disease

Util A Util B Util C (Negating)

Ranolazine Amlodipine Nadolol Isosorbide Dinitrate
Atenolol Propranolol Isosorbide Mononitrate

Acebutolol Penbutolol Bisoprolol Pindolol Betaxolol Timolol Metoprolol Carteolol

References:

Ranexa Prescribing Information, Feb. 2006, CV Therapeutics, Inc.

#### 7. Ranolazine / Digoxin

Alert Message: Concomitant use of Ranexa (ranolazine) and digoxin, a P-glycoprotein (P-gp) substrate, may result in 1.5-fold increase in the digoxin plasma concentrations, Ranolazine is a P-gp inhibitor and the concurrent use of these agents may result in the increased absorption and deceased elimination of digoxin. Dose reduction of digoxin may be necessary.

Conflict Code: DD - Drug/Drug Interaction

Drugs/Disease

Util A Util B Util C

Ranolazine Digoxin

References:

Ranexa Prescribing Information, Feb. 2006, CV Therapeutics, Inc.

#### 8. Ranolazine / Renal Impairment

Alert Message: The use of Ranexa (ranolazine) should be avoided in patients with severe renal impairment. In six subjects with severe renal impairment receiving ranolazine 500 mg b.i.d. the mean diastolic blood pressure was increased approximately 10 to 15 mmHg. If ranolazine therapy is necessary monitor blood pressure regularly.

Conflict Code: MC - Drug (Actual) Disease Precaution

Drugs/Disease

Util A Util B Util C

Ranolazine Renal Impairment

References:

#### Criteria Recommendations

#### Approved Rejected

#### 9. Ranolazine / P-gp Inhibitors

Alert Message: Concomitant use of Ranexa (ranolazine) and P-glycoprotein (P-gp) inhibitors (e.g. ritonavir, cyclosporine, erythromycin, and amiodarone) may result in elevated ranolazine plasma concentrations. Ranolazine is a P-gp substrate and inhibition of the efflux pump may result in the increased absorption of ranolazine.

Conflict Code: DD - Drug/Drug Interaction

Drugs/Disease

Util A Util B Util C

Ranolazine Ritonavir Diltiazem Quinidine Cyclosporine Felodipine Nelfinavir Amiodarone Saguinavir Sirolimus

Clarithromycin Ketoconazole Tacrolimus
Cyclosporine Itraconazole Verapamil

Erythromycin Nicardipine

References:

Ranexa Prescribing Information, Feb. 2006, CV Therapeutics, Inc.

#### 10. Ranolazine / CYP2D6 Substrates

Alert Message: The concomitant use of Ranexa (ranolazine), a CYP2D6 inhibitor, with a CYP2D6 substrate (e.g. tricyclic antidepressants, some antipsychotics) may result in increased plasma concentrations of the CYP2D6 substrate. Dose reduction of the substrate may be necessary.

Conflict Code: DD - Drug/Drug Interaction

Drugs/Disease

Util A Util B Util C

Ranolazine Amitriptyline Haloperidol Imipramine Perphenazine Clomipramine Risperidone

Clomipramine Risperidone
Desipramine Thioridazine
Nortriptyline

Venlafaxine

References:

Ranexa Prescribing Information, Feb. 2006, CV Therapeutics, Inc.

#### 11. Ranolazine / Simvastatin

Alert Message: The concomitant use of Ranexa (ranolazine) and Zocor (simvastatin), a P-glycoprotein (P-gp) substrate, may result in a 2-fold increase in plasma concentrations of simvastatin and its active metabolite. Ranolazine is a P-gp inhibitor and the concurrent use of these agents may result in the increased absorption of simvastatin. Dose reduction of simvastatin may be necessary.

Conflict Code: DD - Drug/Drug Interaction

Drugs/Disease

Util A Util B Util C

Ranolazine Simvastatin

References:

#### **Boxed Warning Update**

Code of Federal Regulations definition for Black Box:

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.

#### Promethazine HCl (marketed as Phenergan and generic products)

**Audience:** Pediatricians, emergency service professionals and patients [Posted 04/25/2006] FDA notified healthcare professionals and patients that cases of breathing problems, some causing death, have been reported to the FDA when the drug was used in children less than two years old. Parents and caregivers should also be careful and get a doctor's advice about giving promethazine HCl in any form to children age two and older. The labeling on all products, brand name and generic, has been changed to reflect these strengthened warnings.

#### **Tequin** (gatifloxacin)

#### **Audience:** Healthcare professionals and patients

[Posted 02/16/2006] BMS notified FDA and healthcare professionals about proposed changes to the prescribing information for Tequin, including an updating of the existing WARNING on hypoglycemia (low blood sugar) and hyperglycemia (high blood sugar), and a CONTRAINDICATION for use in diabetic patients. The changes also include information identifying other risk factors for developing low blood sugar and high blood sugar, including advanced age, renal insufficiency, and concomitant glucose-altering medications while taking Tequin. The proposed changes are highlighted in the following "Dear

Healthcare Provider" letter issued by BMS. Specific wording of these additions and revisions to the labeling is pending FDA review and approval.

#### Tracleer (bosentan)

#### Audience: Cardiopulmonary healthcare professionals

[Posted 03/02/2006] Actelion and FDA notified healthcare professionals of changes to the prescribing information based on cases of hepatotoxity reported. The notification underscored the need to continue monthly liver function monitoring for the duration of Tracleer treatment and the need to adhere to the recommended dosage adjustment and monitoring guidelines described in the product labeling.