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



February 16, 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 August 16, 2012 May 17, 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.

OFFICE OF THE GOVERNOR DRUG UTILIZATION REVIEW BOARD

AGENDA

February 16, 2012

Welcome Mark Reed, M.D. (Chair)

Old Business Mark Reed, M.D. (Chair)

Approval of November 2011 Meeting Minutes

Resource Utilization Review Kyle D. Null, Pharm.D.

Program Summary Report

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 UpdateShannon P. Hardwick, R.Ph.

New Business Kyle D. Null, Pharm.D.

Special Analysis Projects

High Doses of Citalopram Associated with Abnormal Heart Rhythms

Utilization of Simvastatin 80mg Following an FDA Safety Announcement

Desmopressin Nasal Spray Use in Nocturnal Enuresis

Suboxone/Subutex Utilization and PA Process

Exceptions Monitoring

Exceptions Monitoring Criteria Recommendations

Next Meeting Information Mark Reed, M.D. (Chair)



MISSISSIPPI DIVISION OF MEDICAID DRUG UTILIZATION REVIEW (DUR) BOARD MINUTES OF THE NOVEMBER 17, 2011 MEETING

DUR Board Members:	Present	Absent
Gera Bynum, R.Ph.	✓	
Jason Dees, D.O.	✓	
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.		✓
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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, Lacinda Jaynes, DOM.

MS-DUR Staff:

Kyle D. Null, Pharm.D., Clinical Director; Ben Banahan, Ph.D., Project Director

ACS Staff:

Leslie Leon, Pharm.D.

Goold Health Services Staff:

Chad Bissell, Pharm.D.

Visitors:

Dan Barbera, Lilly; Jeff Bell, University of Mississippi School of Pharmacy student; Stewart Mason, University of Mississippi School of Pharmacy student; John Harris, Abbott; Calista Gohteen, Medimmune; Hope Berry, Forest; Al Reine, Takeda;

Call to Order: Dr. Mark Reed, Chairman of the Board, called the meeting to order at 2:06 pm.

Dr. Mark Reed asked for a motion to accept the minutes from the meeting of August 18, 2011. Mr. Merritt made a motion to accept the minutes with a second from Dr. Paul Read. All voted in favor of the motion.

Resource Utilization Review:

Dr. Null reviewed resource utilization report. Dr. Banahan discussed the summary tables further and requested feedback from the DUR Board on possible enhancements to the report.

Pharmacy Program Update:

Ms. Clark introduced Dr. Bissell from Gould Health Systems and informed the Board that Gould Health Systems would be the new vendor for preferred drug list maintenance beginning January 1, 2012. She also announced that a new PDL list is being approved and will go into effect January 1, 2012. The new list will be posted on the DOM website by December 1, 2011. Ms. Clark noted that the NCPDP D.0 format is required for the DOM to receive pharmacy claims after January 1, 2012. This is true for all payers as part of the HIPAA enhancements. She also reminded the Board that pharmacy permits must be in good standing for claims to clear for payment. Ms. Clark reminded pharmacists that the State Board will be closed most of the last week of year so it is important to submit renewals early, otherwise pharmacy claims will be denied.

Ms. Hardwick asked for introductions from the DUR Board members, DOM and MS-DUR staff for the new DUR Board members not present at the August meeting. Ms. Clark pointed out that the Board needs to elect a Chair and Co-Chair at today's meetings and called for nominations from the DUR Board. Mr. Merritt nominated Dr. Mark Reed as Chair, which was seconded by Dr. Dees. Dr. Donahoe nominated Mr. Merritt as Co-Chair, which was seconded by Dr. Paul Read. The vote was unanimous. Ms. Clark complemented Dr. Reed for his prior service as Chair and thanked the new appointees for their service.

Ms. Hardwick provided the Board with program updates. First, Ms. Hardwick discussed the inclusion of appropriate diagnosis and age edits added for Alzheimer's medicines due to misuse that was occurring in use with children with ADHD. Ms. Hardwick mentioned that the Pharmacy Bureau and MS-DUR have begun having joint meetings with DOM medical services, program integrity and computer systems to continue exploring issues related to POS/medical billing on drug products that were discussed at the August 2011 DUR Board meetings.

Medicaid Cough and Cold Quick List

Ms. Hardwick discussed the FDA withdrawal of cough and cold products, which left limited access to certain medications for the treatment of cough and cold in children. Ms. Hardwick mentioned that MS-DUR and DOM have put together a "Medicaid Cough and Cold Quick List" to help providers identify covered agents that are still available on the market. Dr. Null explained the background for development of the "Quick List" and that MS-DUR would be sending laminated copies to the top 400 prescribers of pediatric cough and cold prescriptions from last year, representing about 65% of the total Medicaid cough and cold prescription volume. Ms. Clark mentioned that the "Quick List" would also be disseminated through Medicaid's medical services division. Dr. Null acknowledged Thirston Divinity and Stewart Mason, both PY4 pharmacy students on Dr. Null's managed care rotation, for their help in creating the cough and cold quick list. Dr. Null specifically acknowledged Mr. Divinity for taking the lead on creating the list and Mr. Mason for his assistance with reviewing the clinical content. Dr. Null pointed out that the list would also be distributed through the Mississippi Pharmacist Association quarterly journal, e-newsletter and website. The DUR Board expressed gratitude and commented that the list would be well received by Medicaid providers. Ms. Clark informed the Board that DOM has requested that GHS provide an NDC-based OTC list in the future. Dr. Reed mentioned that several studies have provided consistent evidence that topical oxymetazoline has a better safety profile, particularly for younger children, compared to topical phenylephrine. [This comment was in regard to the lack of an

indication on the "Quick List" for the use of topical oxymetazoline as a nasal decongestant in individuals <2 and 2 to <5 years old]. Dr. Donahoe mentioned that Tyzine (tetrahydrozoline) would be an appropriate addition as well. There was some discussion as to the availability of topical nasal decongestants. Dr. Null mentioned that the list was subject to revision and that MS-DUR would work with DOM on amending the list with the suggestions provided by the Board. Dr. Null also requested feedback from the Board on other initiatives similar to the "Medicaid Cough and Cold Quick List" for MS-DUR to provide to the Medicaid provider community.

Suboxone Prior Authorization

Ms. Hardwick informed the Board that DOM has had to reevaluate the Suboxone prior authorization process. DOM is planning to move this product to SmartPA due to the personnel time required to manage the review process as it is currently structured. DOM is recommending to the Board that MS-DUR run appropriate exception monitoring and educational activities to help further manage the drug through the SmartPA system. Ms. Clark echoed Ms. Hardwick's comments and further requested feedback from the Board on the best way to approach implementing Suboxone into SmartPA. Ms. Clark specifically requested feedback from Dr. Dees, as the sole member on the DUR Board who prescribes Suboxone. Dr. Dees commented that it requires a certain amount of expertise in the medical office to appropriately manage these patients. Dr. Dees mentioned that his reservation with moving Suboxone to SmartPA would be missing the human element to the PA process that cannot be duplicated in the SmartPA system. Dr. Dees supported the idea of using SmartPA with close monitoring of outcomes, including exceptions monitoring and ad hoc analyses of Suboxone claims data. One suggestion offered by Dr. Dees was to compare patients previously denied to determine if they make it through the SmartPA process. Dr. Dees pointed out that it takes a lot of time in the medical office to review cases, and further, he does not know how the limited DOM staff has been able to review the PAs for all of the state. Dr. Dees concluded, stating that ultimately, the control of Suboxone is dependent on the philosophy of the Medicaid providers who prescribe it. Dr. Donahoe interjected that Suboxone was initially brought to the Board's attention several years ago to solve a problem that was out of control, noting that the Suboxone problem will be further out of control if the PA process is implemented electronically. Ms. Clark acknowledged that the Board spent a tremendous amount of time addressing how to appropriately control Suboxone use. Mr. Smith asked DOM about the current PA process. DOM responded that every prior authorization is manually reviewed. Dr. Donahoe pointed out that the Board voted to limit the drug to a maximum of 60 days. This vote was later reversed and the Board voted for manual review with limited use criteria. Ms. Clark pointed out that DOM currently looks for narcotic prescriptions for any source, which is not possible with SmartPA. Dr. Dees asked that MS-DUR provide the Board with information about the number of current users and use patterns. Dr. Donahoe requested that at the next meeting the DUR Board be provided with a summary of past discussions on the topic. Dr. Dees asked for a summary of how other Medicaid programs are handling this issue. Mr. Smith inquired if the DEA was aware and acting on Suboxone problems. Dr. Dees pointed out that the DEA is closely monitoring practices that are writing Suboxone. Dr. Paul Read asked that at the next meeting MS-DUR review the data to make refinements in quantity limits and length of therapy limits. Ms. Clark mentioned that she has been communicating with other Medicaid programs about the handling of Suboxone. Ms. Clark concluded by echoing that DOM does not have the capability to continue managing a manual PA for Suboxone. Mr. Smith requested that MS-DUR collaborate with DOM to provide a clear recommendation for the Board to vote on at the February 2012 DUR Board meeting. Ms. Clark requested that a dosing regimen be recommended by the Board. Dr. Donahoe suggested that the Board wait until MS-DUR reviewed the data to be able to provide a formal recommendation. Dr. Banahan asked Dr. Dees for a suggested treatment guideline that MS-DUR could use to help guide the analysis.

Dr. Dees provided the basic guideline of a 30 day supply at 24mg/day (3 tablets), 4 months at 16mg (2 tablets), after that 8mg/day (1 tablet).

New Business:

Background on Medicaid Quality Measures

Dr. Banahan provided background on the Adult Medicaid Quality Measures and the plan for the February 2012 meeting. Dr. Banahan reiterated the discussion that occurred during the February 2011 DUR Board meeting for the new DUR Board members who joined in July 2011. Dr. Banahan mentioned that the core measures will be finalized in January of next year and voluntary reporting will begin at that time. Mandatory reporting of quality measures will begin in 2013. Dr. Banahan pointed out that these measures were new to the DUR process and that results comparing Mississippi to other state Medicaid programs will be reported at the February 2012 DUR Board meeting. Dr. Null pointed out that a copy of the Federal Register that includes the initial core set of Adult Quality Measures for Medicaid could be found in the appendix of the November 2011 DUR Board packet.

Special Analysis Project Updates

Medical and POS Billings for Drug Products

Dr. Null provided a summary of the joint meeting between DOM medical and pharmacy services, including additional data that would aid in the analysis of J-code billed claims. Ms. Clark explained to the new DUR Board members that it is a new process for DOM to have to address DUR issues on medical drug claims in addition to POS claims. This is due to DOM now receiving rebates on drugs billed on through medical services.

Dilantin (phenytoin) Shortage and Potential Problem with Unmonitored Switching of Manufacturers Dr. Null pointed out that MS-DUR did preliminary analysis that indicated that Dilantin switching is not a significant issue at this time.

Clinical Edits Addressing the New Indications for Cialis (tadalafil)

Dr. Null reminded the Board that certain drugs are excluded from Medicaid coverage; this includes drugs used in the treatment of erectile dysfunction (Section 1927 of the Social Security Act). The new benign prostatic hyperplasia (BPH) indication for Cialis presents some problems since Medicaid cannot pay for the drug erectile dysfunction use, but must cover the drug for BPH. The Board asked for input on how this might be best addressed through clinical edits. Dr. Donahoe indicated that he would expect a few claims through Medicaid. He suggested a step-edit for consistent use with a preferred alpha blocker or 5-alpha reductase inhibitor would be appropriate. Dr. Dees made motion for 90-days of consistent treatment with alpha blocker prior to Cialis use for diagnosis of BPH. Dr. Donahoe seconded the motion. The vote passed unanimously.

Soma (carisoprodol) Use

Dr. Banahan reviewed recent Soma analysis. Ms. Clark reviewed history of the Soma problem with Medicaid and the abuse potential for the product. Ms. Clark also mentioned that a Soma tapering schedule was available on the DOM website. Dr. Paul Read commented that it does not appear to be a large problem at this time and that he recommended that the product stay in SmartPA with the cumulative restriction of 84 within a 6 month period. Ms. Clark indicated DOM would continue to monitor this issue in future.

Exceptions Monitoring

FDA Safety Warnings and Exceptions Monitoring

Dr. Null explained the problem with serious contraindications being announced by FDA and the time lag for any DUR Board recommendations and approval of interventions. Dr. McIntosh indicated that she gets notices such as this from pharmacies and that they are helpful. Dr. Dees moved for acceptance of the recommendation on page 67 of the November 2011 DUR Board packet. The motion was seconded by Dr. Paul Read. The motion was approved unanimously.

Exceptions Monitoring Criteria Recommendations

Dr. Null pointed out to the Board that several recommendations are for removal of obsolete exceptions approved in past meetings. All recommended additions and deletions were voted on as a block vote. Dr. Dees moved for approval of recommendations. The motion was seconded by Mr. Merritt. The motion was approved unanimously.

Next Meeting Information:

Dr. Mark Reed announced next meeting date is February 16, 2012 at 2:00p.m. and thanked everyone for making the effort to attend the DUR Board meeting in order to have a quorum. The meeting adjourned at 3:24 pm.

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

Report Run On: December 31, 2011

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

	Septeml	ber 2011	Octob	er 2011	November 2011 Q		Qua	irter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Antipsychotics (atypical And Typical)	\$2,916,888.65	8,988	\$2,960,995.65	9,004	\$2,667,545.57	8,464	\$8,545,429.87	26,456
Aripiprazole	\$943,764.49	1,659	\$937,588.84	1,649	\$973,876.76	1,717	\$2,855,230.09	5,025
Quetiapine	\$691,942.23	1,675	\$708,070.18	1,679	\$670,061.78	1,587	\$2,070,074.19	4,941
Risperidone	\$330,255.00	2,975	\$339,691.90	3,067	\$324,426.77	3,012	\$994,373.67	9,054
Olanzapine	\$391,003.20	498	\$406,632.30	536	\$162,466.65	191	\$960,102.15	1,225
Ziprasidone	\$230,434.13	472	\$212,690.73	451	\$213,784.38	434	\$656,909.24	1,357
Paliperidone	\$167,356.09	174	\$176,885.98	180	\$148,112.26	145	\$492,354.33	499
Asenapine	\$56,681.32	130	\$62,301.26	143	\$58,003.97	134	\$176,986.55	407
Lurasidone	\$24,003.40	52	\$29,213.95	61	\$34,684.61	68	\$87,901.96	181
Clozapine	\$25,801.25	136	\$21,205.85	111	\$21,217.39	127	\$68,224.49	374
Chlorpromazine	\$12,511.64	288	\$24,892.78	258	\$25,231.18	282	\$62,635.60	828
Haloperidol	\$21,635.38	484	\$20,933.24	468	\$18,333.61	420	\$60,902.23	1,372
lloperidone	\$5,513.03	10	\$5,879.51	11	\$5,513.03	10	\$16,905.57	31
Perphenazine	\$5,236.76	84	\$4,077.50	64	\$3,397.30	62	\$12,711.56	210
Prochlorperazine	\$3,182.42	170	\$2,945.32	138	\$2,070.14	124	\$8,197.88	432
Fluphenazine	\$2,530.63	63	\$2,941.56	70	\$1,781.81	49	\$7,254.00	182
Loxapine	\$1,751.04	21	\$1,784.37	21	\$1,429.50	16	\$4,964.91	58

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

	Septem	ber 2011	Octob	er 2011	Novemb	oer 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims						
Thioridazine	\$1,272.38	43	\$1,126.31	40	\$1,288.00	42	\$3,686.69	125
Trifluoperazine	\$1,133.46	26	\$1,309.08	30	\$1,022.90	22	\$3,465.44	78
Thiothixene	\$595.01	24	\$580.47	24	\$441.76	17	\$1,617.24	65
Pimozide	\$285.79	4	\$244.52	3	\$401.77	5	\$932.08	12
Adrenals	\$1,391,253.84	13,704	\$1,740,402.12	16,167	\$1,628,360.98	15,582	\$4,760,016.94	45,453
Budesonide	\$1,075,656.14	3,504	\$1,334,741.96	4,342	\$1,283,299.06	4,166	\$3,693,697.16	12,012
Prednisolone	\$104,891.47	5,801	\$126,404.30	7,058	\$118,102.95	6,703	\$349,398.72	19,562
Fluticasone	\$55,281.38	427	\$65,043.37	489	\$59,146.47	447	\$179,471.22	1,363
Budesonide-formoterol	\$54,871.12	268	\$59,761.38	293	\$56,513.05	278	\$171,145.55	839
Mometasone	\$33,900.20	254	\$71,606.87	255	\$34,928.73	264	\$140,435.80	773
Beclomethasone	\$25,815.65	206	\$31,004.04	241	\$27,920.47	221	\$84,740.16	668
Formoterol-mometasone	\$9,589.09	46	\$17,544.93	82	\$12,901.51	61	\$40,035.53	189
Methylprednisolone	\$11,241.24	916	\$12,498.08	1,011	\$13,456.16	1,111	\$37,195.48	3,038
Prednisone	\$7,825.52	1,669	\$9,016.10	1,806	\$8,591.95	1,687	\$25,433.57	5,162
Dexamethasone	\$5,423.14	409	\$6,251.04	407	\$6,464.48	455	\$18,138.66	1,271
Flunisolide Nasal	\$2,032.16	31	\$2,558.78	39	\$3,375.93	51	\$7,966.87	121
Hydrocortisone	\$2,801.68	92	\$2,451.67	82	\$2,478.52	87	\$7,731.87	261
Fludrocortisone	\$1,756.40	67	\$1,455.71	59	\$1,097.94	46	\$4,310.05	172
Leukotriene Modifiers	\$1,274,143.75	8,369	\$1,368,667.72	8,982	\$1,295,295.50	8,516	\$3,938,106.97	25,867
Montelukast	\$1,273,627.12	8,363	\$1,368,224.13	8,978	\$1,294,805.89	8,511	\$3,936,657.14	25,852

	Septeml	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims						
Zafirlukast	\$516.63	6	\$349.86	3	\$489.61	5	\$1,356.10	14
Amphetamines	\$1,192,723.60	7,593	\$1,208,410.86	7,633	\$1,210,471.62	7,515	\$3,611,606.08	22,741
Amphetamine-dextroamphetamine	\$654,842.31	4,114	\$662,213.67	4,104	\$667,564.87	4,019	\$1,984,620.85	12,237
Lisdexamfetamine	\$529,801.90	3,384	\$538,545.47	3,439	\$536,655.95	3,424	\$1,605,003.32	10,247
Dextroamphetamine	\$8,079.39	95	\$7,651.72	90	\$6,250.80	72	\$21,981.91	257
Hemostatics	\$830,872.17	37	\$1,362,892.84	49	\$1,089,486.67	46	\$3,283,251.68	132
Anti-inhibitor Coagulant Complex	\$547,473.96	7	\$714,824.49	7	\$622,334.90	7	\$1,884,633.35	21
Antihemophilic Factor	\$217,773.32	18	\$228,063.76	15	\$252,720.66	17	\$698,557.74	50
Antihemophilic Factor-von Willebrand	\$2,795.97	1	\$221,783.94	5	\$134,814.78	5	\$359,394.69	11
Coagulation Factor Viia	\$61,467.02	2	\$162,215.28	8	\$77,033.24	4	\$300,715.54	14
Coagulation Factor Ix			\$33,469.64	2			\$33,469.64	2
Tranexamic Acid	\$1,084.21	7	\$1,144.24	8	\$1,076.22	7	\$3,304.67	22
Aminocaproic Acid	\$277.69	2	\$1,391.49	4	\$1,506.87	6	\$3,176.05	12
Anorex., Resp. & Cerebral Stim., Misc.	\$928,888.03	5,789	\$964,338.05	6,054	\$961,920.17	6,033	\$2,855,146.25	17,876
Methylphenidate	\$608,295.94	3,722	\$632,717.73	3,867	\$625,385.45	3,860	\$1,866,399.12	11,449
Dexmethylphenidate	\$306,161.02	2,044	\$318,131.29	2,164	\$321,140.90	2,152	\$945,433.21	6,360
Modafinil	\$11,134.26	13	\$10,453.61	13	\$11,647.54	12	\$33,235.41	38
Armodafinil	\$3,296.81	10	\$2,925.51	9	\$3,746.28	9	\$9,968.60	28

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

	Septeml	ber 2011	Octob	er 2011	Noveml	per 2011	Qua	irter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Anticonvulsants, Miscellaneous	\$952,290.02	10,314	\$918,694.95	10,185	\$887,913.90	9,942	\$2,758,898.87	30,441
Divalproex Sodium	\$170,422.69	1,648	\$161,594.52	1,584	\$162,676.49	1,576	\$494,693.70	4,808
Oxcarbazepine	\$139,857.02	1,078	\$125,141.99	1,006	\$131,909.71	1,015	\$396,908.72	3,099
Pregabalin	\$123,376.61	656	\$124,922.22	667	\$118,270.87	635	\$366,569.70	1,958
Levetiracetam	\$109,825.51	1,269	\$100,310.77	1,218	\$95,956.20	1,188	\$306,092.48	3,675
Gabapentin	\$88,917.69	2,355	\$88,574.90	2,396	\$83,908.83	2,296	\$261,401.42	7,047
Lamotrigine	\$78,951.82	920	\$84,019.64	950	\$76,343.16	918	\$239,314.62	2,788
Topiramate	\$54,960.26	1,121	\$55,366.82	1,127	\$53,188.92	1,117	\$163,516.00	3,365
Lacosamide	\$44,462.29	102	\$48,616.62	104	\$40,586.64	93	\$133,665.55	299
Carbamazepine	\$38,784.53	647	\$36,371.61	630	\$35,610.83	621	\$110,766.97	1,898
Vigabatrin	\$33,737.90	7	\$31,448.53	6	\$25,727.06	4	\$90,913.49	17
Rufinamide	\$18,243.62	27	\$22,433.58	37	\$23,778.11	39	\$64,455.31	103
Felbamate	\$23,088.88	29	\$12,511.01	16	\$12,844.92	18	\$48,444.81	63
Zonisamide	\$11,698.94	253	\$11,534.71	243	\$11,290.57	242	\$34,524.22	738
Valproic Acid	\$9,191.13	189	\$8,871.65	187	\$8,169.98	169	\$26,232.76	545
Tiagabine	\$6,771.13	13	\$6,575.55	11	\$7,651.61	11	\$20,998.29	35
Beta-adrenergic Agonists	\$735,122.34	12,284	\$817,196.92	14,084	\$800,346.12	13,726	\$2,352,665.38	40,094
Albuterol	\$406,511.13	10,758	\$466,263.63	12,466	\$458,348.48	12,171	\$1,331,123.24	35,395
Fluticasone-salmeterol	\$269,797.43	1,207	\$286,654.75	1,277	\$276,206.68	1,222	\$832,658.86	3,706
Albuterol-ipratropium	\$46,181.76	214	\$48,113.78	223	\$49,986.44	215	\$144,281.98	652

	Septeml	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Levalbuterol	\$8,471.96	38	\$11,502.80	59	\$9,904.72	48	\$29,879.48	145
Formoterol	\$971.70	6	\$2,115.43	12	\$2,096.76	10	\$5,183.89	28
Terbutaline	\$1,844.14	54	\$1,180.64	40	\$1,297.98	44	\$4,322.76	138
Pirbuterol	\$938.86	6	\$533.53	3	\$1,884.63	13	\$3,357.02	22
Arformoterol	\$405.36	1	\$810.30	2	\$611.18	2	\$1,826.84	5
Proton-pump Inhibitors	\$724,073.23	6,603	\$747,582.10	6,460	\$753,231.69	6,378	\$2,224,887.02	19,441
Lansoprazole	\$322,932.91	1,751	\$334,826.76	1,759	\$335,470.68	1,738	\$993,230.35	5,248
Omeprazole	\$202,700.40	3,508	\$228,855.50	3,434	\$229,321.58	3,358	\$660,877.48	10,300
Dexlansoprazole	\$158,587.17	1,204	\$148,335.58	1,136	\$152,448.51	1,159	\$459,371.26	3,499
Amoxicillin/clarithromycin/lansoprazo	\$27,117.20	64	\$23,964.05	55	\$24,048.37	53	\$75,129.62	172
Esomeprazole	\$11,587.73	57	\$10,346.34	51	\$10,278.19	47	\$32,212.26	155
Pantoprazole	\$1,147.82	19	\$491.04	23	\$1,194.23	22	\$2,833.09	64
Rabeprazole			\$470.13	1	\$470.13	1	\$940.26	2
Antineoplastic Agents	\$785,931.98	1,482	\$666,327.09	1,481	\$642,283.15	1,460	\$2,094,542.22	4,423
Leuprolide	\$131,563.04	96	\$106,138.26	86	\$112,193.98	90	\$349,895.28	272
Sorafenib	\$85,150.24	10	\$55,566.88	8	\$51,291.24	6	\$192,008.36	24
Erlotinib	\$55,069.30	11	\$79,520.77	16	\$51,495.87	11	\$186,085.94	38
Imatinib	\$56,252.06	11	\$64,618.55	11	\$52,658.20	9	\$173,528.81	31
Sunitinib	\$52,357.88	6	\$33,655.54	4	\$67,312.90	10	\$153,326.32	20
Capecitabine	\$60,340.72	26	\$46,737.65	20	\$42,049.86	19	\$149,128.23	65

	September 2011		Octob	er 2011	Novemb	per 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Histrelin	\$128,034.40	8					\$128,034.40	8
Everolimus	\$28,793.30	4	\$28,793.30	4	\$42,813.12	6	\$100,399.72	14
Letrozole	\$30,608.78	82	\$26,294.48	72	\$25,317.28	68	\$82,220.54	222
Megestrol	\$26,625.72	244	\$24,116.30	204	\$30,122.58	254	\$80,864.60	702
Lapatinib	\$22,256.50	6	\$36,564.38	10	\$19,077.78	6	\$77,898.66	22
Anastrozole	\$23,433.30	98	\$23,604.94	100	\$23,856.74	94	\$70,894.98	292
Temozolomide	\$3,117.43	1	\$38,458.70	10	\$24,402.68	10	\$65,978.81	21
Methotrexate	\$17,094.52	628	\$17,921.00	668	\$18,010.92	656	\$53,026.44	1,952
Bevacizumab	\$14,794.77	3	\$20,959.94	5	\$16,028.35	4	\$51,783.06	12
Nilotinib	\$8,064.49	1	\$24,193.44	3	\$16,549.12	3	\$48,807.05	7
Dasatinib	\$16,648.08	2	\$8,324.04	1	\$22,478.18	3	\$47,450.30	6
Pazopanib	\$4,528.13	1	\$4,528.13	1	\$10,565.33	2	\$19,621.59	4
Tamoxifen	\$6,207.82	126	\$5,732.56	128	\$4,924.20	90	\$16,864.58	344
Hydroxyurea	\$3,062.45	59	\$3,344.04	58	\$2,718.43	52	\$9,124.92	169
Mercaptopurine	\$2,986.13	30	\$2,752.97	27	\$2,077.93	23	\$7,817.03	80
Bicalutamide	\$2,137.36	20	\$2,238.62	22	\$2,772.12	28	\$7,148.10	70
Exemestane	\$1,804.56	6	\$3,012.72	12	\$1,902.14	8	\$6,719.42	26
Tretinoin	\$4,525.99	1					\$4,525.99	1
Interferon Alfa-2b			\$4,100.76	1			\$4,100.76	1
Fulvestrant			\$3,547.44	2			\$3,547.44	2
Etoposide			\$761.58	2	\$667.93	1	\$1,429.51	3

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

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

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

	Septeml	ber 2011	Octob	er 2011	Novemb	oer 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Cyclophosphamide	\$240.59	1	\$341.87	2	\$730.20	5	\$1,312.66	8
Thioguanine	\$234.42	1	\$369.72	1	\$234.42	1	\$838.56	3
Cephalosporins	\$639,238.88	10,035	\$703,897.65	11,007	\$721,761.31	11,069	\$2,064,897.84	32,111
Cefdinir	\$266,572.59	3,454	\$310,686.74	3,967	\$325,784.23	4,213	\$903,043.56	11,634
Cefixime	\$180,222.41	768	\$183,518.75	790	\$182,776.41	781	\$546,517.57	2,339
Cefprozil	\$113,488.39	1,988	\$132,785.20	2,305	\$143,772.58	2,479	\$390,046.17	6,772
Cephalexin	\$48,895.97	3,171	\$49,872.26	3,170	\$42,024.33	2,844	\$140,792.56	9,185
Ceftriaxone	\$13,409.96	103	\$7,495.26	98	\$8,215.21	108	\$29,120.43	309
Cefuroxime	\$6,639.98	341	\$8,808.98	448	\$8,110.78	413	\$23,559.74	1,202
Cefadroxil	\$6,903.33	185	\$7,613.92	208	\$7,305.29	197	\$21,822.54	590
Cefepime	\$1,980.98	8	\$1,622.79	3	\$1,146.02	6	\$4,749.79	17
Cefaclor	\$604.67	10	\$442.91	8	\$798.67	13	\$1,846.25	31
Cefpodoxime	\$432.80	3	\$302.68	4	\$717.83	10	\$1,453.31	17
Ceftibuten			\$530.50	2	\$321.42	2	\$851.92	4
Ceftaroline					\$607.05	1	\$607.05	1
Corticosteroids	\$679,505.20	6,551	\$694,700.34	6,591	\$677,851.46	6,526	\$2,052,057.00	19,668
Mometasone Nasal	\$396,285.37	3,369	\$425,331.05	3,598	\$397,415.22	3,377	\$1,219,031.64	10,344
Ciprofloxacin-dexamethasone Otic	\$117,792.94	870	\$107,615.86	795	\$123,194.32	904	\$348,603.12	2,569
Fluticasone Nasal	\$109,379.60	1,035	\$109,837.36	1,043	\$105,700.62	1,016	\$324,917.58	3,094
Dexamethasone-tobramycin Ophthal	\$19,149.28	229	\$18,746.10	231	\$15,481.72	211	\$53,377.10	671

	Septeml	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Hydrocortisone/neomycin/polymyxin	\$13,629.64	506	\$12,643.55	469	\$13,874.90	513	\$40,148.09	1,488
Dexamethasone/neomycin/polymyxin	\$3,686.19	202	\$3,075.85	143	\$3,338.74	173	\$10,100.78	518
Loteprednol Ophthalmic	\$3,885.96	28	\$3,132.85	27	\$2,586.17	24	\$9,604.98	79
Hydrocortisone/neomycin/polymyxin	\$3,855.27	45	\$2,333.48	27	\$2,970.37	35	\$9,159.12	107
Flunisolide Nasal	\$2,032.16	31	\$2,558.78	39	\$3,375.93	51	\$7,966.87	121
Tobramycin Ophthalmic	\$2,391.69	176	\$2,159.31	228	\$2,465.68	208	\$7,016.68	612
Prednisolone Ophthalmic	\$2,161.67	145	\$2,031.59	130	\$1,767.44	120	\$5,960.70	395
Triamcinolone Nasal	\$1,731.04	14	\$2,323.48	19	\$1,480.32	12	\$5,534.84	45
Acetic Acid-hydrocortisone Otic	\$1,549.19	10	\$1,347.36	9	\$1,525.13	11	\$4,421.68	30
Colistin/hc/neomycin/thonzonium Oti	\$781.75	11	\$854.83	12	\$1,331.91	20	\$2,968.49	43
Prednisolone-sulfacetamide Sodium O	\$1,239.44	17	\$576.29	12	\$973.28	11	\$2,789.01	40
Loteprednol-tobramycin Ophthalmic	\$622.20	5	\$494.16	4	\$1,249.92	10	\$2,366.28	19
Ciprofloxacin-hydrocortisone Otic	\$584.40	4	\$581.40	4	\$581.40	4	\$1,747.20	12
Bacitracin/neomycin/polymyxin B Oph	\$456.32	10	\$518.69	13	\$417.03	10	\$1,392.04	33
Beclomethasone Nasal	\$436.74	3	\$433.74	3	\$146.58	1	\$1,017.06	7
Fluorometholone Ophthalmic	\$306.55	17	\$300.90	16	\$266.40	19	\$873.85	52
Fluocinolone Otic	\$197.53	6	\$128.72	4	\$191.05	6	\$517.30	16
Insulins	\$640,715.18	3,088	\$639,379.04	3,053	\$627,846.32	3,021	\$1,907,940.54	9,162
Insulin Glargine	\$175,141.30	854	\$183,204.53	859	\$165,346.78	789	\$523,692.61	2,502
Insulin Aspart	\$147,744.44	573	\$157,121.40	607	\$157,397.38	613	\$462,263.22	1,793
Insulin Aspart-insulin Aspart Protamin	\$101,902.23	271	\$95,725.21	263	\$94,242.77	259	\$291,870.21	793

	Septem	ber 2011	Octob	er 2011	Novemb	oer 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Insulin Detemir	\$71,734.35	326	\$67,931.03	310	\$72,731.99	331	\$212,397.37	967
Insulin Isophane-insulin Regular	\$57,577.52	364	\$56,822.23	347	\$52,689.57	326	\$167,089.32	1,037
Insulin Isophane	\$40,537.43	362	\$37,903.24	355	\$41,884.78	379	\$120,325.45	1,096
Insulin Regular	\$25,384.62	256	\$21,406.98	224	\$23,078.15	244	\$69,869.75	724
Insulin Lispro	\$13,096.31	55	\$14,391.47	69	\$13,962.02	59	\$41,449.80	183
Insulin Lispro-insulin Lispro Protamine	\$4,330.33	11	\$2,182.77	6	\$3,854.73	8	\$10,367.83	25
Insulin Glulisine	\$3,266.65	16	\$2,690.18	13	\$2,658.15	13	\$8,614.98	42
Antiretrovirals	\$626,593.68	726	\$595,355.93	674	\$553,554.27	638	\$1,775,503.88	2,038
Efavirenz/emtricitabine/tenofovir	\$157,969.54	94	\$152,226.49	92	\$147,469.92	87	\$457,665.95	273
Emtricitabine-tenofovir	\$84,467.52	78	\$78,536.79	70	\$67,712.76	60	\$230,717.07	208
Atazanavir	\$66,233.25	68	\$61,626.20	64	\$57,147.83	62	\$185,007.28	194
Lamivudine-zidovudine	\$43,487.81	52	\$45,256.29	53	\$46,032.62	57	\$134,776.72	162
Lopinavir-ritonavir	\$41,555.23	59	\$39,898.73	54	\$38,053.60	55	\$119,507.56	168
Raltegravir	\$40,014.39	39	\$37,809.57	38	\$39,211.71	38	\$117,035.67	115
Tenofovir	\$24,868.69	35	\$22,193.15	30	\$22,304.97	29	\$69,366.81	94
Ritonavir	\$25,830.48	82	\$24,586.40	74	\$17,314.23	63	\$67,731.11	219
Abacavir-lamivudine	\$23,544.68	26	\$24,107.15	26	\$19,698.42	21	\$67,350.25	73
Abacavir/lamivudine/zidovudine	\$23,500.29	17	\$24,581.77	17	\$17,332.36	12	\$65,414.42	46
Darunavir	\$21,465.61	21	\$21,465.61	21	\$17,363.80	18	\$60,295.02	60
Efavirenz	\$15,816.47	30	\$16,627.67	32	\$15,407.74	29	\$47,851.88	91
Nelfinavir	\$8,743.71	12	\$6,877.26	9	\$7,370.57	10	\$22,991.54	31

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

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 $[\]ensuremath{^{\dagger}}$ Molecule names accounting for less than \$500 in quarterly amount paid are not shown

	Septem	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Fosamprenavir	\$7,451.90	10	\$4,677.96	4	\$7,888.66	8	\$20,018.52	22
Abacavir	\$7,214.38	13	\$7,026.41	13	\$5,017.56	9	\$19,258.35	35
Lamivudine	\$7,381.98	23	\$5,266.42	16	\$4,922.79	16	\$17,571.19	55
Enfuvirtide	\$5,556.04	2	\$5,556.04	2	\$5,556.04	2	\$16,668.12	6
Nevirapine	\$5,978.03	11	\$5,688.23	10	\$4,808.67	9	\$16,474.93	30
Etravirine	\$5,276.53	7	\$2,842.57	4	\$4,060.60	5	\$12,179.70	16
Didanosine	\$2,656.72	11	\$2,604.10	11	\$2,496.36	10	\$7,757.18	32
Maraviroc	\$2,971.53	3	\$1,981.02	2	\$1,981.02	2	\$6,933.57	7
Zidovudine	\$1,517.53	23	\$1,469.78	22	\$1,778.41	27	\$4,765.72	72
Stavudine	\$1,379.51	7	\$1,967.06	9	\$1,212.35	6	\$4,558.92	22
Indinavir	\$483.26	1	\$483.26	1	\$966.52	2	\$1,933.04	4
Tipranavir	\$1,109.33	1					\$1,109.33	1
Emtricitabine	\$119.27	1			\$444.76	1	\$564.03	2
Opiate Agonists	\$504,394.60	24,773	\$506,158.46	24,672	\$486,011.12	23,607	\$1,496,564.18	73,052
Acetaminophen-hydrocodone	\$221,872.33	15,522	\$220,466.34	15,509	\$215,549.96	14,912	\$657,888.63	45,943
Fentanyl	\$84,045.63	350	\$84,249.46	367	\$81,487.11	337	\$249,782.20	1,054
Acetaminophen-oxycodone	\$60,082.91	2,127	\$59,579.54	2,062	\$56,830.76	1,925	\$176,493.21	6,114
Morphine	\$47,155.64	370	\$52,001.48	393	\$44,244.80	340	\$143,401.92	1,103
Acetaminophen-codeine	\$28,626.13	3,469	\$28,948.53	3,487	\$28,054.13	3,383	\$85,628.79	10,339
Oxycodone	\$25,354.81	233	\$23,497.19	209	\$25,921.74	201	\$74,773.74	643
Tramadol	\$10,131.86	1,804	\$9,860.66	1,762	\$9,301.09	1,683	\$29,293.61	5,249

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

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[†] Molecule names accounting for less than \$500 in quarterly amount paid are not shown

	September 2011		Octob	October 2011		per 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Acetaminophen-tramadol	\$8,006.84	291	\$7,225.01	255	\$6,998.33	248	\$22,230.18	794
Hydrocodone-ibuprofen	\$6,331.20	249	\$6,632.78	247	\$6,673.51	254	\$19,637.49	750
Oxymorphone	\$4,831.97	12	\$4,243.49	12	\$3,569.24	11	\$12,644.70	35
Apap/caffeine/dihydrocodeine	\$3,825.23	87	\$4,912.48	89	\$3,449.73	65	\$12,187.44	241
Hydromorphone	\$1,167.08	63	\$1,592.97	83	\$1,845.79	67	\$4,605.84	213
Meperidine	\$1,105.46	93	\$1,069.43	98	\$870.44	81	\$3,045.33	272
Methadone	\$551.59	70	\$585.47	75	\$672.13	87	\$1,809.19	232
Tapentadol	\$565.91	3	\$797.43	4	\$328.10	3	\$1,691.44	10
Aspirin-oxycodone	\$574.67	25	\$364.97	15	\$69.30	3	\$1,008.94	43

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

Report Run On: December 31, 2011

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

	Septeml	ber 2011	October 2011 November 201		per 2011	Qua	arter	
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Montelukast	\$1,273,627.12	8,363	\$1,368,224.13	8,978	\$1,294,805.89	8,511	\$3,936,657.14	25,852
PDL Singulair	\$1,273,627.12	8,363	\$1,368,224.13	8,978	\$1,294,805.89	8,511	\$3,936,657.14	25,852
Budesonide	\$1,075,656.14	3,504	\$1,334,741.96	4,342	\$1,283,299.06	4,166	\$3,693,697.16	12,012
Budesonide	\$835,842.76	2,950	\$1,063,334.62	3,702	\$1,044,480.32	3,644	\$2,943,657.70	10,296
PDL Pulmicort Respules	\$224,058.00	442	\$253,677.64	514	\$222,939.94	408	\$700,675.58	1,364
PDL Pulmicort Flexhaler	\$15,755.38	112	\$17,729.70	126	\$15,878.80	114	\$49,363.88	352
Aripiprazole	\$943,764.49	1,659	\$937,588.84	1,649	\$973,876.76	1,717	\$2,855,230.09	5,025
PDL Abilify	\$941,513.38	1,641	\$936,214.62	1,641	\$969,876.01	1,704	\$2,847,604.01	4,986
Abilify Discmelt	\$2,251.11	18	\$1,374.22	8	\$4,000.75	13	\$7,626.08	39
Quetiapine	\$691,942.23	1,675	\$708,070.18	1,679	\$670,061.78	1,587	\$2,070,074.19	4,941
PDL Seroquel	\$522,603.02	1,285	\$512,048.19	1,254	\$490,166.53	1,194	\$1,524,817.74	3,733
PDL Seroquel Xr	\$169,339.21	390	\$196,021.99	425	\$179,895.25	393	\$545,256.45	1,208
Amphetamine-dextroamphetamine	\$654,842.31	4,114	\$662,213.67	4,104	\$667,564.87	4,019	\$1,984,620.85	12,237
PDL Adderall Xr	\$547,565.13	2,539	\$552,667.60	2,557	\$565,844.62	2,607	\$1,666,077.35	7,703
Amphetamine-dextroamphetamine	\$79,478.26	1,418	\$79,238.45	1,374	\$74,234.09	1,253	\$232,950.80	4,045
Amphetamine-dextroamphetamine Er	\$27,798.92	157	\$30,307.62	173	\$27,486.16	159	\$85,592.70	489

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

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

	Septeml	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	irter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Anti-inhibitor Coagulant Complex	\$547,473.96	7	\$714,824.49	7	\$622,334.90	7	\$1,884,633.35	21
Feiba Nf	\$317,183.65	5	\$486,963.19	5	\$506,380.08	6	\$1,310,526.92	16
Feiba Vh Immuno	\$230,290.31	2	\$227,861.30	2	\$115,954.82	1	\$574,106.43	5
Methylphenidate	\$608,295.94	3,722	\$632,717.73	3,867	\$625,385.45	3,860	\$1,866,399.12	11,449
Methylphenidate Hydrochloride Er	\$273,783.87	1,621	\$311,647.69	1,848	\$337,800.14	2,004	\$923,231.70	5,473
PDL Concerta	\$222,636.67	1,087	\$202,340.26	974	\$180,131.72	855	\$605,108.65	2,916
PDL Metadate Cd	\$54,890.19	353	\$56,630.07	355	\$50,571.10	316	\$162,091.36	1,024
PDL Daytrana	\$35,609.84	207	\$40,286.34	231	\$37,097.32	214	\$112,993.50	652
PDL Methylin	\$9,097.97	140	\$8,684.28	120	\$7,593.58	107	\$25,375.83	367
Methylphenidate Hydrochloride	\$7,633.71	270	\$8,951.45	303	\$7,966.20	327	\$24,551.36	900
Ritalin La	\$4,150.86	28	\$3,869.67	26	\$3,734.33	25	\$11,754.86	79
Methylin Er	\$356.99	12	\$118.88	4	\$177.52	4	\$653.39	20
Methylphenidate Hydrochloride Sr	\$95.79	3	\$149.04	5	\$273.49	7	\$518.32	15
Lisdexamfetamine	\$529,801.90	3,384	\$538,545.47	3,439	\$536,655.95	3,424	\$1,605,003.32	10,247
PDL Vyvanse	\$529,801.90	3,384	\$538,545.47	3,439	\$536,655.95	3,424	\$1,605,003.32	10,247
Palivizumab	\$414.38	1	\$755,494.03	378	\$664,761.37	362	\$1,420,669.78	741
Synagis	\$414.38	1	\$755,494.03	378	\$664,761.37	362	\$1,420,669.78	741
Albuterol	\$406,511.13	10,758	\$466,263.63	12,466	\$458,348.48	12,171	\$1,331,123.24	35,395
PDL Ventolin Hfa	\$214,347.47	4,977	\$231,532.30	5,373	\$216,871.13	5,053	\$662,750.90	15,403
Albuterol Sulfate	\$180,163.58	5,536	\$222,206.14	6,833	\$229,596.81	6,872	\$631,966.53	19,241

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

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

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

	Septem	ber 2011	Octob	er 2011	Noveml	per 2011	Quarter	
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Proventil Hfa	\$11,523.32	216	\$12,203.25	236	\$11,508.27	221	\$35,234.84	673
Albuterol	\$219.24	24	\$182.92	20	\$327.93	24	\$730.09	68
Azithromycin	\$364,570.46	12,085	\$443,726.57	14,457	\$451,126.94	14,825	\$1,259,423.97	41,367
Azithromycin	\$282,810.33	8,448	\$348,617.47	10,263	\$349,906.08	10,345	\$981,333.88	29,056
Azithromycin 5 Day Dose Pack	\$77,425.17	3,455	\$89,605.99	3,959	\$95,572.74	4,231	\$262,603.90	11,645
Azithromycin 3 Day Dose Pack	\$4,334.96	182	\$5,386.38	233	\$5,648.12	249	\$15,369.46	664
Mometasone Nasal	\$396,285.37	3,369	\$425,331.05	3,598	\$397,415.22	3,377	\$1,219,031.64	10,344
PDL Nasonex	\$396,285.37	3,369	\$425,331.05	3,598	\$397,415.22	3,377	\$1,219,031.64	10,344
Cetirizine	\$399,090.44	14,574	\$417,544.13	15,516	\$383,582.07	14,459	\$1,200,216.64	44,549
Cetirizine Hydrochloride	\$396,233.12	14,269	\$415,003.71	15,242	\$381,275.43	14,196	\$1,192,512.26	43,707
All Day Allergy	\$2,409.15	287	\$2,208.36	260	\$2,015.55	249	\$6,633.06	796
All Day Allergy Children's	\$448.17	18	\$332.06	14	\$291.09	14	\$1,071.32	46
Multivitamin, Prenatal	\$352,259.50	8,282	\$334,197.08	7,860	\$315,379.78	7,510	\$1,001,836.36	23,652
Neevodha	\$106,265.70	2,014	\$112,516.12	2,136	\$111,326.50	2,106	\$330,108.32	6,256
Nexa Select With Dha	\$18,445.46	244	\$15,288.94	204	\$15,924.42	212	\$49,658.82	660
Rovin-nv Dha	\$17,845.94	408	\$15,340.84	350	\$12,604.48	286	\$45,791.26	1,044
Neevo Dha	\$16,782.38	280	\$14,481.84	242	\$13,254.36	224	\$44,518.58	746
Preferaob	\$11,685.46	198	\$13,014.36	218	\$12,571.12	208	\$37,270.94	624
Prefera Ob-one	\$16,775.16	238	\$13,659.10	192	\$5,475.36	76	\$35,909.62	506
Prenexa With Dha	\$11,944.98	164	\$12,425.58	168	\$10,458.54	144	\$34,829.10	476
Concept Dha	\$11,044.22	382	\$10,892.96	376	\$11,528.00	400	\$33,465.18	1,158

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

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

	Septem	ber 2011	Octob	er 2011	Novemb	oer 2011	Qua	irter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Neevo	\$10,738.26	144	\$11,263.56	152	\$10,159.26	136	\$32,161.08	432
Preferaob+dha	\$9,333.62	180	\$9,435.74	184	\$11,662.18	232	\$30,431.54	596
Zatean-pn Plus	\$11,234.66	196	\$8,802.96	156	\$9,511.36	168	\$29,548.98	520
Pnv-dha	\$8,758.46	170	\$10,462.36	198	\$10,161.36	190	\$29,382.18	558
Prenate Essential	\$10,713.60	120	\$8,138.58	92	\$8,081.76	92	\$26,933.94	304
Pnv Select	\$7,064.50	152	\$6,401.70	138	\$7,804.64	136	\$21,270.84	426
Taron-c Dha	\$6,659.94	258	\$6,343.76	244	\$5,757.86	224	\$18,761.56	726
Prenatal Plus	\$367.58	34	\$8,334.44	928	\$8,480.04	954	\$17,182.06	1,916
Prenate Elite Plus Iron	\$3,728.10	42	\$6,168.08	70	\$5,561.38	66	\$15,457.56	178
Citranatal Assure	\$4,552.48	94	\$3,549.16	70	\$5,284.66	110	\$13,386.30	274
Neevo	\$5,593.24	110	\$4,711.30	90	\$2,873.68	58	\$13,178.22	258
Triveen Ten	\$5,553.70	164	\$4,389.58	126	\$3,019.14	94	\$12,962.42	384
Concept Ob	\$3,996.68	148	\$3,520.06	132	\$3,941.86	146	\$11,458.60	426
Citranatal Harmony	\$4,159.16	78	\$3,217.20	60	\$2,870.72	54	\$10,247.08	192
Natelle One Dha	\$4,717.50	50	\$3,397.40	36	\$1,696.70	18	\$9,811.60	104
Prenatal Plus	\$8,698.84	976	\$296.74	28	\$189.00	18	\$9,184.58	1,022
Zatean-pn Dha	\$2,746.40	52	\$3,371.92	64	\$2,854.70	52	\$8,973.02	168
Paire Ob Plus Dha	\$3,227.28	86	\$2,795.32	74	\$2,149.20	58	\$8,171.80	218
Citranatal 90 Dha	\$2,228.46	48	\$2,281.32	44	\$3,322.84	70	\$7,832.62	162
Folcal Dha	\$3,029.40	60	\$2,692.08	54	\$1,923.42	38	\$7,644.90	152
Gesticare Dha Dr	\$4,167.68	68	\$1,792.84	28	\$1,402.66	22	\$7,363.18	118
Tricare Dha One	\$2,701.82	50	\$1,950.36	36	\$1,950.36	36	\$6,602.54	122
Prenaplus	\$2,253.68	210	\$2,280.34	216	\$2,061.34	196	\$6,595.36	622
Tl-select	\$2,480.48	40	\$1,605.18	28	\$2,418.00	40	\$6,503.66	108

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	Septem	ber 2011	October 2011 Novemb		per 2011	Quarter		
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Rovin-nv	\$2,865.36	70	\$1,742.82	42	\$1,671.62	38	\$6,279.80	150
Folivan-ob	\$1,395.14	58	\$2,434.00	100	\$1,694.42	70	\$5,523.56	228
Zatean-pn	\$1,870.50	42	\$1,818.94	40	\$1,025.24	24	\$4,714.68	106
Preque 10	\$1,988.88	46	\$1,574.54	32	\$1,037.16	24	\$4,600.58	102
Prenatal Ad	\$1,351.98	104	\$1,341.60	106	\$1,346.50	104	\$4,040.08	314
Vol-plus	\$1,290.66	112	\$1,292.16	116	\$1,317.14	116	\$3,899.96	344
Pnv- Iron	\$1,263.76	30	\$1,084.50	26	\$867.92	20	\$3,216.18	76
Pnv-dha Plus Docusate	\$1,137.06	26	\$941.38	22	\$468.20	10	\$2,546.64	58
Citranatal Dha	\$1,136.92	24	\$842.92	18	\$500.00	10	\$2,479.84	52
Prenatal 19	\$973.20	70	\$787.02	58	\$714.36	50	\$2,474.58	178
Citranatal B-calm	\$946.12	26	\$743.76	18	\$659.92	20	\$2,349.80	64
Duet Dha Balanced	\$765.82	14	\$811.50	16	\$739.54	14	\$2,316.86	44
Vemavite Prx 2	\$825.60	24	\$657.36	16	\$569.04	12	\$2,052.00	52
Select-ob+dha	\$525.54	12	\$614.20	14	\$567.96	12	\$1,707.70	38
Prenatabs Rx	\$588.96	50	\$595.18	50	\$498.74	42	\$1,682.88	142
Se-natal 19	\$559.20	52	\$597.00	46	\$516.56	40	\$1,672.76	138
Prenatal-u	\$305.28	24	\$426.48	34	\$426.48	34	\$1,158.24	92
Folcaps Omega 3	\$521.06	14	\$223.38	6	\$291.20	8	\$1,035.64	28
Taron-prx Plus Dha	\$470.92	12	\$233.28	6	\$153.52	4	\$857.72	22
Se-care	\$291.02	12	\$451.92	16	\$112.04	4	\$854.98	32
Vinate Care	\$371.64	12	\$241.76	8	\$179.82	6	\$793.22	26
Tricare	\$214.92	6	\$280.56	8	\$280.56	8	\$776.04	22
Prefera Ob Plus Dha	\$507.50	12	\$94.40	2	\$171.44	4	\$773.34	18
Ultimatecare One	\$296.38	8	\$221.58	6	\$215.58	6	\$733.54	20

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

	Septeml	ber 2011	Octob	er 2011	Novemb	oer 2011	Qua	irter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Nestabs Dha	\$191.64	4	\$97.58	2	\$378.32	8	\$667.54	14
Viva Dha	\$134.96	2	\$263.92	4	\$263.92	4	\$662.80	10
Pr Natal 430					\$576.96	18	\$576.96	18
Vinate One	\$153.46	14	\$135.46	14	\$284.14	26	\$573.06	54
Completenate	\$77.32	4	\$158.00	8	\$279.08	14	\$514.40	26
Zatean-ch	\$265.28	8	\$164.24	4	\$76.26	2	\$505.78	14
Risperidone	\$330,255.00	2,975	\$339,691.90	3,067	\$324,426.77	3,012	\$994,373.67	9,054
Risperidone	\$268,253.00	2,899	\$279,427.75	2,990	\$266,832.38	2,941	\$814,513.13	8,830
Risperdal Consta	\$62,002.00	76	\$60,181.47	76	\$57,511.71	70	\$179,695.18	222
Lansoprazole	\$322,932.91	1,751	\$334,826.76	1,759	\$335,470.68	1,738	\$993,230.35	5,248
PDL Prevacid Solutab	\$297,935.60	1,596	\$308,062.92	1,595	\$315,997.64	1,617	\$921,996.16	4,808
Lansoprazole	\$24,997.31	155	\$26,763.84	164	\$19,473.04	121	\$71,234.19	440
Guanfacine	\$310,248.91	1,832	\$324,708.24	1,915	\$325,387.47	1,920	\$960,344.62	5,667
PDL Intuniv	\$310,248.91	1,832	\$324,708.24	1,915	\$325,387.47	1,920	\$960,344.62	5,667
Guanfacine Hydrochloride	\$11,007.66	795	\$11,688.66	839	\$12,141.92	856	\$34,838.24	2,490
Olanzapine	\$391,003.20	498	\$406,632.30	536	\$162,466.65	191	\$960,102.15	1,225
Zyprexa	\$347,173.49	441	\$359,055.36	473	\$139,041.02	168	\$845,269.87	1,082
Zyprexa Zydis	\$43,829.71	57	\$47,576.94	63	\$23,425.63	23	\$114,832.28	143
Amoxicillin-clavulanate	\$299,706.19	5,659	\$318,189.72	5,890	\$333,026.92	6,196	\$950,922.83	17,745
Amoxicillin-clavulanate	\$296,063.50	5,617	\$313,248.95	5,838	\$328,008.46	6,137	\$937,320.91	17,592

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

Propagad by the Evidence Record DUR Initiative MS DUR

	Septem	ber 2011	Octob	er 2011	Noveml	oer 2011	Qua	irter
Generic Molecule / Drug Name	Total Paid*	Total Claims						
Amoxicillin-clavulanate	\$11,622.70	142	\$24,469.48	333	\$24,556.80	373	\$60,648.98	848
PDL Augmentin	\$1,993.76	24	\$2,809.31	30	\$629.99	5	\$5,433.06	59
Amoxicillin-clavulanate Er	\$1,648.93	18	\$2,131.46	22	\$962.30	10	\$4,742.69	50
Amoxicillin-clavulanate Er	\$1,169.44	12	\$392.04	4	\$2,445.44	29	\$4,006.92	45
PDL Augmentin	\$153.86	1	\$289.70	3	\$2,573.02	30	\$3,016.58	34
PDL Augmentin Xr	\$239.30	2			\$468.50	4	\$707.80	6
Dexmethylphenidate	\$306,161.02	2,044	\$318,131.29	2,164	\$321,140.90	2,152	\$945,433.21	6,360
PDL Focalin Xr	\$293,438.80	1,727	\$304,311.22	1,814	\$307,456.48	1,811	\$905,206.50	5,352
Dexmethylphenidate Hydrochloride	\$10,812.68	276	\$11,038.23	294	\$10,786.46	283	\$32,637.37	853
PDL Focalin	\$1,909.54	41	\$2,781.84	56	\$2,897.96	58	\$7,589.34	155
Cefdinir	\$266,572.59	3,454	\$310,686.74	3,967	\$325,784.23	4,213	\$903,043.56	11,634
Cefdinir	\$266,572.59	3,454	\$310,686.74	3,967	\$325,784.23	4,213	\$903,043.56	11,634
Somatropin	\$290,596.50	92	\$290,835.99	91	\$308,446.75	101	\$889,879.24	284
Nutropin Aq Pen 20 Cartridge	\$112,554.32	23	\$118,473.68	23	\$125,876.77	24	\$356,904.77	70
Nutropin Aq Nuspin 10	\$58,528.06	19	\$56,435.29	18	\$46,816.31	18	\$161,779.66	55
Genotropin	\$28,720.78	10	\$34,487.14	13	\$45,525.22	14	\$108,733.14	37
Genotropin Miniquick	\$23,632.75	13	\$21,970.56	11	\$28,936.70	15	\$74,540.01	39
Nutropin Aq Pen 10 Cartridge	\$18,525.12	10	\$18,532.02	11	\$21,500.43	14	\$58,557.57	35
Nutropin Aq Nuspin 5	\$11,126.18	7	\$10,752.31	6	\$11,866.10	7	\$33,744.59	20
Saizen	\$12,536.33	2	\$12,536.33	2			\$25,072.66	4
Norditropin Flexpro Pen	\$5,967.51	2	\$5,967.51	2	\$11,885.02	3	\$23,820.04	7
Tev-tropin	\$9,583.44	2			\$9,583.44	2	\$19,166.88	4

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

	Septem	ber 2011	Octob	er 2011	Noveml	per 2011	Qua	irter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
PDL Nutropin	\$5,224.39	1	\$5,224.39	1			\$10,448.78	2
Omnitrope Pen 10 Cartridge	\$2,248.12	1	\$2,464.82	2	\$2,464.82	2	\$7,177.76	5
Humatrope	\$1,768.27	1	\$1,768.27	1	\$1,768.27	1	\$5,304.81	3
PDL Nutropin Aq			\$2,223.67	1	\$2,223.67	1	\$4,447.34	2
Fluticasone-salmeterol	\$269,797.43	1,207	\$286,654.75	1,277	\$276,206.68	1,222	\$832,658.86	3,706
PDL Advair Diskus	\$249,996.24	1,123	\$267,829.79	1,197	\$253,363.39	1,129	\$771,189.42	3,449
Advair Hfa	\$19,801.19	84	\$18,824.96	80	\$22,843.29	93	\$61,469.44	257
Medroxyprogesterone	\$241,974.90	7,626	\$267,614.16	8,697	\$261,926.85	7,794	\$771,515.91	24,117
Medroxyprogesterone Acetate	\$183,552.30	4,386	\$192,578.49	4,494	\$199,381.80	4,524	\$575,512.59	13,404
Depo-subq Provera 104	\$58,069.80	3,219	\$74,090.34	4,161	\$50,442.30	2,595	\$182,602.44	9,975
Depo-provera Contraceptive	\$352.80	21	\$945.33	42	\$12,102.75	675	\$13,400.88	738
Antihemophilic Factor	\$217,773.32	18	\$228,063.76	15	\$252,720.66	17	\$698,557.74	50
Advate Rahf-pfm	\$114,063.95	15	\$119,877.91	12	\$63,370.28	12	\$297,312.14	39
Helixate Fs	\$43,417.34	1	\$45,053.71	1	\$101,684.25	2	\$190,155.30	4
Recombinate	\$43,580.98	1	\$46,421.09	1	\$44,499.00	1	\$134,501.07	3
Hemofil-m	\$16,711.05	1	\$16,711.05	1	\$16,711.05	1	\$50,133.15	3
Xyntha					\$26,456.08	1	\$26,456.08	1

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

Report Run On: December 31, 2011

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

	Septeml	ber 2011	Octob	er 2011	Novem	oer 2011	Qua	arter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Opiate Agonists	\$504,394.60	24,773	\$506,158.46	24,672	\$486,011.12	23,607	\$1,496,564.18	73,052
Acetaminophen-hydrocodone	\$221,872.33	15,522	\$220,466.34	15,509	\$215,549.96	14,912	\$657,888.63	45,943
Acetaminophen-codeine	\$28,626.13	3,469	\$28,948.53	3,487	\$28,054.13	3,383	\$85,628.79	10,339
Acetaminophen-oxycodone	\$60,082.91	2,127	\$59,579.54	2,062	\$56,830.76	1,925	\$176,493.21	6,114
Tramadol	\$10,131.86	1,804	\$9,860.66	1,762	\$9,301.09	1,683	\$29,293.61	5,249
Morphine	\$47,155.64	370	\$52,001.48	393	\$44,244.80	340	\$143,401.92	1,103
Fentanyl	\$84,045.63	350	\$84,249.46	367	\$81,487.11	337	\$249,782.20	1,054
Acetaminophen-tramadol	\$8,006.84	291	\$7,225.01	255	\$6,998.33	248	\$22,230.18	794
Hydrocodone-ibuprofen	\$6,331.20	249	\$6,632.78	247	\$6,673.51	254	\$19,637.49	750
Oxycodone	\$25,354.81	233	\$23,497.19	209	\$25,921.74	201	\$74,773.74	643
Meperidine	\$1,105.46	93	\$1,069.43	98	\$870.44	81	\$3,045.33	272
Apap/caffeine/dihydrocodeine	\$3,825.23	87	\$4,912.48	89	\$3,449.73	65	\$12,187.44	241
Methadone	\$551.59	70	\$585.47	75	\$672.13	87	\$1,809.19	232
Hydromorphone	\$1,167.08	63	\$1,592.97	83	\$1,845.79	67	\$4,605.84	213
Aspirin-oxycodone	\$574.67	25	\$364.97	15	\$69.30	3	\$1,008.94	43
Oxymorphone	\$4,831.97	12	\$4,243.49	12	\$3,569.24	11	\$12,644.70	35
Tapentadol	\$565.91	3	\$797.43	4	\$328.10	3	\$1,691.44	10

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	Septeml	ber 2011	Octob	er 2011	Noveml	oer 2011	Qua	irter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Penicillins	\$457,376.99	21,171	\$494,592.02	22,669	\$506,138.19	23,285	\$1,458,107.20	67,125
Amoxicillin	\$136,244.81	13,857	\$148,797.84	15,108	\$152,694.75	15,423	\$437,737.40	44,388
Amoxicillin-clavulanate	\$299,706.19	5,659	\$318,189.72	5,890	\$333,026.92	6,196	\$950,922.83	17,745
Penicillin V Potassium	\$16,589.64	1,472	\$16,688.41	1,485	\$16,668.54	1,474	\$49,946.59	4,431
Ampicillin	\$1,963.65	144	\$1,733.14	137	\$1,776.27	153	\$5,473.06	434
Penicillin G Benzathine	\$1,001.22	17	\$1,794.18	27	\$897.90	18	\$3,693.30	62
Dicloxacillin	\$316.47	16	\$200.98	11	\$215.10	12	\$732.55	39
Ampicillin-sulbactam	\$775.12	4	\$1,571.85	4	\$161.93	1	\$2,508.90	9
Benzathine Penicillin-procaine Penicilli	\$260.32	1			\$282.90	6	\$543.22	7
Piperacillin-tazobactam	\$826.31	1	\$1,259.78	2	\$413.88	2	\$2,499.97	5
Oxacillin			\$1,169.13	4			\$1,169.13	4
Nafcillin	\$519.57	1	\$3,186.99	1			\$3,706.56	2
Second Generation Antihistamines	\$431,692.30	17,420	\$451,052.27	18,479	\$416,950.02	17,399	\$1,299,694.59	53,298
Cetirizine	\$399,090.44	14,574	\$417,544.13	15,516	\$383,582.07	14,459	\$1,200,216.64	44,549
Loratadine	\$16,177.33	2,229	\$16,336.93	2,251	\$14,615.24	2,084	\$47,129.50	6,564
Cetirizine-pseudoephedrine	\$7,495.38	386	\$9,643.03	494	\$11,463.15	606	\$28,601.56	1,486
Loratadine-pseudoephedrine	\$2,584.08	148	\$2,461.76	149	\$3,046.80	188	\$8,092.64	485
Levocetirizine	\$3,809.53	56	\$3,558.22	51	\$2,729.39	41	\$10,097.14	148
Acrivastine-pseudoephedrine	\$1,426.77	14	\$346.24	4	\$938.50	12	\$2,711.51	30
Fexofenadine	\$306.96	6	\$577.94	10	\$216.52	6	\$1,101.42	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.

 $\ensuremath{^{\dagger}}$ Molecule names accounting for less than \$500 in quarterly amount paid are not shown

	Septem	ber 2011	Octob	er 2011	Novemb	oer 2011	Qua	irter
AHFS Class / Generic Molecule	Total Paid*	Total Claims						
Desloratadine	\$680.71	6	\$584.02	4	\$358.35	3	\$1,623.08	13
Benzodiazepines	\$204,158.02	16,768	\$211,334.08	16,267	\$198,601.40	16,034	\$614,093.50	49,069
Lorazepam	\$52,326.12	7,695	\$50,145.63	7,431	\$48,505.38	7,290	\$150,977.13	22,416
Alprazolam	\$39,190.88	4,707	\$37,809.90	4,547	\$37,228.22	4,541	\$114,229.00	13,795
Diazepam	\$102,285.40	3,108	\$112,800.54	3,036	\$102,347.66	2,968	\$317,433.60	9,112
Temazepam	\$6,239.10	854	\$6,464.63	851	\$6,657.22	859	\$19,360.95	2,564
Clorazepate	\$2,635.74	243	\$2,567.47	238	\$2,610.15	238	\$7,813.36	719
Triazolam	\$631.47	81	\$543.92	66	\$481.05	62	\$1,656.44	209
Chlordiazepoxide	\$350.34	44	\$436.41	58	\$353.21	44	\$1,139.96	146
Oxazepam	\$393.83	14	\$414.68	15	\$299.95	11	\$1,108.46	40
Adrenals	\$1,391,253.84	13,704	\$1,740,402.12	16,167	\$1,628,360.98	15,582	\$4,760,016.94	45,453
Prednisolone	\$104,891.47	5,801	\$126,404.30	7,058	\$118,102.95	6,703	\$349,398.72	19,562
Budesonide	\$1,075,656.14	3,504	\$1,334,741.96	4,342	\$1,283,299.06	4,166	\$3,693,697.16	12,012
Prednisone	\$7,825.52	1,669	\$9,016.10	1,806	\$8,591.95	1,687	\$25,433.57	5,162
Methylprednisolone	\$11,241.24	916	\$12,498.08	1,011	\$13,456.16	1,111	\$37,195.48	3,038
Fluticasone	\$55,281.38	427	\$65,043.37	489	\$59,146.47	447	\$179,471.22	1,363
Dexamethasone	\$5,423.14	409	\$6,251.04	407	\$6,464.48	455	\$18,138.66	1,271
Budesonide-formoterol	\$54,871.12	268	\$59,761.38	293	\$56,513.05	278	\$171,145.55	839
Mometasone	\$33,900.20	254	\$71,606.87	255	\$34,928.73	264	\$140,435.80	773
Beclomethasone	\$25,815.65	206	\$31,004.04	241	\$27,920.47	221	\$84,740.16	668

	Septeml	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	irter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Hydrocortisone	\$2,801.68	92	\$2,451.67	82	\$2,478.52	87	\$7,731.87	261
Formoterol-mometasone	\$9,589.09	46	\$17,544.93	82	\$12,901.51	61	\$40,035.53	189
Fludrocortisone	\$1,756.40	67	\$1,455.71	59	\$1,097.94	46	\$4,310.05	172
Flunisolide Nasal	\$2,032.16	31	\$2,558.78	39	\$3,375.93	51	\$7,966.87	121
Macrolides	\$405,866.11	13,023	\$499,447.39	15,619	\$514,396.47	16,100	\$1,419,709.97	44,742
Azithromycin	\$364,570.46	12,085	\$443,726.57	14,457	\$451,126.94	14,825	\$1,259,423.97	41,367
Clarithromycin	\$34,153.35	752	\$47,466.69	1,000	\$54,837.68	1,123	\$136,457.72	2,875
Erythromycin	\$6,149.58	154	\$7,638.92	141	\$7,791.81	131	\$21,580.31	426
Erythromycin-sulfisoxazole	\$992.72	32	\$615.21	21	\$640.04	21	\$2,247.97	74
Nonsteroidal Anti-inflammatory Agents	\$154,663.85	13,836	\$157,249.61	14,142	\$145,269.65	13,266	\$457,183.11	41,244
Ibuprofen	\$56,170.45	6,368	\$61,713.51	6,842	\$56,513.05	6,399	\$174,397.01	19,609
Naproxen	\$43,275.33	2,877	\$42,006.82	2,781	\$39,017.35	2,588	\$124,299.50	8,246
Aspirin	\$6,672.28	1,892	\$6,348.82	1,878	\$6,243.14	1,818	\$19,264.24	5,588
Meloxicam	\$8,927.89	1,351	\$9,212.10	1,292	\$9,037.09	1,250	\$27,177.08	3,893
Apap/butalbital/caffeine	\$24,368.40	999	\$22,677.83	957	\$23,457.64	952	\$70,503.87	2,908
Ketorolac	\$7,078.00	441	\$6,939.03	440	\$6,627.23	403	\$20,644.26	1,284
Diclofenac	\$10,722.83	394	\$10,586.59	387	\$9,427.48	358	\$30,736.90	1,139
Indomethacin	\$4,492.85	171	\$4,539.29	160	\$3,547.71	138	\$12,579.85	469
Etodolac	\$2,017.84	70	\$2,516.82	91	\$2,384.72	86	\$6,919.38	247
Ketoprofen	\$759.93	46	\$782.95	53	\$574.09	42	\$2,116.97	141

AHFS Class / Generic Molecule	September 2011		October 2011		November 2011		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Celecoxib	\$8,576.59	53	\$6,933.59	40	\$7,509.37	45	\$23,019.55	138
Oxaprozin	\$1,730.48	47	\$1,669.93	44	\$1,315.43	36	\$4,715.84	127
Sulindac	\$877.80	37	\$997.31	43	\$755.51	31	\$2,630.62	111
Asa/butalbital/caffeine	\$1,055.65	36	\$966.28	36	\$887.86	35	\$2,909.79	107
Flurbiprofen	\$267.77	18	\$255.74	17	\$223.94	14	\$747.45	49
Salsalate	\$343.86	8	\$475.33	12	\$106.24	3	\$925.43	23
Fenoprofen	\$466.15	4	\$483.22	4	\$593.70	5	\$1,543.07	13
Diclofenac-misoprostol	\$644.29	4	\$362.74	2	\$362.74	2	\$1,369.77	8
Beta-adrenergic Agonists	\$735,122.34	12,284	\$817,196.92	14,084	\$800,346.12	13,726	\$2,352,665.38	40,094
Albuterol	\$406,511.13	10,758	\$466,263.63	12,466	\$458,348.48	12,171	\$1,331,123.24	35,395
Fluticasone-salmeterol	\$269,797.43	1,207	\$286,654.75	1,277	\$276,206.68	1,222	\$832,658.86	3,706
Albuterol-ipratropium	\$46,181.76	214	\$48,113.78	223	\$49,986.44	215	\$144,281.98	652
Levalbuterol	\$8,471.96	38	\$11,502.80	59	\$9,904.72	48	\$29,879.48	145
Terbutaline	\$1,844.14	54	\$1,180.64	40	\$1,297.98	44	\$4,322.76	138
Formoterol	\$971.70	6	\$2,115.43	12	\$2,096.76	10	\$5,183.89	28
Pirbuterol	\$938.86	6	\$533.53	3	\$1,884.63	13	\$3,357.02	22
Arformoterol	\$405.36	1	\$810.30	2	\$611.18	2	\$1,826.84	5
Antidepressants	\$449,930.06	12,619	\$426,673.07	12,402	\$398,201.87	12,033	\$1,274,805.00	37,054
Citalopram	\$18,124.09	2,387	\$17,869.88	2,371	\$18,151.23	2,391	\$54,145.20	7,149
Bupropion	\$141,818.30	1,638	\$131,580.32	1,590	\$114,755.28	1,334	\$388,153.90	4,562

AHFS Class / Generic Molecule	September 2011		October 2011		November 2011		Quarter	
	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Trazodone	\$11,134.43	1,397	\$10,854.54	1,338	\$10,660.81	1,376	\$32,649.78	4,111
Fluoxetine	\$19,365.95	1,306	\$19,083.04	1,357	\$18,290.28	1,313	\$56,739.27	3,976
Sertraline	\$14,017.48	1,786	\$13,512.05	1,745	\$13,879.01	1,791	\$28,043.26	3,594
Amitriptyline	\$3,964.80	755	\$3,968.21	773	\$3,876.74	737	\$11,809.75	2,265
Paroxetine	\$8,524.17	592	\$8,324.49	557	\$7,871.64	553	\$24,720.30	1,702
Desvenlafaxine	\$79,197.68	571	\$75,517.15	543	\$72,524.30	521	\$227,239.13	1,635
Mirtazapine	\$20,986.60	547	\$21,274.48	547	\$20,415.47	522	\$62,676.55	1,616
Doxepin	\$9,458.00	446	\$5,450.66	424	\$5,741.04	420	\$20,649.70	1,290
Venlafaxine	\$29,606.60	202	\$29,768.34	215	\$27,635.27	182	\$87,010.21	599
Imipramine	\$8,023.52	203	\$7,932.37	209	\$5,352.50	179	\$21,308.39	591
Escitalopram	\$23,072.78	209	\$21,197.95	183	\$23,174.19	192	\$67,444.92	584
Duloxetine	\$39,969.04	194	\$37,932.63	188	\$36,750.55	189	\$114,652.22	571
Nortriptyline	\$1,215.70	140	\$1,315.19	144	\$1,229.95	135	\$3,760.84	419
Fluvoxamine	\$7,950.32	84	\$7,832.23	74	\$6,526.52	69	\$22,309.07	227
Amitriptyline-perphenazine	\$4,048.58	84	\$3,794.09	69	\$3,232.17	63	\$11,074.84	216
Amitriptyline-chlordiazepoxide	\$1,427.38	29	\$1,576.62	29	\$1,460.94	29	\$4,464.94	87
Clomipramine	\$1,058.99	25	\$870.32	25	\$865.87	21	\$2,795.18	71
Fluoxetine-olanzapine	\$6,194.98	12	\$6,416.40	12	\$5,583.26	10	\$18,194.64	34
Desipramine	\$414.60	5	\$225.47	2	\$127.22	3	\$767.29	10
Sulfonamides	\$154,977.35	11,806	\$140,175.92	10,860	\$130,747.06	10,063	\$425,900.33	32,729
Sulfamethoxazole-trimethoprim	\$153,099.14	11,740	\$139,118.20	10,804	\$128,993.78	9,998	\$421,211.12	32,542

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

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

	Septeml	ber 2011	Octob	er 2011	Novemb	oer 2011	Qua	irter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Sulfasalazine	\$1,181.50	64	\$1,057.72	56	\$1,193.36	64	\$3,432.58	184
Sulfadiazine	\$696.71	2			\$559.92	1	\$1,256.63	3
Cephalosporins	\$639,238.88	10,035	\$703,897.65	11,007	\$721,761.31	11,069	\$2,064,897.84	32,111
Cefdinir	\$266,572.59	3,454	\$310,686.74	3,967	\$325,784.23	4,213	\$903,043.56	11,634
Cephalexin	\$48,895.97	3,171	\$49,872.26	3,170	\$42,024.33	2,844	\$140,792.56	9,185
Cefprozil	\$113,488.39	1,988	\$132,785.20	2,305	\$143,772.58	2,479	\$390,046.17	6,772
Cefixime	\$180,222.41	768	\$183,518.75	790	\$182,776.41	781	\$546,517.57	2,339
Cefuroxime	\$6,639.98	341	\$8,808.98	448	\$8,110.78	413	\$23,559.74	1,202
Cefadroxil	\$6,903.33	185	\$7,613.92	208	\$7,305.29	197	\$21,822.54	590
Ceftriaxone	\$13,409.96	103	\$7,495.26	98	\$8,215.21	108	\$29,120.43	309
Cefaclor	\$604.67	10	\$442.91	8	\$798.67	13	\$1,846.25	31
Cefpodoxime	\$432.80	3	\$302.68	4	\$717.83	10	\$1,453.31	17
Cefepime	\$1,980.98	8	\$1,622.79	3	\$1,146.02	6	\$4,749.79	17
Ceftibuten			\$530.50	2	\$321.42	2	\$851.92	4
Ceftaroline					\$607.05	1	\$607.05	1
Contraceptives	\$492,556.09	10,126	\$511,767.08	10,799	\$478,674.87	9,992	\$1,482,998.04	30,917
Ethinyl Estradiol-norgestimate	\$90,987.81	3,245	\$107,104.74	3,725	\$91,203.16	3,248	\$289,295.71	10,218
Ethinyl Estradiol-norethindrone	\$207,494.08	3,284	\$211,022.44	3,402	\$204,201.22	3,270	\$622,717.74	9,956
Norethindrone	\$35,253.42	1,162	\$36,632.34	1,210	\$34,930.40	1,170	\$106,816.16	3,542
Ethinyl Estradiol-etonogestrel	\$43,552.80	580	\$45,423.19	614	\$42,475.55	565	\$131,451.54	1,759

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

	Septeml	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Ethinyl Estradiol-levonorgestrel	\$46,758.49	560	\$44,622.27	572	\$41,778.56	523	\$133,159.32	1,655
Ethinyl Estradiol-norelgestromin	\$40,728.09	491	\$43,927.81	530	\$44,035.43	529	\$102,866.13	1,294
Ethinyl Estradiol-norgestrel	\$10,024.36	358	\$9,907.23	354	\$9,586.05	342	\$29,517.64	1,054
Drospirenone-ethinyl Estradiol	\$20,018.42	297	\$19,340.76	289	\$17,868.51	271	\$57,227.69	857
Drospirenone/ethinyl Estradiol/levom	\$13,907.35	167	\$14,392.97	168	\$15,612.17	182	\$43,912.49	517
Desogestrel-ethinyl Estradiol	\$5,970.56	169	\$6,292.88	174	\$6,337.90	174	\$18,601.34	517
Dienogest-estradiol	\$2,372.68	28	\$2,004.20	25	\$2,064.24	24	\$6,441.12	77
Ethinyl Estradiol-ethynodiol	\$660.47	24	\$645.86	23	\$614.64	22	\$1,920.97	69
Mestranol-norethindrone	\$346.92	9	\$243.47	7	\$234.94	5	\$825.33	21
Levonorgestrel	\$305.84	8	\$301.22	10	\$286.32	8	\$587.54	18
Anticonvulsants, Miscellaneous	\$952,290.02	10,314	\$918,694.95	10,185	\$887,913.90	9,942	\$2,758,898.87	30,441
Gabapentin	\$88,917.69	2,355	\$88,574.90	2,396	\$83,908.83	2,296	\$261,401.42	7,047
Divalproex Sodium	\$170,422.69	1,648	\$161,594.52	1,584	\$162,676.49	1,576	\$494,693.70	4,808
Levetiracetam	\$109,825.51	1,269	\$100,310.77	1,218	\$95,956.20	1,188	\$306,092.48	3,675
Topiramate	\$54,960.26	1,121	\$55,366.82	1,127	\$53,188.92	1,117	\$163,516.00	3,365
Oxcarbazepine	\$139,857.02	1,078	\$125,141.99	1,006	\$131,909.71	1,015	\$396,908.72	3,099
Lamotrigine	\$78,951.82	920	\$84,019.64	950	\$76,343.16	918	\$239,314.62	2,788
Pregabalin	\$123,376.61	656	\$124,922.22	667	\$118,270.87	635	\$366,569.70	1,958
Carbamazepine	\$38,784.53	647	\$36,371.61	630	\$35,610.83	621	\$110,766.97	1,898
Zonisamide	\$11,698.94	253	\$11,534.71	243	\$11,290.57	242	\$34,524.22	738
Valproic Acid	\$9,191.13	189	\$8,871.65	187	\$8,169.98	169	\$26,232.76	545

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	Septeml	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Lacosamide	\$44,462.29	102	\$48,616.62	104	\$40,586.64	93	\$133,665.55	299
Rufinamide	\$18,243.62	27	\$22,433.58	37	\$23,778.11	39	\$64,455.31	103
Felbamate	\$23,088.88	29	\$12,511.01	16	\$12,844.92	18	\$48,444.81	63
Tiagabine	\$6,771.13	13	\$6,575.55	11	\$7,651.61	11	\$20,998.29	35
Vigabatrin	\$33,737.90	7	\$31,448.53	6	\$25,727.06	4	\$90,913.49	17
Antitussives	\$54,681.26	7,256	\$77,541.56	9,979	\$89,272.87	11,348	\$221,495.69	28,583
Brompheniramine/dextromethorph/p	\$20,405.27	2,235	\$34,358.28	3,681	\$44,474.73	4,854	\$99,238.28	10,770
Codeine-guaifenesin	\$10,884.68	1,993	\$14,757.15	2,616	\$16,091.10	2,876	\$41,732.93	7,485
Nitrofurantoin	\$70,814.98	1,416	\$69,481.13	1,341	\$67,770.75	1,258	\$208,066.86	4,015
Dextromethorphan-guaifenesin	\$5,740.07	1,086	\$7,769.27	1,430	\$7,161.86	1,335	\$20,671.20	3,851
Dextromethorphan	\$8,672.45	778	\$10,341.74	926	\$9,851.64	866	\$28,865.83	2,570
Brompheniramine/dextromethorphan	\$3,356.17	571	\$3,872.64	655	\$3,486.75	575	\$10,715.56	1,801
Benzonatate	\$3,899.53	477	\$4,518.58	533	\$5,588.97	653	\$14,007.08	1,663
Codeine/guaifenesin/pse	\$1,723.09	116	\$1,923.90	138	\$2,617.82	189	\$6,264.81	443
Antipsychotics (atypical And Typical)	\$2,916,888.65	8,988	\$2,960,995.65	9,004	\$2,667,545.57	8,464	\$8,545,429.87	26,456
Risperidone	\$330,255.00	2,975	\$339,691.90	3,067	\$324,426.77	3,012	\$994,373.67	9,054
Aripiprazole	\$943,764.49	1,659	\$937,588.84	1,649	\$973,876.76	1,717	\$2,855,230.09	5,025
Quetiapine	\$691,942.23	1,675	\$708,070.18	1,679	\$670,061.78	1,587	\$2,070,074.19	4,941
Haloperidol	\$21,635.38	484	\$20,933.24	468	\$18,333.61	420	\$60,902.23	1,372
Ziprasidone	\$230,434.13	472	\$212,690.73	451	\$213,784.38	434	\$656,909.24	1,357

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

	Septemb	per 2011	Octob	er 2011	Novemb	oer 2011	Qua	rter
AHFS Class / Generic Molecule	Total Paid*	Total Claims						
Olanzapine	\$391,003.20	498	\$406,632.30	536	\$162,466.65	191	\$960,102.15	1,225
Chlorpromazine	\$12,511.64	288	\$24,892.78	258	\$25,231.18	282	\$62,635.60	828
Paliperidone	\$167,356.09	174	\$176,885.98	180	\$148,112.26	145	\$492,354.33	499
Prochlorperazine	\$3,182.42	170	\$2,945.32	138	\$2,070.14	124	\$8,197.88	432
Asenapine	\$56,681.32	130	\$62,301.26	143	\$58,003.97	134	\$176,986.55	407
Clozapine	\$25,801.25	136	\$21,205.85	111	\$21,217.39	127	\$68,224.49	374
Perphenazine	\$5,236.76	84	\$4,077.50	64	\$3,397.30	62	\$12,711.56	210
Fluphenazine	\$2,530.63	63	\$2,941.56	70	\$1,781.81	49	\$7,254.00	182
Lurasidone	\$24,003.40	52	\$29,213.95	61	\$34,684.61	68	\$87,901.96	181
Thioridazine	\$1,272.38	43	\$1,126.31	40	\$1,288.00	42	\$3,686.69	125
Trifluoperazine	\$1,133.46	26	\$1,309.08	30	\$1,022.90	22	\$3,465.44	78
Thiothixene	\$595.01	24	\$580.47	24	\$441.76	17	\$1,617.24	65
Loxapine	\$1,751.04	21	\$1,784.37	21	\$1,429.50	16	\$4,964.91	58
lloperidone	\$5,513.03	10	\$5,879.51	11	\$5,513.03	10	\$16,905.57	31
Pimozide	\$285.79	4	\$244.52	3	\$401.77	5	\$932.08	12

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

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

Report Run On: December 31, 2011

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

	Septeml	ber 2011	Octob	er 2011	Noveml	per 2011	Qua	arter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Acetaminophen-hydrocodone	\$221,872.33	15,522	\$220,466.34	15,509	\$215,549.96	14,912	\$657,888.63	45,943
Acetaminophen-hydrocodone Bitartrate	\$221,693.58	15,512	\$220,385.96	15,505	\$215,248.38	14,911	\$657,327.92	45,928
Cetirizine	\$399,090.44	14,574	\$417,544.13	15,516	\$383,582.07	14,459	\$1,200,216.64	44,549
Cetirizine Hydrochloride	\$396,233.12	14,269	\$415,003.71	15,242	\$381,275.43	14,196	\$1,192,512.26	43,707
All Day Allergy	\$2,409.15	287	\$2,208.36	260	\$2,015.55	249	\$6,633.06	796
All Day Allergy Children's	\$448.17	18	\$332.06	14	\$291.09	14	\$1,071.32	46
Amoxicillin	\$136,244.81	13,857	\$148,797.84	15,108	\$152,694.75	15,423	\$437,737.40	44,388
Amoxicillin	\$135,197.03	13,845	\$148,027.52	15,099	\$151,315.61	15,410	\$434,540.16	44,354
Moxatag	\$1,047.78	12	\$770.32	9	\$1,379.14	13	\$3,197.24	34
Azithromycin	\$364,570.46	12,085	\$443,726.57	14,457	\$451,126.94	14,825	\$1,259,423.97	41,367
Azithromycin	\$282,810.33	8,448	\$348,617.47	10,263	\$349,906.08	10,345	\$981,333.88	29,056
Azithromycin 5 Day Dose Pack	\$77,425.17	3,455	\$89,605.99	3,959	\$95,572.74	4,231	\$262,603.90	11,645
Azithromycin 3 Day Dose Pack	\$4,334.96	182	\$5,386.38	233	\$5,648.12	249	\$15,369.46	664
Albuterol	\$406,511.13	10,758	\$466,263.63	12,466	\$458,348.48	12,171	\$1,331,123.24	35,395
Albuterol Sulfate	\$180,163.58	5,536	\$222,206.14	6,833	\$229,596.81	6,872	\$631,966.53	19,241
PDL Ventolin Hfa	\$214,347.47	4,977	\$231,532.30	5,373	\$216,871.13	5,053	\$662,750.90	15,403

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

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

	Septem	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	irter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Proventil Hfa	\$11,523.32	216	\$12,203.25	236	\$11,508.27	221	\$35,234.84	673
Albuterol	\$219.24	24	\$182.92	20	\$327.93	24	\$730.09	68
Sulfamethoxazole-trimethoprim	\$153,099.14	11,740	\$139,118.20	10,804	\$128,993.78	9,998	\$421,211.12	32,542
Sulfamethoxazole-trimethoprim	\$105,152.12	6,424	\$95,715.64	5,950	\$88,840.58	5,474	\$289,708.34	17,848
Sulfamethoxazole-trimethoprim Ds	\$45,741.12	5,146	\$42,576.30	4,776	\$39,716.02	4,470	\$128,033.44	14,392
Smz-tmp Ds	\$959.58	106	\$623.02	68	\$437.18	54	\$2,019.78	228
Sulfatrim Pediatric	\$1,246.32	64	\$203.24	10			\$1,449.56	74
Montelukast	\$1,273,627.12	8,363	\$1,368,224.13	8,978	\$1,294,805.89	8,511	\$3,936,657.14	25,852
PDL Singulair	\$1,273,627.12	8,363	\$1,368,224.13	8,978	\$1,294,805.89	8,511	\$3,936,657.14	25,852
Medroxyprogesterone	\$241,974.90	7,626	\$267,614.16	8,697	\$261,926.85	7,794	\$771,515.91	24,117
Medroxyprogesterone Acetate	\$183,552.30	4,386	\$192,578.49	4,494	\$199,381.80	4,524	\$575,512.59	13,404
Depo-subq Provera 104	\$58,069.80	3,219	\$74,090.34	4,161	\$50,442.30	2,595	\$182,602.44	9,975
Depo-provera Contraceptive	\$352.80	21	\$945.33	42	\$12,102.75	675	\$13,400.88	738
Multivitamin, Prenatal	\$352,259.50	8,282	\$334,197.08	7,860	\$315,379.78	7,510	\$1,001,836.36	23,652
Neevodha	\$106,265.70	2,014	\$112,516.12	2,136	\$111,326.50	2,106	\$330,108.32	6,256
Prenatal Plus	\$367.58	34	\$8,334.44	928	\$8,480.04	954	\$17,182.06	1,916
Concept Dha	\$11,044.22	382	\$10,892.96	376	\$11,528.00	400	\$33,465.18	1,158
Rovin-nv Dha	\$17,845.94	408	\$15,340.84	350	\$12,604.48	286	\$45,791.26	1,044
Prenatal Plus	\$8,698.84	976	\$296.74	28	\$189.00	18	\$9,184.58	1,022
Neevo Dha	\$16,782.38	280	\$14,481.84	242	\$13,254.36	224	\$44,518.58	746
Taron-c Dha	\$6,659.94	258	\$6,343.76	244	\$5,757.86	224	\$18,761.56	726

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

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	Septem	ber 2011	Octob	er 2011	Novemb	er 2011	Qua	rter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Nexa Select With Dha	\$18,445.46	244	\$15,288.94	204	\$15,924.42	212	\$49,658.82	660
Preferaob	\$11,685.46	198	\$13,014.36	218	\$12,571.12	208	\$37,270.94	624
Prenaplus	\$2,253.68	210	\$2,280.34	216	\$2,061.34	196	\$6,595.36	622
Preferaob+dha	\$9,333.62	180	\$9,435.74	184	\$11,662.18	232	\$30,431.54	596
Pnv-dha	\$8,758.46	170	\$10,462.36	198	\$10,161.36	190	\$29,382.18	558
Zatean-pn Plus	\$11,234.66	196	\$8,802.96	156	\$9,511.36	168	\$29,548.98	520
Prefera Ob-one	\$16,775.16	238	\$13,659.10	192	\$5,475.36	76	\$35,909.62	506
Prenexa With Dha	\$11,944.98	164	\$12,425.58	168	\$10,458.54	144	\$34,829.10	476
Neevo	\$10,738.26	144	\$11,263.56	152	\$10,159.26	136	\$32,161.08	432
Pnv Select	\$7,064.50	152	\$6,401.70	138	\$7,804.64	136	\$21,270.84	426
Concept Ob	\$3,996.68	148	\$3,520.06	132	\$3,941.86	146	\$11,458.60	426
Triveen Ten	\$5,553.70	164	\$4,389.58	126	\$3,019.14	94	\$12,962.42	384
Vol-plus	\$1,290.66	112	\$1,292.16	116	\$1,317.14	116	\$3,899.96	344
Prenatal Ad	\$1,351.98	104	\$1,341.60	106	\$1,346.50	104	\$4,040.08	314
Prenate Essential	\$10,713.60	120	\$8,138.58	92	\$8,081.76	92	\$26,933.94	304
Citranatal Assure	\$4,552.48	94	\$3,549.16	70	\$5,284.66	110	\$13,386.30	274
Neevo	\$5,593.24	110	\$4,711.30	90	\$2,873.68	58	\$13,178.22	258
Folivan-ob	\$1,395.14	58	\$2,434.00	100	\$1,694.42	70	\$5,523.56	228
Paire Ob Plus Dha	\$3,227.28	86	\$2,795.32	74	\$2,149.20	58	\$8,171.80	218
Citranatal Harmony	\$4,159.16	78	\$3,217.20	60	\$2,870.72	54	\$10,247.08	192
Prenate Elite Plus Iron	\$3,728.10	42	\$6,168.08	70	\$5,561.38	66	\$15,457.56	178
Prenatal 19	\$973.20	70	\$787.02	58	\$714.36	50	\$2,474.58	178
Zatean-pn Dha	\$2,746.40	52	\$3,371.92	64	\$2,854.70	52	\$8,973.02	168
Citranatal 90 Dha	\$2,228.46	48	\$2,281.32	44	\$3,322.84	70	\$7,832.62	162

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

Generic Molecule / Drug Name	Septem	ber 2011	October 2011		Novemb	oer 2011	Quarter	
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Folcal Dha	\$3,029.40	60	\$2,692.08	54	\$1,923.42	38	\$7,644.90	152
Rovin-nv	\$2,865.36	70	\$1,742.82	42	\$1,671.62	38	\$6,279.80	150
Prenatabs Rx	\$588.96	50	\$595.18	50	\$498.74	42	\$1,682.88	142
Se-natal 19	\$559.20	52	\$597.00	46	\$516.56	40	\$1,672.76	138
Tricare Dha One	\$2,701.82	50	\$1,950.36	36	\$1,950.36	36	\$6,602.54	122
Gesticare Dha Dr	\$4,167.68	68	\$1,792.84	28	\$1,402.66	22	\$7,363.18	118
TI-select	\$2,480.48	40	\$1,605.18	28	\$2,418.00	40	\$6,503.66	108
Zatean-pn	\$1,870.50	42	\$1,818.94	40	\$1,025.24	24	\$4,714.68	106
Natelle One Dha	\$4,717.50	50	\$3,397.40	36	\$1,696.70	18	\$9,811.60	104
Preque 10	\$1,988.88	46	\$1,574.54	32	\$1,037.16	24	\$4,600.58	102
Prenatal-u	\$305.28	24	\$426.48	34	\$426.48	34	\$1,158.24	92
Pnv- Iron	\$1,263.76	30	\$1,084.50	26	\$867.92	20	\$3,216.18	76
Citranatal B-calm	\$946.12	26	\$743.76	18	\$659.92	20	\$2,349.80	64
Pnv-dha Plus Docusate	\$1,137.06	26	\$941.38	22	\$468.20	10	\$2,546.64	58
Vinate One	\$153.46	14	\$135.46	14	\$284.14	26	\$573.06	54
Vemavite Prx 2	\$825.60	24	\$657.36	16	\$569.04	12	\$2,052.00	52
Citranatal Dha	\$1,136.92	24	\$842.92	18	\$500.00	10	\$2,479.84	52
Duet Dha Balanced	\$765.82	14	\$811.50	16	\$739.54	14	\$2,316.86	44
Select-ob+dha	\$525.54	12	\$614.20	14	\$567.96	12	\$1,707.70	38
Se-care	\$291.02	12	\$451.92	16	\$112.04	4	\$854.98	32
Folcaps Omega 3	\$521.06	14	\$223.38	6	\$291.20	8	\$1,035.64	28
Vinate Care	\$371.64	12	\$241.76	8	\$179.82	6	\$793.22	26
Completenate	\$77.32	4	\$158.00	8	\$279.08	14	\$514.40	26
Taron-prx Plus Dha	\$470.92	12	\$233.28	6	\$153.52	4	\$857.72	22

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	Septeml	ber 2011	Octob	er 2011	Novemb	per 2011	Qua	arter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Tricare	\$214.92	6	\$280.56	8	\$280.56	8	\$776.04	22
Ultimatecare One	\$296.38	8	\$221.58	6	\$215.58	6	\$733.54	20
Pr Natal 430					\$576.96	18	\$576.96	18
Prefera Ob Plus Dha	\$507.50	12	\$94.40	2	\$171.44	4	\$773.34	18
Nestabs Dha	\$191.64	4	\$97.58	2	\$378.32	8	\$667.54	14
Zatean-ch	\$265.28	8	\$164.24	4	\$76.26	2	\$505.78	14
Viva Dha	\$134.96	2	\$263.92	4	\$263.92	4	\$662.80	10
Clonazepam	\$60,716.22	7,906	\$58,325.52	7,734	\$58,719.48	7,724	\$177,761.22	23,364
Clonazepam	\$60,716.22	7,906	\$58,325.52	7,734	\$58,719.48	7,724	\$177,761.22	23,364
Lorazepam	\$52,326.12	7,695	\$50,145.63	7,431	\$48,505.38	7,290	\$150,977.13	22,416
Lorazepam	\$52,326.12	7,695	\$50,145.63	7,431	\$48,505.38	7,290	\$150,977.13	22,416
Diphenhydramine	\$36,975.68	7,772	\$36,929.04	7,712	\$32,370.00	6,760	\$106,274.72	22,244
Q-dryl	\$23,449.40	4,796	\$23,616.68	4,820	\$20,775.40	4,288	\$67,841.48	13,904
Diphenhydramine Hydrochloride	\$6,794.60	1,536	\$6,671.68	1,508	\$6,143.92	1,348	\$19,610.20	4,392
Diphenhist	\$2,952.64	592	\$3,395.00	660	\$2,603.40	508	\$8,951.04	1,760
Banophen	\$2,918.32	692	\$2,511.56	588	\$1,752.16	424	\$7,182.04	1,704
Diphedryl	\$333.96	60	\$300.28	56	\$595.20	104	\$1,229.44	220
Child Allergy	\$171.52	28	\$132.72	24	\$300.84	52	\$605.08	104
Promethazine	\$77,164.72	6,794	\$76,669.72	6,884	\$82,380.30	7,324	\$236,214.74	21,002
Promethazine Hydrochloride	\$70,329.32	6,352	\$1,840.80	138	\$75,931.64	6,878	\$148,101.76	13,368
Promethazine Hydrochloride	\$895.12	60	\$70,791.46	6,484	\$1,898.36	150	\$73,584.94	6,694

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

	Septem	ber 2011	Octob	er 2011	Noveml	per 2011	Qua	arter
Generic Molecule / Drug Name	Total Paid*	Total Claims						
Promethegan	\$4,161.44	228	\$3,641.00	218	\$4,340.80	272	\$12,143.24	718
Phenadoz	\$2,673.96	214	\$2,039.98	176	\$2,078.06	172	\$6,792.00	562
Ibuprofen	\$56,170.45	6,368	\$61,713.51	6,842	\$56,513.05	6,399	\$174,397.01	19,609
Ibuprofen	\$49,322.99	5,220	\$54,812.91	5,704	\$49,827.77	5,312	\$153,963.67	16,236
Ibu	\$5,658.40	1,010	\$5,464.12	972	\$5,241.67	928	\$16,364.19	2,910
Ibuprofen Childrens	\$947.76	112	\$1,244.54	142	\$1,199.82	130	\$3,392.12	384
Childrens Ibuprofen	\$241.30	26	\$191.94	24	\$243.79	29	\$677.03	79
Prednisolone	\$104,891.47	5,801	\$126,404.30	7,058	\$118,102.95	6,703	\$349,398.72	19,562
Prednisolone Sodium Phosphate	\$27,022.99	2,294	\$35,268.72	2,891	\$35,044.91	2,845	\$97,336.62	8,030
Prednisolone	\$28,632.27	2,111	\$33,567.79	2,485	\$30,711.92	2,277	\$92,911.98	6,873
Veripred 20	\$34,971.60	1,227	\$45,092.24	1,527	\$40,134.92	1,420	\$120,198.76	4,174
Orapred Odt	\$13,585.19	137	\$11,633.86	122	\$11,294.74	112	\$36,513.79	371
Millipred	\$509.99	25	\$694.75	27	\$820.50	45	\$2,025.24	97
Amoxicillin-clavulanate	\$299,706.19	5,659	\$318,189.72	5,890	\$333,026.92	6,196	\$950,922.83	17,745
Amoxicillin-clavulanate	\$296,063.50	5,617	\$313,248.95	5,838	\$328,008.46	6,137	\$937,320.91	17,592
Amoxicillin-clavulanate	\$11,622.70	142	\$24,469.48	333	\$24,556.80	373	\$60,648.98	848
PDL Augmentin	\$1,993.76	24	\$2,809.31	30	\$629.99	5	\$5,433.06	59
Amoxicillin-clavulanate Er	\$1,648.93	18	\$2,131.46	22	\$962.30	10	\$4,742.69	50
Amoxicillin-clavulanate Er	\$1,169.44	12	\$392.04	4	\$2,445.44	29	\$4,006.92	45
PDL Augmentin	\$153.86	1	\$289.70	3	\$2,573.02	30	\$3,016.58	34
PDL Augmentin Xr	\$239.30	2			\$468.50	4	\$707.80	6

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	Septem	ber 2011	Octob	er 2011	Noveml	oer 2011	Qua	irter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Hydroxyzine	\$100,478.32	5,724	\$90,136.34	5,246	\$89,568.54	5,026	\$280,183.20	15,996
Hydroxyzine Hydrochloride	\$83,758.00	4,094	\$72,942.54	3,558	\$72,907.76	3,384	\$229,608.30	11,036
Hydroxyzine Pamoate	\$16,720.32	1,630	\$17,193.80	1,688	\$16,660.78	1,642	\$50,574.90	4,960
Alprazolam	\$39,190.88	4,707	\$37,809.90	4,547	\$37,228.22	4,541	\$114,229.00	13,795
Alprazolam	\$32,633.62	4,640	\$31,439.51	4,481	\$31,362.82	4,486	\$95,435.95	13,607
Alprazolam Er	\$6,557.26	67	\$6,370.39	66	\$5,865.40	55	\$18,793.05	188
Amphetamine-dextroamphetamine	\$654,842.31	4,114	\$662,213.67	4,104	\$667,564.87	4,019	\$1,984,620.85	12,237
PDL Adderall Xr	\$547,565.13	2,539	\$552,667.60	2,557	\$565,844.62	2,607	\$1,666,077.35	7,703
Amphetamine-dextroamphetamine	\$79,478.26	1,418	\$79,238.45	1,374	\$74,234.09	1,253	\$232,950.80	4,045
Amphetamine-dextroamphetamine Er	\$27,798.92	157	\$30,307.62	173	\$27,486.16	159	\$85,592.70	489
Budesonide	\$1,075,656.14	3,504	\$1,334,741.96	4,342	\$1,283,299.06	4,166	\$3,693,697.16	12,012
Budesonide	\$835,842.76	2,950	\$1,063,334.62	3,702	\$1,044,480.32	3,644	\$2,943,657.70	10,296
PDL Pulmicort Respules	\$224,058.00	442	\$253,677.64	514	\$222,939.94	408	\$700,675.58	1,364
PDL Pulmicort Flexhaler	\$15,755.38	112	\$17,729.70	126	\$15,878.80	114	\$49,363.88	352
Metronidazole	\$25,865.18	4,120	\$24,573.10	3,926	\$22,855.38	3,614	\$73,293.66	11,660
Metronidazole	\$25,865.18	4,120	\$24,573.10	3,926	\$22,855.38	3,614	\$73,293.66	11,660
Cefdinir	\$266,572.59	3,454	\$310,686.74	3,967	\$325,784.23	4,213	\$903,043.56	11,634
Cefdinir	\$266,572.59	3,454	\$310,686.74	3,967	\$325,784.23	4,213	\$903,043.56	11,634

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

	Septeml	ber 2011	Octob	er 2011	Noveml	per 2011	Qua	irter
Generic Molecule / Drug Name	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims	Total Paid*	Total Claims
Methylphenidate	\$608,295.94	3,722	\$632,717.73	3,867	\$625,385.45	3,860	\$1,866,399.12	11,449
Methylphenidate Hydrochloride Er	\$273,783.87	1,621	\$311,647.69	1,848	\$337,800.14	2,004	\$923,231.70	5,473
PDL Concerta	\$222,636.67	1,087	\$202,340.26	974	\$180,131.72	855	\$605,108.65	2,916
PDL Metadate Cd	\$54,890.19	353	\$56,630.07	355	\$50,571.10	316	\$162,091.36	1,024
Methylphenidate Hydrochloride	\$7,633.71	270	\$8,951.45	303	\$7,966.20	327	\$24,551.36	900
PDL Daytrana	\$35,609.84	207	\$40,286.34	231	\$37,097.32	214	\$112,993.50	652
PDL Methylin	\$9,097.97	140	\$8,684.28	120	\$7,593.58	107	\$25,375.83	367
Ritalin La	\$4,150.86	28	\$3,869.67	26	\$3,734.33	25	\$11,754.86	79
Methylin Er	\$356.99	12	\$118.88	4	\$177.52	4	\$653.39	20
Methylphenidate Hydrochloride Sr	\$95.79	3	\$149.04	5	\$273.49	7	\$518.32	15
Brompheniramine/dextromethorph/ph	\$20,405.27	2,235	\$34,358.28	3,681	\$44,474.73	4,854	\$99,238.28	10,770
Rynex Dm	\$18,605.97	1,994	\$32,260.49	3,395	\$42,267.95	4,548	\$93,134.41	9,937
Cold & Cough Childrens	\$925.90	118	\$960.51	125	\$995.42	130	\$2,881.83	373
Dimetapp Dm Cold & Cough	\$423.48	57	\$636.17	87	\$472.03	61	\$1,531.68	205
Dimaphen Dm	\$299.92	50	\$330.60	56	\$495.58	88	\$1,126.10	194
Dimetapp Cold & Cough	\$150.00	16	\$170.51	18	\$243.75	27	\$564.26	61
Mometasone Nasal	\$396,285.37	3,369	\$425,331.05	3,598	\$397,415.22	3,377	\$1,219,031.64	10,344
PDL Nasonex	\$396,285.37	3,369	\$425,331.05	3,598	\$397,415.22	3,377	\$1,219,031.64	10,344

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.

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

New Business

Special Analysis Projects

High Doses of Citalopram Associated with Abnormal Heart Rhythms

Background/Issue

Prior to the FDA safety announcement on August 24, 2011, the citalopram drug label stated that certain patients may require a daily dose up to 60mg per day; however, emerging evidence suggests a dose-dependent QT interval prolongation with daily doses of citalopram greater than 40mg per day without additional clinical benefit for treating depression. The following is an excerpt of the FDA safety announcement:

FDA Safety Announcement [8-24-2011]: The U.S. Food and Drug Administration (FDA) is informing healthcare professionals and patients that the antidepressant Celexa (citalopram hydrobromide; also marketed as generics) should no longer be used at doses greater than 40 mg per day because it can cause abnormal changes in the electrical activity of the heart. Studies did not show a benefit in the treatment of depression at doses higher than 40 mg per day.¹

Analysis

Pharmacy claims for all strengths of citalopram were used in the analysis between January 1, 2011 and December 31, 2011. To account for more than once daily dosing and tablet splitting, an estimated daily dose was calculated from the quantity submitted and days supply in the pharmacy claims.

Results

Figure 1 shows citalopram >40mg/day utilization in 2011 by month and prior authorization status. The navy blue line represents prescription drug claims which were processed without a prior authorization and the red line represents claims that had a prior authorization. In the case of citalopram doses over 40mg per day, a "hard edit" was implemented shortly after the FDA safety announcement, which led to a precipitous drop in utilization. A hard edit is an edit which stops the prescription from being filled due to some criteria not being met, in this case a high dose being filled, often requiring a prior authorization.

¹ FDA MedWatch website. FDA Drug Safety Communication: Abnormal heart rhythms associated with high doses of Celexa (citalopram hydrobromide). August 24, 2011. Available at: http://www.fda.gov/DrugS/DrugSafety/ucm269086.htm. Accessed on January 12, 2012.

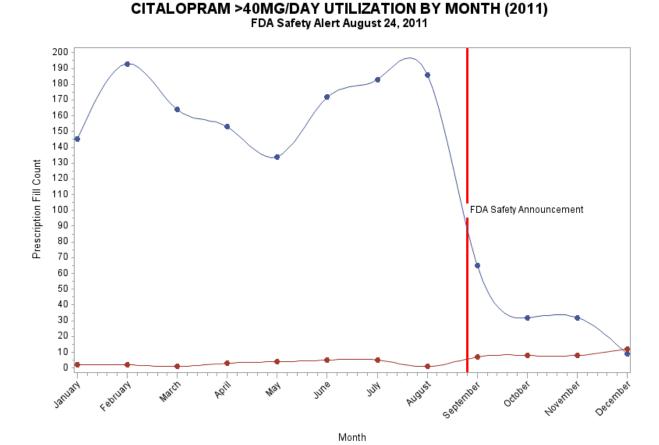


Figure 1 – Citalopram >40mg/day utilization by month (2011)

Conclusions

This analysis was conducted to determine the influence of a "hard edit" on high doses of citalopram following an FDA safety communication and labeling change. Utilization of citalopram in daily doses greater than 40mg significantly dropped since the FDA Safety Announcement.

Recommendation

There are no recommendations at this time. MS-DUR will continue to monitor.

Prior Authorization

Utilization of Simvastatin 80mg Following an FDA Safety Announcement

Background/Issue:

The Division of Medicaid requested MS-DUR to review the claims data for simvastatin 80mg utilization to determine whether a clinical edit or prior authorization would be needed to address potential safety concerns. The following FDA safety announcement was released on June 8, 2011:

"FDA Safety Announcement [06-08-2011] The U.S. Food and Drug Administration (FDA) is recommending limiting the use of the highest approved dose of the cholesterol-lowering medication, simvastatin (80 mg) because of increased risk of muscle damage. Simvastatin 80 mg should be used only in patients who have been taking this dose for 12 months or more without evidence of muscle injury (myopathy). Simvastatin 80 mg should not be started in new patients, including patients already taking lower doses of the drug.

The FDA recommends that healthcare professionals should:

- Maintain patients on simvastatin 80 mg only if they have been taking this dose for 12 or more months without evidence of muscle toxicity.
- Not start new patients on simvastatin 80 mg.
- Place patients who do not meet their LDL cholesterol (LDL-C) goal on simvastatin 40 mg on alternative LDL-C lowering treatment(s) that provides greater LDL-C lowering. [...]²"

Analysis:

The analysis was designed describe simvastatin utilization with regard to the FDA recommendations, specifically addressing whether beneficiaries had been on stable therapy for greater than 12 months and whether "new starts" had occurred since the FDA safety announcement. Prescription claims data from 2010-2011 were used in the analysis. All prescriptions filled for simvastatin 80mg ("high dose") after the FDA safety announcement were reviewed. Treatment naïve beneficiaries receiving a prescription for simvastatin 80mg after the FDA safety announcement were flagged for analysis. To account for tablet splitting, daily dose was calculated from the product strength, quantity submitted and days supply fields. Both brand and generic products were included in the analysis.

Results:

A total of 3,474 beneficiaries had at least one prescription filled for a product containing simvastatin in 2011, with a total of 429 beneficiaries with a calculated daily dose of simvastatin 80mg. In the six months leading up to the FDA safety announcement, roughly 155 beneficiaries per month received a daily dose of 80mg of simvastatin, with the number dropping to 85 beneficiaries by the end of the 2011 (Figure 1).

² FDA Drug Safety Communication: New restrictions, contraindications, and dose limitations for Zocor (simvastatin) to reduce the risk of muscle injury. December 15, 2011. Available at: http://www.fda.gov/Drugs/DrugSafety/ucm256581.htm. Last accessed: January 17, 2012.

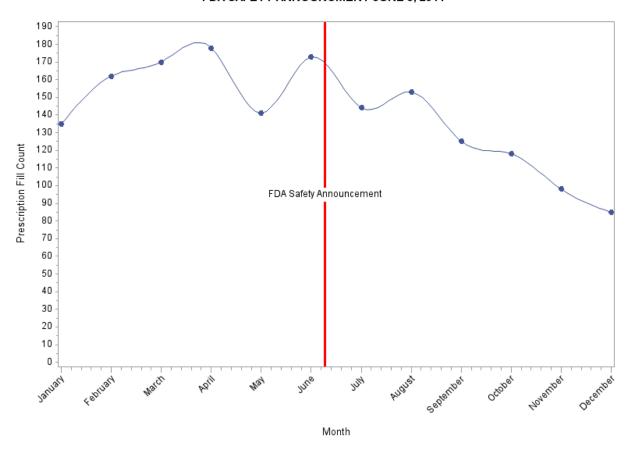


Figure 2
SIMVASTATIN 80MG UTILIZATION (2011)
FDA SAFETY ANNOUNCMENT JUNE 8, 2011

Stable Therapy for 12 Months:

Of those individuals (n=129) who remained on a calculated daily dose of simvastatin 80mg in the final two months of 2011, 56 had been on therapy less than 365 days. Among beneficiaries identified on stable simvastatin 80mg therapy for greater than 12 months (n=73), evidence of myopathy (identified by ICD-9 codes) was found in the medical claims data for 2 beneficiaries while on simvastatin 80mg.

"New Starts":

A total of 85 treatment naïve beneficiaries have received a new prescription for simvastatin 80mg since the FDA safety announcement.

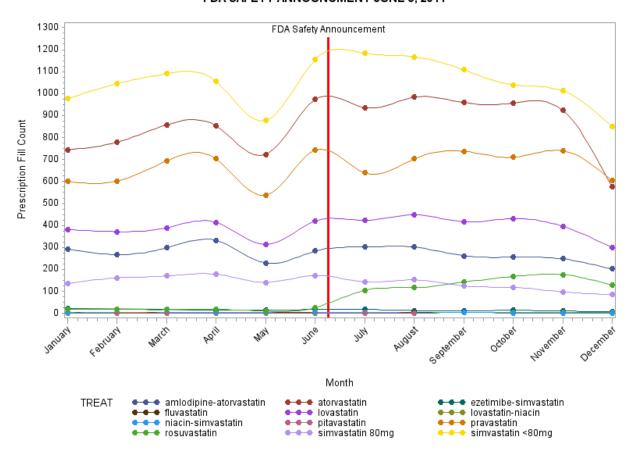
Therapy Switches:

Upon reviewing claims for beneficiaries receiving simvastatin 80mg after the FDA safety announcement, it was evident that many prescribers responded to the safety announcement by switching their patients to another statin or by decreasing the total daily dose of simvastatin to 40mg or less (Table 1).

Table 1. First prescription fill following simvastatin 80mg discontinuation								
Drug Frequency Percent								
atorvastatin	42	29.6%						
lovastatin	1	0.7%						
pravastatin	27	19.0%						
rosuvastatin	18	12.7%						
simvastatin (<=40mg)	54	38.0%						
TOTAL	142	100.00%						

Figure 3

ALL STATIN UTILIZATION (2011)
FDA SAFETY ANNOUNCMENT JUNE 8, 2011



Simvastatin utilization <80mg (yellow) trended downward following the FDA safety announcement (Figure 2). Based on the data presented in Table 1, the rise in pravastatin (rust orange) and rosuvastatin (green) utilization evident in Figure 2 was largely independent of simvastatin switches. Crestor® (rosuvastatin) was listed on the preferred drug list beginning in July 2011. The large dip in atorvastatin (maroon) utilization is likely due to the availability of a copay assistance card, which was made available when Lipitor® lost market exclusivity in December.

Prepared by the Mississippi Evidence-Based DUR Initiative (MS-DUR)

Conclusion:

Because of the rare incidence of myopathies associated with high dose simvastatin, it is possible that prescribers would respond to this safety alert by addressing it at the patient's next scheduled visit, rather than alerting the patient off-cycle. Additionally, the mechanism of this adverse event is well known and has been outlined in the package insert and extant literature prior to the safety alert. As a result, the utilization of simvastatin 80mg should continue a downward trend over the next several months.

Recommendations:

MS-DUR will continue to monitor this exception and will communicate with providers if necessary. Due to the number of simvastatin 80mg "new starts," MS-DUR recommends:

- a clinical edit be implemented at the point of sale to require prior authorization for all simvastatin 80mg equivalent daily doses, and having
- a criteria to include requiring 12 months of stable therapy with no evidence of myopathies during that period.³

³ Hansen KE, Hildebrand JP, Ferguson EE, Stein JH. Outcomes in 45 patients with statin-associated myopathy. *Arch Intern Med.* 2005; 165:2671-2676.

Desmopressin Nasal Spray Use in Nocturnal Enuresis

Background/Issue:

In December 2007, the FDA updated the labeled indications for intranasal formulations of desmopressin acetate (marketed as DDAVP Nasal Spray, DDAVP Rhinal Tube, DDAVP, DDAVP, Minirin, and Stimate Nasal Spray) to remove the indication for treating primary nocturnal enuresis due to the risk of hyponatremia, which has resulted in seizures and, in 2 cases, death. The Division of Medicaid requested that MS-DUR review the use of intranasal formulations of desmopressin for the purpose of treating nocturnal enuresis, for which there is no current medically-accepted indication (including FDA and non-FDA labeled indications). The FDA safety alert is provided:

FDA ALERT [12/4/2007]: FDA has requested the manufacturers update the prescribing information for desmopressin to include important new information about severe hyponatremia and seizures.

Certain patients taking desmopressin are at risk for developing severe hyponatremia that can result in seizures and death. Children treated with desmopressin intranasal formulations for primary nocturnal enuresis (PNE) are particularly susceptible to severe hyponatremia and seizures. As such, desmopressin intranasal formulations are no longer indicated for the treatment of primary nocturnal enuresis and should not be used in hyponatremic patients or patients with a history of hyponatremia. PNE treatment with desmopressin tablets should be interrupted during acute illnesses that may lead to fluid and/or electrolyte imbalance. All desmopressin formulations should be used cautiously in patients at risk for water intoxication with hyponatremia.⁴

FDA has reviewed 61 postmarketing cases of hyponatremic-related seizures associated with the use of desmopressin. Fifty-five cases reported sodium levels ranging from 104 to 130 mEq/L during the seizure event. In two cases, the patients died. Both patients experienced hyponatremia and seizures but the direct contribution of desmopressin to the deaths is unclear. Thirty-six cases were associated with intranasal formulations, of which 25 cases occurred in pediatric patients (<17 years old). The most commonly reported indication of use in these 25 pediatric cases was nocturnal enuresis. Thirty-nine of the 61 cases were associated with at least one concomitant drug or disease that is also associated with hyponatremia and/or seizures.⁵

Analysis:

Beneficiaries with a diagnosis for nocturnal enuresis (ICD-9-CM 788.36) in the medical claim records from January 1, 2011 to December 31, 2011 were included in the analysis. Pharmacy claims for these beneficiaries were reviewed for use of all formulations of desmopressin from 2008 to 2011. Beneficiaries were excluded from the desmopressin analysis if they were found to have a diagnosis of

⁴ FDA Website. {FDA Alert 12/04/2007]. Information for Healthcare Professionals: Desmopressin Acetate (marketed as DDAVP Nasal Spray, DDAVP Rhinal Tube, DDAVP, DDVP, Minirin, and Stimate Nasal Spray) Available at:

 $http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationfor Patients and Providers/ucm 125561. htm. \ Accessed on: January 3, 2012.$

⁵ FDA Website. {FDA Alert 12/04/2007]. Information for Healthcare Professionals: Desmopressin Acetate (marketed as DDAVP Nasal Spray, DDAVP Rhinal Tube, DDAVP, DDVP, Minirin, and Stimate Nasal Spray) Available at:

http://www.fda.gov/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm125561.htm. Accessed on: January 3, 2012.

diabetes insipidus, hemophilia A, or Von Willebrand disease due to the appropriate use of desmopressin in these conditions. Evidence of hyponatremia (ICD-9-CM 276.1) following desmopressin prescription claims was included in the analysis. For comparison, pharmacy claims for imipramine were also reviewed because of its FDA indication for the treatment of nocturnal enuresis for ages ≥6 years.

Results:

A total of 1,025 beneficiaries had a medical claim for nocturnal enuresis during the 2011 calendar year. Of those beneficiaries, 420 had a pharmacy claim for any formulation of desmopressin acetate, with 33 receiving a prescription for an intranasal formulation. Table 1 provides a summary of desmopressin in beneficiaries with a diagnosis of nocturnal enuresis use broken down by formulation and age. The age was calculated at age at the time of the first prescription dispensing identified in the data.

Table 1 – Desmopressin use by formulation and age in beneficiaries (n=420) with a diagnosis of nocturnal enuresis (ICD-9-CM 788.36)

(11 120) 11111 a diagnosis of freetainal charesis (162 5 cm 766166)							
A ===		Total					
Age	Oral	Nasal	Nasal &/ Oral	TOLAI			
<6 years	26	7	0	33			
6-12 year	270	20	6	296			
13-18 years	76*	5	4	85			
>18 years	5	1	0	6			
TOTAL	377	33	10	420			

^{*} One case of hyponatremia was identified in the medical claims for a 17 year old beneficiary receiving desmopressin tablets.

As seen in Table 1, the majority of desmopressin use in individuals diagnosed with nocturnal enuresis is with the tablet formulation (n=377, 89.8%) and only 10.2% had ever had the nasal formulation (n=43) at any time during 2011.

In reviewing beneficiaries claims for an intranasal formulation of desmopressin, it was found that the majority (n=27, 62.8%) had been on therapy for less than 1 year; however, a few beneficiaries (n=16) had been on intranasal therapy for one year or longer.

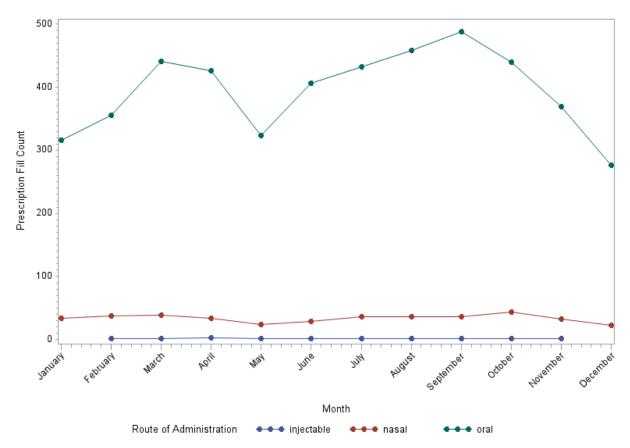
Table 2 – Desmopressin utilization persistency (time from first fill to last fill) among beneficiaries on intranasal formulations n=43

Time on Intranasal Desmopressin Therapy	Number of Beneficiaries	Percent
<1 year	27	62.8%
1 - <2 years	7	16.3%
2 - <3 years	4	9.3%
≥ 3years	5	11.6
TOTAL	91	100%

Figure 1 shows that utilization of intranasal formulations of desmopressin have remained relatively stable over the previous 12 months, while the oral formulation has slight seasonal variations.

Figure 4 - Desmopressin utilization by route of administration for 2011

DESMOPRESSIN UTILIZATION (2011) BY ROUTE OF ADMINISTRATION



Imipramine utilization was reviewed in the beneficiaries diagnosed with nocturnal enuresis because it carries an FDA-labeled indication to treat nocturnal enuresis. Of the beneficiaries with a diagnosis for nocturnal enuresis, 91 had a pharmacy claim for imipramine. Table 3 provides a summary of imipramine utilization by age.

Table 3 – Imipramine use by age in beneficiaries (n=91) with a diagnosis of nocturnal enuresis (ICD-9-CM 788.36)

Age	Number of Beneficiaries	Percent
<6 years	6*	6.6%
6-12 years	65	71.4%
13-18 years	20	22%
>18 years	0	0%
TOTAL	91	100%

^{*} Minimum age was 4.5 years

Prepared by the Mississippi Evidence-Based DUR Initiative (MS-DUR)

Conclusion:

The utilization of desmopressin intranasal formulations has remained stable over the previous 12 months and is being used to treat around 10% of the 420 beneficiaries on any formulation of desmopressin. In some cases, the beneficiaries using intranasal desmopressin have been on therapy for several years. The one case of hyponatremia identified in the data occurred in a 17 year old on desmopressin tablets.

Recommendation:

Unlike other safety actions the FDA may take, this action resulted in the removal of a previously approved indication for the intranasal formulations for the treatment of nocturnal enuresis and updated labeling for all formulations (oral, nasal, and injection), including a contraindication in patients with hyponatremia or a history of hyponatremia. Because there is no explicit contraindication to the intranasal formulation in treating treat nocturnal enuresis and the risk of hyponatremia is a known contraindication for all formulations, MS-DUR does not recommend any action at this time. MS-DUR will continue to monitor the utilization of desmopressin intranasal formulations and may provide educational outreach if necessary.

Suboxone/Subutex Utilization and PA Process

Background/Issue:

Suboxone utilization was brought to the attention of the DUR Board during the November 2008 meeting, noting a 4-fold increase in prescription count for products containing buprenorphine between 2006 and 2007. At that time, the prior authorization (PA) criteria for Suboxone/Subutex consisted of the following:

- For new beneficiaries the provider had to be listed on the Suboxone/Subutex certified registry and the beneficiary had to have a diagnosis of opioid dependence.
- Beneficiaries already receiving therapy could not have claims for opioid analgesics.
- Subutex was only allowed for pregnant beneficiaries.

The DUR Board recommended that a cumulative quantity limit of 62 tablets in 31 days be implemented to address issues with overutilization identified by prescription claims analysis. The DUR Board also voted in favor of a two month approval for Suboxone/Subutex PAs and a requirement of a negative opioid screen and positive Suboxone/Subutex screen at the time of the second PA request. Additionally, the Board recommended that the PA include a signed statement by the patient that he/she is narcotic free at the time of the prescription. It was noted in the minutes of the February 2009 DUR Board meeting that a new PA form was being developed to incorporate these recommendations. After extensive in-house review, DOM postponed a Suboxone specific PA form.

In January 2011, the manual PA process was moved in-house and staffed by the DOM Pharmacy Bureau. During 2011, the resources required for the manual PA process related to Suboxone created a serious strain on the limited PA staffing in DOM. Ms. Hardwick reported to the DUR Board at the August 2011 meeting that this problem was being examined by DOM and MS-DUR. Analysis of the PAs indicated that much of the personnel time was being required to obtain documentation from providers and very seldom did the effort result in denial of a PA request. At the November 2011 DUR Board Meeting, Ms. Hardwick informed the board that DOM was developing a new protocol for moving the Suboxone PA process to SmartPA. The Board discussed the issue and requested that MS-DUR do an updated analysis of Suboxone utilization and plan for appropriate educational and exception monitoring activities to assure that this transition did not result in an increase in inappropriate use of the product.

MS-DUR has worked with DOM during the last few months to support the development of new Suboxone protocols. DOM specifically needed information about clinical data supporting dosage levels and length of time on therapy and information about how much change in prescribing behaviors will be required by the new protocols, whether a lock-in program is justified/needed, and how long a period of maintenance therapy might be appropriate. The major results of the MS-DUR analysis are reported below.

The Prescribing Information for Suboxone sublingual film¹ and tablets² includes the following guidelines for dosing:

- The dosage of SUBOXONE sublingual film should be progressively adjusted in increments/decrements of 2/0.5 mg or 4/1 mg buprenorphine/naloxone to a level that holds the patient in treatment and suppresses opioid withdrawal signs and symptoms.
- The maintenance dose of SUBOXONE sublingual film is generally in the range of 4/1 mg buprenorphine/naloxone to 24/6 mg buprenorphine/naloxone per day depending on the individual patient. Dosages higher than this have not been demonstrated to provide any clinical advantage.
- The decision to discontinue therapy with SUBOXONE sublingual film after a period of
 maintenance should be made as part of a comprehensive treatment plan. Both gradual and
 abrupt discontinuation of buprenorphine has been used, but the data are insufficient to
 determine the best method of dose taper at the end of treatment.

Limited additional clinical data is available regarding recommended dosages for induction and maintenance therapy or for the length of therapy that is appropriate. One debate among addictionologists has been whether Suboxone should be used with opioid-addicted patients for treatment of withdrawal and short term therapy or if patients need to remain on Suboxone treatment indefinitely. One of the few trials to examine effectiveness and length of therapy was reported by Weis, et al³. This clinical trial examined differences in outcomes related to brief treatment (4 weeks) and extended treatment (16 weeks) with a tapered dose for the last weeks of treatment with Suboxone. The conclusions from the study were that prescription opioid-dependent patients reduce opioid use during treatment but if tapered off treatment, even after 12 weeks of treatment, the likelihood of an unsuccessful outcome is high, even in patients receiving counseling in addition to Suboxone therapy. Although much of the focus was on the effectiveness of tapering patients off therapy, the short period of treatment, even in the extended treatment group, does little to answer the question about an appropriate length of treatment. A search of Suboxone treatment centers found that in patient information, centers usually state that Suboxone therapy will last several weeks, months, or a year or more depending on the patient.

Some state Medicaid programs have adopted protocols for restricting the use of Suboxone. Although these regulations are not always posted on web-sites and publically available, DOM did an informal query through a Medicaid DUR list serve and determined that an increasing number of states are implementing restrictions on Suboxone use. Although a complete list of states with restrictions is not available, DOM has determined that as of late 2011, the following states were known to have limits or were considering limits:

- AR 24 months
- ME 24 months
- NE 6 months
- OH Considering 24 month limit
- WI 24 months
- WY 24 months

¹ Reckitt Benckiser Pharmaceuticals, Inc. Suboxone Sublingual Film Prescriging Information. Revised 9/1/2010.

² Reckitt Benckiser Pharmaceuticals, Inc. Suboxone Tablets Prescriging Information. Revised 12/2011.

³ Weis RD, Potter JS, Fiellin DA, et al. Adjunctive Counseling During Brief and Extended Buprenorphine-Naloxone Treatment for Prescription Opioid Dependence. Arch Gen Psychiatry, 2011; 68(12): 1238-1246.

DOM has developed a new protocol for Suboxone that sets maximum dosage levels and limits on the cumulative months of therapy covered and is in the process of moving the PA process to the SmartPA system. The specifics of the new protocol are described later in this report.

MS-DUR Analysis and Results:

MS-DUR conducted an analysis of current Suboxone use in the Mississippi Medicaid program. After running preliminary analysis, MS-DUR and DOM staff met with clinical consultants including a board certified addictionologist and a primary care physician with considerable experience in addiction treatment and Suboxone therapy. Comments from these consultants are included in this report, when appropriate, and were used by DOM in developing the new protocol.

The MS-DUR analysis examined use of Suboxone during the period from January 2008 to August 2011. Analysis included new starts only (patients with their first Suboxone fill occurring after April 1, 2008; January 1 to March 31, 2008 is a wash out period to assure new starts). Key issues examined included:

- Number of new starts and patient getting prescriptions filled each month
- Usual length of time on therapy
- Frequency of restarts after breaks in therapy of 60 or more days
- Daily dosage levels used and dosing patterns when dosages are changed
- Number of unique physicians and pharmacies used for Suboxone by beneficiaries being treated
- Overall number of physicians and pharmacies involved in Suboxone therapies

Number of new starts and typical time on therapy

Table 1 shows the number of new starts each month and the total number of beneficiaries filling prescriptions for Suboxone through the POS program. It appears that DOM efforts starting in late 2010 to better manage Suboxone use have been successful in that the number of new starts dropped after July 2010. At the present time, approximately 20 – 25 beneficiaries start Suboxone therapy in the POS system each month and approximately 200 - 225 beneficiaries are on Suboxone therapy at any one time.

Table 1 Number of Suboxone New Starts and Total Patients by Month															
	2010			2011											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
New starts (includes restarts after 60+ day gap)	41	32	36	36	32	20	12	19	33	24	20	26	21	26	16
Number of RXs filled	212	218	225	251	264	252	163	183	241	230	200	231	184	239	228

^{*} NOTES:

- At the time of this analysis, approximately 29% of POS prescription claims for July 1011 were missing from data provided MS-DUR.

In order to estimate the average length of time patients remain on Suboxone therapy, an analysis was conducted of all new starts who discontinued therapy (went 60+ consecutive days without therapy possession) during the observation period. As shown in column one in Table 2, almost ¾ of beneficiaries starting Suboxone therapy remained on therapy for less than 3 months. Another 18% remained on therapy for 3-6 months. Only 10% of beneficiaries starting Suboxone therapy continuously remained

Table 2 Number of Months Beneficiaries Remained on Therapy

(POS ONLY - Patients starting therapy after 04/1/2008 and stopping therapy for 60+ days before 7/30/2011)

	Initial	First	Second
Number of Months	Treatment	Restart	Restart
on Therapy	n = 1,032	n = 192	n = 33
< 3 months	735 (71%)	137 (71%)	26 (79%)
3 to <6 months	190 (18%)	40 (21%)	4 (12%)
6 to < 9 months	71 (7%)	9 (5%)	2 (6%)
9 to <12 months	22 (2%)	2 (1%)	1 (3%)
12 to < 15 months	9 (1%)	2 (1%)	0 (0%)
15 to < 18 months	3 (0%)	1 (1%)	0 (0%)
18+ months	2 (0%)	1 (1%)	0 (0%)

on therapy for more than 6 months. Based on these results, it would appear that DOM could limit the maximum length of continuous Suboxone therapy to a continuous period of 18 months or perhaps even 12 months and not unduly restrict use from the current treatment patterns that exist.

Breaks in therapy and re-starts

MS-DUR examined the gap in therapy possession occurring between each refill of Suboxone. The most likely criteria to use as the refill gap size for classifying a patient as discontinuing Suboxone therapy and then "re-starting" therapy was determined to be 60 days. As shown in Table 3, approximately 20% of beneficiaries taking Suboxone had a refill gap of 60 days or more. These patients should be considered as having stopped and re-started Suboxone therapy. 4% of Suboxone patients had multiple breaks of 60 days or more during the four years examined. These multiple breaks indicate that these patients may lack commitment to a true addiction therapy treatment plan. Since 20% of beneficiaries had at least one restart after a 60-day discontinuation, DOM should consider allowing at least one restart. Not allowing more than 1 restart would not have affected very many beneficiaries in the last four years, and thus may be a reasonable restriction in Suboxone therapy. However, since this is not a significant problem, DOM may not want to program a clinical edit to restrict additional restarts since it may be more difficult to implement than it is worth. The physician consultant agreed that allowing one restart would be appropriate, but that multiple restarts may not be justified in that it would continue to enable patients and physicians to initiate Suboxone therapy without having patients be seriously committed to successful treatment.

Table 3 Percent of Suboxone Patients Having Refill Gaps and Restarts While on Therapy (POS ONLY - Patients starting therapy after 04/01/2008) N = 1,139									
	Numl	er of Times	Gap or Resta	art Occurred	While on Th	erapy			
Refill Gap Size	0	1	2	3	4	5+			
5 days	631 (55%)	249 (22%)	135 (12%	54 (5%)	33 (3%)	37 (3%)			
10 days	750 (66%)	244 (21%)	80 (7%)	31 (3%)	22 (2%)	12 (1%)			
15 days	825 (72%)	229 (20%)	54 (5%)	16 (1%)	11 (1%)	4 (0%)			
20 days	896 (79%)	182 (16%)	39 (3%)	16 (1%)	6 (1%)	0 (0%)			
30 days	970 (79%)	182 (16%)	39 (3%)	16 (1%)	6 (1%)	0 (0%)			
Discontinuation of 60 days and restart	909 (80%)	183 (16%)	35 (3%)	10 (1%)	2 (0%)	0 (0%)			

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Dosage levels used and dosing patterns

DOM is considering a tapered therapy regimen covering up to 24 mg/day for 1 month; up to 16 mg/day for 4 months; followed by up to 8 mg/day for a defined length of time. As shown in Table 4, the most common starting dose during the last four years was 16 mg/day (75% of patients). Only 13% of patients had starting doses of 24 mg or more per day. The physician consultant indicated that the clinical literature supports an initial dose of 24 mg/day for managing initial withdrawals with patients addicted to heroin, etc., but that doses above 24 mg/day have not been shown to add any additional benefit even in these most severe cases. The consultant also indicated that this initiation dose should be quickly titrated down to a lower initiation dose of not more than 16 mg/day.

Table 4 Product Dosage Strength by Starting Daily Dose (POS ONLY - Patients starting therapy after 04/01/2008)									
Starting Daily Dose		Product	Dosage Strer	ngth Used					
Initial Thearpy	2 MG	2 - 0.5 MG	8 MG	8 - 2 MG	Total				
2 mg/day	1	2	0	0	3 (0%)				
4 mg/day	2	6	0	0	8 (1%)				
6 mg/day	0	9	0	0	9 (1%)				
8 mg/day	0	4	13	106	123 (10%)				
12 mg/day	0	2	0	0	2 (0%)				
16 mg/day	1	0	45	841	887 (75%)				
24 mg/day	0	0	8	132	140 (12%)				
32 mg/day	0	0	1	16	17 (1%)				
Total	4 (0%)	23 (2%)	67 (6%)	1,095 (92%)	1,189				

During the last four years, almost all Suboxone patients (92%) had starting doses that used Suboxone 8 mg - 2 mg. Only 6% of patients used Subutex or buprenorphine 8 mg. Approximately 2% of patients had starting doses less than 8 mg/day. These patients accounted for most of the Subutex or buprenorphine 2 mg use.

These results indicate that only a limited number of beneficiaries would be affected by a starting dose limit of not more than 24 mg/day and that even the limit of 16 mg/day would not require a dose reduction after the first month but for approximately 13% of the patients treated during the last four years.

As shown in Table 5 only a limited amount of dose titration appears to be occurring with Suboxone patients during the last four years. Most patients (79% in column 1) remained on their starting dose throughout their therapy. 92% of patients had only 1 or 2 dosage levels used during their therapy.

Table 5 Number of Different Dosage by Starting Daily Dose (POS ONLY - Patients starting therapy after 04/01/2008) N = 1,227										
Starting Daily Dose	Starting Daily Dose Number of Different Dosages Used During Continuous Therapy									
Initial Thearpy	1	2	3	4	5	6				
2 mg/day	2	0	1	0	0	0				
4 mg/day	7	1	0	0	0	0				
6 mg/day	4	3	0	2	0	0				
8 mg/day	84	34	6	1	0	0				
16 mg/day	748	83	42	11	2	1				
24 mg/day	87	34	10	8	1	0				
32 mg/day	8	4	2	2	1	0				
Total	940 (79%)	159 (13%)	61 (5%)	24 (2%)	4 (0%)	1 (0%)				

Table 6 shows the number of months between the initial treatment with Suboxone and the first restart broken down by the length of the initial treatment. Overall, 75% of beneficiaries starting Suboxone therapy did not have a second treatment cycle. As previously mentioned, 71% of Suboxone patients remained on their initial treatment for less than 3 months. There did not appear to be a relationship between the length of time patients remained on continuous treatment initially and the length of time before restarting if they had a subsequent Suboxone treatment. The length of time between initial treatment and first restart was fairly evenly distributed with as many patients going year before restarting as those starting within 2 to 3 months. MS-DUR concluded, and the physician consultant concurred, that length of the initial Suboxone treatment cannot be used as a surrogate measure of success of treatment.

Table 6 Days Without Possession Before Restart by Length of Initial Treatment (POS ONLY - Patients starting therapy after 04/01/2008)										
Length of Initial		Months	Months Without Possession Between Initial Treatment and First Restart (Row Percents)							
Treatment (Months)	N Column %	No restart	2 + to 3 months	3+ to 6 months	6+ to 9 months	9+ to 12 months	12 + months			
< 3 months	735 71%)	77%	5%	7%	4%	3%	4%			
3 to <6 months	190 (18%)	71%	6%	9%	6%	3%	6%			
6 to < 9 months	71 (7%)	72%	7%	6%	4%	3%	8%			
9 to < 12 months	22 (2%)	59%	9%	9%	18%	0%	5%			
12 + months	14 (1%)	79%	0%	14%	7%	0%	0%			
TOTAL	1,032	75%	5%	8%	4%	3%	5%			

The dosing pattern combinations occurring in patients starting Suboxone therapy as initial therapy or first or second re-start are shown in Table 7. The most common dosing pattern is 16 mg/day continuously (65% for initial therapy and 1st re-start, and 60% for second re-start). Dosing patterns of 16 mg/day followed by lower doses accounted for 3% of patients with initial therapy and patterns of 16 mg/day followed by an increase to 24 mg/day accounted for an additional 3% of patients on initial therapy. These results indicate that most physicians managing Suboxone patients do not titrate doses,

but instead use the same dose throughout therapy. It appears that encouraging MDs prescribing Suboxone to use a tapering dose schedule will require an educational program to support the behavior change.

Table 7 Dosage Patterns For Initial Treatment, First and Second Restarts (POS ONLY - Patients starting therapy after 04/01/2008)							
	Second Restart						
Dosage Pattern 2 /	n = 1,185 2 (0%)	n = 243 1 (0%)	n = 52 0 (0%)				
2/4/8	1 (0%)	0 (0%)	0 (0%)				
4 only	7 (1%)	0 (0%)	0 (0%)				
4/16	1 (0%)	0 (0%)	0 (0%)				
6 only	6 (1%)	0 (0%)	0 (0%)				
6/	3 (0%)	0 (0%)	0 (0%)				
8 only	87 (7%)	20 (08%)	6 (12%)				
8/16	25 (2%)	1 (0%)	0 (0%)				
8 / (lower)	5 (0%)	0 (0%)	0 (0%)				
8 / (higher)	6 (1%)	7 (3%)	0 (0%)				
12 only	2 (0%)	0 (0%)	0 (0%)				
12 /	0 (0%)	0 (0%)	1 (2%)				
16 only	774 (65%)	158 (65%)	31 (60%)				
16/8	20 (2%)	5 (2%)	1 (2%)				
16/8/16/	8 (1%)	1 (0%)	0 (0%)				
16 / 24	49 (4%)	2 (1%)	1 (2%)				
16 / 24 /	28 (2%)	9 (4%)	1 (2%)				
16 / 24 / 32 /	7 (1%)	0 (0%)	0 (0%)				
24 only	92 (8%)	21 (9%)	5 (10%)				
24 / 16	24 (2%)	11 (5%)	5 (10%)				
24 /(lower)	22 (2%)	2 (1%)	0 (0%)				
24 / (higher)	2 (0%)	2 (1%)	1 (2%)				
32 only	9 (1%)	0 (0%)	0 (0%)				
32 /	4 (0%)	2 (1%)	0 (0%)				

As shown in Table 8, less than half (49%) of MDs prescribing Suboxone during the four years used a daily dose of 24 mg. The vast majority (88%) of MDs used a daily dose of 16 mg/day with one or more of their patients on therapy. Over three-fourths of MDs (77%) most frequently prescribed daily dosages of 16 mg/day. If DOM limits starting doses to a maximum of 24 mg/day, it appears this would affect only a limited number of MDs. Table 9 shows the number of doses

Table 8 Dosages Used by MDs Prescribing Suboxone (POS ONLY - Based on patients starting therapy after 04/01/2008)									
	MDs using dosage MDs using dosage MDs using ONLY at all most frequently ONE dose								
Daily Dosage	N = 215	N = 215	N = 108						
2 mg/day	7 (3%)	0 (0%)							
4 mg/day	12 (5%)	0 (0%)							
6 mg/day	10 (5%)	0 (0%)							
8 mg/day	83 (37%)	14 (7%)	12 (11%)						
16 mg/day	198 (88%)	166 (77%)	84 (78%)						
24 mg/day	110 (49%)	35 (16%)	12 (11%)						
32 mg/day	28 (12%)	0 (0%)							

used by MDs broken down by their most frequently used dose. Tables 9 and 10 are limited to only MDs actively treating beneficiaries with Suboxone during 2011, although the data are for all patients treated by these MDs during the previous four years. Although the previous results indicate that MDs often

keep patients on the same daily dose throughout their treatment, MDs currently active in treating DOM patients appear to use a variety of doses across their patients. Only 25% of MDs currently treating DOM beneficiaries used only one daily dose. All of the MDs who predominately used a daily dose of 24 mg/day, also used 16 mg/day and the majority used 8 mg/day or lower doses. Approximately one-fourth (27%) of the MDs who predominately used a daily dose of 16 mg/day only used this dose level. Most of these physicians also used lower and higher daily doses to manage their Suboxone patients. Although it appears that MDs frequently do not titrate individual patient doses in a manner similar to the tapering schedule DOM is considering, it does appear that most MDs currently treating DOM beneficiaries with Suboxone are comfortable using the doses being considered.

Table 9 Number of Different Daily Dosages Used by MDs Prescribing Suboxone MDs Treating Beneficiaries With Suboxone in 2011 ONLY (POS ONLY - Patients starting therapy after 04/01/2008)							
Most Frequent	Number of Different Daily Dosage Used						
Daily Dose Used	1	2	3	4	5	6	7
8 mg/day	1 (100%)						
16 mg/day	14 (27%)	6 (12%)	12 (23%)	12 (23%)	8 (15%)		
24 mg/day		1 (17%)	1 (17%)	2 (33%)		1 (17%)	1 (17%)
TOTAL (n = 59)	15 (25%)	7 (12%)	13 (22%)	14 (24%)	8 (14%)	1 (2%)	1 (2%)

Table 10						
Dosages Used by MDs Prescribing Suboxone by Most Common Dose Used						
MDs With Suboxone Patients in 2011 ONLY						
(POS ONLY - Based on patients starting therapy after 04/01/2008)						
Most Frequent Daily	Dos	Doses Used at Any Stage Of Treatment (number and percent of MDs)				
Dose Used	4 mg/day	6 mg/day	8 mg/day	16 mg/day	24 mg/day	32 mg/day
8 mg/day (n = 1)	-		1 (100%)			
16 mg/day (n = 52)	10 (19%)	5 (10%)	34 (65%)	52 (100%)	34 (65%)	12 (23%)
24 mg/day (n = 6)	2 (33%)	3 (50%)	4 (67%)	6 (100%)	6 (100%)	4 (67%)
TOTAL (n = 59)	12 (20%)	8 (14%)	39 (66%)	58 (98%)	40 (68%)	16 (27%)

Number of physicians and pharmacies involved in therapy

As shown in Table 11, although most beneficiaries with only one treatment start (82%) had only one MD listed on all of their Suboxone prescriptions, some of these patients had multiple MDs listed on their prescriptions. Similar results were observed for beneficiaries being treated with Suboxone during 2011.

Table 11 Number of MDs and Pharmacies Used by Beneficiaries for Suboxone Therapy (Patients starting therapy after 04/01/2008)

	Number of	Number of MDs / Pharmacies Used					
	Treatment Starts	1	2	3	4	5+	
Total Number of	1	764 (82%)	126 (14%)	32 (3%)	8 (1%)	2 (0%)	
	2	96 (48%)	81 (7%)	16 (8%)	8 (4%)	1 (1%)	
MDs Used*	3	16 (40%)	11 (28%)	10 (25%)	1 (3%)	2 (5%)	
(All Beneficiaries N = 1,189)	4	1 (8%)	4 (33%)	6 (50%)	1 (8%)	0 (0%)	
1,103	5	0 (0%)	2 (67%)	0 (0%)	1 (33%)	0 (0%)	
Total Number of Pharmacies Used (All Beneficiaries N = 1,189)	1	672 (72%)	170 (18%)	64 (7%)	19 (2%)	7 (1%)	
	2	79 (39%)	73 (36%)	31 (15%)	13 (6%)	6 (3%)	
	3	12 (30%)	14 (35%)	9 (23%)	4 (10%)	1 (3%)	
	4	2 (17%)	4 (33%)	3 (25%)	1 (8%)	2 (16%)	
	5	1 (33%)	0 (0%)	0 (0%)	1 (33%)	1 (33%)	
Total Number of MDs Used*	1	227 (87%)	31 (12%)	2 (1%)	0 (0%)	0 (0%)	
	2	46 (47%)	38 (38%)	12 (12%)	2 (2%)	1 (1%)	
(Beneficiaries Treated at	3	10 (34%)	8 (28%)	9 (31%)	0 (0%)	2 (7%)	
Some Time in 2011 N = 395)	4	0 (0%)	2 (33%)	4 (67%)	0 (0%)	0 (0%)	
	5	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	
Total Number of Pharmacies Used (Beneficiaries Treated at Some Time in 2011 N=395)	1	200 (77%)	44 (17%)	15 (6%)	1 (0%)	0 (0%)	
	2	36 (36%)	38 (38%)	19 (19%)	5 (5%)	1 (1%)	
	3	8 (28%)	8 (28%)	9 (31%)	3 (10%)	1 (3%)	
	4	1 (17%)	1 (17%)	3 (50%)	1 (17%)	0 (0%)	
	5	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	

^{*} Number of different MDs identified on Suboxone prescriptions filled for beneficiary

Multiple pharmacy use was even more frequent among Suboxone patients. Only 72% of beneficiaries with one Suboxone treatment cycle during the last four years had all of their Suboxone prescriptions filled at the same pharmacy. Although some multiple pharmacy use could be the result of using different locations of the same chain pharmacy, 13% of these patients used 2 or more different pharmacies during their only Suboxone therapy.

Although it would appear that use of multiple MDs and multiple pharmacies may be a problem in controlling Suboxone use, DOM should carefully consider implementation of a lock-in program and what goals would hopefully be achieved by such a change. If the goal is to make sure the dispensing pharmacist has the opportunity to review use of narcotics or other products that are contraindicated in Suboxone therapy, this may not be any more achievable than the current system allows. A patient paying cash for other medications would not be required to use the lock-in pharmacy for cash purchases. Thus the lock-in would not help identify these purchases any better than the existing system does. If Medicaid pays for the other medications, the prescriptions will be available in the POS system and could be detected in SmartPA edits even if the medications were purchased at different pharmacies. The administrative overhead of managing a lock-in program must be carefully weighed against the anticipated benefits of such a program.

Targeted education programs regarding changes in Suboxone coverage and of desired treatment guidelines would not be difficult for MS-DUR and DOM to undertake since there are only 60 MDs who prescribed Suboxone for DOM beneficiaries in 2011. The need for education, however, is reflected in the fact that more than half (52%) of these MDs only had a single DOM patient on Suboxone and

another 30% had 5 or fewer patients (Table 12). The clinical consultant indicated that many practices will limit the number of Medicaid patients under Suboxone treatment since the total number of patients they can treat is limited. This may mean that these physicians are treating a much larger number of Suboxone patients than is reflected by these counts. However, the limited number of Medicaid Suboxone patients in many of these practices could reflect a low volume of Suboxone use in the practice and the possibility that the practice is not appropriately staffed to handle the special issues related to the use of Suboxone.

Table 12 Distribution of MDs by Number of Beneficiaries Started on Suboxone Each Year (Patients starting therapy after 04/01/2008)				
Number of Benes Treated by MD	2008 N = 86	2009 N = 76	2010 N = 76	2011 N = 60
1	38 (44%)	32 (42%)	35 (46%)	31 (52%)
2 to 5	26 (30%)	23 (30%)	24 (32%)	18 (30%)
6 to 10	7 (8%)	12 (16%)	11 (14%)	6 (10%)
11 to 20	9 (10%)	5 (7%)	4 (5%)	5 (8%)
21 to 50	5 (6%)	4 (5%)	2 (3%)	0 (0%)
51+	1 (1%)	0 (0%)	0 (0%)	0 (0%)

New DOM Suboxone protocol

DOM developed the a new Suboxone protocol based on results of the MS-DUR analysis, review of the clinical literature, Suboxone labeling and dosing guidelines, information from how other Medicaid programs are handling Suboxone, and clinical consultant recommendations. The specific criteria included in the new protocol are outlined below.

- Suboxone is covered for opioid-addiction treatment and not for pain.
- Beneficiaries will be covered for a cumulative maximum of 24 months (720 days) of therapy after implementation of the new coverage guidelines. Cumulative days are counted as the total days supply for all prescriptions regardless of daily dose.
- Suboxone and Subutex prescriptions will be reviewed at initial fill and at each refill and a SmartPA approval will be issued when appropriate based on the following criteria:
 - o Treatment must be for diagnosis of addiction not pain.
 - o Initial treatment start:
 - A maximum daily dose of 24 mg/day for the first month of therapy
 - A maximum of 16 mg/day for the next 4 months of therapy
 - A maximum of 8 mg/day maintenance dose for the remainder of time on therapy up to a cumulative 24 months of coverage.
 - A refill gap of 60 days (90 calendar days from last fill of 30 day supply to current attempt to refill) will be considered to be a discontinuation of therapy that requires a restart in treatment.
 - Beneficiary can only have 1 restart of therapy, regardless of cumulative days covered.

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- Dosing for restart of treatment will be limited to:
 - A maximum of 16 mg/day for 2 months of therapy
 - A maximum of 8 mg/day maintenance dose for the remainder of time on therapy up to a cumulative 24 months of coverage.
- Subutex can only be given during pregnancy.
- Prescriptions for 2mg strength tablets have a quantity limit of 60
- Beneficiaries cannot have prescription for more than 5 day supply of opiate while on Suboxone therapy.
 - Opiate prescription presented for more than 5 day supply will be rejected with message to pharmacy that patient is on Suboxone therapy and cannot have opiate prescription for more than 5 day supply and remain on Suboxone/Subutex therapy.
 - Suboxone/Subutex refills will be rejected if opiate prescription for more than 5 day supply has been filled within last 30 days.
 - Maximum of 2 5-day opiate prescription fills can be covered while on Suboxone therapy.

Recommendations:

Based on prior treatment patterns, it appears that the new Suboxone protocol can be implemented by DOM with a minimum of change being required among MD prescriber behaviors. Although most MDs do not currently use doses that exceed those in the new protocol, educating MDs about the use of higher doses for induction and stabilization and then reducing patients to lower doses for maintenance therapy will require some education. MS-DUR recommends that the following educational and exception monitoring activities be undertaken to support implementation of the new protocol:

- MS-DUR will work with DOM to develop a Medicaid Suboxone Therapy Guide Sheet that will be sent, along with other educational materials, to all MDs currently prescribing Suboxone for Medicaid beneficiaries. The guide sheet and materials will be mailed prior to implementation of the new protocol.
- During the first year of implementation, MS-DUR will run monthly exceptions monitoring and send educational material to address the following situations:
 - New physician prescribing Suboxone/Subutex to Medicaid beneficiary MD educational materials sent to MD
 - Patient beginning new treatment PT level education materials sent to patient about
 DOM coverage, patient responsibilities, etc.
 - Patients subject to reduction in maximum daily dose during the next month MD will be mailed notice about patients and reminded about DOM coverage guidelines.
- MS-DUR will continuously monitor Suboxone utilization for changes in utilization trends before
 and after implementation of the new protocol and will report on these trends at upcoming DUR
 Board Meetings.

Exceptions Monitoring Criteria Recommendations

MISSISSIPPI MEDICAID RETROSPECTIVE DRUG UTILIZATION REVIEW EXCEPTIONS MONITORING CRITERIA RECOMMENDATIONS

Criteria Recommendations

1. Long-term use of proton-pump inhibitor therapy

Message: Several published observational studies suggest that proton pump inhibitor (PPI) therapy may be associated with an increased risk for osteoporosis-related fractures of the hip, wrist, or spine. The risk of fracture was increased in patients who received high-dose, defined as multiple daily doses, and long-term PPI therapy (a year or longer). Patients should use the lowest dose and shortest duration of PPI therapy appropriate to the condition being treated.

Exception Type: IDU – Extended duration

Input 1 Input 2

Drug class: Proton pump inhibitors Therapy >1 year

References:

FDA Drug Safety Labeling Changes. November 2011. Available at:

http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm262248.htm

2. Coadministration of phenytoin and delavirdine contraindicated

Message: The coadministration of phenytoin and delavirdine (Rescriptor) is contraindicated due to potential for loss of virologic response and possible resistance to delavirdine (Rescriptor) or to the class of non-nucleoside reverse transcriptase inhibitors.

Exception Type: DDI - Drug-drug interaction

Field Type 1 Field Type 2 phenytoin delavirdine

References:

FDA Drug Safety Labeling Changes. December 2011. Available at:

http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm286345.htm

3. Risk of fetal toxicity with the use of captopril

Message: The FDA updated the labeling of captopril (Capoten) in December 2011 to include a warning recommending the discontinuation of captopril as soon as possible after a pregnancy is detected. Drugs that act directly on the renin-angiotensin system can cause injury and death to the developing fetus.

Exception Type: DDC - Drug-disease contraindication

Field Type 1 Field Type 2 captopril pregnancy

References:

FDA Safety Labeling Changes. December 2011. Available at:

http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm258784.htm

4. Risk of fetal toxicity with the use of azilsartan

Message: The FDA updated the labeling of azilsartan (Edarbi) in December 2011 to include a warning to advise prescribers against the use of drugs that act on the rennin-angiotensin system during the second and third trimesters of pregnancy reduces fetal renal function and increases fetal and neonatal morbidity and death

Exception Type: DDC - Drug-disease contraindication

Field Type 1 Field Type 2 azilsartan pregnancy

References:

FDA Safety Labeling Changes. December 2011. Available at:

http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm258784.htm

5. Telbivudine (Tyzeka) contraindicated with pegylated interferon alfa-2a (Pegasys)

Message: The FDA updated the labeling of Tyzeka in December 2011 to include a contraindication with pegylated interferon alfa-2a (Pegasys) due to the increased risk of the occurrence and severity of peripheral neuropathy when the drugs are taken together, in comparison to both drugs alone.

Exception Type: DDI - Drug-drug interaction

Field 1 Field 2

telbivudine pegylated interferon alfa-2a

References:

FDA MedWatch Safety Labeling Changes. December 2011. Available at: http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm287523.htm

6. Avoid concomitant use of clopidogrel with select proton pump inhibitors

Message: In December 2011, the FDA changed the Warning and Precautions labeling on clopidogrel, advising prescribers to avoid concomitant use of clopidogrel (Plavix) with omeprazole (Prilosec) or esomeprazole (Nexium) because both significantly reduce the antiplatelet activity of Plavix. Concomitant administration of clopidogrel with pantoprazole reduces the pharmacological activity of clopidogrel, while concomitant administration of lansoprazole and clopidogrel in healthy subjects had no clinically important effect.

Exception Type: DDI - Drug-drug interaction

Field Type 1 Field Type 2 Clopidogrel omeprazole

esomeprazole pantoprazole

References:

FDA Drug Safety Labeling Changes. December 2011. Available at: http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm225843.htm

7. Use of pimozide (Orap) with strong CYP 2D6 inhibitors is contraindicated

Message: In September 2011, the FDA added a contraindication to the label of pimozide (Orap) stating clinical drug interaction studies have demonstrated that pimozide is metabolized by CYP 2D6. Concomitant use of ORAP with strong CYP 2D6 inhibitors is contraindicated.

Exception Type: DDI - Drug-drug interaction

Field 1 Field 2

pimozide Strong CYP 2D6 inhibitors

References:

FDA MedWatch Drug Labeling Change. September 2011. Available at: http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm175823.htm

8. Combined total daily dose of acetaminophen not to exceed 4,000mg in 24 hours

Message: In January 2011, the FDA added a black box warning to products containing acetaminophen and recommended that manufacturers limit acetaminophen to 325mg per tablet, including prescription combination products. The combined total daily dose of acetaminophen from all products should not exceed 4,000mg in a 24 hour period due to the risk of liver injury.

Exception Type: IDO - High dose alert

Field 1 Field 2

acetaminophen

References:

FDA MedWatch Drug Labeling Change. January 2011. Available at:

http://www.fda.gov/Drugs/DrugSafety/ucm239821.htm

9. Avoid co-administration of aliskiren with cyclosporine

Message: Products containing aliskiren (e.g., Amturnide, Tekamlo, Tekturna, Valturna, etc) should not be used in combination with cyclosporine due to the risk of significant increases in aliskiren blood concentrations.

Exception Type: DDI - Drug-drug interaction

Field Type 1 Field Type 2 aliskiren cyclosporine

References:

FDA MedWatch Drug Labeling Change. March 2011. Available at:

http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm250259.htm

10. Avoid co-administration of aliskiren with itraconazole

Message: Products containing aliskiren (e.g., Amturnide, Tekamlo, Tekturna, Valturna, etc) should not be used in combination with itraconazole due to the risk of significant increases in aliskiren blood concentrations.

Exception Type: DDI - Drug-drug interaction

Field Type 1 Field Type 2 aliskiren itraconazole

References:

FDA MedWatch Drug Labeling Change. March 2011. Available at:

http://www.fda.gov/Safety/MedWatch/SafetyInformation/ucm250259.htm

11. Aliskiren-containing products should not be used in combination with ACE inhibitors or ARBs in patients with diabetes

Message: Products containing aliskiren (e.g., Amturnide, Tekamlo, Tekturna, Valturna, etc) should not be used in patients with diabetes as a precautionary measure due to interim results from the Aliskiren Trial in Type 2 Diabetes Using Cardio-Renal Endpoints (ALTITUDE).

Exception Type: DDC - Drug-disease contraindication

Field Type 1 Field Type 2 aliskiren type 2 diabetes

References:

Novartis Pharmaceuticals Corporation. Dear Healthcare Professional Letter. January 2012. Available at: http://www.pharma.us.novartis.com/assets/pdf/TKT-1118923%20Dear_HCP_Letter_email_with%20Tek-Val%20Pls vf.pdf

12. Aliskiren-containing products should not be used in combination with ACE inhibitors or ARBs in patients with diabetes

Message: Due to interim results from the Aliskiren Trial in Type 2 Diabetes Using Cardio-Renal Endpoints (ALTITUDE), it is recommended that healthcare professionals stop the use of Valturna (aliskiren and valsartan) tablets in patients who are diabetic.

Exception Type: DDC - Drug-disease contraindication

Field Type 1 Field Type 2 aliskiren type 2 diabetes

References:

Novartis Pharmaceuticals Corporation. Dear Healthcare Professional Letter. January 2012. Available at: http://www.pharma.us.novartis.com/assets/pdf/TKT-1118923%20Dear_HCP_Letter_email_with%20Tek-Val%20PIs vf.pdf

Proposed Revision of Select Exceptions Monitoring Criteria

[12-15-2011] The U.S. Food and Drug Administration (FDA) is notifying the public that it has revised the dose limitation for the cholesterol-lowering drug simvastatin from 10 mg to 20 mg when it is coadministered with the cardiac drug amiodarone. In June 2011, FDA previously recommended that the dose limitation for simvastatin be decreased from 20 mg to 10 mg, and has now reconsidered that recommendation.

Co-administration of simvastatin with select drugs
 Description: Due to an increased risk of myopathies, the dose of simvastatin should not exceed
 10mg/day for patients taking amiodarone, verapamil or diltiazem. Additionally, the dose of
 simvastatin should not exceed 20mg for individuals taking amiodarone, amlodipine or ranolazine.

Exception Type: Drug-drug interaction (DDI)

Input 1	<u>Input 2</u>
amiodarone	simvastatin >10mg
verapamil	simvastatin >10mg
diltiazem	simvastatin >10mg
amiodarone	simvastatin >20mg
amlodipine	simvastatin >20mg
ranolazine	simvastatin >20mg

References:

Zocor® (simvastatin) Package Insert, December 2011, Merck, Inc.

FDA Drug Safety Communication: Revised dose limitation for Zocor (simvastatin) when taken with amiodarone. http://www.fda.gov/Drugs/DrugSafety/ucm283137.htm