Division of Medicaid
Office of the Governor
State of Mississippi
Drug Utilization Review (DUR) Board Meeting

May 17, 2012 at 2:00pm

Woolfolk Building, Room 117

Jackson, MS

Prepared by:

The University of Mississippi School of Pharmacy

Evidence-Based DUR Initiative, MS-DUR

Drug Utilization Review Board

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

Edgar Donahoe, M.D. (Co-Chair)
Indianola Family Medicine Group
122 Baker Street
Indianola, MS 38751
Term Expires: June 30, 2013

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

Antoinette M. Hubble, M.D.
McComb Children's Clinic
300 Rawls Dr. Ste 100
McComb, MS 39648
Term Expires: June 30, 2014

Cherise McIntosh, Pharm.D.
UMC Dept of Pharmacy
2500 North State St.
Jackson, MS 39216
Term Expires: June 30, 2014

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

Paul Read, Pharm.D.
CVS Pharmacy #5744
3910 Hardy Street
Hattiesburg , MS 39402
Term Expires: June 30, 2012

Mark Reed, M.D. (Chair)
University of MS Medical Center
2500 North State Street, Trailer 16
Jackson, MS 39216
Term Expires: June 30, 2013

Dennis Smith, R.Ph.
Polk's Discount Pharmacy
1031 Star Rd
Brandon, MS 39042
Term Expires: June 30, 2014

Cynthia Undesser, M.D.
MS Children's Home Services
402 Wesley Ave
Jackson, MS 39202
Term Expires: June 30, 2014

Vicky Veazey, R.Ph.
MS State Hospital , Bldg 50
Whitfield, MS 39193
Term Expires: June 30, 2013
Vicky Veazey, R.Ph.

2012 DUR Board Meeting Dates

February 16, 2012
May 17, 2012
August 16, 2012
November 15, 2012

As with any analysis, great efforts are made to ensure that the information reported in this document is accurate. The most recent administrative claims data available are being used at the time the reports are generated, which includes the most recent adjudication history. As a result, values may vary between reporting periods and between DUR Board meetings, reflecting updated reversals and claims adjustments.

Only Mississippi Medicaid beneficiaries with fee-for-service claims are included in the analyses. Claims for Medicare full dual eligibles are included, when applicable. MississippiCAN data is not being reported unless otherwise specified. Further, reported dollar figures represent reimbursement to providers and are not representative of overall Medicaid costs.

The preferred drug list (PDL) indicators found in the resource utilization report are only included for reference and to facilitate discussion among the DUR Board members. As a result, the PDL indicators should not be considered the official PDL list. Please refer to the Mississippi Division of Medicaid website for the official PDL list.

MISSISSIPPI DIVISION OF MEDICAID

OFFICE OF THE GOVERNOR

DRUG UTILIZATION REVIEW BOARD

AGENDA

May 17, 2012

Welcome	Mark Reed, M.D. (Chair)
Old Business	Mark Reed, M.D. (Chair)
Approval of February 2012 Meeting Minutes	
Resource Utilization Review	Kyle D. Null, Pharm.D.
Synagis® (palivizumab) Utilization for 2011-2012 RSV Season	
Top 15 Drug Classes and Top 25 Drug Detail – Amount Paid*	
Top 15 Drug Classes and Top 25 Drug Detail – Number of Claims	
Pharmacy Program Update	Shannon P. Hardwick, R.Ph.
New Business	Kyle D. Null, Pharm.D.
Special Analysis Projects	
Review of Sedative Hypnotic Therapy Switches	
Pharmacy Lock-in Program Recommendations for Program Integrity	
Utilization of Provigil/Nuvigil	
Exceptions Monitoring	
Exceptions Monitoring Criteria Recommendations	
Next Meeting Information	Mark Reed, M.D. (Chair)

DUR Board Meeting Minutes

MISSISSIPPI DIVISION OF MEDICAID
DRUG UTILIZATION REVIEW (DUR) BOARD
MINUTES OF THE MAY 17, 2012 MEETING

DUR Board Members:	Present	Absent
Gera Bynum, R.Ph.	✓	
Edgar Donahoe, M.D. **(Co-Chair)**		✓
Laura Gray, M.D.		✓
Antoinette M. Hubble, M.D.	✓	
Cherise McIntosh, Pharm.D.		✓
Lee Merritt, R.Ph.		✓
Paul Read, Pharm.D.	✓	
Mark Reed, M.D. **(Chair)**	✓	
Dennis Smith, R.Ph.	✓	
Cynthia Undesser, M.D.	✓	
Vicky Veazey, R.Ph.		✓
Total	**6**	**5**

Also Present:

DOM Staff:
Judith Clark, R.Ph., DOM Pharmacy Bureau Director; Shannon Hardwick, R.Ph., DOM Clinical Pharmacist, DUR Coordinator; Terri Kirby, R.Ph., DOM Clinical Pharmacist; Otis Washington, Jr. Program Integrity; Tammy Bailey, RN, BSN, Program Integrity; Tamiko Young, Program Integrity.

MS-DUR Staff:
Kyle Null, Pharm.D., Clinical Director; Ben Banahan, Ph.D., Project Director; Thomas Chapman, M.S., Analyst.

ACS Staff:
Leslie Leon, Pharm.D.

Goold Health Systems (GHS) Staff:
Chad Bissell, Pharm.D., Account Manager; James Clair, CEO

Visitors:
John Harris, Abbott; Steve Curry, Meda Pharmaceuticals; Callista Goheen, Medimmune; Pat Harvey, Sunovion; Lee Ann Griffin, Pfizer.

Call to Order:
Dr. Mark Reed, Chairman of the Board, called the meeting to order at 2:00 pm. Dr. Reed noted there were not enough members present for a quorum, so no official business could be conducted. Minutes from the February 2012 meeting will be tabled for approval at the next meeting.

Resource Utilization Review:
Dr. Null provided an overview of Synagis® utilization during the 2011-2012 RSV season. Dr. Null noted this last season ran from October 2011 to March 2012, based on epidemiologic data from the Center for

Disease Control (CDC). Each beneficiary was eligible for a total of 5 injections, based on the 2009 Redbook guidelines. Dr. Null mentioned the cost per beneficiary being somewhat higher this year. This appears to be related to (1) an increase in "second season" babies being treated, (2) an increase in number of doses received per beneficiary, and (3) five high risk babies over the age of 24 months being treated.

Dr. Null noted that no major shifts or trends were found in resource utilization report.

Pharmacy Program Update:
Ms. Hardwick passed out a list summarizing the PDL changes that will go into effect in July 2012, and noted the list is also posted on the DOM website. Ms. Hardwick also pointed out a provider education sheet (posted on the MS-DUR and DOM websites) related to the proton pump inhibitor PDL changes and their use in PEG tubes.

Ms. Clark noted that effective July 1, 2012 all injectable antipsychotics will be reimbursed only through medical benefits and no longer through point-of-sale (POS), except in the case of long term care residents. Ms. Clark mentioned that when office administered drugs first came to market many of the community mental health centers were not able to bill on a medical claim for these drugs, so in order to allow for access, injectable antipsychotics were able to be billed through POS. Ms. Clark continued by stating that the DOM has been systematically moving any office-administered drug to be billed through the medical claims. Ms. Clark noted that billing these drugs through the POS would take up a "mark" for the month, reducing the total number of drugs the beneficiary could receive for the month. She noted that this will be included in the next DOM Provider Bulletin.

Ms. Hardwick informed the DUR Board that effective July 1, 2012 DOM will begin accepting ICD-9 codes through pharmacy POS for drugs that currently have clinical edits for diagnosis. This will be a pilot program in 2012 in preparation for required implementation of ICD-9/10 codes being required on prescription claims. Ms. Clark noted that this effort will prevent providers from having to submit paper prior authorizations on the drugs included in the pilot program. She noted that this information will be included in the next DOM Provider Bulletin.

Ms. Clark discussed safety issues raised by the FDA on long-term use of PPIs, specifically the increased incidence of *C. difficile* and fractures. Currently, DOM has a quantity limit but no duration limit on PPIs. Several other states have already adopted duration of use limits and DOM will be working on development and implementation of duration of use limits for PPIs. She asked for input from Board members with respect to criteria that might be appropriate for new guidelines. Data will be provided for a discussion at the next Board meeting and if the analysis indicates significant problems DOM will take action before then.

Ms. Clark informed the Board that there has been a lot of activity from the Department of Health and Human Services (DHHS) and the Centers for Medicare & Medicaid Services (CMS) related to antipsychotic use among foster children. A state plan is being developed and may be implemented shortly. Ms. Clark noted that the DOM DUR program will be responsible for monitoring the use of antipsychotics and other mental health drugs in this population. Dr. Undesser noted that many of these children appear to be enrolled in MS-CAN. Ms. Clark pointed out that DOM cannot be responsible for monitoring use if the children are enrolled in MS-CAN, but the DUR Board would focus on DOM beneficiaries. Ms. Clark mentioned that she will be attending another meeting with the state Department of Human Services (DHS) later in the week as part of the ongoing development of the state

plan. Ms. Clark informed the Board that Dr. Sabeen Javaid, a psychiatry resident at UMC studying with Dr. Undesser, has been provided data by DOM and MS-DUR to support a presentation on this issue at Grand Rounds in June.

New Business:

Special analysis projects:

Review of Sedative Hypnotic Therapy Switches

Dr. Null noted that the review of sedative hypnotic switches came from the prior authorization (PA) team. The PA team started seeing a large number of PAs after a rejection in SmartPA for sedative hypnotics based on the current criteria for implementing the quantity limits on these drugs. MS-DUR analysis indicated that many of these rejections are the result of dose changes and therapy changes causes new prescription fills to exceed the current quantity limit criteria. MS-DUR is seeking Board input on potential changes in the current algorithm to eliminate this problem. MS-DUR is recommending a change that would allow one therapy change (dose change or drug change) in a 12-month period. Ms. Bynum suggested that it might be necessary to allow one dose change and one drug change per year. Dr. Paul Read reported that he sees changes such as these fairly frequently. Dr. Mark Reed noted that proposal was reasonable. The DUR Board members present concurred that implementing this change had merit; however, an official motion would be sought at the next meeting due to lack of a quorum.

Dr. Mark Reed inquired about the possibility of achieving a quorum through electronic means, so that action would not have to be suspended due to lack of a physical quorum. Ms. Clark replied that the attorney general's office currently does not allow for public meetings to be held in an electronic forum. Dr. Mark Reed noted that it might be a good idea to address this idea. Dr. Undesser noted that "Go to Meeting" will be considered a billable patient contact beginning on July 1, 2012 so it would make sense that other official business may be conducted in such a way. Ms. Clark noted she would inquire about it.

Pharmacy Lock-in Program Recommendations for Program Integrity

Ms. Clark explained how DOM has various bureaus that handle different components of the overall program. Program Integrity (PI) is responsible for auditing and assuring compliance with DOM policies and procedures. Staff from the PI introduced themselves to the DUR Board. Ms. Clark noted that nationally, there is a big push to better monitor and manage controlled substance use. PI has initiated a beneficiary lock-in program and would welcome reports from DUR and the Pharmacy Bureau for potential diversion problems that need to be further evaluated for possible enrollment in the lock-in program. Ms. Clark requested that PI speak to the DUR Board. Otis Washington thanked the DUR Board for having them as guests at the meeting and acknowledged their desire to have MS-DUR recommend beneficiaries to the pharmacy lock-in program, based on discussion with the DUR Board and working directly with PI to identify appropriate criteria based on retrospective claims review by MS-DUR.

Dr. Null noted that one of the recommendations for addressing drug diversion from CMS is to look across programs, including Medicare Part D data, which can be made available for program purposes. PI noted that would be a good approach. Dr. Null reviewed the analysis by MS-DUR on unique pharmacies and unique prescribers being used by beneficiaries for narcotic analgesics. Input was sought from the Board on what drugs should be included in this analysis, as well as a "cut point" for the number of unique prescribers and pharmacies to identify potentially inappropriate activities by beneficiaries. Ms. Clark noted that the NPI number may be associated with a clinic and not necessarily with an individual prescriber. Dr. Null concurred with Ms. Clark, but also noted when filling a prescription, especially for a controlled substance, that he would personally check that the NPI matched a prescriber and not a clinic. Dr. Banahan noted that one limitation of a claims-based approach is that DUR is only able to identify the

prescribers and pharmacies based on the NPI numbers submitted on the claims. Dr. Banahan also pointed out that the number of unique pharmacies and prescribers was selected to reduce the possibility of false positives and to provide PI with a manageable list of beneficiaries to review. Dr. Banahan noted the need for a set of criteria that would identify outlier beneficiaries that would warrant a manual review by PI.

Dr. Mark Reed suggested that it might be helpful to eliminate post-surgery care for 10-days to 2 weeks. PI indicated that having a diagnosis in the reports would be helpful. Mr. Smith posited that the muscle relaxants would closely match the analgesics. Dr. Null noted that in a separate analysis not reported to the Board the distribution of unique prescribers/pharmacies only changed slightly when including/excluding other drug categories. Dr. Null also noted that this analysis was limited to narcotic analgesics, but that it would be expanded to other categories for the PI reports. Ms. Bynum noted that this analysis only includes Medicaid FFS claims and not claims paid for by cash. Dr. Banahan asked the staff from PI what would be most useful for them to receive from MS-DUR. Mr. Washington replied that the current discussion and report included some of the same elements they had been discussing internally. Mr. Washington asked that drugs such as [benzodiazepines] be included. PI noted that it would be helpful to include Medicare Part D data from these beneficiaries in such an analysis, as well as diagnosis codes from the medical claims. Dr. Null noted that MS-DUR does not have access to the prescription drug monitoring program (PDMP) database to allow for combining it with the Medicaid claims data, but that Medicare Part D data for Mississippi residents may be available for use in such a way. Ms. Clark noted that combining Medicaid data with Medicare Part D data would be helpful. Ms. Clark noted that dual-eligibles taking benzodiazepines are currently paid for by Medicaid, even though benzodiazepines are not typically covered in the Medicaid fee-for-service program.

Dr. Null asked for comments on using findings from these routine drug abuse analyses for coordination of care or other provider outreach. Dr. Undesser commented that getting letters notifying prescribers and pharmacies about patients getting multiple prescriptions from multiple prescribers would be helpful to the providers. Dr. Paul Read commented on the current quantity limits associated with some of the drugs of abuse and noted that it was a very helpful, preventative measure already in place. Ms. Bynum noted that the presence of multiple prescribers was not as concerning as multiple pharmacies or the combination multiple prescribers and multiple pharmacies. Dr. Mark Reed proposed an alternative method of identifying beneficiaries by taking a distribution-based approach and targeting the outliers, rather than the count-based approach. Dr. Banahan noted the data are highly positively skewed, with most individuals using 1 or 2 prescriber/pharmacies. Items identified as possible additional criteria for analysis include variation in zip codes for pharmacies, possible identification of multiple stores for the same chain, and diagnosis codes such as surgeries. PI noted that beneficiaries remain in the pharmacy lock-in program for one (1) year, which entails receiving all medications from one pharmacy and visiting only one general practitioner. Specialist referrals are allowed from the primary general practitioner. Ms. Clark indicated DOM and MS-DUR will conduct the initial analysis, provide a report to PI, and report on results of this initiative at the next Board meeting.

Utilization of Provigil/Nuvigil

Dr. Null noted that Tennessee had a spike in Provigil/Nuvigil use a year ago and reported this at the American Drug Utilization Review Society (ADURS) annual meeting. The issue was examined by MS-DUR to determine if Mississippi had a similar trend. The clinical criteria for Mississippi is very similar to Tennessee's, with the exception that Tennessee requires failure of a continuous positive airway pressure (CPAP) or bilevel positive airway pressure (BiPAP). The analysis indicated that Mississippi's total

utilization appears to be trending downward. As a result, MS-DUR does not recommend any changes at this time because of this trend and the existing criteria that are in place.

Valturna (aliskiren/valsartan) Withdrawal
Valturna is being pulled from the market for use in diabetics patients as of July 20, 2012. MS-DUR ran an analysis and determined that there will be minimal impact in the Medicaid program and concluded that no additional action is required.

Exceptions Monitoring
Review and action tabled until a quorum is reached at next meeting.

Other Business
Ms. Clark reported on changes in CMS requirements that penalize state Medicaid programs for newer line extensions of existing products, e.g., XR or CR versions of products. The final ruling has not been released, but DOM has already begun addressing this issue with changes that will be made in the PDL list effective July 2012. Ms. Clark introduced Chad Bissell from Goold Health Systems (GHS), the PDL vendor for Mississippi Medicaid, and requested that he comment on the new PDL list and line extension ruling from CMS. Dr. Bissell reported that the changes regarding rebates and line extensions will be retroactive to January 2010, requiring back-payment to CMS for line-extensions paid since that time. Gould Health Systems is working with DOM to minimize the impact of the new regulations.

Mr. Smith asked for clarification on why some products were recently removed from the 90-day list. Ms. Clark reported that the legislature defines the prescription limits for Medicaid. DOM is allowed to have a 90-day list for a limited number of medications. A recent review by an outside consultant recommended that the change with lovastatin be made because more effective drugs in the same category have been made available generically since the 90-day list was last updated. Mr. Smith indicated that use of the 90-day list was a great way to help patients manage the prescription limits. Dr. Null indicated that the new 90-day list was mailed out to the top 300-plus prescribers using the products on the list as part of the education surrounding this change.

Next Meeting Information:
Dr. Reed announced next meeting date is August 16, 2012 at 2:00 P.M. and thanked everyone for making the effort to attend the DUR Board meeting in order to have a quorum. The meeting adjourned at 3:17 P.M.

Submitted,
Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report

Top 15 Drugs by Class

Top 25 Drug Detail

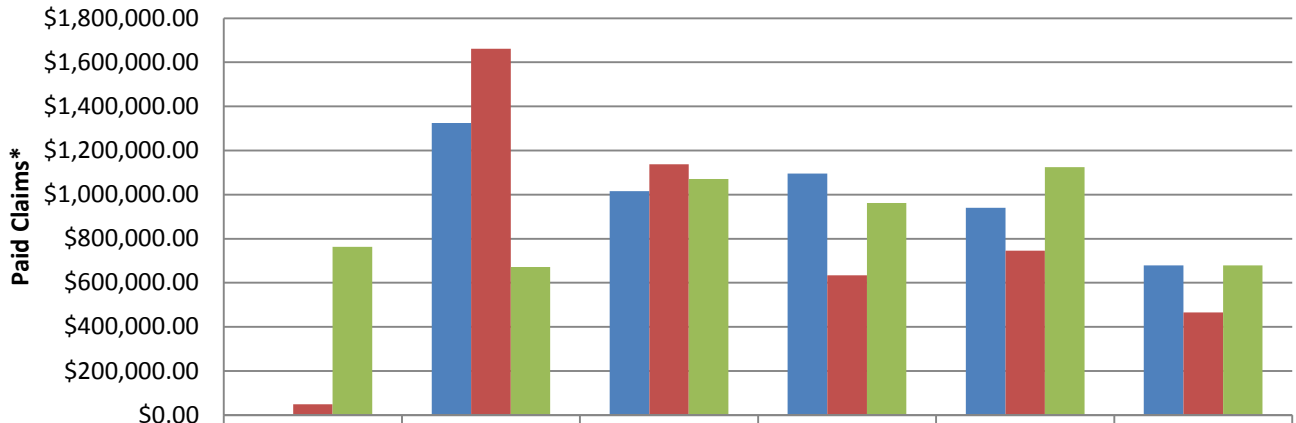
By Amount Paid* and Number of Claims

Synagis® (palivizumab) Summary

2011-2012 RSV Season

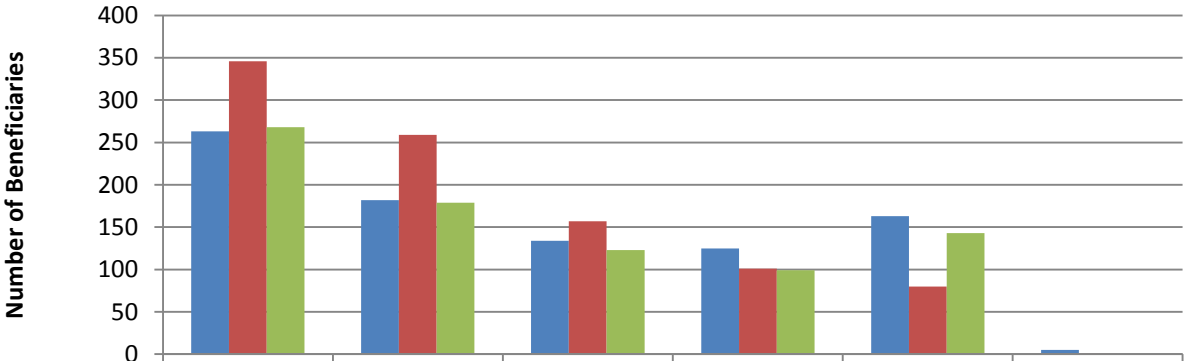
	RSV Season		
Description	**2009-2010**	**2010-2011**	**2011-2012**
Total Reimbursement*	$5,055,035	$4,679,821	$5,271,331
Total Unique Beneficiaries	872	944	812
Total Point-of-Sale Claims	3,198	2,736	2,741
Average Reimbursement* per Beneficiary	$8,832±$4,908	$7,965±$4,969	$9,909±$5,685
Average Reimbursement* per Injection	$2,074±$931	$2,152±$956	$2,388±$1,075

Figure 1 - Synagis® (palivizumab) Paid Claims*



	October	November	December	January	February	March
2009-2010	$0.00	$1,324,710.38	$1,015,511.43	$1,096,032.04	$939,835.03	$678,673.84
2010-2011	$48,492.18	$1,661,262.92	$1,138,105.08	$633,549.24	$745,552.90	$465,807.93
2011-2012	$763,570.41	$671,187.71	$1,071,233.11	$961,440.72	$1,124,757.63	$679,141.80

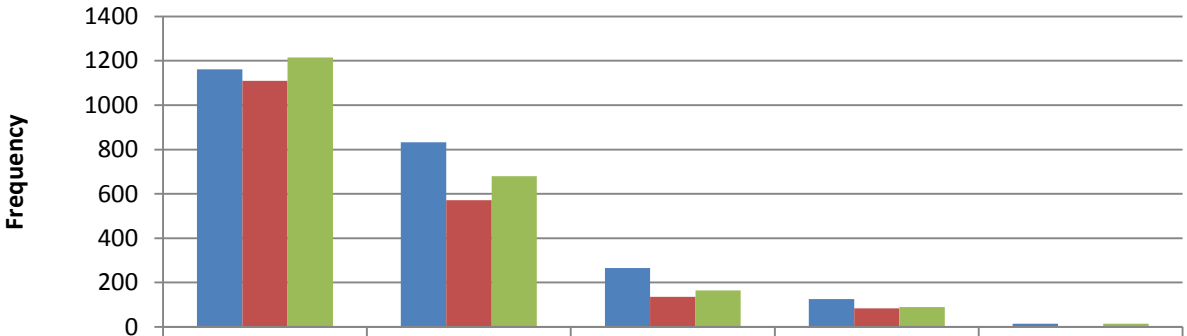
Figure 2 - Synagis® (palivizumab) Number of Injections per Beneficiary



	1	2	3	4	5	6
2009-2010	263	182	134	125	163	5
2010-2011	346	259	157	101	80	1
2011-2012	268	179	123	99	143	0

Number of Injections

Figure 3 - Estimated Age of Beneficiaries at the Time of Each Synagis® (palivizumab) Injection



	<6	6-12	13-18	19-24	>24
2009-2010	1162	833	266	126	14
2010-2011	1109	571	135	84	2
2011-2012	1215	679	164	90	15

Beneficiary Age (in Months)

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ł

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Antipsychotics (atypical And Typical)	**$2,906,766.27**	**8,534**	**$3,096,546.84**	**8,953**	**$3,370,043.30**	**9,756**	**$9,373,356.41**	**27,243**
Aripiprazole	$977,840.83	1,608	$1,044,205.32	1,684	$1,117,785.94	1,827	$3,139,832.09	5,119
Quetiapine	$726,473.21	1,584	$767,743.96	1,598	$853,965.88	1,803	$2,348,183.05	4,985
Olanzapine	$344,849.43	495	$341,955.55	477	$405,019.30	603	$1,091,824.28	1,575
Risperidone	$329,553.57	2,921	$348,757.62	3,109	$367,731.66	3,304	$1,046,042.85	9,334
Ziprasidone	$211,095.89	411	$216,569.41	415	$194,929.03	383	$622,594.33	1,209
Paliperidone	$143,837.06	138	$178,051.81	166	$217,244.82	207	$539,133.69	511
Asenapine	$56,930.13	126	$66,376.84	142	$71,386.90	155	$194,693.87	423
Lurasidone	$26,628.31	51	$33,767.53	65	$39,602.37	79	$99,998.21	195
Haloperidol	$23,301.65	491	$25,770.01	523	$29,656.67	594	$78,728.33	1,608
Chlorpromazine	$22,242.24	226	$23,544.40	246	$25,349.84	256	$71,136.48	728
Clozapine	$22,117.71	129	$23,155.31	147	$22,062.88	145	$67,335.90	421
Iloperidone	$9,209.84	15	$13,736.78	24	$10,504.50	17	$33,451.12	56
Perphenazine	$3,420.20	60	$3,440.46	62	$4,940.08	78	$11,800.74	200
Fluphenazine	$1,980.71	53	$2,414.17	57	$2,431.46	62	$6,826.34	172
Prochlorperazine	$2,118.16	116	$2,026.14	118	$2,235.16	120	$6,379.46	354
Trifluoperazine	$1,381.26	24	$1,507.33	31	$1,694.39	31	$4,582.98	86

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown

Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ǂ

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Loxapine	$1,606.24	17	$1,529.25	20	$1,001.12	15	$4,136.61	52
Thioridazine	$1,130.31	39	$1,247.21	43	$1,223.11	44	$3,600.63	126
Pimozide	$546.61	6	$323.78	3	$682.79	8	$1,553.18	17
Thiothixene	$502.91	24	$423.96	23	$595.40	25	$1,522.27	72
Adrenals	**$1,706,086.09**	**15,845**	**$1,894,152.72**	**17,944**	**$1,658,090.62**	**15,297**	**$5,258,329.43**	**49,086**
Budesonide	$1,365,392.40	4,336	$1,508,436.50	4,722	$1,300,919.16	3,980	$4,174,748.06	13,038
Prednisolone	$123,328.26	7,075	$150,176.52	8,207	$115,882.48	6,495	$389,387.26	21,777
Budesonide-formoterol	$60,649.95	281	$61,283.13	273	$67,482.96	270	$189,416.04	824
Fluticasone	$53,384.09	401	$57,581.22	431	$59,970.99	447	$170,936.30	1,279
Beclomethasone	$29,737.69	228	$33,170.46	251	$36,516.04	281	$99,424.19	760
Mometasone	$29,616.91	226	$32,994.07	245	$29,539.57	226	$92,150.55	697
Formoterol-mometasone	$12,394.23	56	$14,857.83	67	$14,490.19	67	$41,742.25	190
Methylprednisolone	$12,797.22	1,047	$14,421.30	1,170	$13,619.14	1,096	$40,837.66	3,313
Prednisone	$8,412.49	1,632	$9,445.76	1,918	$9,332.63	1,856	$27,190.88	5,406
Dexamethasone	$5,135.88	398	$5,621.71	478	$4,368.95	401	$15,126.54	1,277
Hydrocortisone	$2,179.09	75	$2,654.38	88	$2,456.21	84	$7,289.68	247
Flunisolide Nasal	$1,619.66	27	$1,951.72	26	$1,926.57	29	$5,497.95	82
Fludrocortisone	$1,352.79	58	$1,488.18	64	$1,510.26	61	$4,351.23	183
Leukotriene Modifiers	**$1,314,314.31**	**8,171**	**$1,435,308.31**	**8,591**	**$1,596,427.82**	**9,559**	**$4,346,050.44**	**26,321**
Montelukast	$1,313,943.05	8,167	$1,434,030.82	8,583	$1,595,389.60	9,553	$4,343,363.47	26,303

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ǂ Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ł

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Zafirlukast	$371.26	4	$627.70	6	$509.63	5	$1,508.59	15
Zileuton			$649.79	2	$528.59	1	$1,178.38	3
Amphetamines	**$1,223,319.60**	**7,402**	**$1,353,040.65**	**8,133**	**$1,413,836.05**	**8,570**	**$3,990,196.30**	**24,105**
Amphetamine-dextroamphetamine	$655,041.59	3,925	$714,852.06	4,287	$751,359.57	4,545	$2,121,253.22	12,757
Lisdexamfetamine	$559,671.29	3,396	$628,227.39	3,755	$649,857.54	3,904	$1,837,756.22	11,055
Dextroamphetamine	$8,606.72	81	$9,961.20	91	$12,618.94	121	$31,186.86	293
Anorex., Resp. & Cerebral Stim., Misc.	**$961,236.34**	**5,784**	**$1,056,678.93**	**6,313**	**$1,113,928.26**	**6,578**	**$3,131,843.53**	**18,675**
Methylphenidate	$618,778.98	3,715	$686,399.51	4,097	$727,299.01	4,257	$2,032,477.50	12,069
Dexmethylphenidate	$328,227.80	2,047	$356,844.55	2,197	$370,138.82	2,300	$1,055,211.17	6,544
Modafinil	$10,586.59	13	$9,753.40	10	$12,677.07	11	$33,017.06	34
Armodafinil	$3,642.97	9	$3,681.47	9	$3,813.36	10	$11,137.80	28
Anticonvulsants, Miscellaneous	**$933,476.81**	**9,840**	**$982,301.79**	**10,362**	**$1,041,726.46**	**11,026**	**$2,957,505.06**	**31,228**
Divalproex Sodium	$165,795.28	1,595	$167,969.27	1,630	$180,585.47	1,761	$514,350.02	4,986
Oxcarbazepine	$131,715.79	1,011	$131,348.86	1,024	$140,889.50	1,098	$403,954.15	3,133
Pregabalin	$124,929.32	643	$134,950.80	666	$141,275.87	698	$401,155.99	2,007
Levetiracetam	$98,304.58	1,163	$106,530.11	1,240	$113,766.65	1,354	$318,601.34	3,757
Gabapentin	$83,108.88	2,237	$93,657.30	2,501	$95,779.45	2,567	$272,545.63	7,305
Lamotrigine	$82,857.57	876	$85,114.54	871	$95,848.69	979	$263,820.80	2,726
Topiramate	$55,704.85	1,114	$59,508.92	1,133	$63,583.51	1,234	$178,797.28	3,481
Lacosamide	$48,291.71	105	$60,697.25	137	$63,906.94	150	$172,895.90	392

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ǂ

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Carbamazepine	$34,880.05	587	$40,285.08	635	$39,333.91	653	$114,499.04	1,875
Vigabatrin	$34,876.72	6	$33,733.99	6	$31,452.44	7	$100,063.15	19
Rufinamide	$25,068.05	37	$22,497.64	32	$27,170.89	41	$74,736.58	110
Felbamate	$20,876.00	27	$17,606.58	25	$18,830.82	27	$57,313.40	79
Zonisamide	$12,332.53	253	$12,505.45	268	$12,877.14	260	$37,715.12	781
Valproic Acid	$8,199.92	169	$9,041.11	180	$8,422.53	181	$25,663.56	530
Tiagabine	$6,050.55	11	$6,711.43	11	$7,690.65	10	$20,452.63	32
Magnesium Sulfate	$485.01	6	$143.46	3	$312.00	6	$940.47	15
Monoclonal Antibodies	**$961,157.58**	**498**	**$1,128,709.92**	**591**	**$687,241.30**	**371**	**$2,777,108.80**	**1,460**
Palivizumab	$961,157.58	498	$1,128,709.92	591	$687,241.30	371	$2,777,108.80	1,460
Hemostatics	**$697,805.19**	**68**	**$1,231,447.57**	**94**	**$828,244.47**	**66**	**$2,757,497.23**	**228**
Anti-inhibitor Coagulant Complex	$220,213.16	3	$479,317.24	6	$350,822.08	5	$1,050,352.48	14
Antihemophilic Factor	$222,324.28	10	$275,574.41	17	$285,197.98	14	$783,096.67	41
Coagulation Factor Viia	$161,939.55	5	$170,755.19	9	$65,127.82	2	$397,822.56	16
Antihemophilic Factor-von Willebrand	$74,903.99	4	$109,918.53	5	$73,227.38	3	$258,049.90	12
Coagulation Factor Ix	$11,558.31	1	$188,888.91	10	$48,028.44	4	$248,475.66	15
Tranexamic Acid	$6,076.50	40	$6,911.00	45	$5,404.77	35	$18,392.27	120
Aminocaproic Acid	$789.40	5	$82.29	2	$436.00	3	$1,307.69	10
Beta-adrenergic Agonists	**$792,980.18**	**13,663**	**$917,456.69**	**15,740**	**$846,369.45**	**13,526**	**$2,556,806.32**	**42,929**
Albuterol	$464,391.67	12,183	$553,510.59	14,155	$474,620.19	11,926	$1,492,522.45	38,264

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ǂ Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ǂ

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Fluticasone-salmeterol	$261,886.46	1,163	$294,085.84	1,227	$299,412.94	1,239	$855,385.24	3,629
Albuterol-ipratropium	$49,342.26	205	$52,272.70	225	$53,906.51	228	$155,521.47	658
Levalbuterol	$12,184.81	49	$12,582.50	54	$12,396.65	43	$37,163.96	146
Terbutaline	$1,558.26	42	$2,495.00	64	$2,281.24	68	$6,334.50	174
Formoterol	$1,980.43	10	$681.53	4	$2,474.65	15	$5,136.61	29
Pirbuterol	$1,209.08	8	$1,393.41	9	$1,268.11	8	$3,422.96	23
Arformoterol	$405.15	1	$850.04	2	$850.04	2	$2,105.23	5
Proton-pump Inhibitors	**$744,968.40**	**6,241**	**$788,020.11**	**6,711**	**$823,517.98**	**6,907**	**$2,356,506.49**	**19,859**
Lansoprazole	$327,133.58	1,668	$331,445.02	1,690	$346,654.36	1,748	$1,005,232.96	5,106
Omeprazole	$236,570.69	3,386	$253,500.16	3,689	$260,810.08	3,785	$750,880.93	10,860
Dexlansoprazole	$146,826.64	1,068	$165,376.67	1,198	$167,860.56	1,219	$480,063.87	3,485
Amoxicillin/clarithromycin/lansoprazol	$22,688.16	51	$21,359.63	48	$32,142.64	73	$76,190.43	172
Esomeprazole	$10,860.21	52	$15,229.93	68	$14,478.91	64	$40,569.05	184
Pantoprazole	$889.12	16	$961.39	17	$1,424.12	17	$3,274.63	50
Cephalosporins	**$715,698.38**	**11,067**	**$841,130.60**	**12,839**	**$715,465.06**	**10,896**	**$2,272,294.04**	**34,802**
Cefdinir	$348,150.13	4,568	$441,123.71	5,708	$355,014.80	4,681	$1,144,288.64	14,957
Cefixime	$160,561.41	718	$155,616.51	677	$155,904.01	665	$472,081.93	2,060
Cefprozil	$138,520.66	2,392	$164,269.69	2,786	$127,325.22	2,122	$430,115.57	7,300
Cephalexin	$40,613.85	2,697	$43,255.54	2,860	$42,766.32	2,723	$126,635.71	8,280
Ceftriaxone	$9,313.26	121	$19,061.56	119	$13,282.17	120	$41,656.99	360

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ǂ Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ǂ

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Cefuroxime	$7,856.99	395	$10,647.76	542	$7,722.08	396	$26,226.83	1,333
Cefadroxil	$4,508.72	137	$4,510.75	123	$6,493.68	155	$15,513.15	415
Cefepime	$3,170.82	11	$762.02	2	$4,884.22	16	$8,817.06	29
Cefaclor	$1,211.70	18	$840.68	15	$251.72	6	$2,304.10	39
Ceftibuten	$212.98	1	$638.94	3	$301.40	2	$1,153.32	6
Ceftaroline					$1,133.51	2	$1,133.51	2
Cefpodoxime	$546.36	4	$273.53	3	$252.18	2	$1,072.07	9
Cefazolin	$758.92	4	$129.91	1			$888.83	5
Corticosteroids	**$617,986.49**	**5,899**	**$756,796.29**	**7,021**	**$842,590.55**	**7,545**	**$2,217,373.33**	**20,465**
Mometasone Nasal	$343,446.82	2,907	$424,620.66	3,499	$509,795.81	3,997	$1,277,863.29	10,403
Ciprofloxacin-dexamethasone Otic	$131,005.52	926	$148,317.86	1,027	$134,087.12	932	$413,410.50	2,885
Fluticasone Nasal	$92,875.51	883	$124,515.60	1,124	$138,629.35	1,238	$356,020.46	3,245
Dexamethasone-tobramycin Ophthal	$16,547.70	214	$20,199.07	265	$22,078.91	278	$58,825.68	757
Hydrocortisone/neomycin/polymyxin	$13,526.48	498	$16,304.02	606	$13,478.74	503	$43,309.24	1,607
Dexamethasone/neomycin/polymyxin	$3,750.76	173	$4,776.60	200	$4,455.85	245	$12,983.21	618
Loteprednol Ophthalmic	$4,798.30	30	$3,407.07	24	$3,227.38	25	$11,432.75	79
Tobramycin Ophthalmic	$3,108.90	241	$3,341.09	289	$3,680.11	310	$10,130.10	840
Hydrocortisone/neomycin/polymyxin	$2,475.76	27	$2,562.51	27	$4,919.76	52	$9,958.03	106
Prednisolone Ophthalmic	$2,225.13	140	$1,793.46	123	$2,237.90	150	$6,256.49	413
Flunisolide Nasal	$1,619.66	27	$1,951.72	26	$1,926.57	29	$5,497.95	82
Acetic Acid-hydrocortisone Otic	$1,399.96	9	$1,286.47	8	$1,659.35	12	$4,345.78	29

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ǂ Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ǂ

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Ciprofloxacin-hydrocortisone Otic	$1,226.25	8	$1,048.79	7	$1,265.52	8	$3,540.56	23
Triamcinolone Nasal	$858.02	7	$861.02	7	$1,480.32	12	$3,199.36	26
Loteprednol-tobramycin Ophthalmic	$634.28	5	$1,457.32	11	$795.72	6	$2,887.32	22
Colistin/hc/neomycin/thonzonium Oti	$630.94	10	$1,046.48	14	$816.59	12	$2,494.01	36
Prednisolone-sulfacetamide Sodium O	$231.52	12	$696.52	17	$744.18	13	$1,672.22	42
Beclomethasone Nasal	$146.58	1	$1,020.06	7	$143.58	1	$1,310.22	9
Fluorometholone Ophthalmic	$301.08	16	$344.81	21	$432.16	26	$1,078.05	63
Bacitracin/neomycin/polymyxin B Oph	$363.01	8	$296.88	7	$209.41	6	$869.30	21
Fluocinolone Otic	$238.80	8	$281.76	10	$119.40	4	$639.96	22
Difluprednate Ophthalmic			$328.28	2	$217.46	2	$545.74	4
Insulins	**$650,426.01**	**2,881**	**$716,564.54**	**3,154**	**$727,341.08**	**3,274**	**$2,094,331.63**	**9,309**
Insulin Glargine	$192,257.54	821	$218,231.19	908	$218,217.40	927	$628,706.13	2,656
Insulin Aspart	$158,642.14	594	$163,659.90	628	$176,602.30	675	$498,904.34	1,897
Insulin Aspart-insulin Aspart Protamin	$95,354.76	249	$107,236.84	294	$104,022.84	284	$306,614.44	827
Insulin Detemir	$68,649.08	298	$72,318.79	302	$75,163.67	327	$216,131.54	927
Insulin Isophane-insulin Regular	$52,180.60	285	$61,880.71	342	$60,986.50	338	$175,047.81	965
Insulin Isophane	$39,763.86	341	$39,359.35	340	$46,191.93	400	$125,315.14	1,081
Insulin Regular	$21,861.19	212	$25,778.13	248	$25,421.99	244	$73,061.31	704
Insulin Lispro	$15,545.68	60	$17,936.88	63	$13,270.88	56	$46,753.44	179
Insulin Lispro-insulin Lispro Protamine	$3,693.83	8	$7,387.64	16	$4,091.08	8	$15,172.55	32
Insulin Glulisine	$2,477.33	13	$2,775.11	13	$3,372.49	15	$8,624.93	41

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ǂ Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ǂ

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Antineoplastic Agents	**$572,332.17**	**1,363**	**$648,803.44**	**1,495**	**$685,556.38**	**1,569**	**$1,906,691.99**	**4,427**
Leuprolide	$95,068.40	72	$125,538.30	86	$97,911.62	68	$318,518.32	226
Everolimus	$57,813.78	8	$45,809.24	6	$94,705.50	14	$198,328.52	28
Imatinib	$54,334.62	8	$45,064.16	7	$65,105.98	10	$164,504.76	25
Erlotinib	$49,482.97	10	$54,489.27	11	$52,465.56	10	$156,437.80	31
Sorafenib	$51,291.24	6	$42,931.92	8	$50,458.28	8	$144,681.44	22
Sunitinib	$34,851.66	4	$72,411.76	10	$36,347.70	4	$143,611.12	18
Dasatinib	$33,302.16	4	$25,604.66	3	$43,207.55	5	$102,114.37	12
Capecitabine	$28,728.06	12	$35,920.26	13	$36,124.48	15	$100,772.80	40
Anastrozole	$24,196.60	94	$29,778.70	118	$30,891.18	116	$84,866.48	328
Letrozole	$25,816.12	72	$23,868.00	64	$27,984.98	76	$77,669.10	212
Lapatinib	$14,943.64	4	$24,036.62	6	$32,621.00	8	$71,601.26	18
Megestrol	$22,375.42	194	$23,760.42	210	$24,234.16	212	$70,370.00	616
Methotrexate	$17,301.76	600	$19,557.44	672	$20,816.84	724	$57,676.04	1,996
Nilotinib	$8,064.48	1	$24,193.44	3	$24,193.44	3	$56,451.36	7
Temozolomide	$6,670.20	4	$14,848.35	7	$14,519.50	10	$36,038.05	21
Bevacizumab	$15,016.59	3	$15,127.50	3	$5,042.50	1	$35,186.59	7
Tamoxifen	$6,206.50	130	$6,074.62	126	$6,883.06	144	$19,164.18	400
Pazopanib	$11,048.22	2	$4,890.30	1			$15,938.52	3
Gemcitabine	$3,602.95	1	$3,602.95	1	$3,602.95	1	$10,808.85	3
Bicalutamide	$3,200.56	30	$3,746.56	28	$3,844.02	28	$10,791.14	86

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ǂ Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ǂ

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Hydroxyurea	$2,965.35	60	$2,978.38	66	$4,093.41	72	$10,037.14	198
Fulvestrant	$3,600.64	2	$3,600.64	2			$7,201.28	4
Exemestane	$3,158.32	14	$1,208.16	6	$2,457.40	12	$6,823.88	32
Mercaptopurine	$1,895.10	23	$2,786.15	35	$1,993.17	21	$6,674.42	79
Bortezomib					$6,214.41	1	$6,214.41	1
Tretinoin					$2,346.02	1	$2,346.02	1
Cyclophosphamide	$722.53	4	$501.65	3	$927.56	4	$2,151.74	11
Antiretrovirals	**$516,480.33**	**579**	**$589,998.43**	**636**	**$660,886.87**	**713**	**$1,767,365.63**	**1,928**
Efavirenz/emtricitabine/tenofovir	$140,134.13	81	$171,852.71	109	$183,982.44	108	$495,969.28	298
Emtricitabine-tenofovir	$72,673.74	63	$75,946.92	64	$97,152.76	87	$245,773.42	214
Atazanavir	$53,965.09	55	$62,169.68	62	$63,465.36	62	$179,600.13	179
Raltegravir	$28,628.89	28	$35,563.13	34	$53,250.27	54	$117,442.29	116
Lopinavir-ritonavir	$36,487.91	52	$35,524.89	48	$42,092.85	57	$114,105.65	157
Lamivudine-zidovudine	$31,499.44	38	$32,688.87	40	$35,611.43	47	$99,799.74	125
Tenofovir	$24,979.51	33	$23,866.38	31	$25,405.18	33	$74,251.07	97
Abacavir-lamivudine	$20,142.04	22	$26,269.44	27	$24,006.78	25	$70,418.26	74
Abacavir/lamivudine/zidovudine	$17,615.82	12	$24,654.70	17	$24,423.91	16	$66,694.43	45
Darunavir	$20,869.16	20	$19,519.25	19	$25,106.01	25	$65,494.42	64
Ritonavir	$20,673.43	63	$18,584.59	62	$21,587.30	68	$60,845.32	193
Efavirenz	$11,289.41	21	$16,870.49	31	$13,745.59	25	$41,905.49	77
Nelfinavir	$5,665.72	8	$7,594.03	10	$5,673.07	7	$18,932.82	25

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ǂ Molecule names accounting for less than $500 in quarterly amount paid are not shown

Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Amount Paid*ǂ

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Abacavir	$5,129.51	9	$7,881.88	14	$9,246.11	16	$18,052.90	32
Nevirapine	$4,499.20	8	$4,938.66	8	$6,198.35	15	$15,636.21	31
Fosamprenavir	$4,793.03	5	$4,936.59	5	$5,841.82	5	$15,571.44	15
Lamivudine	$4,279.97	14	$4,246.32	13	$4,885.83	16	$13,412.12	43
Etravirine	$2,436.96	3	$4,745.06	6	$4,457.99	6	$11,640.01	15
Enfuvirtide	$2,920.25	2	$2,859.78	1	$5,719.56	2	$11,499.59	5
Maraviroc	$2,022.58	2	$4,115.32	4	$3,170.28	3	$9,308.18	9
Didanosine	$2,425.13	10	$2,304.63	9	$2,404.70	10	$7,134.46	29
Zidovudine	$2,207.51	25	$1,595.55	16	$1,341.64	17	$5,144.70	58
Stavudine	$658.64	4	$824.80	5	$1,151.12	7	$2,634.56	16
Indinavir	$483.26	1			$966.52	2	$1,449.78	3

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ǂ Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Amount Paid*ł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Montelukast	**$1,313,943.05**	**8,167**	**$1,434,030.82**	**8,583**	**$1,595,389.60**	**9,553**	**$4,343,363.47**	**26,303**
Singulair	$1,313,943.05	8,167	$1,434,030.82	8,583	$1,595,389.60	9,553	$4,343,363.47	26,303
Budesonide	**$1,365,392.40**	**4,336**	**$1,508,436.50**	**4,722**	**$1,300,919.16**	**3,980**	**$4,174,748.06**	**13,038**
Budesonide	$1,124,950.12	3,830	$1,244,441.98	4,182	$1,026,582.90	3,438	$3,395,975.00	11,450
Pulmicort Respules	$225,007.34	402	$231,479.76	408	$238,567.36	392	$695,054.46	1,202
Pulmicort Flexhaler	$15,434.94	104	$32,514.76	132	$35,768.90	150	$83,718.60	386
Aripiprazole	**$977,840.83**	**1,608**	**$1,044,205.32**	**1,684**	**$1,117,785.94**	**1,827**	**$3,139,832.09**	**5,119**
Abilify	$974,956.21	1,595	$1,038,859.89	1,663	$1,114,143.33	1,815	$3,127,959.43	5,073
Abilify Discmelt	$2,884.62	13	$5,345.43	21	$3,642.61	12	$11,872.66	46
Palivizumab	**$961,157.58**	**498**	**$1,128,709.92**	**591**	**$687,241.30**	**371**	**$2,777,108.80**	**1,460**
Synagis	$961,157.58	498	$1,128,709.92	591	$687,241.30	371	$2,777,108.80	1,460
Quetiapine	**$726,473.21**	**1,584**	**$767,743.96**	**1,598**	**$853,965.88**	**1,803**	**$2,348,183.05**	**4,985**
Seroquel	$551,113.54	1,223	$571,578.37	1,211	$643,809.06	1,387	$1,766,500.97	3,821
Seroquel Xr	$175,359.67	361	$196,165.59	387	$210,156.82	416	$581,682.08	1,164

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Amount Paid*ł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Amphetamine-dextroamphetamine	**$655,041.59**	**3,925**	**$714,852.06**	**4,287**	**$751,359.57**	**4,545**	**$2,121,253.22**	**12,757**
Adderall Xr	$557,073.02	2,562	$606,400.62	2,779	$635,786.15	2,917	$1,799,259.79	8,258
Amphetamine-dextroamphetamine	$72,252.68	1,214	$80,144.37	1,342	$85,618.59	1,449	$238,015.64	4,005
Amphetamine-dextroamphetamine Er	$25,166.93	145	$28,307.07	166	$29,954.83	179	$83,428.83	490
Adderall	$548.96	4					$548.96	4
Methylphenidate	**$618,778.98**	**3,715**	**$686,399.51**	**4,097**	**$727,299.01**	**4,257**	**$2,032,477.50**	**12,069**
Methylphenidate Hydrochloride Er	$305,608.56	1,796	$388,536.87	2,283	$465,311.72	2,596	$1,159,457.15	6,675
Concerta	$198,545.06	970	$173,475.96	746	$139,852.73	625	$511,873.75	2,341
Metadate Cd	$54,652.74	305	$61,131.73	332	$60,692.74	337	$176,477.21	974
Daytrana	$41,114.96	225	$43,630.66	233	$42,179.29	222	$126,924.91	680
Methylphenidate Hydrochloride	$8,238.30	311	$11,328.77	436	$10,430.53	410	$29,997.60	1,157
Methylin	$7,681.76	79	$6,636.12	48	$6,215.88	38	$20,533.76	165
Ritalin La	$2,380.03	15	$1,213.87	6	$1,971.11	10	$5,565.01	31
Methylphenidate Hydrochloride Sr	$327.28	9	$200.30	7	$522.84	15	$1,050.42	31
Lisdexamfetamine	**$559,671.29**	**3,396**	**$628,227.39**	**3,755**	**$649,857.54**	**3,904**	**$1,837,756.22**	**11,055**
Vyvanse	$559,671.29	3,396	$628,227.39	3,755	$649,857.54	3,904	$1,837,756.22	11,055
Albuterol	**$464,391.67**	**12,183**	**$553,510.59**	**14,155**	**$474,620.19**	**11,926**	**$1,492,522.45**	**38,264**
Albuterol Sulfate	$253,763.54	7,313	$296,292.79	8,471	$222,123.89	6,393	$772,180.22	22,177
Ventolin Hfa	$197,292.79	4,628	$239,664.74	5,369	$237,687.58	5,267	$674,645.11	15,264
Proventil Hfa	$13,096.01	226	$17,120.32	294	$14,319.83	248	$44,536.16	768
Albuterol	$148.84	14	$162.18	17	$419.80	16	$730.82	47

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Amount Paid*ł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Azithromycin	**$422,348.11**	**13,755**	**$509,025.70**	**16,823**	**$402,278.06**	**13,168**	**$1,333,651.87**	**43,746**
Azithromycin	$332,715.36	9,811	$394,908.29	11,821	$319,687.48	9,528	$1,047,311.13	31,160
Azithromycin 5 Day Dose Pack	$85,076.17	3,756	$107,766.65	4,743	$77,891.30	3,452	$270,734.12	11,951
Azithromycin 3 Day Dose Pack	$4,431.20	186	$6,303.57	258	$4,699.28	188	$15,434.05	632
Mometasone Nasal	**$343,446.82**	**2,907**	**$424,620.66**	**3,499**	**$509,795.81**	**3,997**	**$1,277,863.29**	**10,403**
Nasonex	$343,446.82	2,907	$424,620.66	3,499	$509,795.81	3,997	$1,277,863.29	10,403
Cetirizine	**$331,030.63**	**12,354**	**$411,141.35**	**14,367**	**$496,525.77**	**16,574**	**$1,238,697.75**	**43,295**
Cetirizine Hydrochloride	$329,157.25	12,124	$409,195.38	14,127	$493,916.35	16,281	$1,232,268.98	42,532
All Day Allergy	$1,734.62	222	$1,878.86	236	$2,282.95	277	$5,896.43	735
All Day Allergy Children's	$138.76	8	$67.11	4	$326.47	16	$532.34	28
Cefdinir	**$348,150.13**	**4,568**	**$441,123.71**	**5,708**	**$355,014.80**	**4,681**	**$1,144,288.64**	**14,957**
Cefdinir	$348,150.13	4,568	$441,123.71	5,708	$355,014.80	4,681	$1,144,288.64	14,957
Guanfacine	**$348,635.12**	**1,951**	**$385,524.71**	**2,123**	**$403,015.95**	**2,219**	**$1,137,175.78**	**6,293**
Intuniv	$348,635.12	1,951	$385,524.71	2,123	$403,015.95	2,219	$1,137,175.78	6,293
Guanfacine Hydrochloride	$11,290.45	786	$11,987.78	825	$13,190.29	907	$36,468.52	2,518
Somatropin	**$347,824.92**	**95**	**$337,045.76**	**99**	**$410,723.94**	**116**	**$1,095,594.62**	**310**
Nutropin Aq Nuspin 20	$95,652.42	18	$80,816.47	16	$106,166.67	20	$282,635.56	54
Genotropin	$49,825.51	16	$58,948.79	16	$86,399.34	26	$195,173.64	58
Nutropin Aq Nuspin 10	$43,672.87	16	$53,122.11	20	$66,692.75	23	$163,487.73	59

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Amount Paid*ł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Nutropin Aq Pen 20 Cartridge	$64,988.68	10	$47,832.84	8	$49,113.09	7	$161,934.61	25
Genotropin Miniquick	$23,927.51	12	$22,834.45	11	$25,227.92	12	$71,989.88	35
Nutropin Aq Pen 10 Cartridge	$18,716.32	9	$24,580.63	12	$25,369.33	12	$68,666.28	33
Saizen	$20,766.77	3	$15,185.92	2	$15,185.92	2	$51,138.61	7
Tev-tropin	$9,583.44	2	$10,062.55	2	$10,062.55	2	$29,708.54	6
Norditropin Flexpro Pen	$5,967.51	2	$8,758.20	3	$12,716.83	4	$27,442.54	9
Nutropin Aq Nuspin 5	$8,328.49	4	$8,732.16	6	$9,120.19	4	$26,180.84	14
Nutropin Aq	$2,379.01	1	$2,379.01	1	$2,379.01	1	$7,137.03	3
Humatrope	$1,768.27	1	$1,903.44	1	$1,903.44	1	$5,575.15	3
Omnitrope Pen 10 Cartridge	$2,248.12	1	$1,889.19	1	$386.90	2	$4,524.21	4
Olanzapine	**$344,849.43**	**495**	**$341,955.55**	**477**	**$405,019.30**	**603**	**$1,091,824.28**	**1,575**
Olanzapine	$278,295.48	397	$290,775.50	401	$317,736.99	453	$886,807.97	1,251
Zyprexa	$49,143.05	77	$41,995.06	61	$65,865.50	125	$157,003.61	263
Zyprexa Zydis	$17,410.90	21	$9,184.99	15	$21,416.81	25	$48,012.70	61
Dexmethylphenidate	**$328,227.80**	**2,047**	**$356,844.55**	**2,197**	**$370,138.82**	**2,300**	**$1,055,211.17**	**6,544**
Focalin Xr	$314,971.22	1,730	$6,118.59	32	$354,148.65	1,912	$675,238.46	3,674
Focalin Xr	$6,112.83	33	$343,097.44	1,852	$6,170.40	33	$355,380.67	1,918
Dexmethylphenidate Hydrochloride	$10,999.02	276	$12,196.13	318	$14,372.77	363	$37,567.92	957
Focalin	$2,257.56	41	$1,550.98	27	$1,617.40	25	$5,425.94	93
Anti-inhibitor Coagulant Complex	**$220,213.16**	**3**	**$479,317.24**	**6**	**$350,822.08**	**5**	**$1,050,352.48**	**14**
Feiba Nf	$79,700.88	2	$479,317.24	6	$219,311.66	4	$778,329.78	12
Feiba Vh Immuno	$140,512.28	1			$131,510.42	1	$272,022.70	2

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Amount Paid*ł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Risperidone	**$329,553.57**	**2,921**	**$348,757.62**	**3,109**	**$367,731.66**	**3,304**	**$1,046,042.85**	**9,334**
Risperidone	$263,810.23	2,844	$279,870.93	3,029	$295,131.03	3,218	$838,812.19	9,091
Risperdal Consta	$65,688.79	76	$68,734.87	79	$72,093.15	84	$206,516.81	239
Risperdal	$54.55	1	$151.82	1	$507.48	2	$713.85	4
Lansoprazole	**$327,133.58**	**1,668**	**$331,445.02**	**1,690**	**$346,654.36**	**1,748**	**$1,005,232.96**	**5,106**
Prevacid Solutab	$318,267.42	1,609	$323,256.41	1,631	$339,118.94	1,696	$980,642.77	4,936
Lansoprazole	$8,866.16	59	$8,188.61	59	$7,535.42	52	$24,590.19	170
Amoxicillin-clavulanate	**$295,505.66**	**5,491**	**$353,173.64**	**6,532**	**$293,357.32**	**5,331**	**$942,036.62**	**17,354**
Amoxicillin-clavulanate	$292,576.93	5,462	$351,967.91	6,516	$292,253.34	5,318	$936,798.18	17,296
Amoxicillin-clavulanate	$48,031.61	761	$74,948.29	1,220	$71,179.98	1,129	$194,159.88	3,110
Augmentin	$941.77	11	$1,068.28	15	$966.53	12	$2,976.58	38
Augmentin	$461.48	4	$566.61	5	$1,600.77	13	$2,628.86	22
Amoxicillin-clavulanate Er	$1,986.96	18	$349.17	2	$137.45	1	$2,473.58	21
Fluticasone-salmeterol	**$261,886.46**	**1,163**	**$294,085.84**	**1,227**	**$299,412.94**	**1,239**	**$855,385.24**	**3,629**
Advair Diskus	$240,278.58	1,072	$270,077.50	1,133	$271,611.97	1,126	$781,968.05	3,331
Advair Hfa	$21,607.88	91	$24,008.34	94	$27,800.97	113	$73,417.19	298
Adalimumab	**$257,707.00**	**96**	**$277,380.50**	**106**	**$255,121.64**	**108**	**$790,209.14**	**310**
Humira Pen	$146,159.32	62	$172,104.86	72	$153,887.84	68	$472,152.02	202
Humira	$63,755.34	26	$60,746.96	26	$80,993.16	36	$205,495.46	88
Humira Pen Crohn's Disease Starter Package	$47,792.34	8	$36,432.06	6	$12,144.02	2	$96,368.42	16

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Amount Paid*ł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Humira Pen Psoriasis Starter Package			$8,096.62	2	$8,096.62	2	$16,193.24	4
Medroxyprogesterone	**$254,491.59**	**7,743**	**$260,205.03**	**8,097**	**$269,835.24**	**8,088**	**$784,531.86**	**23,928**
Medroxyprogesterone Acetate	$191,574.81	4,398	$193,100.37	4,503	$209,198.73	4,836	$593,873.91	13,737
Depo-provera Contraceptive	$37,987.47	2,118	$51,864.57	2,880	$51,327.39	2,862	$141,179.43	7,860
Depo-subq Provera 104	$24,929.31	1,227	$15,240.09	714	$9,309.12	390	$49,478.52	2,331
Antihemophilic Factor	**$222,324.28**	**10**	**$275,574.41**	**17**	**$285,197.98**	**14**	**$783,096.67**	**41**
Advate Rahf-pfm	$170,097.32	8	$73,050.31	10	$169,718.89	11	$412,866.52	29
Helixate Fs	$52,226.96	2	$71,495.66	3	$50,662.98	1	$174,385.60	6
Recombinate			$73,187.91	2	$46,421.09	1	$119,609.00	3
Xyntha			$39,445.51	1			$39,445.51	1
Hemofil-m			$18,395.02	1	$18,395.02	1	$36,790.04	2

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Opiate Agonists	**$439,390.12**	**21,742**	**$481,599.19**	**23,157**	**$513,893.55**	**24,616**	**$1,434,882.86**	**69,515**
Acetaminophen-hydrocodone	$201,788.52	13,791	$214,838.58	14,596	$231,707.04	15,692	$648,334.14	44,079
Acetaminophen-codeine	$25,071.44	3,002	$27,008.47	3,237	$28,046.00	3,390	$80,125.91	9,629
Acetaminophen-oxycodone	$53,142.00	1,865	$59,838.20	2,015	$60,960.68	2,069	$173,940.88	5,949
Tramadol	$8,372.71	1,530	$9,120.91	1,658	$9,204.42	1,703	$19,957.66	3,658
Fentanyl	$71,004.45	309	$84,538.29	376	$90,819.67	406	$246,362.41	1,091
Morphine	$37,283.33	306	$37,864.71	299	$38,737.29	316	$113,885.33	921
Acetaminophen-tramadol	$6,750.84	227	$6,864.62	247	$6,903.17	253	$20,518.63	727
Oxycodone	$20,949.83	195	$24,857.82	209	$29,309.47	258	$75,117.12	662
Hydrocodone-ibuprofen	$4,789.74	201	$5,051.14	196	$5,469.55	219	$15,310.43	616
Hydromorphone	$1,759.68	74	$2,959.66	94	$2,342.60	81	$7,061.94	249
Meperidine	$851.24	84	$863.42	85	$791.90	71	$2,506.56	240
Methadone	$547.08	67	$624.86	74	$602.39	69	$1,774.33	210
Apap/caffeine/dihydrocodeine	$3,320.56	63	$3,280.47	48	$3,445.58	61	$10,046.61	172
Aspirin-oxycodone	$314.48	11	$100.96	5	$201.69	9	$617.13	25
Oxymorphone	$2,868.73	8	$3,273.03	7	$4,089.73	9	$10,231.49	24
Tapentadol	$438.06	3	$335.57	3	$1,131.31	5	$1,904.94	11

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Penicillins	**$461,115.47**	**21,155**	**$550,380.71**	**25,414**	**$458,437.57**	**21,180**	**$1,469,933.75**	**67,749**
Amoxicillin	$140,362.68	14,174	$173,928.28	17,252	$141,354.14	14,271	$455,645.10	45,697
Amoxicillin-clavulanate	$295,505.66	5,491	$353,173.64	6,532	$293,357.32	5,331	$942,036.62	17,354
Penicillin V Potassium	$14,477.70	1,297	$15,768.15	1,394	$15,796.24	1,380	$46,042.09	4,071
Ampicillin	$1,780.93	149	$2,124.03	183	$1,969.39	146	$5,874.35	478
Penicillin G Benzathine	$1,005.41	21	$1,387.87	24	$1,266.75	21	$3,660.03	66
Dicloxacillin	$365.86	15	$389.03	19	$372.45	19	$1,127.34	53
Piperacillin-tazobactam	$1,608.28	1	$1,285.37	3	$2,106.36	8	$5,000.01	12
Ampicillin-sulbactam	$421.02	2	$795.08	4	$803.72	3	$2,019.82	9
Oxacillin	$1,684.75	2	$1,182.52	1			$2,867.27	3
Nafcillin	$3,856.03	2					$3,856.03	2
Penicillin G Potassium			$297.82	1	$1,411.20	1	$1,709.02	2
Second Generation Antihistamines	**$366,744.60**	**15,109**	**$447,514.41**	**17,458**	**$535,779.94**	**19,877**	**$1,350,038.95**	**52,444**
Cetirizine	$331,030.63	12,354	$411,141.35	14,367	$496,525.77	16,574	$1,238,697.75	43,295
Loratadine	$13,100.18	1,884	$14,120.89	2,076	$16,584.78	2,379	$43,805.85	6,339
Cetirizine-pseudoephedrine	$9,913.17	530	$12,425.91	678	$11,258.55	602	$33,597.63	1,810
Loratadine-pseudoephedrine	$3,391.05	226	$3,597.49	252	$3,526.64	226	$10,515.18	704
Levocetirizine	$6,746.44	91	$4,637.65	67	$5,352.64	71	$16,736.73	229
Acrivastine-pseudoephedrine	$908.26	10	$691.57	7	$1,233.77	11	$2,833.60	28
Fexofenadine	$218.02	5	$422.60	8	$501.48	9	$1,142.10	22

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Desloratadine	$1,436.85	9	$476.95	3	$796.31	5	$2,710.11	17
Adrenals	**$1,706,086.09**	**15,845**	**$1,894,152.72**	**17,944**	**$1,658,090.62**	**15,297**	**$5,258,329.43**	**49,086**
Prednisolone	$123,328.26	7,075	$150,176.52	8,207	$115,882.48	6,495	$389,387.26	21,777
Budesonide	$1,365,392.40	4,336	$1,508,436.50	4,722	$1,300,919.16	3,980	$4,174,748.06	13,038
Prednisone	$8,412.49	1,632	$9,445.76	1,918	$9,332.63	1,856	$27,190.88	5,406
Methylprednisolone	$12,797.22	1,047	$14,421.30	1,170	$13,619.14	1,096	$40,837.66	3,313
Fluticasone	$53,384.09	401	$57,581.22	431	$59,970.99	447	$170,936.30	1,279
Dexamethasone	$5,135.88	398	$5,621.71	478	$4,368.95	401	$15,126.54	1,277
Budesonide-formoterol	$60,649.95	281	$61,283.13	273	$67,482.96	270	$189,416.04	824
Beclomethasone	$29,737.69	228	$33,170.46	251	$36,516.04	281	$99,424.19	760
Mometasone	$29,616.91	226	$32,994.07	245	$29,539.57	226	$92,150.55	697
Hydrocortisone	$2,179.09	75	$2,654.38	88	$2,456.21	84	$7,289.68	247
Formoterol-mometasone	$12,394.23	56	$14,857.83	67	$14,490.19	67	$41,742.25	190
Fludrocortisone	$1,352.79	58	$1,488.18	64	$1,510.26	61	$4,351.23	183
Flunisolide Nasal	$1,619.66	27	$1,951.72	26	$1,926.57	29	$5,497.95	82
Benzodiazepines	**$199,834.21**	**15,300**	**$207,626.06**	**16,401**	**$221,378.61**	**16,866**	**$628,838.88**	**48,567**
Lorazepam	$47,473.05	7,026	$49,717.71	7,515	$52,160.73	7,686	$149,351.49	22,227
Alprazolam	$34,548.94	4,285	$37,101.40	4,628	$38,461.06	4,784	$110,111.40	13,697
Diazepam	$107,870.26	2,862	$110,574.36	3,048	$118,989.22	3,120	$337,433.84	9,030
Temazepam	$6,225.60	767	$6,656.17	856	$7,904.69	897	$20,786.46	2,520

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Clorazepate	$2,314.31	207	$2,256.91	214	$2,501.32	240	$7,072.54	661
Chlordiazepoxide	$428.47	53	$471.50	57	$418.90	50	$1,318.87	160
Triazolam	$443.84	60	$394.94	52	$407.53	47	$1,246.31	159
Oxazepam	$335.31	11	$359.52	13	$403.86	14	$1,098.69	38
Macrolides	**$476,974.79**	**14,829**	**$573,555.05**	**18,077**	**$454,778.66**	**14,069**	**$1,505,308.50**	**46,975**
Azithromycin	$422,348.11	13,755	$509,025.70	16,823	$402,278.06	13,168	$1,333,651.87	43,746
Clarithromycin	$45,459.17	916	$56,939.84	1,128	$43,900.45	771	$146,299.46	2,815
Erythromycin	$8,313.05	131	$6,965.88	107	$8,195.97	117	$23,474.90	355
Erythromycin-sulfisoxazole	$854.46	27	$623.63	19	$404.18	13	$1,882.27	59
Beta-adrenergic Agonists	**$792,980.18**	**13,663**	**$917,456.69**	**15,740**	**$846,369.45**	**13,526**	**$2,556,806.32**	**42,929**
Albuterol	$464,391.67	12,183	$553,510.59	14,155	$474,620.19	11,926	$1,492,522.45	38,264
Fluticasone-salmeterol	$261,886.46	1,163	$294,085.84	1,227	$299,412.94	1,239	$855,385.24	3,629
Albuterol-ipratropium	$49,342.26	205	$52,272.70	225	$53,906.51	228	$155,521.47	658
Terbutaline	$1,558.26	42	$2,495.00	64	$2,281.24	68	$6,334.50	174
Levalbuterol	$12,184.81	49	$12,582.50	54	$12,396.65	43	$37,163.96	146
Formoterol	$1,980.43	10	$681.53	4	$2,474.65	15	$5,136.61	29
Pirbuterol	$1,209.08	8	$1,393.41	9	$1,268.11	8	$3,422.96	23
Arformoterol	$405.15	1	$850.04	2	$850.04	2	$2,105.23	5
Nonsteroidal Anti-inflammatory Agents	**$137,317.19**	**12,707**	**$150,950.42**	**14,173**	**$149,262.27**	**14,268**	**$437,529.88**	**41,148**
Ibuprofen	$53,708.18	6,087	$61,985.13	7,043	$60,385.56	6,818	$176,078.87	19,948

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Naproxen	$39,231.07	2,649	$42,019.67	2,854	$40,450.67	2,761	$121,701.41	8,264
Aspirin	$5,692.34	1,688	$5,916.52	1,758	$7,452.56	2,158	$19,061.42	5,604
Meloxicam	$8,951.21	1,236	$9,879.03	1,372	$9,790.47	1,396	$28,620.71	4,004
Apap/butalbital/caffeine	$21,446.59	944	$21,378.80	983	$20,080.65	964	$62,906.04	2,891
Ketorolac	$6,505.33	410	$5,981.86	407	$4,526.45	410	$17,013.64	1,227
Diclofenac	$8,509.64	329	$8,952.63	346	$9,595.10	363	$27,057.37	1,038
Indomethacin	$2,557.65	123	$2,776.69	132	$2,268.14	114	$7,602.48	369
Etodolac	$385.82	13	$1,968.69	74	$1,938.27	77	$4,292.78	164
Celecoxib	$8,576.22	52	$7,707.51	47	$9,273.94	52	$25,557.67	151
Sulindac	$821.76	36	$1,104.97	47	$820.50	35	$2,747.23	118
Asa/butalbital/caffeine	$662.89	27	$821.32	33	$895.70	30	$2,379.91	90
Flurbiprofen	$267.43	17	$184.10	14	$225.67	15	$677.20	46
Salsalate	$362.56	12	$232.49	7	$203.77	6	$798.82	25
Diflunisal	$141.90	3	$181.62	5	$201.40	4	$524.92	12
Nabumetone	$134.09	2	$194.34	3	$246.00	4	$574.43	9
Ketoprofen	$103.99	1	$345.63	3	$374.51	5	$824.13	9
Fenoprofen	$85.34	1	$212.90	2	$212.90	2	$511.14	5
Diclofenac-misoprostol	$362.74	2	$197.61	1	$197.61	1	$757.96	4
Antitussives	**$88,801.36**	**11,285**	**$119,532.07**	**14,922**	**$85,860.85**	**10,727**	**$294,194.28**	**36,934**
Brompheniramine/dextromethorph/p	$48,697.78	5,360	$68,298.07	7,449	$50,165.65	5,483	$167,161.50	18,292
Codeine-guaifenesin	$14,513.22	2,606	$18,882.00	3,385	$12,550.82	2,328	$45,946.04	8,319

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claimsł

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Nitrofurantoin	$72,664.44	1,292	$72,733.72	1,349	$81,845.45	1,498	$227,243.61	4,139
Dextromethorphan-guaifenesin	$6,608.04	1,205	$7,663.51	1,393	$6,035.33	1,106	$20,306.88	3,704
Benzonatate	$5,267.90	628	$6,626.35	801	$6,002.17	717	$17,896.42	2,146
Dextromethorphan	$7,377.78	674	$9,278.35	838	$6,353.45	571	$23,009.58	2,083
Brompheniramine/dextromethorphan	$3,827.48	627	$4,565.42	742	$1,957.15	318	$10,350.05	1,687
Codeine/guaifenesin/pse	$2,509.16	185	$4,218.37	314	$2,796.28	204	$9,523.81	703
Antidepressants	**$387,722.32**	**11,353**	**$422,714.94**	**12,393**	**$420,375.89**	**12,640**	**$1,230,813.15**	**36,386**
Citalopram	$16,907.96	2,213	$18,684.72	2,484	$18,727.46	2,524	$54,320.14	7,221
Sertraline	$13,263.89	1,713	$14,810.47	1,899	$15,008.60	1,960	$43,082.96	5,572
Fluoxetine	$17,653.25	1,252	$19,443.28	1,362	$21,353.87	1,473	$58,450.40	4,087
Trazodone	$10,420.85	1,287	$11,066.47	1,320	$11,909.24	1,409	$33,396.56	4,016
Bupropion	$111,743.96	1,254	$122,477.90	1,386	$118,597.24	1,354	$352,819.10	3,994
Amitriptyline	$3,673.28	688	$4,312.62	823	$3,914.67	748	$11,900.57	2,259
Desvenlafaxine	$75,318.70	528	$89,132.09	605	$84,779.57	579	$249,230.36	1,712
Mirtazapine	$18,666.39	471	$19,506.09	485	$19,258.16	494	$57,430.64	1,450
Doxepin	$4,703.40	378	$4,742.68	388	$5,664.52	452	$15,110.60	1,218
Paroxetine	$7,861.12	546	$7,998.27	562	$8,815.96	605	$17,528.74	1,196
Imipramine	$5,772.77	209	$6,132.89	218	$8,156.10	229	$20,061.76	656
Venlafaxine	$25,715.99	178	$24,548.02	162	$25,280.87	172	$75,544.88	512
Duloxetine	$35,032.24	163	$35,810.97	173	$40,145.33	175	$110,988.54	511
Escitalopram	$20,597.89	164	$23,596.94	184	$14,793.10	110	$58,987.93	458

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Nortriptyline	$1,112.76	122	$1,284.87	141	$1,265.84	143	$3,663.47	406
Fluvoxamine	$6,682.81	68	$6,377.68	72	$8,489.57	79	$21,550.06	219
Amitriptyline-perphenazine	$2,878.40	56	$3,040.56	57	$3,172.90	64	$9,091.86	177
Amitriptyline-chlordiazepoxide	$1,470.07	28	$1,616.36	31	$1,608.74	30	$4,695.17	89
Clomipramine	$925.86	21	$924.47	22	$758.62	20	$2,608.95	63
Fluoxetine-olanzapine	$7,285.31	13	$7,027.21	13	$8,547.19	16	$22,859.71	42
Desipramine	$248.32	5	$143.18	3	$128.45	3	$519.95	11
Cephalosporins	**$715,698.38**	**11,067**	**$841,130.60**	**12,839**	**$715,465.06**	**10,896**	**$2,272,294.04**	**34,802**
Cefdinir	$348,150.13	4,568	$441,123.71	5,708	$355,014.80	4,681	$1,144,288.64	14,957
Cephalexin	$40,613.85	2,697	$43,255.54	2,860	$42,766.32	2,723	$126,635.71	8,280
Cefprozil	$138,520.66	2,392	$164,269.69	2,786	$127,325.22	2,122	$430,115.57	7,300
Cefixime	$160,561.41	718	$155,616.51	677	$155,904.01	665	$472,081.93	2,060
Cefuroxime	$7,856.99	395	$10,647.76	542	$7,722.08	396	$26,226.83	1,333
Cefadroxil	$4,508.72	137	$4,510.75	123	$6,493.68	155	$15,513.15	415
Ceftriaxone	$9,313.26	121	$19,061.56	119	$13,282.17	120	$41,656.99	360
Cefaclor	$1,211.70	18	$840.68	15	$251.72	6	$2,304.10	39
Cefepime	$3,170.82	11	$762.02	2	$4,884.22	16	$8,817.06	29
Cefpodoxime	$546.36	4	$273.53	3	$252.18	2	$1,072.07	9
Ceftibuten	$212.98	1	$638.94	3	$301.40	2	$1,153.32	6
Cefazolin	$758.92	4	$129.91	1			$888.83	5
Ceftaroline					$1,133.51	2	$1,133.51	2

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Anticonvulsants, Miscellaneous	**$933,476.81**	**9,840**	**$982,301.79**	**10,362**	**$1,041,726.46**	**11,026**	**$2,957,505.06**	**31,228**
Gabapentin	$83,108.88	2,237	$93,657.30	2,501	$95,779.45	2,567	$272,545.63	7,305
Divalproex Sodium	$165,795.28	1,595	$167,969.27	1,630	$180,585.47	1,761	$514,350.02	4,986
Levetiracetam	$98,304.58	1,163	$106,530.11	1,240	$113,766.65	1,354	$318,601.34	3,757
Topiramate	$55,704.85	1,114	$59,508.92	1,133	$63,583.51	1,234	$178,797.28	3,481
Oxcarbazepine	$131,715.79	1,011	$131,348.86	1,024	$140,889.50	1,098	$403,954.15	3,133
Lamotrigine	$82,857.57	876	$85,114.54	871	$95,848.69	979	$263,820.80	2,726
Pregabalin	$124,929.32	643	$134,950.80	666	$141,275.87	698	$401,155.99	2,007
Carbamazepine	$34,880.05	587	$40,285.08	635	$39,333.91	653	$114,499.04	1,875
Zonisamide	$12,332.53	253	$12,505.45	268	$12,877.14	260	$37,715.12	781
Valproic Acid	$8,199.92	169	$9,041.11	180	$8,422.53	181	$25,663.56	530
Lacosamide	$48,291.71	105	$60,697.25	137	$63,906.94	150	$172,895.90	392
Rufinamide	$25,068.05	37	$22,497.64	32	$27,170.89	41	$74,736.58	110
Felbamate	$20,876.00	27	$17,606.58	25	$18,830.82	27	$57,313.40	79
Tiagabine	$6,050.55	11	$6,711.43	11	$7,690.65	10	$20,452.63	32
Vigabatrin	$34,876.72	6	$33,733.99	6	$31,452.44	7	$100,063.15	19
Magnesium Sulfate	$485.01	6	$143.46	3	$312.00	6	$940.47	15
Sulfonamides	**$123,707.16**	**9,361**	**$138,723.45**	**10,333**	**$147,660.95**	**11,010**	**$410,091.56**	**30,704**
Sulfamethoxazole-trimethoprim	$122,636.32	9,318	$137,025.96	10,262	$142,350.44	10,928	$402,012.72	30,508
Sulfasalazine	$927.18	42	$1,555.90	70	$1,481.24	74	$3,964.32	186

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Sulfadiazine	$143.66	1	$141.59	1	$3,829.27	8	$4,114.52	10
Contraceptives	**$418,687.88**	**8,930**	**$444,513.91**	**9,550**	**$448,304.20**	**9,641**	**$1,311,505.99**	**28,121**
Ethinyl Estradiol-norgestimate	$86,599.21	3,070	$90,293.16	3,224	$88,529.78	3,277	$265,422.15	9,571
Ethinyl Estradiol-norethindrone	$177,291.00	2,870	$190,291.68	3,086	$196,223.50	3,186	$563,806.18	9,142
Norethindrone	$29,598.86	958	$34,090.20	1,122	$30,936.82	1,028	$94,625.88	3,108
Ethinyl Estradiol-etonogestrel	$39,361.97	535	$41,723.38	566	$42,152.46	569	$123,237.81	1,670
Ethinyl Estradiol-levonorgestrel	$32,085.42	448	$33,735.17	485	$34,832.46	506	$100,653.05	1,439
Ethinyl Estradiol-norelgestromin	$44,731.07	503	$47,305.60	521	$52,282.15	576	$109,998.31	1,274
Ethinyl Estradiol-norgestrel	$8,336.41	298	$8,088.31	285	$8,241.04	291	$24,665.76	874
Drospirenone-ethinyl Estradiol	$14,794.12	224	$14,160.05	218	$13,771.91	213	$42,726.08	655
Desogestrel-ethinyl Estradiol	$5,940.62	164	$6,440.04	182	$6,310.34	177	$18,691.00	523
Drospirenone/ethinyl Estradiol/levom	$11,999.27	141	$12,639.39	147	$15,159.74	177	$39,798.40	465
Ethinyl Estradiol-ethynodiol	$393.22	14	$587.30	21	$522.77	19	$1,503.29	54
Dienogest-estradiol	$1,290.15	15	$1,548.18	18	$1,548.18	18	$4,386.51	51
Mestranol-norethindrone	$372.33	10	$335.80	7	$363.80	8	$1,071.93	25
Levonorgestrel	$214.74	6	$228.94	6	$246.88	8	$690.56	20
Antipsychotics (atypical And Typical)	**$2,906,766.27**	**8,534**	**$3,096,546.84**	**8,953**	**$3,370,043.30**	**9,756**	**$9,373,356.41**	**27,243**
Risperidone	$329,553.57	2,921	$348,757.62	3,109	$367,731.66	3,304	$1,046,042.85	9,334
Aripiprazole	$977,840.83	1,608	$1,044,205.32	1,684	$1,117,785.94	1,827	$3,139,832.09	5,119
Quetiapine	$726,473.21	1,584	$767,743.96	1,598	$853,965.88	1,803	$2,348,183.05	4,985

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Class Report
Top 15 Classes By Quarterly Number of Claims†

AHFS Class / Generic Molecule	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Haloperidol	$23,301.65	491	$25,770.01	523	$29,656.67	594	$78,728.33	1,608
Olanzapine	$344,849.43	495	$341,955.55	477	$405,019.30	603	$1,091,824.28	1,575
Ziprasidone	$211,095.89	411	$216,569.41	415	$194,929.03	383	$622,594.33	1,209
Chlorpromazine	$22,242.24	226	$23,544.40	246	$25,349.84	256	$71,136.48	728
Paliperidone	$143,837.06	138	$178,051.81	166	$217,244.82	207	$539,133.69	511
Asenapine	$56,930.13	126	$66,376.84	142	$71,386.90	155	$194,693.87	423
Clozapine	$22,117.71	129	$23,155.31	147	$22,062.88	145	$67,335.90	421
Prochlorperazine	$2,118.16	116	$2,026.14	118	$2,235.16	120	$6,379.46	354
Perphenazine	$3,420.20	60	$3,440.46	62	$4,940.08	78	$11,800.74	200
Lurasidone	$26,628.31	51	$33,767.53	65	$39,602.37	79	$99,998.21	195
Fluphenazine	$1,980.71	53	$2,414.17	57	$2,431.46	62	$6,826.34	172
Thioridazine	$1,130.31	39	$1,247.21	43	$1,223.11	44	$3,600.63	126
Trifluoperazine	$1,381.26	24	$1,507.33	31	$1,694.39	31	$4,582.98	86
Thiothixene	$502.91	24	$423.96	23	$595.40	25	$1,522.27	72
Iloperidone	$9,209.84	15	$13,736.78	24	$10,504.50	17	$33,451.12	56
Loxapine	$1,606.24	17	$1,529.25	20	$1,001.12	15	$4,136.61	52
Pimozide	$546.61	6	$323.78	3	$682.79	8	$1,553.18	17

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
† Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Number of Claimsł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Amoxicillin	**$140,362.68**	**14,174**	**$173,928.28**	**17,252**	**$141,354.14**	**14,271**	**$455,645.10**	**45,697**
Amoxicillin	$140,257.19	14,173	$173,509.32	17,248	$140,877.48	14,266	$454,643.99	45,687
Moxatag	$105.49	1	$418.96	4	$476.66	5	$1,001.11	10
Acetaminophen-hydrocodone	**$201,788.52**	**13,791**	**$214,838.58**	**14,596**	**$231,707.04**	**15,692**	**$648,334.14**	**44,079**
Acetaminophen-hydrocodone Bitartrate	$167.04	12	$214,792.82	14,589	$231,666.70	15,686	$446,626.56	30,287
Acetaminophen-hydrocodone Bitartrate	$201,721.31	13,782	$435.45	33	$1,078.68	72	$203,235.44	13,887
Azithromycin	**$422,348.11**	**13,755**	**$509,025.70**	**16,823**	**$402,278.06**	**13,168**	**$1,333,651.87**	**43,746**
Azithromycin	$332,715.36	9,811	$394,908.29	11,821	$319,687.48	9,528	$1,047,311.13	31,160
Azithromycin 5 Day Dose Pack	$85,076.17	3,756	$107,766.65	4,743	$77,891.30	3,452	$270,734.12	11,951
Azithromycin 3 Day Dose Pack	$4,431.20	186	$6,303.57	258	$4,699.28	188	$15,434.05	632
Cetirizine	**$331,030.63**	**12,354**	**$411,141.35**	**14,367**	**$496,525.77**	**16,574**	**$1,238,697.75**	**43,295**
Cetirizine Hydrochloride	$329,157.25	12,124	$409,195.38	14,127	$493,916.35	16,281	$1,232,268.98	42,532
All Day Allergy	$1,734.62	222	$1,878.86	236	$2,282.95	277	$5,896.43	735
All Day Allergy Children's	$138.76	8	$67.11	4	$326.47	16	$532.34	28
Albuterol	**$464,391.67**	**12,183**	**$553,510.59**	**14,155**	**$474,620.19**	**11,926**	**$1,492,522.45**	**38,264**
Albuterol Sulfate	$253,763.54	7,313	$296,292.79	8,471	$222,123.89	6,393	$772,180.22	22,177

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims

* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.

ł Molecule names accounting for less than $500 in quarterly amount paid are not shown

Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Number of Claimsł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Ventolin Hfa	$197,292.79	4,628	$239,664.74	5,369	$237,687.58	5,267	$674,645.11	15,264
Proventil Hfa	$13,096.01	226	$17,120.32	294	$14,319.83	248	$44,536.16	768
Albuterol	$148.84	14	$162.18	17	$419.80	16	$730.82	47
Sulfamethoxazole-trimethoprim	**$122,636.32**	**9,318**	**$137,025.96**	**10,262**	**$142,350.44**	**10,928**	**$402,012.72**	**30,508**
Sulfamethoxazole-trimethoprim	$86,950.68	5,348	$97,232.74	5,812	$100,107.34	6,196	$284,290.76	17,356
Sulfamethoxazole-trimethoprim Ds	$35,168.30	3,912	$39,047.24	4,364	$41,738.66	4,670	$115,954.20	12,946
Smz-tmp Ds	$517.34	58	$745.98	86	$504.44	62	$1,767.76	206
Montelukast	**$1,313,943.05**	**8,167**	**$1,434,030.82**	**8,583**	**$1,595,389.60**	**9,553**	**$4,343,363.47**	**26,303**
Singulair	$1,313,943.05	8,167	$1,434,030.82	8,583	$1,595,389.60	9,553	$4,343,363.47	26,303
Medroxyprogesterone	**$254,491.59**	**7,743**	**$260,205.03**	**8,097**	**$269,835.24**	**8,088**	**$784,531.86**	**23,928**
Medroxyprogesterone Acetate	$191,574.81	4,398	$193,100.37	4,503	$209,198.73	4,836	$593,873.91	13,737
Depo-provera Contraceptive	$37,987.47	2,118	$51,864.57	2,880	$51,327.39	2,862	$141,179.43	7,860
Depo-subq Provera 104	$24,929.31	1,227	$15,240.09	714	$9,309.12	390	$49,478.52	2,331
Clonazepam	**$56,004.44**	**7,328**	**$62,460.20**	**7,964**	**$63,464.78**	**8,238**	**$181,929.42**	**23,530**
Clonazepam	$56,004.44	7,328	$62,460.20	7,964	$63,464.78	8,238	$181,929.42	23,530
Lorazepam	**$47,473.05**	**7,026**	**$49,717.71**	**7,515**	**$52,160.73**	**7,686**	**$149,351.49**	**22,227**
Lorazepam	$47,473.05	7,026	$49,717.71	7,515	$52,160.73	7,686	$149,351.49	22,227
Prednisolone	**$123,328.26**	**7,075**	**$150,176.52**	**8,207**	**$115,882.48**	**6,495**	**$389,387.26**	**21,777**
Prednisolone Sodium Phosphate	$32,910.51	2,846	$37,982.76	3,305	$31,498.25	2,657	$102,391.52	8,808

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Number of Claimsł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Prednisolone	$32,496.97	2,494	$37,435.29	2,836	$31,894.42	2,346	$101,826.68	7,676
Veripred 20	$42,370.65	1,566	$51,494.50	1,800	$36,794.71	1,302	$130,659.86	4,668
Orapred Odt	$14,633.95	142	$21,735.53	219	$14,175.10	150	$50,544.58	511
Millipred	$533.07	22	$782.43	37	$852.05	36	$2,167.55	95
Flo-pred	$338.13	3	$617.46	5	$667.95	4	$1,623.54	12
Promethazine	**$73,785.08**	**6,596**	**$81,366.20**	**7,112**	**$76,487.86**	**6,730**	**$231,639.14**	**20,438**
Promethazine Hydrochloride	$5,449.54	422	$73,783.24	6,708	$69,834.50	6,280	$149,067.28	13,410
Promethazine Hydrochloride	$67,656.22	6,194	$7,960.00	620	$8,456.26	672	$84,072.48	7,486
Promethegan	$4,063.16	250	$5,533.28	264	$4,722.74	312	$14,319.18	826
Phenadoz	$2,065.70	152	$1,940.36	134	$1,930.62	138	$5,936.68	424
Ibuprofen	**$53,708.18**	**6,087**	**$61,985.13**	**7,043**	**$60,385.56**	**6,818**	**$176,078.87**	**19,948**
Ibuprofen	$47,421.13	5,048	$54,478.44	5,778	$53,372.26	5,623	$155,271.83	16,449
Ibu	$5,134.10	906	$6,112.77	1,107	$5,586.25	1,034	$16,833.12	3,047
Ibuprofen Children's	$909.06	107	$1,179.94	132	$1,048.90	118	$3,137.90	357
Childrens Ibuprofen	$232.27	25	$200.72	24	$378.15	43	$811.14	92
Diphenhydramine	**$28,524.56**	**6,056**	**$30,745.44**	**6,492**	**$31,365.96**	**6,576**	**$90,635.96**	**19,124**
Q-dryl	$17,266.44	3,568	$18,550.60	3,780	$17,804.44	3,600	$53,621.48	10,948
Diphenhydramine Hydrochloride	$6,215.72	1,412	$6,063.76	1,448	$8,188.60	1,852	$20,468.08	4,712
Diphenhist	$2,644.16	520	$3,041.36	576	$2,746.52	528	$8,432.04	1,624
Banophen	$1,834.28	452	$2,257.52	540	$1,881.20	456	$5,973.00	1,448
Diphenhydramine Hydrochloride	$6,215.72	1,412	$79.56	12	$18.92	4	$6,314.20	1,428
Diphedryl	$344.84	64	$449.04	80	$216.32	44	$1,010.20	188

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Number of Claimsł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Child Allergy	$131.44	24	$209.48	36	$293.20	52	$634.12	112
Multivitamin, Prenatal	**$228,981.12**	**6,168**	**$228,448.26**	**6,304**	**$229,696.42**	**6,458**	**$687,125.80**	**18,930**
Prenatal Plus	$10,411.26	1,162	$11,637.96	1,298	$613.36	62	$22,662.58	2,522
Concept Dha	$15,828.72	552	$16,643.92	580	$16,967.78	592	$49,440.42	1,724
Prenatal Plus	$518.28	52	$717.32	72	$11,955.62	1,342	$13,191.22	1,466
Taron-c Dha	$7,416.84	270	$10,658.70	384	$11,318.14	404	$29,393.68	1,058
Pnv-dha	$17,118.00	316	$18,553.14	336	$19,144.20	346	$54,815.34	998
Prenaplus	$2,508.22	244	$2,984.20	282	$3,360.18	320	$8,852.60	846
Prefera Ob-one	$12,721.16	172	$17,870.08	242	$21,521.20	286	$52,112.44	700
Nestabs Dha	$8,155.76	178	$10,934.08	232	$13,902.14	286	$32,991.98	696
Nexa Select With Dha	$17,073.08	220	$18,744.40	230	$19,206.72	238	$55,024.20	688
Preferaob+dha	$13,372.32	254	$10,726.70	200	$11,572.96	214	$35,671.98	668
Vitafol-one	$6,627.96	132	$9,247.18	182	$15,217.54	300	$31,092.68	614
Preferaob	$11,976.24	192	$13,253.04	208	$13,258.76	208	$38,488.04	608
Citranatal Assure	$7,064.14	142	$6,583.16	132	$8,911.26	178	$22,558.56	452
Pnv Select	$9,536.22	156	$9,420.68	156	$7,730.52	130	$26,687.42	442
Concept Ob	$3,716.58	138	$4,015.50	150	$3,844.22	142	$11,576.30	430
Prenexa With Dha	$12,270.06	156	$12,867.34	158	$8,878.54	110	$34,015.94	424
Vol-plus	$1,710.92	148	$1,356.00	116	$1,643.94	146	$4,710.86	410
Prenatal 19	$1,108.48	82	$1,969.02	144	$2,167.68	156	$5,245.18	382
Rovin-nv Dha	$14,475.66	330	$444.40	10			$14,920.06	340
Prenatal Ad	$1,259.48	100	$1,331.86	108	$1,096.38	88	$3,687.72	296
Zatean-pn Plus	$6,641.16	116	$6,016.04	104	$3,365.06	58	$16,022.26	278

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Number of Claimsł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Levomefolate Dha	$4,563.60	80	$5,863.08	106	$5,070.60	92	$15,497.28	278
Tricare Dha One	$3,811.34	70	$5,604.10	108	$5,258.40	96	$14,673.84	274
Zatean-pn Dha	$4,142.30	76	$4,689.12	86	$5,800.90	106	$14,632.32	268
Citranatal Harmony	$4,927.92	92	$4,315.60	80	$4,833.08	90	$14,076.60	262
Folivan-ob	$1,604.04	66	$1,827.56	74	$2,238.36	92	$5,669.96	232
Paire Ob Plus Dha	$1,764.58	46	$2,761.58	74	$3,215.30	86	$7,741.46	206
Citranatal 90 Dha	$2,675.82	50	$3,857.22	78	$3,705.46	78	$10,238.50	206
Prenatabs Rx	$607.36	52	$931.08	82	$847.76	72	$2,386.20	206
Triveen Ten	$2,461.92	76	$1,875.38	56	$1,860.58	52	$6,197.88	184
Prennaissance With Dha	$991.98	16	$4,491.54	74	$6,287.52	92	$11,771.04	182
Citranatal Harmony	$4,927.92	92	$4,315.60	80	$611.50	10	$9,855.02	182
Prenatal-u	$721.20	60	$541.68	44	$671.76	58	$1,934.64	162
Prenate Elite Plus Iron	$5,762.88	66	$5,128.90	58	$2,306.28	26	$13,198.06	150
Prenate Essential	$4,459.00	50	$4,997.68	56	$2,737.18	32	$12,193.86	138
Tl-select	$2,840.42	46	$2,268.36	36	$2,335.04	36	$7,443.82	118
Se-natal 19	$447.56	34	$619.12	48	$454.12	34	$1,520.80	116
Prenaissance Plus	$1,346.04	28	$1,809.24	38	$2,203.68	46	$5,358.96	112
Citranatal B-calm	$1,300.20	36	$1,024.60	26	$1,311.62	32	$3,636.42	94
Citranatal Dha	$1,636.92	34	$1,382.14	30	$1,194.00	24	$4,213.06	88
Zatean-pn	$1,128.12	26	$1,654.68	36	$1,019.86	22	$3,802.66	84
Prenatal Plus Iron	$168.00	18	$244.80	26	$316.56	34	$729.36	78
Folcal Dha	$1,099.98	22	$811.44	16	$1,424.52	28	$3,335.94	66
Natelle One Dha	$2,332.98	24	$1,952.36	20	$1,533.08	16	$5,818.42	60
Preque 10	$1,350.44	28	$342.50	12	$863.56	20	$2,556.50	60

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims

* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.

ł Molecule names accounting for less than $500 in quarterly amount paid are not shown

Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Number of Claimsł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Prenatabs Fa	$119.88	14	$233.22	26	$157.86	18	$510.96	58
Vinate Care	$551.46	18	$303.70	10	$427.58	14	$1,282.74	42
Levomefolatepnv	$1,145.66	18	$696.30	14	$382.66	10	$2,224.62	42
Neevodha	$2,322.82	34	$249.82	4	$107.06	2	$2,679.70	40
Duet Dha Balanced	$630.04	8	$1,196.74	14	$1,362.56	16	$3,189.34	38
Macnatal Cn With Dha	$685.32	14	$487.80	10	$691.32	14	$1,864.44	38
Folcaps Omega 3	$737.00	20	$148.60	4	$297.20	8	$1,182.80	32
Pnv-dha Plus Docusate	$462.20	10	$645.88	14	$373.36	8	$1,481.44	32
Gesticare Dha	$596.36	8	$790.50	10	$930.60	12	$2,317.46	30
Rovin-nv	$1,232.32	28					$1,232.32	28
Taron-prx Plus Dha	$340.96	8	$328.96	8	$514.44	12	$1,184.36	28
Vemavite Prx 2	$563.04	12	$379.36	8	$183.68	4	$1,126.08	24
Pnv-omega	$645.44	12	$164.22	4	$290.66	6	$1,100.32	22
Zatean-ch	$493.28	12	$164.52	4	$246.78	6	$904.58	22
Select-ob+dha	$292.46	6	$593.40	12	$197.80	4	$1,083.66	22
Taron-bc	$191.92	8	$62.28	2	$335.40	10	$589.60	20
Pr Natal 430	$196.32	6	$204.48	6	$168.52	6	$569.32	18
Tricare	$274.56	8	$208.92	6	$137.28	4	$620.76	18
Ob Complete With Dha					$1,069.12	16	$1,069.12	16
Duet Dha Balanced	$630.04	8	$90.82	2	$347.46	6	$1,068.32	16
Triveen-prx Rnf	$179.80	4	$179.80	4	$179.80	4	$539.40	12
Brompheniramine/dextromethorph/ph	**$48,697.78**	**5,360**	**$68,298.07**	**7,449**	**$50,165.65**	**5,483**	**$167,161.50**	**18,292**
Rynex Dm	$46,039.28	4,983	$64,749.75	6,954	$48,255.49	5,204	$159,044.52	17,141

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims

* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.

ł Molecule names accounting for less than $500 in quarterly amount paid are not shown

Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Number of Claimsł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Dimaphen Dm	$725.56	125	$1,195.34	201	$865.13	143	$2,786.03	469
Cold & Cough Childrens	$1,106.24	147	$1,332.76	167	$769.37	100	$3,208.37	414
Dimetapp Dm Cold & Cough	$732.72	94	$827.42	105	$199.67	26	$1,759.81	225
Amoxicillin-clavulanate	**$295,505.66**	**5,491**	**$353,173.64**	**6,532**	**$293,357.32**	**5,331**	**$942,036.62**	**17,354**
Amoxicillin-clavulanate	$292,576.93	5,462	$351,967.91	6,516	$292,253.34	5,318	$936,798.18	17,296
Amoxicillin-clavulanate	$48,031.61	761	$74,948.29	1,220	$71,179.98	1,129	$194,159.88	3,110
Augmentin	$941.77	11	$1,068.28	15	$966.53	12	$2,976.58	38
Augmentin	$461.48	4	$566.61	5	$1,600.77	13	$2,628.86	22
Amoxicillin-clavulanate Er	$1,986.96	18	$349.17	2	$137.45	1	$2,473.58	21
Hydroxyzine	**$86,905.66**	**4,968**	**$91,290.80**	**5,294**	**$99,782.02**	**5,684**	**$277,978.48**	**15,946**
Hydroxyzine Hydrochloride	$70,790.70	3,366	$73,867.64	3,536	$82,238.84	3,914	$226,897.18	10,816
Hydroxyzine Pamoate	$16,114.96	1,602	$17,423.16	1,758	$17,543.18	1,770	$51,081.30	5,130
Cefdinir	**$348,150.13**	**4,568**	**$441,123.71**	**5,708**	**$355,014.80**	**4,681**	**$1,144,288.64**	**14,957**
Cefdinir	$348,150.13	4,568	$441,123.71	5,708	$355,014.80	4,681	$1,144,288.64	14,957
Alprazolam	**$34,548.94**	**4,285**	**$37,101.40**	**4,628**	**$38,461.06**	**4,784**	**$110,111.40**	**13,697**
Alprazolam	$29,937.02	4,236	$32,323.10	4,578	$33,587.15	4,734	$95,847.27	13,548
Alprazolam Er	$4,611.92	49	$4,778.30	50	$4,873.91	50	$14,264.13	149
Budesonide	**$1,365,392.40**	**4,336**	**$1,508,436.50**	**4,722**	**$1,300,919.16**	**3,980**	**$4,174,748.06**	**13,038**
Budesonide	$1,124,950.12	3,830	$1,244,441.98	4,182	$1,026,582.90	3,438	$3,395,975.00	11,450
Pulmicort Respules	$225,007.34	402	$231,479.76	408	$238,567.36	392	$695,054.46	1,202

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

Resource Utilization Report
Drug Detail Report
Top 25 Drugs By Quarterly Number of Claimsł

Generic Molecule / Drug Name	January 2012		February 2012		March 2012		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Pulmicort Flexhaler	$15,434.94	104	$32,514.76	132	$35,768.90	150	$83,718.60	386
Amphetamine-dextroamphetamine	**$655,041.59**	**3,925**	**$714,852.06**	**4,287**	**$751,359.57**	**4,545**	**$2,121,253.22**	**12,757**
Adderall Xr	$557,073.02	2,562	$606,400.62	2,779	$635,786.15	2,917	$1,799,259.79	8,258
Amphetamine-dextroamphetamine	$72,252.68	1,214	$80,144.37	1,342	$85,618.59	1,449	$238,015.64	4,005
Amphetamine-dextroamphetamine Er	$25,166.93	145	$28,307.07	166	$29,954.83	179	$83,428.83	490
Adderall	$548.96	4					$548.96	4
Methylphenidate	**$618,778.98**	**3,715**	**$686,399.51**	**4,097**	**$727,299.01**	**4,257**	**$2,032,477.50**	**12,069**
Methylphenidate Hydrochloride Er	$305,608.56	1,796	$388,536.87	2,283	$465,311.72	2,596	$1,159,457.15	6,675
Concerta	$198,545.06	970	$173,475.96	746	$139,852.73	625	$511,873.75	2,341
Methylphenidate Hydrochloride	$8,238.30	311	$11,328.77	436	$10,430.53	410	$29,997.60	1,157
Metadate Cd	$54,652.74	305	$61,131.73	332	$60,692.74	337	$176,477.21	974
Daytrana	$41,114.96	225	$43,630.66	233	$42,179.29	222	$126,924.91	680
Methylin	$7,681.76	79	$6,636.12	48	$6,215.88	38	$20,533.76	165
Ritalin La	$2,380.03	15	$1,213.87	6	$1,971.11	10	$5,565.01	31
Methylphenidate Hydrochloride Sr	$327.28	9	$200.30	7	$522.84	15	$1,050.42	31
Metronidazole	**$23,935.64**	**3,692**	**$26,776.82**	**4,026**	**$26,122.84**	**3,954**	**$76,835.30**	**11,672**
Metronidazole	$23,935.64	3,692	$26,598.46	4,024	$26,122.84	3,954	$76,656.94	11,670
Lisdexamfetamine	**$559,671.29**	**3,396**	**$628,227.39**	**3,755**	**$649,857.54**	**3,904**	**$1,837,756.22**	**11,055**
Vyvanse	$559,671.29	3,396	$628,227.39	3,755	$649,857.54	3,904	$1,837,756.22	11,055

Note: Resource Utilization Report Currently Contains Only Fee For Service Medicaid Claims
* Dollar figures represent reimbursement to pharmacies and are not representative of overall Medicaid costs.
ł Molecule names accounting for less than $500 in quarterly amount paid are not shown
Prepared by the Evidence-Based DUR Initiative, MS-DUR

New Business

Special Analysis Projects

Review of Sedative Hypnotic Therapy Switches

Background

The Mississippi Division of Medicaid (DOM) currently has a clinical edit in SmartPA regarding sedative hypnotics to allow for a cumulative 31 unit quantity in 31 days. Sedative hypnotic agents are rejected at the point-of-sale (POS) if the current claim plus the history of all sedative hypnotics exceeds 31 units in the past 25 days. The prior authorization team at DOM recognized that therapy switches and strength changes were being rejected at the POS and were requiring prior authorization. The DOM requested MS-DUR to review rejected sedative hypnotic claims to determine the extent of this occurrence and to seek a recommendation from the DUR Board based on the results of the analysis.

Analysis

All prescription claims from August 1, 2011 to April 20, 2012 for sedative hypnotics listed in Table 1 were selected. Claims that appeared to be rejected due to an early refill were flagged and reviewed for the presence of therapy switches and dose changes.

Table 1: Sedative hypnotics, including quantity limits

Sedative/Hypnotics Included in Analysis		Quantity
Generic Name	***Brand Name***	**Limit**
Doxepin	Sinequan	n/a
Estazolam	Prosom	31
Eszopiclone	Lunesta	31
Flurazepam	Dalmane	31
Ramelteon	Rozerem	31
Temazepam	Restoril	31
Triazolam	Halcion	31
Zaleplon	Sonata	31
Zolpidem	Ambien IR/CR	31

Results

A total of 21,898 paid claims for sedative/hypnotics were identified, which represents 5,667 unique beneficiaries. All claim rejects following a paid claim were reviewed. A total of 2,403 claims appeared to be rejected due to an early refill and 342 of those claims were associated either with a therapy change (n=208) or a dose change (n=134) from the previous paid claim. The other claims appeared to be rejected because of other reasons, primarily due to exceeding the monthly service limit (5 prescriptions per month; max of 2 brand name). MS-DUR also reviewed the submitted quantities associated with sedative hypnotic claims. Only six paid claims exceeding the quantity limit were identified and all were for the same beneficiary and each had been issued a prior authorization. Table 1 includes a list of quantity limits established by the DOM.

Recommendation

MS-DUR recommends editing the current sedative hypnotic criteria to allow for one (1) therapy change with another sedative hypnotic or a strength change on the current therapy within a 12 month period.

Pharmacy Lock-In Program Recommendations for Program Integrity

Background

In January 2012, the Centers for Medicare & Medicaid Services (CMS) released a document titled, "Drug Diversion in the Medicaid Program: State Strategies for Reducing Prescription Drug Diversion in Medicaid." The document outlined several elements of a robust State controlled prescription drug (CPD) program (please see the **Appendix** for the full document).[1] The Mississippi Division of Medicaid (DOM) has already implemented some of the recommendations provided by CMS (e.g., prescription quantity limits). Select elements from the recommendations listed in the CMS document include:

- Identifying problematic CPD diversion issues within the retroactive drug utilization review (DUR) process
- Establishing or augmenting effective recipient "lock-in" programs per 42 CFR 431.54(e) for recipients who over utilize prescription drugs
- Looking across Federal programs to expose fraudulent activities (i.e., Medicaid/Medicare dual eligibles)

Mississippi Medicaid requested that MS-DUR review prescription claims for CPDs outlined in the report, focusing on opioid analgesics. The Mississippi DOM is seeking input from the DUR Board on retrospective DUR activities that would identify potential CPD diversion or abuse issues. Additionally, Mississippi DOM is seeking a directive from the DUR Board for MS-DUR to generate a target list of beneficiaries to be considered by DOM Program Integrity for the pharmacy lock-in program.

Analysis

Prescription claims for narcotic analgesics filled from January 1, 2011 to December 31, 2011 were reviewed. Representative narcotic analgesics include: codeine, dihydrocodeine, hydrocodone, meperidine, methadone, morphine, oxycodone, and oxymorphone. Buprenorphine containing products were also included in the analysis.

The number of unique prescribers and unique pharmacies were counted per beneficiary only for narcotic analgesics and buprenorphine (Table 2).

[1] Centers for Medicare & Medicaid Services (CMS). Drug Diversion in the Medicaid Program: State Strategies for Reducing Prescription Drug Diversion in Medicaid. January 2012. Available online: https://www.cms.gov/Medicare-Medicaid-Coordination/Fraud-Prevention/MedicaidIntegrityProgram/downloads//drugdiversion.pdf. Accessed on: April 25, 2012.

Table 2: Count of unique prescribers and pharmacies

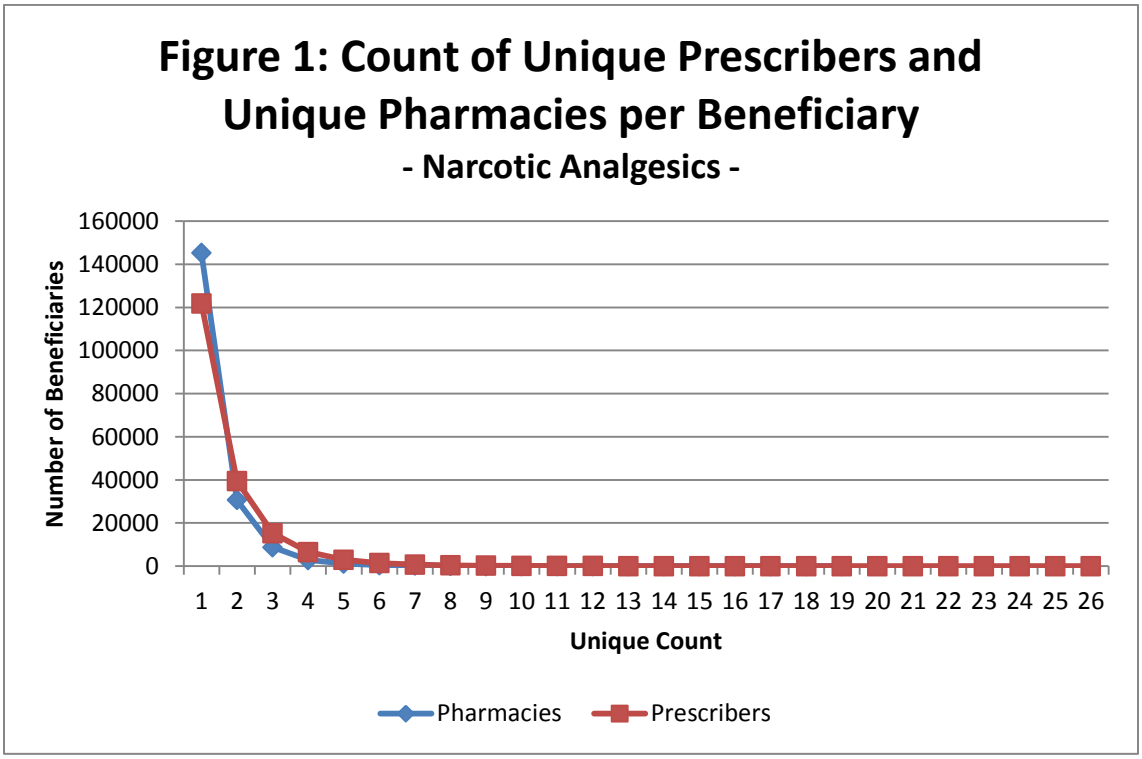
		Unique Pharmacies			
	Count	**1-3**	**4-6**	**7-10**	**≥11**
Unique Prescribers	**1-3**	127,632	1,261	24	0
	4-6	7,839	2,471	103	0
	7-10	853	906	225	0
	≥11	35	155	125	17
	Total	136,359	4793	477	17

Unique prescribers and pharmacies were identified by their national provider identifier (NPI) number. Table 3 provides a summary of narcotic analgesic prescriptions by drug name for the entire sample and for those beneficiaries receiving prescriptions for one of the target drugs from ≥7 different physicians **AND** filling prescriptions at ≥7 pharmacies.

Table 3: Frequency of Narcotic Analgesic Prescriptions

Drug Name	**All Prescriptions**		**≥7 Prescribers AND ≥7 Pharmacies**	
	Frequency	**Cumulative Percentage**	**Frequency**	**Cumulative Percentage**
acetaminophen-hydrocodone	240,340	70.8	140	38.1
acetaminophen-codeine	42,578	12.5	46	12.5
acetaminophen-oxycodone	27,681	8.2	84	22.9
morphine	6,756	2.0	13	3.5
fentanyl	4,963	1.5	10	2.7
oxycodone	4,083	1.2	13	3.5
All others	13,006	3.8	61	16.6
Total	339,407	100%	367	100%

The cutoff of 7 unique prescribers and pharmacies was selected in an attempt to limit the number of false positives in order to have a manageable number beneficiaries that Program Integrity could address, given a target list of beneficiaries (Figure 1).



Recommendations

MS-DUR is seeking a directive from the DUR Board for development of criteria for working with DOM's Program Integrity by monitoring prescriptions and providing a target list of beneficiaries for review for potential pharmacy lock-in.

Some considerations for discussion include:

1. which drug categories to include/exclude,
2. determining an optimal cut-point for unique prescribers/pharmacies,
3. potential exceptions monitoring criteria, and
4. insights on coordination of care educational outreach for prescribers.

For reference, some state Medicaid programs have used the following for restricted/excluded drugs:

Potential Restricted Medicines List

- Narcotic analgesics
- Muscle Relaxants (carisoprodol and cyclobenzaprine)
- CNS Stimulants
- Benzodiazepines

Potential Excluded Drugs

- Anabolic steroids
- Barbiturates
- Lyrica
- Provigil and Nuvigil

Utilization of Provigil/Nuvigil

Background

TennCare (Tennessee's Medicaid program) responded to a potentially inappropriate escalation of Provigil/Nuvigil use by establishing the following drug use criteria for Provigil, which must be failed prior to using Nuvigil:

Provigil will be approved for recipients meeting **ONE** of the following criteria:

- Diagnosis of obstructive sleep apnea/hypopnea syndrome supported by a documented sleep study, **AND** trial and failure (minimum duration of 3 months with documented compliance) of Continuous Positive Airway Pressure (CPAP) or BiPAP device **OR** contraindication to such.
- Diagnosis of Shift work sleep disorder, **AND** statement of patient's work schedule showing a minimum of 6 hours worked between the hours of 10 pm and 8 am
- Diagnosis of Narcolepsy
- Diagnosis of ADD/ADHD, **AND** trial and failure of, or contraindication to, **TWO** preferred agents.

Because Tennessee is a neighboring state and regional prescribing practices may affect drug utilization, the Mississippi Division of Medicaid requested that MS-DUR review the utilization of Provigil/Nuvigil. Currently, both drugs are non-preferred for Mississippi Medicaid and have SmartPA criteria requiring a diagnosis of narcolepsy, obstructive sleep apnea or shift work sleep disorder, a history of prior use with a stimulant, along with age edits based on medically-accepted and FDA-labeled indications (Table 4). The Mississippi DOM diverges from TennCare's criteria primarily in the requirement of CPAP or BiPAP and the documentation of the beneficiary's work schedule.

Table 4: FDA-Labeled and Medically-Accepted Indications

	Diagnosis				Age Limit
	Narcolepsy	Obstructive Sleep Apnea	Shift Work Sleep Disorder	Attention Deficit Hyperactivity Disorder	
Provigil (modafinil)	FDA	FDA; Adjunct†	FDA	Medically Accepted‡	≥16 years
Nuvigil (armodafinil)	FDA	FDA; Adjunct†	FDA	n/a	≥17 years

† FDA labeled indication an adjunct to standard treatment(s) for the underlying obstruction

‡ Adult/Pediatric: Evidence favors efficacy and strength of recommendation Class IIb - Recommended, In Some Cases

Analysis

Provigil and Nuvigil users were identified from pharmacy claims in the 2009, 2010, and 2011 Mississippi Division of Medicaid pharmacy claims. Among these patients, diagnoses of sleep apnea, shift work sleep disorder, narcolepsy, and ADD/ADHD were identified using ICD 9 codes from the medical claims file (Table 5). A composite outcome denoting the presence of any of the 4 conditions was created.

Table 5: Diagnoses and ICD-9 codes for analysis

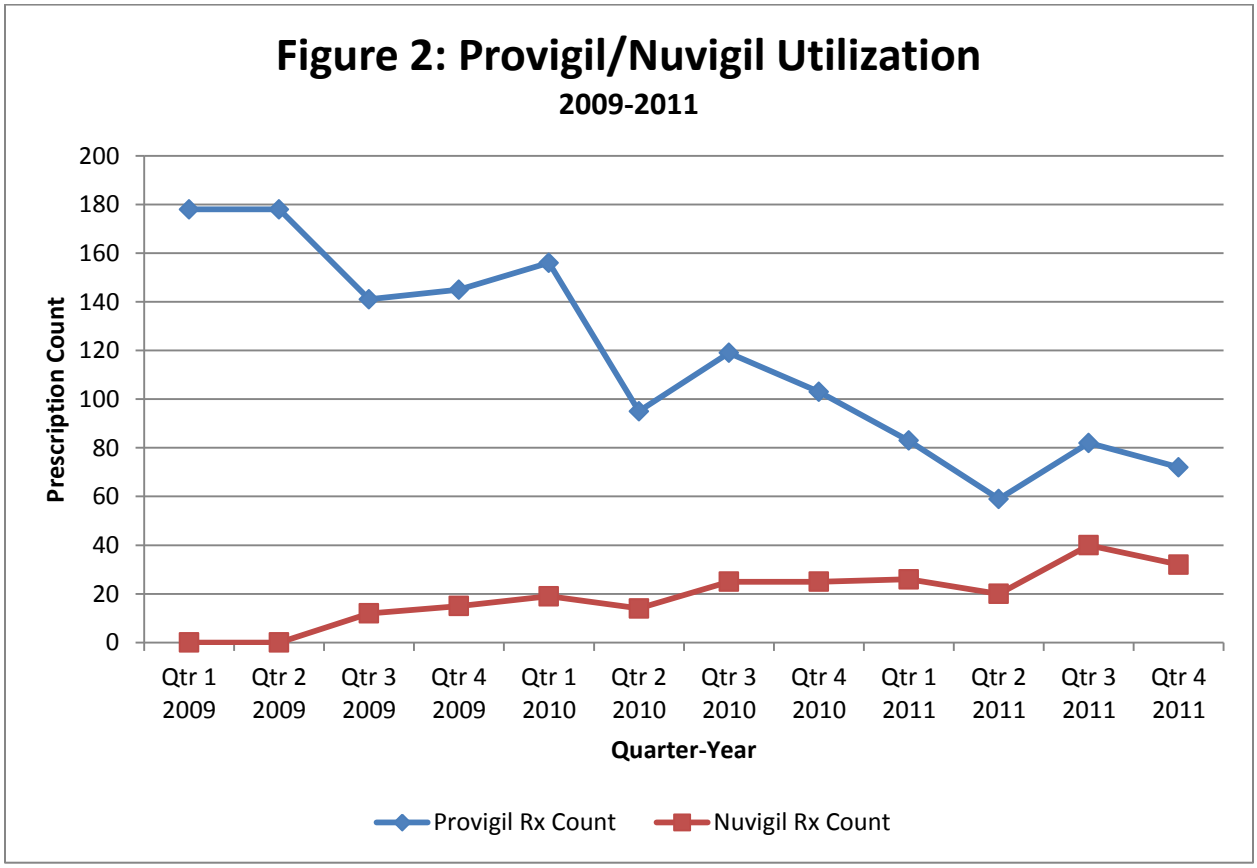
Condition	ICD 9 codes
Sleep apnea	327.23
Shift work sleep disorder	307.45
Narcolepsy	347.xx
ADD/ADHD	314.00, 314.01

Results

The number of patients, total number of prescriptions, and average number of prescriptions for Provigil and Nuvigil are provided in Table 6. All patients who were on Nuvigil were previous users of Provigil.

Table 6: Utilization of Provigil/Nuvigil (2009-2011)

	Provigil	Nuvigil
Number of patients	176	53
Total number of prescriptions	1,411	228
Average number of prescriptions per person	8.0	4.3



A greater proportion of Provigil users (46.59%) as compared to Nuvigil users (37.74%) did not have any relevant diagnoses present in the medical claims (Table 7).

Table 7: Proportion of Provigil/Nuvigil Beneficiaries with Relevant Diagnoses Present in Medical Claims

Diagnosis	Provigil users n=176 (%)		Nuvigil users n=53 (%)	
Diagnosis present →	**Yes**	**No**	**Yes**	**No**
Sleep apnea	55 (31.25)	121 (68.7)	23 (43.40)	30 (56.60)
Shift work sleep disorder	1 (0.57)	175 (99.43)	1 (1.89)	52 (98.11)
Narcolepsy	39 (22.16)	137 (77.84)	15 (28.30)	38 (71.70)
ADD/ADHD	26 (14.77)	150 (85.23)	7 (13.21)	46 (86.79)
Composite outcome:	**94 (53.41)**	**82 (46.59)**	**33 (62.26)**	**20 (37.74)**

Recommendation

MS-DUR recommends that no additional drug use criteria be applied to the use of Provigil/Nuvigil at this time. Despite the absence of relevant diagnoses in the medical claims data for a fairly large proportion of beneficiaries on Provigil/Nuvigil, the current clinical rules are comprehensive and the missing diagnoses will be rectified when diagnoses are required on prescriptions beginning sometime after October 2013. MS-DUR will continue to provide general education to providers on this topic and targeted education to select providers, if needed. Given the decreased overall utilization for Provigil/Nuvigil and the current criteria already in place, requiring prior use and failure of a CPAP or BiPAP may not be a productive use of DOM's resources.

Exceptions Monitoring Criteria Recommendations

MISSISSIPPI MEDICAID
RETROSPECTIVE DRUG UTILIZATION REVIEW
EXCEPTIONS MONITORING CRITERIA RECOMMENDATIONS

Criteria Recommendations

1. **Concomitant use of PPIs with methotrexate**
   Message: The FDA updated the labeling of esomeprazole (Nexium) in January 2012 to include a warning that concomitant use of PPIs with methotrexate (primarily at high doses) may elevate and prolong serum levels of methotrexate and/or its metabolite hydroxymethotrexate, possibly leading to methotrexate toxicities. In high-dose methotrexate administration a temporary withdrawal of the PPI may be considered in some patients.

   Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
Drug Class: Proton pump inhibitors	methotrexate

   References:
   FDA Drug Safety Labeling Changes. January 2012. Available at:
   http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm290946.htm

2. **Renin Inhibitors**
   Message: The FDA updated the labeling of aliskiren (Tekurna), aliskiren/hydrochlorothiazide (Tekurna HCT), amlodipine/aliskiren/hydrochlorothiazide (Amturnide), amlodipine/aliskiren (Tekamko), and aliskiren/valsartan (Valturna) in January 2012 to include a warning that the co-administration of Non-Steroidal Anti-Inflammatory Agents (NSAIDs), including Selective Cyclooxygenase Inhibitors *(*COX-2) inhibitors with agents acting on the renin-angiotensin system, including aliskiren, may result in deterioration of renal function, including possible acute renal failure in patients who are elderly, volume-depleted (including those on diuretic therapy), or with compromised renal function.

   Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
Aliskiren	NSAIDs
	COX-2 inhibitors

   References:
   FDA Drug Safety Labeling Changes. January 2012. Available at:
   http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm290727.htm

3. Renal Impairment and ezetimibe (Zetia)

Message: In January 2012, the FDA updated the labeling of ezetimibe (Zetia) to include use in renal impairment as reflect in the results of the Study of Heart and Renal Protection (SHARP) trial. No dosage adjustment of ezetimibe (Zetia) monotherapy is necessary. However, because renal impairment is a risk factor for statin-associated myopathy, doses of simvastatin exceeding 20 mg should be used with caution and close monitoring when administered concomitantly with ezetimibe in patients with moderate to severe renal impairment.

Exception Type: DDC - Drug-disease contraindication

Field 1	Field 2	Field 3
ezetimibe	simvastatin >20mg	renal impairment

References:
FDA Drug Safety Labeling Changes. January 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm176808.htm

4. Use of ACE inhibitors and antidiabetic medications

Message: In January 2012, the FDA updated the labeling of trandolapril (Mavik) to include a new section under drug-interaction that the concomitant use of ACE inhibitors and antidiabetic medicines (insulin or oral hypoglycemic agents) may cause an increased blood glucose lowering effect with greater risk of hypoglycemia.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
ACE inhibitors	insulin
	oral hypoglycemic agents

References:
FDA Drug Safety Labeling Changes. January 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm211812.htm

5. Avoid use of Benicar in pregnancy

Message: The FDA updated the labeling of olmesartan (Benicar) in February 2012 to include a warning recommending that olmesartan be discontinued as soon as pregnancy is detected. The use of drugs that act directly on the renin-angiotensin-aldosterone system during pregnancy can cause fetal and neonatal morbidity and death.

Exception Type: DCC - Drug-condition contraindication

Field 1	Field 2
Benicar	pregnancy

References:
FDA Drug Safety Labeling Changes. February 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm258781.htm

6. Risk of fetal toxicity with the use of aliskiren

Message: The FDA updated the labeling of aliskiren (Tekurna), aliskiren/hydrochlorothiazide (Tekurna HCT), amlodipine/aliskiren/hydrochlorothiazide (Amturnide), amlodipine/aliskiren (Tekamko), and aliskiren/valsartan (Valturna) in February 2012 to include a warning to discontinue aliskiren as soon as pregnancy is detected. The use of drugs that act directly on the renin-angiotensin-aldosterone system during pregnancy can cause fetal and neonatal morbidity and death.

Exception Type: DCC - Drug-condition contraindication

Field 1	Field 2
aliskiren	pregnancy

References:
FDA Drug Safety Labeling Changes. February 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm279774.htm

7. Olmesartan use in children less than 1 year of age

Message: The FDA updated the labeling of olmesartan (Benicar) in February 2012 to include a warning recommending that children <1 year of age must not receive olmesartan for hypertension. Drugs that act directly on the renin-angiotensin aldosterone system (RAAS) can have effects on the development of immature kidneys.

Exception Type: CAP - Pediatric warning

Field 1	Field 2
olmesartan	children <1 year of age

References:
FDA Drug Safety Labeling Changes. February 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm258781.htm

8. Letairis Education and Access Program (LEAP)

Message: In February 2012, the FDA updated the labeling of ambrisentan (Letairis) to include a warning do not to administer ambrisentan to a pregnant woman because it may cause fetal harm, consistently seen in animal studies. Because of the risk of birth defects, ambrisentan is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the Letairis Education and Access Program (LEAP). As a component of the Letairis REMS, prescribers, patients, and pharmacies must enroll in the program.

Exception Type: DDC - Drug-disease contraindication

Field 1	Field 2
ambrisentan	pregnancy

References:
FDA Drug Safety Labeling Changes. February 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm233391.htm

9. Risk of fetal toxicity with the use of enalapril

Message: The FDA updated the labeling of enalapril (Vasotec) and enalapril/hydrochlorothiazide (Vaseretic) in February 2012 to include a warning recommending the discontinuation of enalapril as soon as pregnancy is detected. The use of drugs that act directly on the renin-angiotensin-aldosterone system during pregnancy can cause fetal and neonatal morbidity and death.

Exception Type: DCC - Drug-condition contraindication

Field 1	Field 2
enalapril	pregnancy

References:
FDA Drug Safety Labeling Changes. February 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm295767.htm

10. Co-administration of enalapril with NSAIDs/COX-2 inhibitors

Message: The FDA updated the labeling of enalapril (Vasotec) and enalapril/hydrochlorothiazide (Vaseretic) in February 2012 to include a precaution that the co-administration of Non-Steroidal Anti-Inflammatory Agents (NSAIDs), including selective cyclooxygenase inhibitors *(*COX-2) inhibitors with agents acting on the renin-angiotensin system may result in deterioration of renal function, including possible acute renal failure in patients who are elderly, volume-depleted (including those on diuretic therapy), or with compromised renal function.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
enalapril	NSAIDS
	COX-2 inhibitors

References:
FDA Drug Safety Labeling Changes. February 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm295767.htm

11. Exogenous estrogen use in patients with thrombotic disorders

Message: The FDA updated the labeling of drospirenone and estradiol (Angeliq), estradiol gel (Elestrin), conjugated estrogens (Premarin), and conjugated estrogens/medroxyprogesterone acetate (Prempro, Premphase) in February 2012 to include a contraindication in patients with known protein C, protein S, or antithrombin deficiency, or other known thrombophilic disorders.

Exception Type: DDC - Drug-disease contraindication

Field 1	Field 2
conjugated estrogens	thrombotic disorders
estradiol	

References:
FDA Drug Safety Labeling Changes. February 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm296119.htm

12. Exogenous estrogens use in patients with hereditary angioedema

Message: The FDA updated the labeling of drospirenone and estradiol (Angeliq), estradiol gel (Elestrin), conjugated estrogens (Premarin), and conjugated estrogens/medroxyprogesterone acetate (Prempro, Premphase) in February 2012 to include a warning that exogenous estrogens may exacerbate symptoms of angioedema in women with hereditary angioedema.

Exception Type: DDC - Drug-disease contraindication

Field 1	Field 2
conjugated estrogens	hereditary angioedema
estradiol	

References:
FDA Drug Safety Labeling Changes. February 2012. Available at:
http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm296119.htm

13. Co-administration of boceprevir (Victrelis) and ritonavir-boosted HIV protease inhibitors

Message: In February 2012, the FDA informed healthcare professionals and patients that drug interactions between the hepatitis C virus (HCV) protease inhibitor boceprevir (Victrelis) and certain ritonavir-boosted HIV protease inhibitors can potentially reduce the effectiveness of these medicines when they are used together.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
boceprevir	HIV protease inhibitors
	tipranavir (Aptivus)
	indinavir (Crixivan)
	saquinavir (Invirase)
	fosamprenavir (Lexiva)
	nelfinavir (Viracept)

References:
FDA Safety Communication. February 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm291119.htm

14. Statin dose limitations with protease inhibitors

Message: In March 2012, the FDA updated prescribing information concerning interactions between protease inhibitors and certain statin drugs. Concomitant use of drugs labeled as having a strong inhibitory effect on CYP3A4 pathway can raise the plasma levels of statins and may increase the risk of myopathy.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
atorvastatin	tipranavir + ritonavir
	telaprevir
	lopinavir + ritonavir
	darunavir + ritonavir
	fosamprenavir
	fosamprenavir + ritonavir
	saquinavir + ritonavir
	nelfinavir

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm293877.htm

15. Statin dose limitations with protease inhibitors

Message: In March 2012, the FDA updated prescribing information concerning interactions between protease inhibitors and certain statin drugs. Concomitant use of drugs labeled as having a strong inhibitory effect on CYP3A4 pathway can raise the plasma levels of statins and may increase the risk of myopathy.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
lovastatin	HIV protease inhibitors
	boceprevir
	telaprevir

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm293877.htm

16. Statin dose limitations with protease inhibitors

Message: In March 2012, the FDA updated prescribing information concerning interactions between protease inhibitors and certain statin drugs. Concomitant use of drugs labeled as having a strong inhibitory effect on CYP3A4 pathway can raise the plasma levels of statins and may increase the risk of myopathy.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
Pitavastatin	atazanavir ± ritonavir
	darunavir + ritonavir
	lopinavir + ritonavir

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm293877.htm

17. Statin dose limitations with protease inhibitors

Message: In March 2012, the FDA updated prescribing information concerning interactions between protease inhibitors and certain statin drugs. Concomitant use of drugs labeled as having a strong inhibitory effect on CYP3A4 pathway can raise the plasma levels of statins and may increase the risk of myopathy.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
pravastatin	darunavir + ritonavir
	lopinavir + ritonavir

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm293877.htm

18. Statin dose limitations with protease inhibitors

Message: In March 2012, the FDA updated prescribing information concerning interactions between protease inhibitors and certain statin drugs. Concomitant use of drugs labeled as having a strong inhibitory effect on CYP3A4 pathway can raise the plasma levels of statins and may increase the risk of myopathy.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
rosuvastatin	atazanavir ± ritonavir
	lopinavir + ritonavir

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm293877.htm

19. Statin dose limitations with protease inhibitors

Message: In March 2012, the FDA updated prescribing information concerning interactions between protease inhibitors and certain statin drugs. Concomitant use of drugs labeled as having a strong inhibitory effect on CYP3A4 pathway can raise the plasma levels of statins and may increase the risk of myopathy.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
simvastatin	HIV protease inhibitors
	boceprevir
	telaprevir

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm293877.htm

20. High dose citalopram and potential risk of abnormal heart rhythms

Message: In March 2012, the FDA clarified dosing and warning recommendations for citalopram. Citalopram should no longer be used at doses >40 mg per day due to potentially dangerous abnormalities in the electrical activity of the heart. Use at any dose is discouraged in patients with certain conditions due to risk of QT prolongation, and caution needs to be taken when citalopram is used in such patients. Lower doses should be used in patients >60 years of age.

Exception Type: IDO - High dose alert

Field 1
citalopram >40 mg/day

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm297391.htm

21. High dose citalopram and potential risk of abnormal heart rhythms

Message: In March 2012, the FDA clarified dosing and warning recommendations for citalopram. Citalopram should no longer be used at doses >40 mg per day due to potentially dangerous abnormalities in the electrical activity of the heart. Use at any dose is discouraged in patients with certain conditions due to risk of QT prolongation, and caution needs to be taken when citalopram is used in such patients. Lower doses should be used in patients >60 years of age.

Exception Type: CAP - Elderly warning

Field 1	Field 2
citalopram >40 mg/day	Age >60 years

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm297391.htm

22. High dose citalopram and potential risk of abnormal heart rhythms

Message: In March 2012, the FDA clarified dosing and warning recommendations for citalopram. Citalopram should no longer be used at doses > 40 mg per day due to potentially dangerous abnormalities in the electrical activity of the heart. Use at any dose is discouraged in patients with certain conditions due to risk of QT prolongation, and caution needs to be taken when citalopram is used in such patients. Lower doses should be used in patients >60 years of age.

Exception Type: DDC - Drug-disease contraindication

Field 1	Field 2
citalopram	QT prolongation

References:
FDA Safety Communication. March 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm297391.htm

23. Combination of aliskiren with ARBs or ACEIs in patients with diabetes or renal impairment

Message: In April 2012, FDA notified healthcare professionals of possible risks when using blood pressure medicines containing aliskiren with other drugs called angiotensin converting enzyme inhibitors (ACEIs) and angiotensin receptor blockers (ARBs) in patients with diabetes or kidney (renal) impairment. Concomitant use of aliskiren with ARBs or ACEIs in patients with diabetes is contraindicated because of the risk of renal impairment, hypotension, and hyperkalemia. Avoid use of aliskiren with ARBs or ACEIs in patients with renal impairment where GFR < 60 mL/min.

Exception Type: DDC - Drug-disease contraindication

Field 1	Field 2	Field 3
aliskiren	ARB	Diabetes
	ACEI	

References:
FDA Safety Communication. April 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm300889.htm

24. Co-administration of boceprevir (Victrelis) and ritonavir-boosted HIV protease inhibitors

Message: In April 2012, FDA has revised the Victrelis drug label to state that co-administration of Victrelis with ritonavir-boosted Reyataz (atazanavir), ritonavir-boosted Prezista (darunavir), or Kaletra (lopinavir/ritonavir) to patients infected with both chronic HCV and HIV is not recommended at this time as concomitant use can potentially reduce the effectiveness of these medicines.

Exception Type: DDI - Drug-drug interaction

Field 1	Field 2
boceprevir	lopinavir+ritonavir (Kaletra)
	darunavir (Prezista)
	atazanavir (Reyataz)

References:
FDA Safety Communication. April 2012. Available at:
http://www.fda.gov/Drugs/DrugSafety/ucm301616.htm

Appendix

Drug Diversion in the Medicaid Program

State Strategies for Reducing Prescription Drug Diversion in Medicaid

January 2012

Background

"Drug diversion" is best defined as the diversion of licit drugs for illicit purposes. It involves the diversion of drugs from legal and medically necessary uses towards uses that are illegal and typically not medically authorized or necessary. While drug diversion is not a new phenomenon, States are reporting a significant increase in the problem. In fact, according to the 2010 National Drug Threat Assessment report, "The threat posed by the diversion and abuse of controlled prescription drugs (CPDs), primarily pain relievers, is increasing, as evidenced by the sharp rise in the percentage (4.6 percent in 2007, 9.8 percent in 2009) of state and local law enforcement agencies reporting CPDs as the greatest drug threat in their area." Increased abuse of CPDs has led to elevated numbers of deaths related to prescription opioids, which increased 98 percent from 2002 to 2006.[1]

The National Drug Threat Assessment report further states that, "The most commonly diverted CPDs are opioid pain relievers, according to Drug Enforcement Administration (DEA) and the National Survey of Drug Use and Health (NSDUH) data."[2] Opioid pain relievers are popular among drug abusers because of the euphoria they induce. Opioid pain relievers include codeine, fentanyl (Duragesic, Actiq), hydromorphone (Dilaudid), meperidine (Demerol, which is prescribed less often because of its side effects), morphine (MS Contin), oxycodone (OxyContin), pentazocine (Talwin), dextropropoxyphene (Darvon), methadone (Dolophine), and hydrocodone combinations (Vicodin, Lortab, and Lorcet)."

In addition to opioids, it has been reported that significant diversion is occurring with high cost antipsychotic and mental health drugs, such as aripiprazole (Abilify), ziprasidone (Geodon), risperidone (Risperdal), quetiapine (Seroquel), and olanzapine (Zyprexa), as well as benzodiazepines such as alprazalam (Xanax), clonazepam (Klonopin) and lorazepam (Ativan).

The impact of drug diversion on the Medicaid program goes beyond just the cost of the prescription drugs. There are also the costs associated with doctor's visits, emergency department (ED) treatment, rehabilitation centers, and other health care needs, not to mention the human toll. In 2008, the Drug Abuse Warning Network (DAWN), operated by the Substance Abuse and Mental Health Services Administration (SAMHSA), estimated that prescription or over-the-counter drugs used non-medically were involved

[1] Figure 18 from the National Drug Threat Assessment- Number of Reported Unintentional Poisoning Deaths with Mention of Opioid Analgesics 5,547 (2002) 11,001 (2006) http://www.justice.gov/ndic/pubs38/38661/index.htm

[2] http://www.oas.samhsa.gov/nhsda.htm

in 1.0 million ED visits. Among the legal drugs, the most common drug categories involved were drugs acting on the central nervous system, especially opioid painkillers and psychotherapeutic drugs (especially sedatives and antidepressants). Opioid painkillers were associated with approximately 306,000 visits and benzodiazepines with 272,000 visits.[3] As entities jointly responsible for the Medicaid program, both CMS and State Medicaid Agencies (SMAs) must take action to make certain that the correct controls and safeguards are in place to ensure prescription drugs are used by their intended beneficiaries and purposes.

Federal Partnerships

The CMS and DEA have established key partnerships in the prevention of drug diversion. The mission of DEA's Office of Diversion Control is to prevent, detect, and investigate the diversion of controlled pharmaceuticals and listed chemicals from legitimate sources while ensuring an adequate and uninterrupted supply for legitimate medical, commercial, and scientific needs. The DEA is responsible for the Controlled Substance Registration File which is a list of 1.3 million active registrants of all entities and provider types that prescribe, administer, procure, and dispense controlled substances. This file contains identifying information of each registrant. In December 12, 2010 CMS issued an Advisory to State Program Integrity Directors on Medicaid Prescription Drug Fraud and Abuse Prevention: Access to DEA Registration File. Further, information on the DEA can be found at the following link: http://www.deadiversion.usdoj.gov.

State Partnerships

On March 25, 2010 CMS and the DEA met with both local and State officials in Ohio to discuss the growing problem of drug diversion in that state. In response to these growing concerns, the CMS Medicaid Integrity Group and the State of Ohio agreed to work collaboratively to reduce improper payments for prescription drugs.

Additionally, CMS in close collaboration with States, is providing education resources through its Education Medicaid Integrity Contractor (Education MIC) to promote best practices and will focus on providers that have been identified as having the high potential aberrant prescribing patterns for five targeted therapeutic drug classes that have also been identified as having potentially high outlier payments. Materials will focus on the importance of prescribing drugs within the dosage guidelines approved by the FDA. Although this collaboration effort is initially being piloted in only 5 States, if the results are promising, plans are in place to expand the education campaign nationally. Also, the Education MIC is developing written materials to help educate providers on areas of drug diversion, including how to identify drug seeking behavior in beneficiaries and appropriate reporting of suspicious fraudulent behavior.

Strategies for Combating Controlled Prescription Drug Diversion in Medicaid

Previous laws enacted to help safeguard against drug diversion include tamper resistant prescription pads. Effective October 1, 2007, Federal law prohibits payments for covered outpatient drugs written on non tamper-resistant pad. As part of State efforts to

[3] http://www.cdc.gov/HomeandRecreationalSafety/pdf/poison-issue-brief.pdf

combat drug diversion, States should ensure that this requirement is being enforced. For more information on the tamper resistant prescription pad requirements, including Frequently Asked Questions and a State Medicaid Director Letter, see the CMS website at the following link: http://www.cms.gov/FraudAbuseforProfs/15_TRP.asp#TopOfPage."

One of the first lines of prevention in drug diversion is the ability to identify and screen high risk providers that may facilitate drug diversion. The Affordable Care Act grants States significant new authority to fight fraud and abuse in the area of drug diversion, including the ability to:

- Establish enhanced oversight for new providers,
- Establish periods of enrollment moratoria or other limits on providers identified as being high risk for fraud and abuse,
- Establish enhanced provider screening, and
- Require States to suspend payment when there is a credible allegation of fraud which may include evidence of overprescribing by doctors, overutilization by recipients, or questionable medical necessity.

In addition to these provisions in the Affordable Care Act, there are other actions States can take to prevent and detect problems with drug diversion. Elements of a robust State controlled prescription drug program include:

- Identifying problematic CPD diversion issues within the retroactive Drug Utilization Review (DUR) process. The State of Kentucky's program integrity area has access to a database of all controlled substance prescriptions filled in Kentucky. Access to the system helps identify outliers and reduce the time and cost involved in drug diversion investigations.[4]

- Establishing effective pro-active DUR screenings, such as implementing a prior approval process for high CPD doses or quantities and regularly monitoring for overutilization. The Pennsylvania Medicaid Program, with the help of the DUR board, was able to identify anomalies in utilization as the basis for refining the Medicaid program's prior authorization criteria. A Pharmacy and Therapeutics Committee developed a preferred drug list (PDL) that limits the prescribing habits of physicians to appropriate drugs in each drug class. The PDL is updated twice a year and has proven cost effective. From SFY 2005 to SFY 2007, per member per month costs in Pennsylvania decreased from $95.84 to $76.90.[5]

- Monitoring pain management clinics for evidence of overprescribing opioids. Pain management clinics are often at the center of significant drug diversion activities and in some States are unregulated. Monitoring programs should not only review opioids dispensed at pharmacies, but also those opioids that might be

[4] http://www.cms.gov/FraudAbuseforProfs/Downloads/kyfy09comppireport.pdf
[5] http://www.cms.gov/FraudAbuseforProfs/Downloads/pafy08comppifinalreport.pdf

dispensed by the provider in the pain management clinic. Oklahoma and Florida have each enacted legislation increasing monitoring of pain management clinics. For more details, refer to the section "Examples of recent State Legislation affecting Drug Diversion" on page 5 of this bulletin.

- Looking across Federal programs to expose fraudulent activities. Drug diversion impacts both Medicaid and Medicare. CMS encourages States to become involved in the Medi-Medi program. Medi-Medi contractors analyze and link data from both the Medicaid and Medicare claims processing systems. They have an established track record of exposing fraudulent provider activity that otherwise may not have been revealed through the review of State Medicaid data alone.

- Collaborating with colleagues in State agencies, bordering States, and law enforcement. Drug diversion impacts the entire healthcare systems and can occur across State lines. SMAs should share information with other State agencies responsible for mental health, substance abuse, pharmacy and medical boards to plan special projects that deal with aberrant providers and beneficiaries. SMAs should share information with bordering States when confirmed diversion links have been established. We also encourage you to reach out to law enforcement, including Medicaid Fraud Control Units (MFCUs), and State and local police. The State of Louisiana program integrity staff teamed up with mental health rehabilitation (MHR) staff from a sister agency to conduct a 100 percent review of all MHR providers. The project involved the monitoring and auditing of approximately 131 MHR providers and resulted in a number of major findings of fraud or abuse. Louisiana saved $64,797,452 through cost avoidance and made 49 overpayment recoveries that netted $585,604.54. The project also resulted in 14 referrals to the Medicaid Fraud Control Unit (MFCU).[6]

- Implementing a prescription drug monitoring program (PDMP). Practitioners and pharmacists should be encouraged to enter data and routinely access PDMPs, where available, to view patient utilization records and identify potential abusers. As of July 31, 2009, 40 States have PMDP laws, and 33 States have operational programs.[7]

- Establishing or augmenting effective recipient "lock-in" programs per 42 CFR 431.54(e) for recipients who over utilize prescription drugs. If a Medicaid agency finds that a recipient has utilized Medicaid services at a frequency or amount that is not medically necessary, as determined in accordance with utilization guidelines established by the State, the agency may restrict that recipient for a reasonable period of time to obtain Medicaid services from designated providers only. The agency may impose these restrictions only if the following conditions are met.

[6] http://www.cms.gov/FraudAbuseforProfs/Downloads/lafy09comppirev.pdf

[7] "Prescription Drug Monitoring Program: A brief overview national alliance for model state drug laws. August 2009. http://www.namsdl.org/documents/PDMPsBriefOverview7-31-09.pdf

Many States have lock-in programs, but not all include a restriction requiring beneficiaries to obtain prescriptions from a single pharmacy. In an attempt to end pharmacy-hopping, some States are requiring high users of certain drugs, including OxyContin, Xanax and Valium, to use only one pharmacy and get prescriptions for controlled substances from only one medical office. This helps to improve monitoring of the entire processes from prescription to medication utilization. The State of Iowa has a robust lock-in program with an estimated cost savings of approximately $2 million annually. Recipients abusing the program are locked into a primary care physician, pharmacy, and hospital/emergency room. The lock-in program creates a safety net approach and limits the recipient's ability to obtain drugs. The program also identifies providers who may be engaging in unsound medical practices.[8]

- Encouraging beneficiary participation in the national prescription drug "Take-Back" campaign that offers more than 4,000 sites around the nation where the public can drop off expired, unused and unwanted prescription drugs. Unused medications in the household may contribute to growing rates of prescription drug abuse among Americans. The first ever National Prescription Drug Take Back Day on Saturday, September 25, 2010, collected 121 tons of pills. Information on the "Take-Back" campaign can be found at the following link: http://www.takebacknetwork.com.

- Encouraging providers and beneficiaries to safeguard their identities. Identifiers, such as National Provider Identification (NPI) numbers, Tax Identification Numbers (TIN), U.S. Drug Enforcement Administration (DEA) numbers, and Social Security numbers (SSN) have become extremely valuable commodities. When fraudulently obtained, these identifiers can be submitted on claims to receive payment for services or items never received by patients. This kind of identity theft can have grave personal, professional and legal consequences for providers and beneficiaries. Providers and beneficiaries should be educated on appropriate steps they can take to safeguard their identities. Information on medical identity theft can be found at the following link: http://www.oig.hhs.gov/fraud/idtheft/.

Additional Resources

Below are additional resources that may be helpful in combating drug diversion.

Government Accountability Office (GAO) Report

In September 2009, GAO issued a report entitled "Fraud and Abuse Related to Controlled Substances Identified in Selected States." This report highlights strategies some States employ to combat controlled substance fraud waste and abuse. These strategies include:

[8] http://www.cms.gov/FraudAbuseforProfs/Downloads/iacompfy08pireviewfinalreport.pdf

- Checking the List of Excluded Individuals/Entities (LEIE)[9] and the Excluded Parties List System (EPLS),[10] as routine procedures in screening prescribing providers and pharmacies.
- Verifying that the pharmacy and prescribing physician are registered with the DEA for controlled substances they are prescribing or dispensing. For further information, refer to CMS' December 12, 2010 Advisory on Medicaid Prescription Drug Fraud and Abuse Prevention: Access to DEA Registration File.
- Ensuring beneficiaries are not being enrolled multiple times through pre-enrollment checks.
- Checking Social Security Administration (SSA) master death files for deceased beneficiaries and providers, and preventing payment of claims that contain deceased beneficiary or deceased provider information.

CMS recommends that States implement the GAO strategies as part of an effective drug diversion prevention program. A copy of the full report can be found at the following link: http://www.gao.gov/new.items/d09957.pdf

Center for Disease Control and Prevention (CDC) Issue Brief

In July 2010, the CDC issued a poison-issue brief entitled "Unintentional Drug Poisoning in the United States." This brief summarizes the most recent information about deaths and emergency department (ED) visits resulting from drug poisoning. The brief indicates that drug overdose death rates have increased five-fold since 1990, largely because of prescription opioid painkillers. The brief also provides recommendations to healthcare providers, pharmacy benefit managers, and States on the use and monitoring of opioid prescriptions.

A copy of the full brief can be found at the following link: http://www.cdc.gov/HomeandRecreationalSafety/pdf/poison-issue-brief.pdf

Examples of recent State Legislation affecting Drug Diversion

- In April 2010, Oklahoma (OK) enacted legislation, the Oklahoma Interventional Pain Management and Treatment Act (SB 479), which makes it unlawful to practice or offer to practice interventional pain management unless the practitioner is a licensed Doctor of Medicine (MD) or Doctor of Osteopathic (DO) Medicine. This legislation does not prohibit a nurse anesthetist from administering a lumbar intra-laminar epidural steroid injection or peripheral nerve blocks if requested by and under the supervision of a physician (MD/DO) and under conditions in which timely on-site consultation by such physician is available. This legislation prohibits nurse anesthetists from operating a freestanding pain management

[9] Maintained by the U.S. Department of Health & Human Services-Office of Inspector General
[10] Maintained by the U.S. General Services Administration

facility without direct supervision of a physician who is board-certified in interventional pain management or its equivalent.

- In May 2010, Utah (UT) enacted legislation (HB28) aimed at greater enforcement of drug laws targeted at prescription drug abuse. The new law reduces the availability of prescription drugs for abuse; increases public awareness of the negative physical and psychological effects of prescription drug abuse; provides for the legal sanctions to prosecute those who abuse them; decreases tolerance of non-medical use of prescription drugs; adds the muscle-relaxer Soma to the State's controlled substance list; makes the penalty for selling fake versions of illegal drugs the same as that for selling the real drugs; and establishes a network for disposal of unwanted prescription drugs, among other changes.

- In June 2010, Florida (FL) enacted legislation (S 2272) that gives the State greater oversight of pain-management clinics. The new law increases State regulation of the clinics, stiffens penalties the State may impose upon them, limits anyone paying cash for the prescription narcotics to a 72-hour supply for dispensation, bans advertisements for specific treatments like the opiate oxycodone and requires specific training for doctors to practice pain management.

- In August 2010, health care officials in Massachusetts approved a new detection system designed to stop "doctor shopping'' by addicted patients who try to deceive doctors into prescribing narcotics. Expanding upon an older system that reported on a limited number of drugs and did not offer direct physician access, the new process and application will require pharmacists to report prescriptions they receive for a much broader roster of medications, including steroids. The system will receive weekly updates rather than monthly. Physicians will be able to review the prescription histories of patients and be able to identify those with a history of widespread abuse. Lastly, they will also receive public health reports on their patients who are flagged by the system.

Conclusion

The CMS Medicaid Integrity Group is actively working with States and law enforcement partners on drug diversion issues and looks forward to working with all States to reduce improper payments and diversion of prescription drugs. If you have any questions or would like more information on this topic, please contact Gretchen Kane, Medicaid Integrity Specialist, CMS Medicaid Integrity Group, at 415-744-3806 or Gretchen.Kane@cms.hhs.gov .