

South Dakota
Department of Social Services

Medicaid P&T Committee Meeting

March 12, 2010





DEPARTMENT OF SOCIAL SERVICES

MEDICAL SERVICES

700 Governors Drive

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**SOUTH DAKOTA
MEDICAID P&T COMMITTEE MEETING
AGENDA**

Friday, March 12, 2010

1:00 – 3:00 PM

DDN Locations:

Sioux Falls

University Center

Room UC189S

2205 Career Avenue

Pierre

Capitol Building

DDN Room B

500 E Capitol

Rapid City

Rapid City Regional Hospital

353 Fairmont Blvd/Edu. Services

Call to Order

Approval of Minutes of Previous Meeting

Prior Authorization Update

Review of Top 15 Therapeutic Categories/Top 25 Drugs

Old Business

Antipsychotics

Antidepressants

Cerebral Stimulants

New Business

Drug Product and Utilization Review

Suboxone/Subutex

Prior Authorization of High Cost/Low Utilization Drugs

Oral Presentations and Comments by Manufacturers' Representatives

Next Meeting Date/Adjournment

**Minutes of the December 11, 2009
Pharmacy & Therapeutics (P&T) Committee Meeting
SD Department of Social Services, Medical Services Division**

Members present

Dana Darger, R.Ph.; Bill Ladwig, R.Ph.; Dennis Hedge, PharmD.; Rick Holm, M.D.; Debra Farver, PharmD.; Willis Sutliff, M.D.; Galen Goeden, R.Ph., Timothy Soundy, M.D., James Engelbrecht, M.D.

Members absent

Verdayne Brandenburg, M.D.

DSS staff present

Mike Jockheck, RPh; Larry Iversen, Director of Medical Services

HID staff present

Candace Rieth, Pharm.D.

Administrative Business

The P&T meeting was called to order by D. Darger at approximately 1:00pm. The minutes of the September 11, 2009 meeting were presented. G. Goeden made a motion to approve. D. Farver seconded the motion. The motion was approved unanimously.

Prior Authorization Statistics

C. Rieth presented an overview of the prior authorization (PA) activity for September 2009. There were a total of 2,174 PAs processed in the month of September, with 99.72% of those requests responded to in less than 8 hours. There were 1,940 (89%) requests received electronically and 234 (11%) requests received by fax. In response to a request from the committee, C. Rieth presented the number of approvals and denials, by form type, for the faxed (manual) PA requests.

Analysis of the Top 15 Therapeutic Classes

C. Rieth reviewed the Top 15 Therapeutic Classes by total cost of claims from 07/01/2009 – 09/30/2009. The top five classes were antipsychotics, anticonvulsants, cerebral stimulants, amphetamines, and antidepressants. The top 15 therapeutic classes make up 41.47% of total claims.

Antipsychotic Review

C. Rieth reviewed antipsychotic utilization with the P&T committee. At the September meeting, W. Sutliff made a motion that the psych experts on the committee develop a proposal for a tiered system for the antipsychotics and the antidepressants and present it at the December meeting. The committee reviewed the proposal. If a prior authorization is implemented, the committee made the recommendation that all recipients currently stable on therapy be grandfathered. The committee also suggested that a list of psychiatrists as well as mid-levels, supervised by a psychiatrist, be maintained and exempt from the prior authorization process. W. Sutliff made a motion to implement a prior authorization on antipsychotics and that a form and criteria be developed for the committee to review at the next meeting. D. Hedge seconded the motion. Phyllis Arends, representing NAMI, spoke against implementation of a prior authorization on antipsychotics. The motion was approved unanimously.

Antidepressant Review

C. Rieth reviewed antidepressant utilization with the P&T committee. At the September meeting, W. Sutliff made a motion that the psych experts on the committee develop a proposal for a tiered system for the antipsychotics and the antidepressants and present it at the December meeting. The committee reviewed the

proposal. The committee suggested that a list of psychiatrists as well as mid-levels, supervised by a psychiatrist, be maintained and exempt from the prior authorization process. B. Ladwig made a motion to implement a prior authorization on antidepressants and to exclude bupropion + SSRI and mirtazapine + SSRI from duplicate therapy rejection. G. Goeden seconded the motion. Phyllis Arends, representing NAMI, spoke against implementation of a prior authorization on antidepressants. Donna Linke, CNP, spoke against prior authorization of antidepressants. Lois Mastin, representing Forest, spoke against prior authorization of antidepressants. The motion was approved unanimously. A prior authorization form and criteria will be developed for the committee to review at the next meeting.

PPI Review

C. Rieth reviewed PPI utilization with the P&T committee. G. Goeden made a motion to take generic Prevacid off of prior authorization. B. Ladwig seconded the motion. There was no public comment. Motion passed unanimously.

Nuvigil/Provigil Review

C. Rieth reviewed Nuvigil/Provigil information with the P&T committee. A motion was made at the September meeting to place Nuvigil and Provigil on prior authorization. There was no public comment. The motion was approved unanimously.

ADHD Review

Because of time constraints, this topic will be reviewed at the March, 2010 meeting.

Savella Review

C. Rieth reviewed Savella information with the P&T committee. The committee tabled the discussion on Savella.

Sancuso Review

C. Rieth reviewed Sancuso information with the P&T committee. D. Farver made a motion that Sancuso be placed on prior authorization. B. Ladwig seconded the motion. There was no public comment. Motion passed unanimously.

The next meeting date is March 12, 2010. The location should remain the same. A motion was made by T. Soundy at 3 pm to adjourn the SD Medicaid P&T meeting. G. Goeden seconded. Motion passed unanimously and the meeting was adjourned.

**South Dakota Medicaid
Monthly Prior Authorization Report
December 1, 2009 – December 31, 2009**

PA Response Time Ratio

Total PAs	Response Under 8 Hours	Response Over 8 Hours	% Under 8 Hours	% Over 8 Hours
2,294	2,289	5	99.78%	0.22%

By Form Type

Form Type	Description	Approve	Deny
AFX	Amrix and Fexmid	0	18
ALT	Altabax	6	35
AMB	Ambien CR	33	141
ANF	Anti-infectives (antibiotics)	0	5
ANT	Antihistamines	22	75
ARB	ARBS	21	57
DAW	Dispense As Written	13	44
GRH	Growth Hormone	11	4
HLM	Head Lice Medication	19	52
MAX	Max Units Override	93	1,224
PPI	Proton Pump Inhibitors	82	248
SMR	Skeletal Muscle Relaxants	1	0
ULT	Ultram ER	42	44
VUS	Vusion	1	1
XOL	Xolair	2	0
Totals		346	1,948

By Request Type

12/01/09 - 12/31/09	# of Requests	Electronic Requests		Faxed Requests		Mailed Requests		Phone Requests	
		#	%	#	%	#	%	#	%
Amrix and Fexmid	18	14	78%	4	22%	0	0%	0	0%
Altabax	41	36	88%	5	12%	0	0%	0	0%
Ambien CR	174	150	86%	24	14%	0	0%	0	0%
Anti-infectives (antibiotics)	5	5	100%	0	0%	0	0%	0	0%
Antihistamines	97	76	78%	21	22%	0	0%	0	0%
ARBS	78	71	91%	7	9%	0	0%	0	0%
Dispense As Written	57	33	58%	24	42%	0	0%	0	0%
Growth Hormone	15	2	13%	13	87%	0	0%	0	0%
Head Lice Medication	71	44	62%	27	38%	0	0%	0	0%
Max Units Override	1,317	1,213	92%	104	8%	0	0%	0	0%
Proton Pump Inhibitors	330	261	79%	69	21%	0	0%	0	0%
Skeletal Muscle Relaxants	1	0	0%	1	100%	0	0%	0	0%
Ultram ER	86	75	87%	11	13%	0	0%	0	0%
Vusion	2	1	50%	1	50%	0	0%	0	0%
Xolair	2	0	0%	2	100%	0	0%	0	0%
Prior Authorization Totals	1,778	1,583	89%	195	11%	0	0%	0	0%



**South Dakota Medicaid
Monthly Prior Authorization Report
December 1, 2009 – December 31, 2009**

Electronic PAs (unique)

12/01/09 - 12/31/09	# Unique Approved	# Unique Denied	# Unique Incomplete	Unique Total	Approval %	Total Transactions
Prior Authorizations:						
Amrix and Fexmid	0	14	0	14	0.00%	14
Altabax	1	35	0	36	2.80%	36
Ambien CR	16	130	0	146	11.00%	150
Anti-infectives (antibiotic)	0	5	0	5	0.00%	5
Antihistamines	8	68	0	76	10.50%	76
ARBS	14	44	0	58	24.10%	71
Dispense As Written	0	33	0	33	0.00%	36
Growth Hormone	0	2	0	2	0.00%	2
Head Lice Medication	0	43	0	43	0.00%	44
Max Units Override	20	1,121	0	1,141	1.80%	1,210
Proton Pump Inhibitors	27	216	0	243	11.10%	261
Ultram ER	32	41	0	73	43.80%	75
Vusion	0	1	0	1	0.00%	1
Prior Authorization Totals:	118	1,753	0	1,871	6.30%	1,981

Manual PAs (unique)

12/01/09 - 12/31/09	# Unique Approved	# Unique Denied	# Unique Incomplete	Unique Total	Approval %
Prior Authorizations:					
Amrix and Fexmid	0	4	0	4	0%
Altabax	5	0	0	5	100%
Ambien CR	17	7	0	24	71%
Antihistamines	14	7	0	21	67%
ARBS	7	0	0	7	100%
Dispense As Written	13	11	0	24	54%
Growth Hormone	11	2	0	13	85%
Head Lice Medication	19	8	0	27	70%
Max Units Override	73	31	0	104	70%
Proton Pump Inhibitors	55	14	0	69	20%
Skeletal Muscle Relaxants	1	0	0	1	100%
Ultram ER	10	1	0	11	91%
Vusion	1	0	0	1	100%
Xolair	2	0	0	2	100%
Prior Authorization Totals:	228	85	0	313	73%

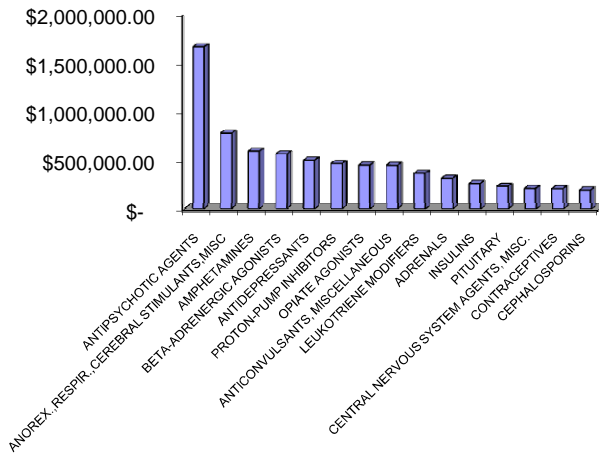
**SOUTH DAKOTA MEDICAID
Cost Management Analysis**

TOP 15 THERAPEUTIC CLASSES BY TOTAL COST OF CLAIMS FROM 10/01/2009 - 12/22/2009

AHFS Therapeutic Class	Rx	Paid	Paid/Rx	% Total Claims
ANTIPSYCHOTIC AGENTS	6,525	\$ 1,661,158.42	\$ 254.58	3.35%
ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	5,935	\$ 774,679.91	\$ 130.53	3.05%
AMPHETAMINES	4,282	\$ 589,802.04	\$ 137.74	2.20%
BETA-ADRENERGIC AGONISTS	8,932	\$ 560,557.34	\$ 62.76	4.58%
ANTIDEPRESSANTS	13,164	\$ 498,776.90	\$ 37.89	6.76%
PROTON-PUMP INHIBITORS	5,379	\$ 464,341.19	\$ 86.32	2.76%
OPIATE AGONISTS	12,196	\$ 448,557.13	\$ 36.78	6.26%
ANTICONVULSANTS, MISCELLANEOUS	6,372	\$ 445,993.91	\$ 69.99	3.27%
LEUKOTRIENE MODIFIERS	3,264	\$ 362,051.85	\$ 110.92	1.68%
ADRENALS	4,902	\$ 312,428.86	\$ 63.73	2.52%
INSULINS	1,649	\$ 258,358.42	\$ 156.68	0.85%
PITUITARY	533	\$ 229,301.28	\$ 430.21	0.27%
CENTRAL NERVOUS SYSTEM AGENTS, MISC.	1,239	\$ 207,464.11	\$ 167.44	0.64%
CONTRACEPTIVES	3,269	\$ 204,646.25	\$ 62.60	1.68%
CEPHALOSPORINS	5,936	\$ 192,033.48	\$ 32.35	3.05%
TOTAL TOP 15	83,577	\$ 7,210,151.09	\$ 86.27	42.90%
Total Rx Claims	194,837			
From 10/01/2009 - 12/22/2009				

**Top 15 Therapeutic Classes
Based on Total Cost of Claims**

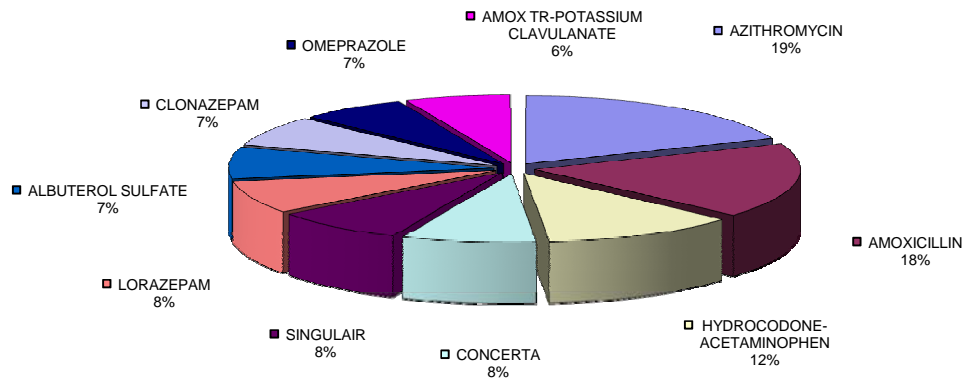
Claims Paid



TOP 25 DRUGS BASED ON NUMBER OF CLAIMS FROM 10/01/2009 - 12/22/2009

Drug	AHFS Therapeutic Class	Rx	Paid	Paid/Rx	% Total Claims
AZITHROMYCIN	MACROLIDES	7,655	\$ 161,893.66	\$ 21.15	3.93%
AMOXICILLIN	PENICILLINS	7,170	\$ 65,248.81	\$ 9.10	3.68%
HYDROCODONE-ACETAMINOPHEN	OPIATE AGONISTS	4,788	\$ 51,683.48	\$ 10.79	2.46%
CONCERTA	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	3,328	\$ 477,819.89	\$ 143.58	1.71%
SINGULAIR	LEUKOTRIENE MODIFIERS	3,251	\$ 360,677.73	\$ 110.94	1.67%
LORAZEPAM	BENZODIAZEPINES (ANXIOLYTIC,SEDATIV/HYP)	3,122	\$ 27,228.25	\$ 8.72	1.60%
ALBUTEROL SULFATE	BETA-ADRENERGIC AGONISTS	3,018	\$ 54,984.99	\$ 18.22	1.55%
CLONAZEPAM	BENZODIAZEPINES (ANTICONVULSANTS)	2,912	\$ 25,807.76	\$ 8.86	1.49%
OMEPRAZOLE	PROTON-PUMP INHIBITORS	2,619	\$ 52,073.12	\$ 19.88	1.34%
AMOX TR-POTASSIUM CLAVULANATE	PENICILLINS	2,599	\$ 71,203.60	\$ 27.40	1.33%
FLUOXETINE HCL	ANTIDEPRESSANTS	2,274	\$ 18,217.40	\$ 8.01	1.17%
TAMIFLU	NEURAMINIDASE INHIBITORS	2,225	\$ 169,714.43	\$ 76.28	1.14%
CEFIDINIR	CEPHALOSPORINS	2,165	\$ 106,085.84	\$ 49.00	1.11%
CETIRIZINE HCL	SECOND GENERATION ANTIHISTAMINES	2,096	\$ 33,587.69	\$ 16.02	1.08%
SERTRALINE HCL	ANTIDEPRESSANTS	2,004	\$ 18,633.20	\$ 9.30	1.03%
SULFAMETHOXAZOLE-TRIMETHOPRIM	SULFONAMIDES (SYSTEMIC)	1,953	\$ 17,220.85	\$ 8.82	1.00%
CEPHALEXIN	CEPHALOSPORINS	1,899	\$ 23,049.43	\$ 12.14	0.97%
LEVOTHYROXINE SODIUM	THYROID AGENTS	1,814	\$ 16,336.14	\$ 9.01	0.93%
DEXTROAMPHETAMINE-AMPHETAMINE	AMPHETAMINES	1,805	\$ 307,369.31	\$ 170.29	0.93%
LORATADINE	SECOND GENERATION ANTIHISTAMINES	1,775	\$ 13,836.38	\$ 7.80	0.91%
RISPERIDONE	ANTIPSYCHOTIC AGENTS	1,677	\$ 61,029.53	\$ 36.39	0.86%
IBUPROFEN	NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	1,622	\$ 10,513.31	\$ 6.48	0.83%
VENTOLIN HFA	BETA-ADRENERGIC AGONISTS	1,585	\$ 55,800.22	\$ 35.21	0.81%
CHERATUSSIN AC	ANTITUSSIVES	1,560	\$ 10,894.45	\$ 6.98	0.80%
TRAZODONE HCL	ANTIDEPRESSANTS	1,558	\$ 10,792.05	\$ 6.93	0.80%
TOTAL TOP 25		68,474	\$ 2,221,701.52	\$ 32.45	35.14%
Total Rx Claims		194,837			
From 10/01/2009 - 12/22/2009					

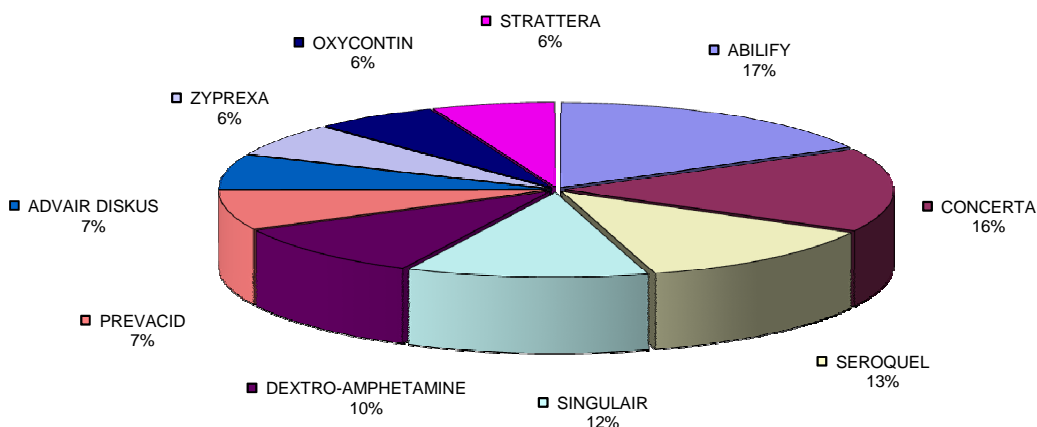
Top 10 Drugs
Based on Number of Claims



TOP 25 DRUGS BASED ON TOTAL CLAIMS COST FROM 10/01/2009 - 12/22/2009

Drug	AHFS Therapeutic Class	Rx	Paid	Paid/Rx	% Total Claims
ABILIFY	ANTIPSYCHOTIC AGENTS	1,360	\$ 516,640.75	\$ 379.88	0.70%
CONCERTA	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	3,328	\$ 477,819.89	\$ 143.58	1.71%
SEROQUEL	ANTIPSYCHOTIC AGENTS	1,447	\$ 377,166.07	\$ 260.65	0.74%
SINGLAIR	LEUKOTRIENE MODIFIERS	3,251	\$ 360,677.73	\$ 110.94	1.67%
DEXTRO-AMPHETAMINE	AMPHETAMINES	1,805	\$ 307,369.31	\$ 170.29	0.93%
PREVACID	PROTON-PUMP INHIBITORS	1,322	\$ 224,445.49	\$ 169.78	0.68%
ADVAIR DISKUS	BETA-ADRENERGIC AGONISTS	1,065	\$ 199,471.72	\$ 187.30	0.55%
ZYPREXA	ANTIPSYCHOTIC AGENTS	340	\$ 191,772.70	\$ 564.04	0.17%
OXYCONTIN	OPIATE AGONISTS	521	\$ 182,417.95	\$ 350.13	0.27%
STRATTERA	CENTRAL NERVOUS SYSTEM AGENTS, MISC.	1,202	\$ 182,270.44	\$ 151.64	0.62%
TAMIFLU	NEURAMINIDASE INHIBITORS	2,225	\$ 169,714.43	\$ 76.28	1.14%
VYVANSE	AMPHETAMINES	1,426	\$ 168,592.06	\$ 118.23	0.73%
AZITHROMYCIN	MACROLIDES	7,655	\$ 161,893.66	\$ 21.15	3.93%
FOCALIN XR	ANOREX.,RESPIR.,CEREBRAL STIMULANTS,MISC	1,067	\$ 141,860.52	\$ 132.95	0.55%
GEODON	ANTIPSYCHOTIC AGENTS	320	\$ 125,758.17	\$ 392.99	0.16%
RISPERDAL CONSTA	ANTIPSYCHOTIC AGENTS	145	\$ 112,386.26	\$ 775.08	0.07%
CYMBALTA	ANTIDEPRESSANTS	763	\$ 112,080.78	\$ 146.89	0.39%
PULMICORT	ADRENALS	425	\$ 107,099.17	\$ 252.00	0.22%
CEFdinIR	CEPHALOSPORINS	2,165	\$ 106,085.84	\$ 49.00	1.11%
XOPENEX	BETA-ADRENERGIC AGONISTS	739	\$ 101,341.51	\$ 137.13	0.38%
SEROQUEL XR	ANTIPSYCHOTIC AGENTS	317	\$ 101,042.49	\$ 318.75	0.16%
NEXIUM	PROTON-PUMP INHIBITORS	500	\$ 100,551.94	\$ 201.10	0.26%
FLOVENT HFA	ADRENALS	875	\$ 99,623.59	\$ 113.86	0.45%
EFFEXOR XR	ANTIDEPRESSANTS	563	\$ 92,735.13	\$ 164.72	0.29%
LEXAPRO	ANTIDEPRESSANTS	1,003	\$ 90,084.25	\$ 89.81	0.51%
TOTAL TOP 25		35,829	\$ 4,810,901.85	\$ 134.27	18.39%
Total Rx Claims		194,837			
From 10/01/2009 - 12/22/2009					

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



SD Medicaid Antipsychotic Utilization

12/23/2008 - 12/22/2009

AHFS Class 281608

Label Name	Rx Num	Total Reimb Amt	Cost per Script
ABILIFY 1 MG/ML SOLUTION	24	\$5,205.65	\$216.90
ABILIFY 10 MG TABLET	1485	\$547,798.40	\$368.89
ABILIFY 15 MG TABLET	871	\$279,420.04	\$320.80
ABILIFY 2 MG TABLET	416	\$154,333.93	\$371.00
ABILIFY 20 MG TABLET	525	\$272,906.68	\$519.82
ABILIFY 30 MG TABLET	458	\$259,740.94	\$567.12
ABILIFY 5 MG TABLET	2239	\$788,257.77	\$352.06
ABILIFY DISCMELT 10 MG TABLET	44	\$22,016.88	\$500.38
ABILIFY DISCMELT 15 MG TABLET	10	\$5,181.41	\$518.14
CHLORPROMAZINE 10 MG TABLET	1	\$9.99	\$9.99
CHLORPROMAZINE 100 MG TABLET	35	\$1,133.52	\$32.39
CHLORPROMAZINE 25 MG TABLET	3	\$66.90	\$22.30
CHLORPROMAZINE 50 MG TABLET	3	\$42.25	\$14.08
CLOZAPINE 100 MG TABLET	1179	\$86,373.85	\$73.26
CLOZAPINE 200 MG TABLET	173	\$39,160.40	\$226.36
CLOZAPINE 25 MG TABLET	437	\$13,978.26	\$31.99
CLOZAPINE 50 MG TABLET	38	\$2,011.55	\$52.94
CLOZARIL 100 MG TABLET	80	\$49,910.41	\$623.88
CLOZARIL 25 MG TABLET	20	\$1,845.01	\$92.25
FAZACLO 100 MG ODT	82	\$17,992.43	\$219.42
FAZACLO 100 MG TABLET	21	\$3,045.85	\$145.04
FAZACLO 25 MG ODT	15	\$2,465.86	\$164.39
FAZACLO 25 MG TABLET	9	\$524.66	\$58.30
FLUPHENAZINE 1 MG TABLET	2	\$30.36	\$15.18
FLUPHENAZINE 10 MG TABLET	27	\$371.25	\$13.75
FLUPHENAZINE 2.5 MG TABLET	6	\$73.26	\$12.21
FLUPHENAZINE 5 MG TABLET	3	\$39.09	\$13.03
FLUPHENAZINE DEC 25 MG/ML VL	30	\$1,618.42	\$53.95
GEODON 20 MG CAPSULE	132	\$34,057.10	\$258.01
GEODON 20 MG VIAL	24	\$459.97	\$19.17
GEODON 40 MG CAPSULE	315	\$85,270.51	\$270.70
GEODON 60 MG CAPSULE	286	\$102,499.49	\$358.39
GEODON 80 MG CAPSULE	587	\$274,119.41	\$466.98
HALOPERIDOL 0.5 MG TABLET	15	\$137.33	\$9.16
HALOPERIDOL 1 MG TABLET	56	\$571.41	\$10.20
HALOPERIDOL 10 MG TABLET	28	\$2,116.95	\$75.61
HALOPERIDOL 2 MG TABLET	26	\$311.85	\$11.99
HALOPERIDOL 5 MG TABLET	65	\$923.49	\$14.21
HALOPERIDOL DEC 100 MG/ML VIAL	25	\$499.85	\$19.99
HALOPERIDOL DEC 50 MG/ML VIAL	2	\$65.42	\$32.71
HALOPERIDOL LAC 2 MG/ML CONC	10	\$34.00	\$3.40
HALOPERIDOL LAC 5 MG/ML VIAL	2	\$23.17	\$11.59
INVEGA ER 3 MG TABLET	177	\$56,704.13	\$320.36

SD Medicaid Antipsychotic Utilization

12/23/2008 - 12/22/2009

AHFS Class 281608

Label Name	Rx Num	Total Reimb Amt	Cost per Script
INVEGA ER 6 MG TABLET	243	\$85,207.65	\$350.65
INVEGA ER 9 MG TABLET	76	\$39,870.74	\$524.62
INVEGA SUSTENNA 117 MG PREF SY	9	\$6,577.08	\$730.79
INVEGA SUSTENNA 156 MG PREF SY	4	\$4,255.36	\$1,063.84
INVEGA SUSTENNA 234 MG PREF SY	4	\$6,375.12	\$1,593.78
LOXAPINE 10 MG CAPSULE	28	\$1,207.30	\$43.12
LOXAPINE 25 MG CAPSULE	9	\$318.75	\$35.42
LOXAPINE 5 MG CAPSULE	3	\$53.85	\$17.95
LOXAPINE 50 MG CAPSULE	12	\$961.80	\$80.15
MOBAN 25 MG TABLET	2	\$340.94	\$170.47
MOBAN 50 MG TABLET	1	\$114.42	\$114.42
PERPHENAZINE 2 MG TABLET	20	\$573.21	\$28.66
PERPHENAZINE 4 MG TABLET	17	\$1,115.54	\$65.62
PERPHENAZINE 8 MG TABLET	8	\$266.54	\$33.32
PROCHLORPERAZINE MAL POWDER	1	\$34.13	\$34.13
RISPERDAL 0.25 MG TABLET	18	\$2,332.84	\$129.60
RISPERDAL 0.5 MG TABLET	38	\$3,273.19	\$86.14
RISPERDAL 1 MG TABLET	57	\$9,126.65	\$160.12
RISPERDAL 1 MG/ML SOLUTION	39	\$10,382.54	\$266.22
RISPERDAL 2 MG TABLET	7	\$642.38	\$91.77
RISPERDAL 3 MG TABLET	12	\$3,510.65	\$292.55
RISPERDAL 4 MG TABLET	1	\$413.05	\$413.05
RISPERDAL CONSTA 12.5 MG SYR	15	\$2,192.25	\$146.15
RISPERDAL CONSTA 25 MG SYR	105	\$46,487.50	\$442.74
RISPERDAL CONSTA 37.5 MG SYR	167	\$108,358.17	\$648.85
RISPERDAL CONSTA 50 MG SYR	379	\$363,297.89	\$958.57
RISPERDAL M-TAB 0.5 MG ODT	37	\$5,530.47	\$149.47
RISPERDAL M-TAB 1 MG ODT	49	\$9,749.38	\$198.97
RISPERDAL M-TAB 2 MG ODT	26	\$14,098.99	\$542.27
RISPERDAL M-TAB 3 MG ODT	2	\$1,197.56	\$598.78
RISPERDAL M-TAB 4 MG ODT	8	\$3,654.15	\$456.77
RISPERIDONE 0.25 MG TABLET	1103	\$47,008.65	\$42.62
RISPERIDONE 0.5 MG TABLET	1940	\$89,691.45	\$46.23
RISPERIDONE 1 MG TABLET	2103	\$108,757.14	\$51.72
RISPERIDONE 1 MG/ML SOLUTION	213	\$20,130.32	\$94.51
RISPERIDONE 2 MG TABLET	1144	\$79,833.64	\$69.78
RISPERIDONE 3 MG TABLET	489	\$40,141.20	\$82.09
RISPERIDONE 4 MG TABLET	309	\$28,037.54	\$90.74
RISPERIDONE M-TAB 0.5 MG ODT	78	\$11,941.54	\$153.10
RISPERIDONE M-TAB 1 MG ODT	32	\$4,616.14	\$144.25
RISPERIDONE M-TAB 2 MG ODT	61	\$19,702.12	\$322.99
RISPERIDONE M-TAB 3 MG ODT	2	\$961.50	\$480.75
SEROQUEL 100 MG TABLET	1659	\$280,113.23	\$168.84

SD Medicaid Antipsychotic Utilization

12/23/2008 - 12/22/2009

AHFS Class 281608

Label Name	Rx Num	Total Reimb Amt	Cost per Script
SEROQUEL 200 MG TABLET	958	\$339,167.45	\$354.04
SEROQUEL 25 MG TABLET	1220	\$151,285.76	\$124.00
SEROQUEL 300 MG TABLET	992	\$494,471.59	\$498.46
SEROQUEL 400 MG TABLET	362	\$179,678.87	\$496.35
SEROQUEL 50 MG TABLET	1318	\$235,609.47	\$178.76
SEROQUEL XR 150 MG TABLET	95	\$20,418.94	\$214.94
SEROQUEL XR 200 MG TABLET	277	\$62,419.39	\$225.34
SEROQUEL XR 300 MG TABLET	392	\$144,722.57	\$369.19
SEROQUEL XR 400 MG TABLET	303	\$169,634.78	\$559.85
SEROQUEL XR 50 MG TABLET	173	\$29,032.98	\$167.82
THIORIDAZINE 10 MG TABLET	15	\$286.05	\$19.07
THIORIDAZINE 100 MG TABLET	2	\$27.50	\$13.75
THIORIDAZINE 25 MG TABLET	13	\$154.28	\$11.87
THIORIDAZINE 50 MG TABLET	11	\$119.97	\$10.91
THIOTHIXENE 2 MG CAPSULE	4	\$28.30	\$7.08
TRIFLUOPERAZINE 10 MG TABLET	12	\$309.00	\$25.75
TRIFLUOPERAZINE 2 MG TABLET	49	\$1,403.46	\$28.64
TRIFLUOPERAZINE 5 MG TABLET	14	\$417.50	\$29.82
ZYPREXA 10 MG TABLET	345	\$138,607.81	\$401.76
ZYPREXA 10 MG VIAL	14	\$1,028.01	\$73.43
ZYPREXA 15 MG TABLET	264	\$203,892.43	\$772.32
ZYPREXA 2.5 MG TABLET	139	\$33,756.44	\$242.85
ZYPREXA 20 MG TABLET	286	\$278,978.41	\$975.45
ZYPREXA 5 MG TABLET	382	\$118,255.56	\$309.57
ZYPREXA 7.5 MG TABLET	85	\$34,123.18	\$401.45
ZYPREXA ZYDIS 10 MG TABLET	127	\$58,895.79	\$463.75
ZYPREXA ZYDIS 15 MG TABLET	51	\$38,059.39	\$746.26
ZYPREXA ZYDIS 20 MG TABLET	33	\$29,187.46	\$884.47
ZYPREXA ZYDIS 5 MG TABLET	78	\$24,855.19	\$318.66
Totals	28530	\$7,364,631.19	3,158 recipients

Antipsychotics with Quantity Limits

Medication	Dosage Form	Qty Limit
Abilify	Tablets	34
Abilify	Discmelt	34
Zyprexa	Tablets	68
Zyprexa	Zydis	68
Seroquel	100	102
Seroquel	200	136
Seroquel	25	102
Seroquel	300	170
Seroquel	400	102
Seroquel	50	102
Seroquel	XR 200	34
Seroquel	XR 150	none
Seroquel	XR 300	68
Seroquel	XR 400	68
Seroquel	XR50	none
Geodon	20	none
Geodon	40	68
Geodon	60	68
Risperdal	consta	2
Risperdal	tablets and M-tab	68
Risperdal	solution	none
Clozapine		none
Saphris		none
Fanapt		none
Fazaclo		none
Invega	tablets	34
Invega Sustenna		none

Antipsychotic Utilization Summary by Age

Age	Recip Count	Rx Count	Total Dollars
2	1	3	\$914.19
3	1	1	\$79.36
4	10	62	\$6,311.20
5	22	157	\$12,295.27
6	37	183	\$16,714.56
7	53	396	\$44,401.47
8	78	683	\$101,551.70
9	80	665	\$104,573.48
10	93	783	\$129,821.26
11	111	998	\$167,573.13
12	104	853	\$164,667.66
13	114	982	\$190,827.70
14	150	1265	\$261,911.71
15	162	1299	\$242,204.21
16	182	1599	\$385,317.35
17	213	1776	\$427,056.49
18	132	997	\$217,754.20
19	117	762	\$208,574.83
20	61	445	\$97,377.60
21	45	423	\$116,568.84
22	41	328	\$79,958.41
23	42	360	\$106,323.98
24	31	390	\$115,289.64
25	48	480	\$112,389.42
26	33	300	\$76,485.97
27	46	483	\$139,699.85
28	49	494	\$164,023.33
29	40	338	\$82,808.50
30	42	475	\$156,616.16
31	41	311	\$90,894.62
32	44	332	\$93,507.38
33	34	189	\$40,506.94
34	41	282	\$93,783.52
35	35	288	\$79,103.67
36	28	217	\$84,865.75
37	31	197	\$84,860.40
38	34	255	\$87,981.44
39	36	401	\$125,477.45
40	34	275	\$107,325.74
41	34	360	\$101,094.11
42	26	173	\$58,777.17
43	28	300	\$84,201.56
44	32	322	\$116,682.65
45	34	338	\$132,198.63

Age	Recip Count	Rx Count	Total Dollars
46	36	429	\$179,439.87
47	43	588	\$233,868.07
48	40	385	\$154,232.16
49	34	545	\$163,429.81
50	39	443	\$148,914.37
51	29	247	\$90,564.01
52	29	399	\$151,764.46
53	25	345	\$119,007.83
54	29	495	\$140,035.68
55	23	271	\$82,661.40
56	32	326	\$92,204.52
57	26	330	\$97,691.21
58	15	169	\$46,795.00
59	14	246	\$67,027.28
60	23	179	\$38,716.88
61	19	270	\$65,098.70
62	13	197	\$73,892.61
63	11	118	\$18,325.84
64	15	237	\$71,616.34
65	5	37	\$8,925.82
66	1	2	\$296.70
67	1	12	\$7,362.04
71	1	3	\$334.71
73	1	3	\$440.27
82	1	4	\$57.75
83	1	2	\$27.50
93	1	19	\$547.86
102	1	9	\$0.00

South Dakota Medicaid P&T Committee
Proposal for Antipsychotic Use

First Tier of Antipsychotics

Abilify (aripiprazole)

Zyprexa (olanzapine)

Seroquel (quetiapine)

Geodon (ziprasidone)

Risperidone

Clozapine

Traditional antipsychotics

Second Tier of Antipsychotics

Saphris (asenapine)

Fanapt (iloperidone)

Invega (paliperidone): unless documented hepatic problems

Any quick dissolving tablet or liquid

Long acting injectables such as Risperdal Consta (risperidone) and Invega Sustenna (paliperidone) must be initially prescribed by a psychiatrist.

If more than one atypical antipsychotic for greater than 90 days, then the antipsychotics must be initially prescribed by a psychiatrist.



ATYPICAL ANTIPSYCHOTICS PRIOR AUTHORIZATION FORM

SD DEPARTMENT OF SOCIAL SERVICES MEDICAL SERVICES DIVISION

Fax Completed Form to:
866-254-0761
For questions regarding this
Prior authorization, call
866-705-5391

SD Medicaid requires that patients receiving a new prescription for an atypical antipsychotic considered to be an alternate dosage form (e.g., rapid dissolve tablets, injectables) or an isomer/metabolite of a covered agent must first try and fail a tier one agent.

- Traditional antipsychotics do not require a prior authorization.
- Abilify (aripiprazole), Zyprexa (olanzapine), Seroquel (quetiapine), Geodon (ziprasidone), clozapine, and risperidone do not require a prior authorization when written for their standard tablet/capsule dosage form.
- Patients currently stabilized on a second generation antipsychotic will not be asked to change medication.

Part I: RECIPIENT INFORMATION (To be completed by physician's representative or pharmacy):

RECIPIENT NAME:	RECIPIENT MEDICAID ID NUMBER:
Recipient Date of birth: / /	

Part II: PHYSICIAN INFORMATION (To be completed by physician's representative or pharmacy):

PHYSICIAN NAME:	PHYSICIAN DEA NUMBER:	
City:	PHONE: ()	FAX: ()

Part III: TO BE COMPLETED BY PHYSICIAN:

Requested Drug and Dosage: (must be completed)
Diagnosis for this request:
Qualifications for coverage:
<input type="checkbox"/> Unable to swallow the standard tablet/capsule dosage form
Adverse Reaction (attach FDA MedWatch form) or contraindication: (provide description below):
Medical Justification for use of alternate dosage forms or isomers/metabolites of a covered agent without trial of a tier one agent:
Physician Signature: _____ Date: _____

Part IV: PHARMACY INFORMATION

PHARMACY NAME:	SD MEDICAID PROVIDER NUMBER:
Phone: ():	FAX: ()
Drug:	NDC#:

Part V: FOR OFFICIAL USE ONLY

Date: / /	Initials: _____
Approved - Effective dates of PA: From: / /	To: / /
Denied: (Reasons)	

SD Medicaid Antidepressant Utilization

12/23/2008 - 12/22/2009

AHFS Class 281604

Label Name	Rx Num	Total Remb Amt	Cost per Script
AMITRIP-CDP 12.5-5 TABLET	3	\$48.71	\$16.24
AMITRIPTYLINE HCL 10 MG TAB	502	\$3,439.16	\$6.85
AMITRIPTYLINE HCL 100 MG TAB	201	\$1,603.24	\$7.98
AMITRIPTYLINE HCL 150 MG TAB	59	\$637.41	\$10.80
AMITRIPTYLINE HCL 25 MG TAB	915	\$6,179.89	\$6.75
AMITRIPTYLINE HCL 50 MG TAB	468	\$3,283.54	\$7.02
AMITRIPTYLINE HCL 75 MG TAB	75	\$529.89	\$7.07
BUDEPRION SR 100 MG TABLET	194	\$6,936.50	\$35.76
BUPROPION HCL 100 MG TABLET	143	\$2,526.01	\$17.66
BUPROPION HCL 75 MG TABLET	95	\$1,277.92	\$13.45
BUDEPRION SR 150 MG TABLET	998	\$40,334.15	\$40.41
CELEXA 20 MG TABLET	11	\$1,135.48	\$103.23
CELEXA 40 MG TABLET	2	\$317.06	\$158.53
CITALOPRAM 10 MG/5 ML SOLUTION	34	\$3,031.16	\$89.15
CITALOPRAM HBR 10 MG TABLET	437	\$3,060.87	\$7.00
CITALOPRAM HBR 20 MG TABLET	2068	\$13,833.63	\$6.69
CITALOPRAM HBR 40 MG TABLET	1532	\$13,160.09	\$8.59
CLOMIPRAMINE 25 MG CAPSULE	10	\$86.56	\$8.66
CLOMIPRAMINE 50 MG CAPSULE	55	\$800.97	\$14.56
CLOMIPRAMINE 75 MG CAPSULE	20	\$386.60	\$19.33
DESIPRAMINE 10 MG TABLET	1	\$9.38	\$9.38
DESIPRAMINE 100 MG TABLET	11	\$246.09	\$22.37
DESIPRAMINE 25 MG TABLET	40	\$792.83	\$19.82
DESIPRAMINE 50 MG TABLET	30	\$1,706.23	\$56.87
DOXEPIN 10 MG CAPSULE	79	\$765.54	\$9.69
DOXEPIN 100 MG CAPSULE	39	\$418.12	\$10.72
DOXEPIN 25 MG CAPSULE	67	\$514.80	\$7.68
DOXEPIN 50 MG CAPSULE	34	\$296.14	\$8.71
FLUOXETINE 20 MG/5 ML SOLUTION	220	\$2,537.55	\$11.53
FLUOXETINE HCL 10 MG CAPSULE	2333	\$16,378.49	\$7.02
FLUOXETINE 20 MG CAPSULE	2	\$18.77	\$9.39
FLUOXETINE HCL 20 MG CAPSULE	5710	\$51,689.43	\$9.05
FLUOXETINE HCL 40 MG CAPSULE	309	\$5,456.05	\$17.66
FLUVOXAMINE MALEATE 100 MG TAB	112	\$3,493.34	\$31.19
FLUVOXAMINE MALEATE 25 MG TAB	40	\$761.70	\$19.04
FLUVOXAMINE MALEATE 50 MG TAB	128	\$2,326.80	\$18.18
IMIPRAMINE HCL 10 MG TABLET	92	\$1,232.68	\$13.40
IMIPRAMINE HCL 25 MG TABLET	404	\$5,850.97	\$14.48
IMIPRAMINE HCL 50 MG TABLET	295	\$4,940.83	\$16.75
IMIPRAMINE PAMOATE 75 MG CAP	18	\$5,971.42	\$331.75
LEXAPRO 10 MG TABLET	2037	\$182,392.51	\$89.54
LEXAPRO 20 MG TABLET	2146	\$204,790.01	\$95.43
LEXAPRO 5 MG TABLET	85	\$7,000.19	\$82.36

**SD Medicaid Antidepressant Utilization
12/23/2008 - 12/22/2009**

Label Name	Rx Num	Total Remb Amt	Cost per Script
LEXAPRO 5 MG/5 ML SOLUTION	23	\$3,089.22	\$134.31
MAPROTYLINE 25 MG TABLET	9	\$443.72	\$49.30
NEFAZODONE HCL 100 MG TABLET	25	\$656.95	\$26.28
NEFAZODONE HCL 150 MG TABLET	33	\$1,415.63	\$42.90
NEFAZODONE HCL 200 MG TABLET	1	\$38.35	\$38.35
NORTRIPTYLINE 10 MG/5 ML SOL	1	\$19.75	\$19.75
NORTRIPTYLINE HCL 10 MG CAP	220	\$1,993.27	\$9.06
NORTRIPTYLINE HCL 25 MG CAP	323	\$2,785.04	\$8.62
NORTRIPTYLINE HCL 50 MG CAP	155	\$1,396.70	\$9.01
NORTRIPTYLINE HCL 75 MG CAP	47	\$623.94	\$13.28
PAMELOR 10 MG/5 ML SOLUTION	3	\$717.48	\$239.16
PAROXETINE HCL 10 MG TABLET	163	\$1,689.10	\$10.36
PAROXETINE HCL 10 MG/5 ML SUSP	21	\$3,262.78	\$155.37
PAROXETINE HCL 20 MG TABLET	642	\$7,353.42	\$11.45
PAROXETINE HCL 30 MG TABLET	167	\$2,324.78	\$13.92
PAROXETINE HCL 40 MG TABLET	319	\$4,386.96	\$13.75
PAXIL CR 25 MG TABLET	2	\$179.30	\$89.65
PAXIL CR 37.5 MG TABLET	22	\$3,448.17	\$156.74
PERPHEN-AMITRIP 2 MG-10 MG TAB	14	\$102.86	\$7.35
PRISTIQ 50 MG TABLET	28	\$3,288.88	\$117.46
PROTRIPTYLINE HCL 10 MG TABLET	13	\$2,167.51	\$166.73
PROTRIPTYLINE HCL 5 MG TABLET	1	\$46.89	\$46.89
PROZAC 10 MG PULVULE	1	\$7.75	\$7.75
PROZAC 20 MG PULVULE	2	\$19.10	\$9.55
PROZAC 40 MG PULVULE	2	\$1,413.12	\$706.56
PROZAC WEEKLY 90 MG CAPSULE	69	\$8,280.21	\$120.00
SERTRALINE 20 MG/ML ORAL CONC	176	\$7,021.69	\$39.90
SERTRALINE HCL 100 MG TABLET	3344	\$31,459.14	\$9.41
SERTRALINE HCL 25 MG TABLET	858	\$6,611.47	\$7.71
SERTRALINE HCL 50 MG TABLET	2764	\$23,200.65	\$8.39
SYMBYAX 12-25 MG CAPSULE	31	\$17,550.25	\$566.14
SYMBYAX 12-50 MG CAPSULE	51	\$25,009.18	\$490.38
SYMBYAX 3-25 MG CAPSULE	26	\$5,969.10	\$229.58
SYMBYAX 6-25 MG CAPSULE	41	\$13,134.64	\$320.36
SYMBYAX 6-50 MG CAPSULE	35	\$10,635.28	\$303.87
TRAZODONE 50 MG TABLET	3437	\$21,144.29	\$6.15
WELLBUTRIN SR 150 MG TABLET	8	\$792.72	\$99.09
WELLBUTRIN XL 150 MG TABLET	25	\$1,249.58	\$49.98
ZOLOFT 100 MG TABLET	17	\$899.10	\$52.89
ZOLOFT 20 MG/ML ORAL CONC	12	\$186.60	\$15.55
ZOLOFT 25 MG TABLET	2	\$114.95	\$57.48
ZOLOFT 50 MG TABLET	8	\$1,164.93	\$145.62
Totals	37,685	\$884,416.22	7,133 recipients

Antidepressant Utilization Summary by Age

Age	Recip Count	Rx Count	Total Dollars
2	2	4	\$729.73
3	3	9	\$88.21
4	6	13	\$139.94
5	17	53	\$554.05
6	41	158	\$1,313.75
7	58	198	\$2,393.57
8	89	408	\$4,234.57
9	115	626	\$7,192.68
10	137	785	\$8,074.81
11	153	999	\$16,566.72
12	162	926	\$10,685.45
13	196	1256	\$24,366.07
14	254	1490	\$20,236.79
15	294	1791	\$35,213.11
16	374	2056	\$28,754.92
17	397	2131	\$36,157.01
18	346	1702	\$30,956.14
19	264	991	\$19,623.05
20	144	597	\$17,606.69
21	142	570	\$11,489.02
22	147	590	\$15,546.13
23	183	651	\$15,083.46
24	151	544	\$8,251.99
25	186	619	\$12,381.99
26	166	660	\$20,148.18
27	181	789	\$20,607.87
28	148	668	\$13,436.52
29	173	708	\$18,892.77
30	153	661	\$20,083.32
31	125	553	\$16,949.55
32	122	656	\$18,885.54
33	127	585	\$15,583.31
34	100	503	\$11,972.62
35	105	496	\$15,825.73
36	92	394	\$8,317.23
37	82	404	\$13,620.54
38	100	551	\$14,753.81
39	82	570	\$17,634.31
40	80	384	\$11,619.84
41	87	484	\$14,864.53
42	71	432	\$11,896.53
43	61	303	\$6,828.38
44	80	492	\$15,509.07
45	75	452	\$13,418.91
46	88	591	\$20,549.48
47	72	457	\$26,085.96

Age	Recip Count	Rx Count	Total Dollars
48	77	471	\$13,716.14
49	68	511	\$13,225.09
50	60	397	\$13,397.18
51	44	225	\$4,568.07
52	55	455	\$22,449.13
53	55	413	\$12,750.72
54	64	503	\$13,682.48
55	49	340	\$8,218.90
56	64	412	\$8,735.19
57	49	366	\$8,868.51
58	33	251	\$12,125.32
59	49	380	\$12,027.27
60	53	527	\$13,205.03
61	43	338	\$15,653.79
62	45	359	\$9,140.48
63	37	350	\$16,270.79
64	26	215	\$5,971.13
65	18	133	\$3,088.76
66	3	7	\$42.29
68	1	7	\$58.31
70	1	3	\$38.55
71	1	3	\$21.44
73	1	7	\$1,709.04
80	1	8	\$36.83
83	2	7	\$28.00
89	1	21	\$252.38
96	1	1	\$11.55

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurences
BUDEPRION XL , BUPROPION XL , LEXAPRO , SERTRALINE HCL	1
BUPROPION XL , PAROXETINE HCL	1
BUDEPRION XL , SERTRALINE HCL	1
BUDEPRION SR , FLUOXETINE HCL	1
BUDEPRION XL , CITALOPRAM HBR	2
BUPROPION HCL SR , PAROXETINE HCL , SERTRALINE HCL	1
BUPROPION HCL SR , FLUOXETINE HCL	1
BUDEPRION XL , LEXAPRO	1
BUPROPION HCL SR , BUPROPION XL , SERTRALINE HCL	3
BUDEPRION SR , LEXAPRO	1
BUPROPION HCL , BUPROPION XL , PAROXETINE HCL	2
BUPROPION XL , CITALOPRAM HBR , PAROXETINE HCL	2
BUDEPRION XL , LEXAPRO	1
BUPROPION XL , CITALOPRAM HBR , LEXAPRO	3
BUPROPION XL , LEXAPRO	1
BUDEPRION XL , SERTRALINE HCL	1
BUPROPION HCL SR , CITALOPRAM HBR	1
BUPROPION HCL SR , SERTRALINE HCL	1
BUDEPRION XL , FLUOXETINE HCL	1
BUDEPRION XL , FLUOXETINE HCL	2
BUDEPRION SR , FLUOXETINE HCL	2

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurrences
BUPROPION HCL SR , CITALOPRAM HBR , SERTRALINE HCL	2
BUPROPION HCL SR , BUPROPION XL , SERTRALINE HCL	2
BUPROPION HCL SR , SERTRALINE HCL	1
BUDEPRION XL , LEXAPRO	1
BUPROPION HCL , BUPROPION HCL SR , SERTRALINE HCL	2
BUPROPION HCL SR , CITALOPRAM HBR	1
BUPROPION HCL SR , CITALOPRAM HBR	1
BUPROPION HCL SR , FLUOXETINE HCL	1
BUPROPION HCL SR , CITALOPRAM HBR	1
BUDEPRION SR , BUPROPION HCL , CITALOPRAM HBR	2
BUDEPRION XL , CITALOPRAM HBR	1
BUDEPRION XL , FLUOXETINE HCL	1
BUPROPION XL , SERTRALINE HCL	2
BUPROPION HCL SR , SERTRALINE HCL	1
BUDEPRION XL , FLUOXETINE HCL , LEXAPRO	1
BUPROPION HCL SR , BUPROPION XL , FLUOXETINE HCL , SERTRALINE HCL	1
BUPROPION XL , SERTRALINE HCL	1
BUPROPION HCL SR , PAROXETINE HCL	2
BUPROPION XL , LEXAPRO	1
BUDEPRION XL , BUPROPION XL , FLUOXETINE HCL	1

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurences
BUPROPION HCL SR , FLUOXETINE HCL	2
BUPROPION HCL SR , SERTRALINE HCL	1
BUDEPRION XL , BUPROPION XL , CITALOPRAM HBR	4
BUPROPION XL , CITALOPRAM HBR	1
BUPROPION HCL SR , FLUOXETINE HCL	1
BUPROPION XL , FLUOXETINE HCL	2
BUPROPION HCL SR , FLUOXETINE HCL , SERTRALINE HCL	2
BUPROPION XL , SERTRALINE HCL	1
BUDEPRION XL , BUPROPION XL , CITALOPRAM HBR	2
BUPROPION HCL , SERTRALINE HCL	4
BUDEPRION XL , SERTRALINE HCL	2
BUDEPRION XL , CITALOPRAM HBR	1
BUPROPION XL , FLUOXETINE HCL	3
BUDEPRION XL , CITALOPRAM HBR	1
BUPROPION HCL SR , BUPROPION XL	1
BUPROPION HCL SR , LEXAPRO	1
BUPROPION HCL SR , BUPROPION XL , CITALOPRAM HBR , LEXAPRO	2
BUDEPRION XL , BUPROPION XL , FLUOXETINE HCL , LEXAPRO , SERTRALINE	2
BUPROPION HCL SR , PAROXETINE HCL	1
BUDEPRION XL , BUPROPION XL , LEXAPRO	1
BUDEPRION XL , SERTRALINE HCL	2

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurrences
BUDEPRION XL , LEXAPRO	2
BUDEPRION XL , BUPROPION HCL SR , BUPROPION XL	3
BUDEPRION XL , FLUOXETINE HCL	1
BUDEPRION XL , BUPROPION HCL SR , FLUOXETINE HCL	2
BUDEPRION SR , BUPROPION HCL SR , CITALOPRAM HBR	2
BUDEPRION SR , FLUOXETINE HCL	3
BUPROPION HCL SR , SERTRALINE HCL	2
BUPROPION XL , CITALOPRAM HBR	1
BUPROPION HCL SR , CITALOPRAM HBR	1
BUPROPION XL , CITALOPRAM HBR	2
BUDEPRION XL , LEXAPRO	1
BUDEPRION XL , BUPROPION XL , SERTRALINE HCL	2
BUPROPION XL , CITALOPRAM HBR , SERTRALINE HCL	3
BUDEPRION XL , BUPROPION XL , CITALOPRAM HBR , SERTRALINE HCL	3
BUDEPRION XL , BUPROPION XL , PAROXETINE HCL	1
BUDEPRION XL , BUPROPION XL , FLUOXETINE HCL	4
BUPROPION XL , CITALOPRAM HBR	1
BUPROPION HCL , SERTRALINE HCL	2
BUDEPRION SR , SERTRALINE HCL	2
BUDEPRION XL , BUPROPION XL , LEXAPRO	1

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurences
BUPROPION HCL SR , CITALOPRAM HBR	2
BUDEPRION XL , SERTRALINE HCL	1
BUPROPION HCL SR , SERTRALINE HCL	2
BUDEPRION XL , BUPROPION HCL SR , FLUOXETINE HCL	1
BUDEPRION SR , LEXAPRO	1
BUDEPRION XL , BUPROPION HCL , FLUOXETINE HCL	4
BUDEPRION SR , FLUOXETINE HCL , SERTRALINE HCL	2
BUDEPRION XL , BUPROPION XL	2
BUPROPION XL , FLUOXETINE HCL	1
BUDEPRION XL , BUPROPION XL , SERTRALINE HCL	1
BUPROPION HCL SR , FLUOXETINE HCL	1
BUPROPION HCL SR , LEXAPRO	1
BUDEPRION SR , CITALOPRAM HBR	1
BUPROPION XL , SERTRALINE HCL	2
BUPROPION HCL SR , CITALOPRAM HBR , PAROXETINE HCL	4
BUDEPRION XL , BUPROPION XL , FLUOXETINE HCL	3
BUPROPION HCL SR , SERTRALINE HCL	1
BUPROPION HCL SR , FLUOXETINE HCL	1
BUPROPION XL , FLUOXETINE HCL	1
BUDEPRION XL , BUPROPION XL , FLUOXETINE HCL	4
BUPROPION HCL , BUPROPION HCL SR , BUPROPION XL , LEXAPRO	4

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurrences
BUDEPRION XL , BUPROPION HCL SR , LEXAPRO	3
BUPROPION HCL SR , CITALOPRAM HBR	1
BUDEPRION XL , FLUOXETINE HCL	1
BUPROPION HCL SR , LEXAPRO	3
BUDEPRION XL , LEXAPRO	1
BUPROPION HCL SR , LEXAPRO	1
BUPROPION HCL , BUPROPION HCL SR , PAROXETINE HCL	2
BUDEPRION XL , BUPROPION XL , PAROXETINE HCL	2
BUDEPRION XL , CITALOPRAM HBR , SERTRALINE HCL	1
BUDEPRION XL , BUPROPION XL	3
BUDEPRION XL , BUPROPION XL , LEXAPRO	1
BUDEPRION XL , BUPROPION XL , FLUOXETINE HCL	1
BUPROPION XL , CITALOPRAM HBR	1
BUPROPION XL , FLUOXETINE HCL	2
BUDEPRION XL , BUPROPION XL , LEXAPRO	1
BUDEPRION XL , SERTRALINE HCL	2
BUDEPRION XL , LEXAPRO	1
BUPROPION HCL SR , CITALOPRAM HBR	1
BUDEPRION XL , CITALOPRAM HBR , FLUOXETINE HCL	3
BUPROPION HCL , BUPROPION XL , SERTRALINE HCL	1

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurrences
BUPROPION XL , SERTRALINE HCL	2
BUPROPION XL , FLUOXETINE HCL	1
BUDEPRION XL , SERTRALINE HCL	2
BUPROPION HCL SR , FLUOXETINE HCL	3
BUPROPION HCL , BUPROPION HCL SR , LEXAPRO	2
BUPROPION HCL SR , BUPROPION XL , FLUOXETINE HCL	2
BUDEPRION XL , BUPROPION XL , CITALOPRAM HBR	3
BUPROPION XL , CITALOPRAM HBR	1
BUDEPRION XL , BUPROPION HCL SR , BUPROPION XL , CITALOPRAM HBR	3
BUDEPRION XL , FLUOXETINE HCL	1
BUPROPION HCL SR , BUPROPION XL , FLUOXETINE HCL	1
BUPROPION XL , SERTRALINE HCL	3
BUPROPION XL , PAROXETINE HCL , SERTRALINE HCL	3
BUDEPRION SR , BUDEPRION XL , LEXAPRO	3
BUDEPRION XL , FLUOXETINE HCL	1
BUDEPRION SR , BUDEPRION XL , FLUOXETINE HCL , SERTRALINE HCL	2
BUDEPRION XL , FLUOXETINE HCL	2
BUDEPRION SR , FLUOXETINE HCL	4
BUDEPRION SR , PAROXETINE HCL	1
BUDEPRION XL , FLUOXETINE HCL	1
BUDEPRION XL , LEXAPRO	1

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurrences
BUDEPRION SR , SERTRALINE HCL	1
BUPROPION HCL SR , CITALOPRAM HBR	2
BUPROPION HCL SR , SERTRALINE HCL	1
BUPROPION XL , CITALOPRAM HBR	1
BUPROPION XL , LEXAPRO	2
BUPROPION HCL SR , LEXAPRO	4
BUDEPRION XL , BUPROPION XL , LEXAPRO	2
BUPROPION XL , LEXAPRO	1
BUDEPRION SR , SERTRALINE HCL	1
BUDEPRION XL , BUPROPION XL , CITALOPRAM HBR	2
BUPROPION HCL SR , LEXAPRO	1
BUDEPRION SR , BUPROPION HCL , BUPROPION HCL SR , LEXAPRO	3
BUDEPRION SR , BUDEPRION XL , BUPROPION HCL SR , BUPROPION XL	9
BUDEPRION XL , CITALOPRAM HBR	1
BUDEPRION XL , BUPROPION XL , CITALOPRAM HBR	1
BUDEPRION XL , BUPROPION XL , LEXAPRO	1
BUDEPRION SR , BUDEPRION XL , BUPROPION HCL , CITALOPRAM HBR	4
BUPROPION HCL SR , PAROXETINE HCL , SERTRALINE HCL	3
BUPROPION HCL , BUPROPION XL , SERTRALINE HCL	4
BUDEPRION XL , BUPROPION HCL SR , SERTRALINE HCL	2

Recipients taking bupropion + at least one SSRI
12/23/08 - 12/22/09
Overlapping time frame = 60 days

Unique Recipients = 183	Occurrences
BUDEPRION SR , BUDEPRION XL , BUPROPION HCL SR , BUPROPION XL	1
BUPROPION XL , LEXAPRO	2
BUDEPRION SR , CITALOPRAM HBR , SERTRALINE HCL	1
BUPROPION HCL SR , SERTRALINE HCL	2
BUDEPRION XL , CITALOPRAM HBR	1
BUPROPION HCL , LEXAPRO	1
BUPROPION HCL SR , FLUOXETINE HCL	2
BUPROPION XL , LEXAPRO	1
BUDEPRION SR , BUPROPION HCL SR , PAROXETINE HCL	2
BUDEPRION XL , CITALOPRAM HBR	1
BUDEPRION XL , FLUOXETINE HCL , LEXAPRO	3
BUDEPRION XL , BUPROPION XL , CITALOPRAM HBR	1
BUDEPRION XL , FLUOXETINE HCL	2
BUDEPRION XL , BUPROPION XL , FLUOXETINE HCL	3
BUDEPRION XL , BUPROPION XL , SERTRALINE HCL	2
BUDEPRION SR , BUPROPION HCL SR , CITALOPRAM HBR , FLUOXETINE HCL	2
BUDEPRION XL , BUPROPION XL , FLUOXETINE HCL	2
BUPROPION HCL , BUPROPION HCL SR , FLUOXETINE HCL	3
BUPROPION HCL SR , FLUOXETINE HCL	2

Recipients taking mirtazapine + at least one SSRI

12/23/08 - 12/22/09

Overlapping time frame = 60 days

Unique Recipients = 77	Occurrences
CITALOPRAM HBR , FLUOXETINE HCL , MIRTAZAPINE	3
CITALOPRAM HBR , FLUOXETINE HCL , MIRTAZAPINE	1
CITALOPRAM HBR , FLUOXETINE HCL , MIRTAZAPINE	2
CITALOPRAM HBR , LEXAPRO , MIRTAZAPINE	1
CITALOPRAM HBR , LEXAPRO , MIRTAZAPINE	3
CITALOPRAM HBR , MIRTAZAPINE	1
CITALOPRAM HBR , MIRTAZAPINE	2
CITALOPRAM HBR , MIRTAZAPINE	3
CITALOPRAM HBR , MIRTAZAPINE	4
CITALOPRAM HBR , MIRTAZAPINE	1
CITALOPRAM HBR , MIRTAZAPINE	2
CITALOPRAM HBR , MIRTAZAPINE	2
CITALOPRAM HBR , MIRTAZAPINE	1
CITALOPRAM HBR , MIRTAZAPINE	4
CITALOPRAM HBR , MIRTAZAPINE	2
CITALOPRAM HBR , MIRTAZAPINE	1
CITALOPRAM HBR , MIRTAZAPINE	5
CITALOPRAM HBR , MIRTAZAPINE	2
CITALOPRAM HBR , MIRTAZAPINE	1
CITALOPRAM HBR , MIRTAZAPINE	1
CITALOPRAM HBR , MIRTAZAPINE , SERTRALINE HCL	4
CITALOPRAM HBR , MIRTAZAPINE , SERTRALINE HCL	1
FLUOXETINE HCL , LEXAPRO , MIRTAZAPINE	2
FLUOXETINE HCL , MIRTAZAPINE	2
FLUOXETINE HCL , MIRTAZAPINE	1
FLUOXETINE HCL , MIRTAZAPINE	1
FLUOXETINE HCL , MIRTAZAPINE	3
FLUOXETINE HCL , MIRTAZAPINE	3
FLUOXETINE HCL , MIRTAZAPINE	1
FLUOXETINE HCL , MIRTAZAPINE	1
FLUOXETINE HCL , MIRTAZAPINE	2
FLUOXETINE HCL , MIRTAZAPINE	3
FLUOXETINE HCL , MIRTAZAPINE	2
FLUOXETINE HCL , MIRTAZAPINE	2
FLUOXETINE HCL , MIRTAZAPINE	1
FLUOXETINE HCL , MIRTAZAPINE	3
FLUOXETINE HCL , MIRTAZAPINE	1
FLUOXETINE HCL , MIRTAZAPINE	2
FLUOXETINE HCL , MIRTAZAPINE	3
FLUOXETINE HCL , MIRTAZAPINE	2
FLUOXETINE HCL , MIRTAZAPINE	4
FLUOXETINE HCL , MIRTAZAPINE , SERTRALINE HCL	3
LEXAPRO , MIRTAZAPINE	2
LEXAPRO , MIRTAZAPINE	1

Recipients taking mirtazapine + at least one SSRI

12/23/08 - 12/22/09

Overlapping time frame = 60 days

Unique Recipients = 77	Occurrences
LEXAPRO , MIRTAZAPINE	1
LEXAPRO , MIRTAZAPINE	1
LEXAPRO , MIRTAZAPINE	1
LEXAPRO , MIRTAZAPINE	2
LEXAPRO , MIRTAZAPINE	1
LEXAPRO , MIRTAZAPINE	2
LEXAPRO , MIRTAZAPINE	2
LEXAPRO , MIRTAZAPINE	1
LEXAPRO , MIRTAZAPINE	2
LEXAPRO , MIRTAZAPINE	3
LEXAPRO , MIRTAZAPINE , SERTRALINE HCL	2
MIRTAZAPINE , PAROXETINE HCL	2
MIRTAZAPINE , PAROXETINE HCL	1
MIRTAZAPINE , PAROXETINE HCL	2
MIRTAZAPINE , SERTRALINE HCL	1
MIRTAZAPINE , SERTRALINE HCL	1
MIRTAZAPINE , SERTRALINE HCL	1
MIRTAZAPINE , SERTRALINE HCL	2
MIRTAZAPINE , SERTRALINE HCL	2
MIRTAZAPINE , SERTRALINE HCL	2
MIRTAZAPINE , SERTRALINE HCL	3
MIRTAZAPINE , SERTRALINE HCL	7
MIRTAZAPINE , SERTRALINE HCL	1
MIRTAZAPINE , SERTRALINE HCL	2
MIRTAZAPINE , SERTRALINE HCL	2
MIRTAZAPINE , SERTRALINE HCL	3
MIRTAZAPINE , SERTRALINE HCL	1
MIRTAZAPINE , SERTRALINE HCL	4
MIRTAZAPINE , SERTRALINE HCL	2
MIRTAZAPINE , SERTRALINE HCL	2
MIRTAZAPINE , SERTRALINE HCL	1
MIRTAZAPINE , SERTRALINE HCL	5
MIRTAZAPINE , SERTRALINE HCL	5

South Dakota Medicaid P&T Committee

Proposal for Antidepressant Use

First Tier of Antidepressants

Bupropion, Bupropion SR, Bupropion XL

Citalopram

Fluoxetine

Mirtazapine

Paroxetine

Sertraline

Venlafaxine, Venlafaxine XR

Second Tier of Antidepressants

Desvenlafaxine (Pristiq)

Duloxetine (Cymbalta)

Escitalopram (Lexapro)

Fluvoxamine (except if prescribed for Obsessive-Compulsive Disorder)

Mirtazapine (Remeron SolTab)

Paroxetine (Paxil CR or Pexeva)

Selegiline (Emsam)

Any trade name antidepressant for which there is a generic available.

If more than one antidepressant for more than 60 days, the antidepressants must be initially prescribed by a psychiatrist (with the exception of trazodone).

A second tier antidepressant may be used if two trials of a first tier generic antidepressant have been completed (failed) in the last 365 days.

Two failed trials with an antidepressant from tier one - at least one of the trials had to last 6 weeks.



ANTIDEPRESSANT PRIOR AUTHORIZATION FORM

SD DEPARTMENT OF SOCIAL SERVICES MEDICAL SERVICES DIVISION

Fax Completed Form to:
866-254-0761
For questions regarding this
Prior authorization, call
866-705-5391

SD Medicaid requires that patients receiving a new prescription for a second tier antidepressant must fail two trials of a first tier agent.

- Tricyclics, trazodone, bupropion, citalopram, fluoxetine, mirtazapine, immediate release paroxetine, sertraline and venlafaxine do not require a prior authorization.
- Patients currently stabilized on a second generation antidepressant will not be asked to change medication.

Part I: RECIPIENT INFORMATION (To be completed by physician's representative or pharmacy):

RECIPIENT NAME:	RECIPIENT MEDICAID ID NUMBER:
Recipient Date of birth: / /	

Part II: PHYSICIAN INFORMATION (To be completed by physician's representative or pharmacy):

PHYSICIAN NAME:	PHYSICIAN DEA NUMBER:
City:	PHONE: () FAX: ()

Part III: TO BE COMPLETED BY PHYSICIAN:

Requested Drug and Dosage: (must be completed)
Diagnosis for this request:
Qualifications for coverage:
<input type="checkbox"/> Two failed trials (in the last 365 days) with an antidepressant from tier one-at least one trial had to last 6 weeks:
1. List failed medication
2. List failed medication
Adverse Reaction (attach FDA MedWatch form) or contraindication: (provide description below):
Medical Justification for use of a tier two agent without trial of a tier one agent:
Physician Signature: _____ Date: _____

Part IV: PHARMACY INFORMATION

PHARMACY NAME:	SD MEDICAID PROVIDER NUMBER:
Phone: ():	FAX: ()
Drug:	NDC#:

Part V: FOR OFFICIAL USE ONLY

Date: / /	Initials: _____
Approved - Effective dates of PA: From: / /	To: / /
Denied: (Reasons)	

**South Dakota Department of Social Services
Pharmacotherapy Review
Medications for
Attention Deficit Hyperactivity Disorder (ADHD)
December 11, 2009**

I. Overview

ADHD is a severe, debilitating condition affecting approximately 7.8% of school age children, based on a recent national survey. Other sources report prevalence as high as 12% in school-aged children with 60%-85% of children continuing to experience ADHD symptoms into their adolescent years and 30%-77% into their adult years. Children with ADHD are usually diagnosed between the ages of 6 to 12. Suboptimal academic performance is often the reason for initial screening. A diagnosis of ADHD is subjective in nature, with the provider looking for symptoms of inattention, hyperactivity, and impulsivity: symptoms that are frequent and severe enough to interfere with the child's, and often the family's, ability to lead a normal life. These children, left undiagnosed or untreated, are at higher risk of self-injury, depression, low self-esteem, delinquent behavior, antisocial personality traits, substance abuse and other comorbidities.

Most medications for Attention Deficit Hyperactivity Disorder (ADHD) are CNS stimulants, which are thought to work by blocking reuptake of norepinephrine and dopamine in the presynaptic neurons and increasing release of these neurotransmitters into the extraneural space. There are two non-stimulant medications for ADHD, atomoxetine (Strattera[®]) and guanfacine (Intuniv[®]). Strattera is classified as a norepinephrine reuptake inhibitor and works by selectively inhibiting presynaptic norepinephrine transporters. Intuniv is classified as a selective alpha_{2A}-adrenergic receptor agonist that reduces sympathetic nerve impulses to the heart and blood vessels resulting in a decrease in peripheral vascular resistance and a reduction in heart rate.

Pharmacotherapy, along with behavior therapy and counseling, can help those patients diagnosed with ADHD lead a normal and productive life. For many years, CNS stimulants have been considered first-line therapy for the treatment of ADHD. With the approval of atomoxetine in late 2002, patients now have another treatment option.

II. Current Treatment Guidelines

**American Academy of Child and Adolescent Psychiatry (AACAP)
Practice Parameter for the Use of Stimulant Medication in the Treatment of Children,
Adolescents, and Adults (2007)**

- 1) The first agent tried should have FDA approval for the treatment of ADHD; possible agents would be dextroamphetamine, methylphenidate (MPH), mixed salts of amphetamine, and atomoxetine.
- 2) Stimulants have been proven in many clinical trials to be highly effective in the treatment of ADHD.
- 3) The physician may choose either MPH or amphetamines, as data suggests equal efficacy between the two stimulant types.
- 4) Longer-acting formulations may be used as initial treatment and are associated with greater compliance. Physicians do not need to initiate treatment with the short-acting forms, or use them to titrate to the appropriate dosage of the long-acting forms. Short-acting forms may be used to initiate therapy in low-weight children where long-acting forms may not be available in the necessary smaller doses.
- 5) Once a medication is initiated, the dose should be titrated up every 1 to 3 weeks until the maximum dose for the stimulant is reached, the symptoms of ADHD remit, or side effects prevent further titration.

- 6) It is recommended that the patient be in contact with the physician during the titration period and visit the physician after 1 month of therapy to assess effectiveness and determine long-term therapy plans.
- 7) Patients may show an initial response rate of up to 85% when both stimulant forms are tried versus the response rate of only 65%-75% observed in clinical trials when patients were treated with only one stimulant. Therefore, if a patient fails one stimulant, it is recommended that another be tried.
- 8) For the treatment of preschoolers, the available evidence suggests that titration of stimulants be done slowly and that lower doses may be effective. This may be due to slower metabolism of methylphenidate (MPH) in preschoolers.
- 9) In studies published comparing atomoxetine to stimulants, greater efficacy was seen in those patients treated with stimulants.
- 10) Atomoxetine may be used as a first-line agent in patients with an active substance abuse problem, comorbid anxiety, tics, or in those who experience severe side effects while taking stimulants.

American Academy of Child and Adolescent Psychiatry (AACAP)
Clinical Practice Guideline: Treatment of the School-Aged Child with Attention-Deficit Hyperactivity Disorder (2001)

- 1) Identify target behavior symptom(s) and collect previous treatment data.
- 2) Develop a treatment plan that involves drug and/or behavioral therapy and involves parents, teachers, and caregivers. It is also important to recognize that ADHD is a chronic condition.
- 3) Define appropriate target outcomes, so that medication effectiveness can be clearly and systemically evaluated. It is important to define clear goals – control of symptoms at school, at home, or both – so that it can be determined whether or not a child needs long-acting, short-acting, or a combination of the two types of medication.
- 4) Medication selection:
 - a. CNS stimulants are still considered to be first-line therapy as 70 to 80% of children respond favorably to this class.
 - b. Response to one stimulant medication does not predict response to another.
 - c. Children who fail two stimulant medications can be tried on a third stimulant medication.
 - d. When the selected regimen has not met targeted outcomes, clinicians should evaluate the original diagnosis, use of all appropriate treatments, adherence to the treatment plan, and presence of coexisting conditions.
 - e. If a child fails treatment with at least 3 stimulants, second-line treatments may be considered. These include tricyclic antidepressants, bupropion, and clonidine.

III. Drug Treatment for ADHD

Product	Dosage Forms	Dosing Frequency	Duration of Action
Immediate-release (IR) methylphenidate			
<i>Ritalin</i> (Novartis)	5, 10, 20 mg tabs	Adults: Given bid to tid preferably 30 to 45 minutes before meals. Children \geq 6 yr: Given twice daily before breakfast and lunch.	3 to 4 h
<i>Methylin</i> Tabs (Mallinckrodt)	5, 10, 20 mg tabs	Adults: Given bid to tid preferably 30 to 45 minutes before meals. Children \geq 6 yr: Given twice	3 to 4 h

Product	Dosage Forms	Dosing Frequency	Duration of Action
		daily before breakfast and lunch.	
<i>Methylin</i> Chewable Tabs(Mallinckrodt)	2.5, 5, 10 mg chewable tabs	Adults: Given bid to tid preferably 30 to 45 minutes before meals. Children \geq 6 yr: Given twice daily before breakfast and lunch.	3 to 4 h
<i>Methylin</i> Oral Solution (Mallinckrodt)	5 mg/5 mL, 10 mg/5 mL oral solution	Adults: Given bid to tid preferably 30 to 45 minutes before meals. Children \geq 6 yr: Given twice daily before breakfast and lunch.	3 to 4 h
Immediate-release (IR) dexamethylphenidate			
<i>Focalin</i> (Novartis)	2.5, 5, 10 mg tabs	Given bid at least 4 hr apart without regard to meals.	4 to 5 h
Extended-release (ER) dexamethylphenidate			
<i>Focalin XR</i> (Novartis)	5, 10, 15, 20 mg caps	Given once daily in the morning. May be taken whole or sprinkled over applesauce. If sprinkled over applesauce, should be used immediately and not be stored for future use. Capsule and/or capsule content should not be crushed.	up to 12 h
Extended-(ER)/Sustained release-(SR) methylphenidate			
<i>Ritalin LA</i> (Novartis) Bead-filled capsule (1/2 IR and 1/2 enteric coated, delayed release)	10, 20, 30, 40 mg LA caps	Given once daily in the morning. May be taken whole or sprinkled on applesauce. Applesauce should not be warm. If sprinkled over applesauce, should be used immediately and not stored for future use. Capsule and/or capsule content should not be crushed.	8 to 10 h
<i>Ritalin SR</i> (Novartis) Wax matrix tab	20 mg SR tabs	Given once daily to bid in dose corresponding to q8h dose IR. Must be swallowed whole.	6 to 8 h (Package insert says approx. 8 h)
<i>Metadate ER</i> (UCB)	10, 20 mg ER tabs	Given once daily to bid in dose corresponding to q8h dose IR. Must be swallowed whole.	6 to 8 h (Package insert says approx. 8 h)
<i>Methylin ER</i> (Mallinckrodt)	10, 20 mg ER tabs	Given once daily to bid in dose corresponding to q8h dose IR. Must be swallowed whole.	6 to 8 h (Package insert says approx. 8 h)
<i>Concerta</i> (McNeil Pediatrics) OROS (osmotic system has	18, 27, 36, 54 mg ER tabs	Given once daily in the morning without regard to meals. Must be	12 h

Product	Dosage Forms	Dosing Frequency	Duration of Action
hole for drug release) with IR over-coat.		swallowed whole.	
<i>Metadate CD</i> (UCB) Bead-filled capsule (30% IR and 70% ER)	10, 20, 30, 40, 50, 60 mg ER caps	Given once daily in the morning before breakfast. May be taken whole or sprinkled over applesauce. If sprinkled over applesauce, should be used immediately and not stored for future use. Capsule and/or capsule content should not be crushed.	8 to 9 h
<i>Daytrana</i> (Shire) Transdermal patch	1.1 mg/hr (10 mg/9 hr) 1.6 mg/hr (15 mg/9 hr) 2.2 mg/hr (20 mg/9 hr) 3.3 mg/hr (30 mg/9 hr)	Worn daily for 9 hours (apply 2 hrs before desired effect). Patch to be replaced once a day in the morning. Alternate application site daily.	12 h
Immediate-release (IR) dextroamphetamine and amphetamine salts mixture			
<i>Adderall</i> (Barr)	5, 7.5, 10, 12.5, 15, 20, 30 mg scored tabs	Given once daily or bid without regard to meals. First dose on awakening, additional doses at 4 to 6 h intervals.	4 to 6 h
Extended-release (ER) dextroamphetamine and amphetamine salts mixture			
<i>Adderall XR</i> (Shire)	5, 10, 15, 20, 25, 30 mg ER caps	Given once daily in the morning without regard to meals. May be taken whole or sprinkled on applesauce. Sprinkled applesauce should not be chewed or stored for later.	10 to 12 h
Sustained-release (SR) dextroamphetamine			
<i>Dexedrine Spansule</i> Cap filled with IR and SR beads (GlaxoSmithKline)	5, 10, 15 mg SR caps	Once daily or bid dose without regard to meals. Do not chew beads in cap.	6 to 10 h
<i>Vyvanse</i> (lisdexamfetamine) (Shire) Prodrug of dextroamphetamine.	20, 30, 40, 50, 60, 70 mg caps	Given once daily in the morning without regard to meals. May be taken whole or contents dissolved in glass of water. If solution prepared, it should be used immediately and not stored.	13 h
Nonstimulants			
Atomoxetine			
<i>Strattera</i> (Eli Lilly & Co.) • Response rate is lower compared to	10, 18, 25, 40, 60, 80, 100 mg caps	Given once daily or bid without regard to meals.	24 h

Product	Dosage Forms	Dosing Frequency	Duration of Action
methylphenidate. <ul style="list-style-type: none"> Consider atomoxetine for patients with anxiety, insomnia, or substance abuse disorders. 			
Guanfacine			
<i>Intuniv</i> (Shire) <ul style="list-style-type: none"> May be an alternative or an add-on to stimulants for children who do not receive enough benefit from, or who are intolerant to, stimulants alone (e.g., tics, insomnia, etc). There are no head-to-head trials comparing <i>Intuniv</i> to other ADHD medications. However, the improvements in mean ADHD-RS-IV scores were comparable to atomoxetine at lower doses and comparable to stimulants at higher doses (≥ 0.13 mg/kg).⁵⁷ 	1, 2, 3, 4 mg extended-release tabs	Given once daily; avoid high-fat meals. Tablets should not be crushed or chewed or broken before swallowing. Do not substitute for immediate-release guanfacine tablets on a mg-per-mg basis due to different pharmacokinetic profiles. Start at 1 mg daily and titrate dose at no more than 1 mg/week increments. Keep dose within 1 mg to 4 mg/day depending on response and tolerability. Consider dosing on a mg/kg basis with starting doses of 0.05 mg/kg to 0.08 mg/kg once daily. Doses up to 0.12 mg/kg once daily may provide additional benefit. When discontinuing, taper the dose in decrements of no more than 1 mg every 3 to 7 days.	About 24 h

IV. ADHD Medication Drug Interactions

Clinically important drug interactions exist for the ADHD medications with certain, important differences among the classes. Each of the medications in this class should be used cautiously with antihypertensives (as stimulants, atomoxetine and guanfacine, may antagonize the effects of antihypertensive medications), tricyclic antidepressants, and MAO inhibitors (can result in hypertensive crisis).

Amphetamines

- GI acidifying agents (ascorbic acid, guanethidine, fruit juice) decrease absorption of amphetamines and urinary acidifiers (aluminum chloride) increase excretion of amphetamines.
- GI alkalizers (sodium bicarb) increase absorption of amphetamines and urinary alkalizers (acetazolamide) decrease excretion of amphetamines.
- Chlorpromazine/haloperidol block dopamine/norepinephrine receptors decreasing effects of amphetamines.
- Lithium carbonate inhibits stimulatory effects of amphetamines.
- Meperidine activity is potentiated by amphetamines.
- Co-administration of phenobarbital and phenytoin with amphetamines may lead to a synergistic anticonvulsant action.

Methylphenidate and Dexmethylphenidate

- May decrease metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, phenytoin, and primidone), and antidepressants (TCA's and SSRI's) resulting in the need for dosage adjustments.
- Serious adverse events have been noted with concomitant use of clonidine, although no causality has been established. This combination should be carefully monitored if use is deemed therapeutically necessary.

Atomoxetine

- Paroxetine, fluoxetine, and quinidine are all CYP2D6 inhibitors, dosing of atomoxetine may need to be adjusted when given with any of these medications.
- The effects of albuterol on heart rate and blood pressure may be potentiated by atomoxetine.
- MAOIs-coadministration is contraindicated.
- Pressor agents-administer with caution because of possible effects on blood pressure.
- CYP3A substrates-coadministration resulted in a 15% increase in midazolam AUC.

Guanfacine

- CYP3A4/5 inhibitors (e.g., ketoconazole)-coadministration may increase rate and extent of guanfacine exposure.
- CYP3A4 inducers (e.g., rifampin)-coadministration may decrease rate and extent of guanfacine exposure.
- Valproic acid-coadministration may increase serum valproic acid concentrations.
- Antihypertensive drugs-use caution
- CNS depressants-use caution

V. Comparative Adverse Effects of ADHD Medications

Black Box Warning for Amphetamines

Amphetamines have a high potential for abuse. Administration of amphetamines for prolonged periods of time may lead to drug dependence and must be avoided. Particular attention should be paid to the possibility of subjects obtaining amphetamines for non-therapeutic use or distribution to others and the drugs should be prescribed or dispensed sparingly. Misuse of amphetamines may cause sudden death and serious cardiovascular adverse events.

Black Box Warning for Methylphenidate and Dexmethylphenidate

ORAL

Methylphenidate and dexmethylphenidate should be given cautiously to patients with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative. Chronic abusive use can lead to marked tolerance and psychological dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during withdrawal from abusive use since severe depression may occur. Withdrawal following chronic therapeutic use may unmask symptoms of the underlying disorder that may require follow-up.

TRANSDERMAL

Methylphenidate patch should be given cautiously to patients with a history of drug dependence or alcoholism. Chronic abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during withdrawal from abusive use, since severe depression may occur. Withdrawal following chronic therapeutic use may unmask symptoms of the underlying disorder that may require follow-up.

In September 2005, the FDA issued an alert and the manufacturer of atomoxetine revised its labeling to include a black box warning about the risks of suicidal ideation. Patients started on atomoxetine should be monitored for suicidal thinking and behavior, clinical worsening of symptoms, and unusual changes in behavior. The risk of suicidal ideation in patients taking atomoxetine was 0.4% (5/1357

patients) versus none (0/851) in the placebo arm. Additionally, there have been postmarketing reports indicating that atomoxetine can cause severe liver damage in rare instances. In clinical trials with over 6,000 patients and postmarketing use in over 2 million patients, there have been rare cases of serious liver injury that were considered probably or possibly related to atomoxetine. Because of this information, atomoxetine should be discontinued and liver function testing should be performed at the first sign of liver injury (e.g., pruritus, jaundice, dark urine, right upper quadrant tenderness or unexplained flu-like symptoms).

On February 21, 2007, the FDA directed all manufacturers of products approved for the treatment of ADHD to develop Patient Medication Guides to alert patients to possible cardiovascular risks and risks of adverse psychiatric symptoms associated with the medicines, and to advise them of precautions that can be taken. An FDA review of reports of serious cardiovascular adverse events in patients taking usual doses of ADHD products revealed reports of sudden death in patients with underlying serious heart problems or defects, and reports of stroke and heart attack in adults with certain risk factors. FDA recommends that children, adolescents, or adults who are being considered for treatment with ADHD drug products work with their physician or other health care professional to develop a treatment plan that includes a careful health history and evaluation of current status, particularly for cardiovascular and psychiatric problems (including assessment for a family history of such problems).

Rare reports of neuroleptic malignant syndrome (NMS) have occurred with dexamethylphenidate and methylphenidate. In most cases, patients were receiving therapies associated with NMS. It is not known whether this is a drug/drug interaction, a reaction to one drug alone, or due to some other cause. In regard to other adverse reactions, many similarities exist between the drugs used to treat ADHD. Tachycardia, increased blood pressure, anorexia, weight loss, and sleep pattern disturbances are of major concern, especially in this population of patients. Dry mouth, restlessness, visual disturbances and urticaria are also commonly seen. With the exception of atomoxetine, all medications carry the risk of lowering the seizure threshold, exacerbating tics, and Tourettes syndrome. One consideration to note, it has been clearly demonstrated that patients who do not respond well to one stimulant medication may respond to another. However, there have been reports of psychiatric adverse effects such as exacerbation of pre-existing psychosis, induction of mixed/manic episodes, hallucinations, delusions, paranoia, and aggression that could be cause for concern.

One final consideration is that CNS stimulants have reported suppression of growth (weight gain and/or height) with long-term use. Although it appears that this a temporary delay and that the patients will normalize in late adolescence, children should be monitored for height and weight changes while taking a CNS stimulant.

VI. Conclusion

Medication treatment for ADHD has increased dramatically over the past 10 years with stimulants becoming the most prescribed psychotropic drug for children. Scientific evidence shows that stimulants are an effective short-term treatment for ADHD, with medication resulting in better symptomatic relief than treatment with behavioral therapy, alone. However, the evidence for comparative efficacy and adverse events of drugs for treating ADHD is severely lacking in measuring functional or long-term outcomes. More rigorous studies are needed to establish the comparative effectiveness of medications used to treat ADHD

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SD Medicaid
Utilization of Medications Used for ADD/ADHD
12/23/2008 - 12/22/2009

Label Name	Rx Num	Total Reimb Amt	Cost per Script
ADDERALL 10 MG TABLET	3	\$50.70	\$16.90
ADDERALL 20 MG TABLET	15	\$4,712.81	\$314.19
ADDERALL XR 10 MG CAPSULE	768	\$139,255.53	\$181.32
ADDERALL XR 15 MG CAPSULE	566	\$106,276.88	\$187.77
ADDERALL XR 20 MG CAPSULE	1579	\$350,247.16	\$221.82
ADDERALL XR 25 MG CAPSULE	505	\$100,657.77	\$199.32
ADDERALL XR 30 MG CAPSULE	1077	\$207,551.79	\$192.71
ADDERALL XR 5 MG CAPSULE	335	\$62,112.46	\$185.41
AMPHETAMINE SALTS 10 MG TAB	645	\$9,789.71	\$15.18
AMPHETAMINE SALTS 12.5 MG TB	18	\$1,189.94	\$66.11
AMPHETAMINE SALTS 15 MG TAB	82	\$2,541.03	\$30.99
AMPHETAMINE SALTS 20 MG TABLET	372	\$7,607.66	\$20.45
AMPHETAMINE SALTS 30 MG TAB	211	\$4,071.41	\$19.30
AMPHETAMINE SALTS 5 MG TAB	502	\$7,087.49	\$14.12
CONCERTA 18 MG TABLET SA	2090	\$259,942.13	\$124.37
CONCERTA 27 MG TABLET SA	2132	\$287,442.62	\$134.82
CONCERTA 36 MG TABLET SA	5608	\$939,178.87	\$167.47
CONCERTA 54 MG TABLET SA	3840	\$558,426.20	\$145.42
D-AMPHETAMINE ER 10 MG CAPSULE	182	\$12,829.27	\$70.49
D-AMPHETAMINE ER 15 MG CAPSULE	145	\$14,640.12	\$100.97
D-AMPHETAMINE ER 5 MG CAPSULE	73	\$3,315.89	\$45.42
DAYTRANA 10 MG/9 HR PATCH	173	\$27,967.81	\$161.66
DAYTRANA 15 MG/9 HR PATCH	196	\$30,616.65	\$156.21
DAYTRANA 20 MG/9 HOUR PATCH	196	\$31,360.95	\$160.00
DAYTRANA 30 MG/9 HOUR PATCH	263	\$42,112.98	\$160.13
DESOXYN 5 MG TABLET	18	\$18,154.08	\$1,008.56
DEXEDRINE SPANSULE 10 MG	6	\$467.49	\$77.92
DEXEDRINE SPANSULE 15 MG	8	\$782.37	\$97.80
DEXEDRINE SPANSULE 5 MG	1	\$202.89	\$202.89
DEXMETHYLPHENIDATE 10 MG TAB	102	\$4,478.77	\$43.91
DEXMETHYLPHENIDATE 2.5 MG TAB	67	\$1,293.63	\$19.31
DEXMETHYLPHENIDATE 5 MG TAB	117	\$3,539.69	\$30.25
DEXTROAMPHETAMINE 10 MG TAB	158	\$3,618.57	\$22.90
DEXTROAMPHETAMINE 5 MG TAB	54	\$1,354.56	\$25.08
DEXTROSTAT 5 MG TABLET	2	\$11.57	\$5.79
FOCALIN 10 MG TABLET	113	\$5,919.46	\$52.38
FOCALIN 2.5 MG TABLET	16	\$463.64	\$28.98
FOCALIN 5 MG TABLET	183	\$7,138.54	\$39.01
FOCALIN XR 10 MG CAPSULE	1402	\$186,886.21	\$133.30
FOCALIN XR 15 MG CAPSULE	887	\$130,081.08	\$146.65
FOCALIN XR 20 MG CAPSULE	1480	\$229,370.35	\$154.98
FOCALIN XR 5 MG CAPSULE	613	\$92,608.36	\$151.07

SD Medicaid
Utilization of Medications Used for ADD/ADHD
12/23/2008 - 12/22/2009

Label Name	Rx Num	Total Reimb Amt	Cost per Script
METADATE CD 10 MG CAPSULE	109	\$14,551.19	\$133.50
METADATE CD 20 MG CAPSULE	289	\$34,530.36	\$119.48
METADATE CD 30 MG CAPSULE	111	\$14,124.52	\$127.25
METADATE CD 40 MG CAPSULE	79	\$11,814.22	\$149.55
METADATE CD 50 MG CAPSULE	12	\$2,437.53	\$203.13
METADATE CD 60 MG CAPSULE	24	\$4,873.14	\$203.05
METADATE ER 20 MG TABLET	1	\$12.13	\$12.13
METHYLIN 10 MG CHEWABLE TABLET	15	\$2,807.64	\$187.18
METHYLIN 10 MG TABLET	583	\$7,910.71	\$13.57
METHYLIN 10 MG/5 ML SOLUTION	42	\$9,701.22	\$230.98
METHYLIN 2.5 MG CHEWABLE TAB	38	\$4,458.52	\$117.33
METHYLIN 20 MG TABLET	222	\$4,837.11	\$21.79
METHYLIN 5 MG CHEWABLE TABLET	38	\$4,100.08	\$107.90
METHYLIN 5 MG TABLET	587	\$5,775.52	\$9.84
METHYLIN 5 MG/5 ML SOLUTION	35	\$4,706.34	\$134.47
METHYLIN ER 10 MG TABLET	69	\$1,987.45	\$28.80
METHYLIN ER 20 MG TABLET	139	\$2,193.68	\$15.78
METHYLPHENIDATE 10 MG TABLET	311	\$3,840.15	\$12.35
METHYLPHENIDATE 20 MG TABLET	97	\$2,098.31	\$21.63
METHYLPHENIDATE 5 MG TABLET	245	\$2,327.86	\$9.50
METHYLPHENIDATE ER 20 MG TAB	127	\$1,876.85	\$14.78
PROVIGIL 100 MG TABLET	93	\$27,581.68	\$296.58
PROVIGIL 200 MG TABLET	531	\$206,123.30	\$388.18
RITALIN 20 MG TABLET	12	\$1,564.76	\$130.40
RITALIN LA 10 MG CAPSULE	110	\$15,190.11	\$138.09
RITALIN LA 20 MG CAPSULE	303	\$40,046.35	\$132.17
RITALIN LA 30 MG CAPSULE	289	\$37,567.63	\$129.99
RITALIN LA 40 MG CAPSULE	172	\$24,162.21	\$140.48
STRATTERA 10 MG CAPSULE	368	\$63,931.86	\$173.73
STRATTERA 100 MG CAPSULE	108	\$18,447.39	\$170.81
STRATTERA 18 MG CAPSULE	495	\$75,437.83	\$152.40
STRATTERA 25 MG CAPSULE	1208	\$172,019.25	\$142.40
STRATTERA 40 MG CAPSULE	1433	\$221,745.00	\$154.74
STRATTERA 60 MG CAPSULE	1022	\$151,276.05	\$148.02
STRATTERA 80 MG CAPSULE	498	\$80,045.30	\$160.73
VYVANSE 20 MG CAPSULE	540	\$71,875.20	\$133.10
VYVANSE 30 MG CAPSULE	1415	\$185,901.72	\$131.38
VYVANSE 40 MG CAPSULE	651	\$86,038.08	\$132.16
VYVANSE 50 MG CAPSULE	1344	\$179,527.00	\$133.58
VYVANSE 60 MG CAPSULE	501	\$65,540.91	\$130.82
VYVANSE 70 MG CAPSULE	1069	\$139,261.89	\$130.27
Totals	42,138	\$5,901,605.14	5,538 recipients

**Medications Used to Treat ADD/ADHD
Summary by Age**

Age	Recip Count	Rx Count	Total Dollars
3	11	47	\$2,369.75
4	41	215	\$22,851.48
5	106	648	\$73,147.86
6	227	1612	\$192,923.87
7	335	2547	\$340,733.46
8	404	3318	\$417,517.82
9	460	3976	\$520,721.10
10	477	3970	\$517,521.48
11	434	3666	\$501,541.63
12	411	3640	\$519,081.67
13	395	3050	\$432,672.35
14	401	3200	\$489,700.61
15	358	2613	\$376,216.83
16	313	2068	\$314,417.93
17	295	2051	\$311,501.76
18	195	1195	\$187,178.32
19	114	529	\$82,595.34
20	57	324	\$46,659.60
21	41	293	\$51,338.28
22	14	81	\$10,438.25
23	23	147	\$19,195.55
24	23	155	\$30,486.96
25	26	196	\$23,076.03
26	20	79	\$12,467.84
27	34	173	\$24,706.04
28	26	152	\$19,870.97
29	18	124	\$24,169.91
30	16	69	\$8,126.78
31	17	153	\$11,579.06
32	19	114	\$18,473.79
33	9	52	\$5,852.71
34	19	141	\$14,022.94
35	17	112	\$22,390.43
36	17	122	\$15,334.99
37	14	59	\$8,612.82
38	10	85	\$22,950.78
39	14	94	\$10,980.76
40	10	64	\$18,360.51
41	7	56	\$5,633.90
42	12	70	\$10,266.36
43	4	43	\$2,313.56
44	10	105	\$20,799.11
45	7	33	\$6,368.58
46	12	102	\$27,894.03
47	4	28	\$2,317.29
48	8	34	\$4,078.14

Age	Recip Count	Rx Count	Total Dollars
49	6	43	\$10,030.71
50	6	52	\$13,580.15
51	4	43	\$4,267.62
52	5	36	\$937.78
53	2	18	\$1,135.18
54	2	7	\$955.81
55	2	19	\$6,535.43
56	7	81	\$29,597.03
57	6	96	\$12,544.97
58	4	31	\$9,549.79
59	1	8	\$1,928.40
60	2	13	\$465.91
61	2	33	\$541.79
62	2	38	\$607.90
64	2	17	\$7,499.66

Consecutive Duplication for Medications used to treat ADD/ADHD

12/23/2008 - 12/22/2009

Overlap of 90 days

Unique Recipients = 47, Unique Providers = 72	Occurrences
ADDERALL XR , AMPHETAMINE SALT COMBO , CONCERTA , METHYLPHENIDATE HCL	4
ADDERALL XR , AMPHETAMINE SALT COMBO , DEXTROAMPHETAMINE SULFATE	7
ADDERALL XR , AMPHETAMINE SALT COMBO , STRATTERA	3
ADDERALL XR , AMPHETAMINE SALT COMBO , STRATTERA	2
ADDERALL XR , AMPHETAMINE SALT COMBO , STRATTERA , VYVANSE	2
ADDERALL XR , CONCERTA , STRATTERA	3
ADDERALL XR , FOCALIN XR , STRATTERA	2
AMPHETAMINE SALT COMBO , CONCERTA , FOCALIN XR , STRATTERA	4
AMPHETAMINE SALT COMBO , METHYLIN , VYVANSE	5
AMPHETAMINE SALT COMBO , METHYLPHENIDATE HCL , VYVANSE	1
CONCERTA , DEXTROAMPHETAMINE SULFATE , STRATTERA , VYVANSE	1
CONCERTA , FOCALIN , FOCALIN XR , METHYLIN	2
CONCERTA , FOCALIN , METHYLIN	1
CONCERTA , FOCALIN XR , METHYLPHENIDATE HCL	1
CONCERTA , METHYLIN , METHYLPHENIDATE HCL	2
CONCERTA , METHYLIN , METHYLPHENIDATE HCL	1
CONCERTA , METHYLIN , STRATTERA	2
CONCERTA , METHYLIN , STRATTERA	4
CONCERTA , METHYLIN , STRATTERA	4
CONCERTA , METHYLIN , STRATTERA	1
CONCERTA , METHYLIN , STRATTERA	1
CONCERTA , METHYLIN , STRATTERA	1
CONCERTA , METHYLIN , STRATTERA	1
CONCERTA , METHYLIN , STRATTERA	1
CONCERTA , METHYLPHENIDATE HCL , STRATTERA	2
DAYTRANA , FOCALIN XR , STRATTERA , VYVANSE	1
DAYTRANA , METADATE CD , METHYLIN	2
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR	1
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR	3
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR	2
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR	2
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR	4
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR	2
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR	2
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR	4
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR , STRATTERA	2
DEXMETHYLPHENIDATE HCL , FOCALIN , FOCALIN XR , STRATTERA	1
DEXMETHYLPHENIDATE HCL , FOCALIN , RITALIN LA	1
DEXMETHYLPHENIDATE HCL , FOCALIN XR , STRATTERA	1
DEXMETHYLPHENIDATE HCL , FOCALIN XR , STRATTERA	2
DEXTROAMPHETAMINE SULFATE , STRATTERA , VYVANSE	2
FOCALIN , FOCALIN XR , STRATTERA	2
METADATE CD , METHYLIN , METHYLPHENIDATE HCL	2
METADATE CD , METHYLIN , METHYLPHENIDATE HCL	1
METHYLIN , METHYLIN ER , METHYLPHENIDATE SR	2
METHYLIN , METHYLIN ER , METHYLPHENIDATE SR , STRATTERA	2
METHYLIN , METHYLPHENIDATE HCL , RITALIN LA	2
METHYLIN , METHYLPHENIDATE HCL , RITALIN LA	4

**South Dakota Department of Social Services
Pharmacotherapy Review
Suboxone® and Subutex® Review**

I. Overview

Suboxone and Subutex are both schedule III narcotic medications currently approved for the treatment of opioid dependence under the federal Drug Addiction Treatment Act of 2000 (DATA). Both contain buprenorphine, an opioid agonist-antagonist that produces the same opioid agonist effects as other opioids but produces less psychomimetic effects (e.g., delusions, euphoria, hallucinations, etc.), and less withdrawal symptoms in opioid-dependent patients. Suboxone also contains naloxone, an agent that is included to discourage the diversion and misuse of the buprenorphine component. When taken orally, naloxone has limited bioavailability; when crushed and injected, it will precipitate opioid withdrawal symptoms. Therefore, Suboxone is the preferred agent when being used in an outpatient setting; Subutex should only be administered in a supervised setting, due to the absence of naloxone.

II. Pharmacology

Buprenorphine is a partial agonist at the mu-opioid receptor and an antagonist at the kappa-opioid receptor. Naloxone is an antagonist at the mu-opioid receptor.

III. Pharmacokinetics

Pharmacokinetic parameters of buprenorphine after the administration of 4mg, 8mg, and 16mg Suboxone doses and 16mg Subutex dose				
Parameter	Suboxone 4mg	Suboxone 8mg	Suboxone 16mg	Subutex 16mg
C _{max} ng/mL	1.84 (39)	3.0 (51)	5.95 (38)	5.47 (23)
AUC (hour.ng/mL)	12.52 (35)	20.22 (43)	34.89 (33)	32.63 (25)

IV. Warnings/Precautions

Respiratory Depression – significant respiratory depression has been associated with buprenorphine, particularly by the intravenous route. Patients should be warned of the potential danger of self-administration of benzodiazepines or other depressants while under treatment with Subutex or Suboxone.

CNS Depression – Patients receiving buprenorphine in the presence of other narcotic analgesics, general anesthetics, benzodiazepines, phenothiazines, other tranquilizers, sedative/hypnotics or other CNS depressants (including alcohol) may exhibit increased CNS depression. When such combined therapy is contemplated, reduction of the dose of one or both agents should be considered.

Dependence – Buprenorphine is a partial agonist at the mu-opiate receptor and chronic administration produces dependence of the opioid type, characterized by withdrawal upon abrupt discontinuation or rapid taper. The withdrawal syndrome is milder than seen with full agonists, and may be delayed in onset.

Hepatitis, hepatic events – Cases of cytolytic hepatitis and hepatitis with jaundice have been observed in the addict population receiving buprenorphine both in clinical trials and in post-marketing adverse event reports. A measurement of liver function tests prior to initiation of treatment is recommended to establish a baseline. Periodic monitoring of liver function tests during treatment is also recommended.

Allergic Reactions – Cases of acute and chronic hypersensitivity to buprenorphine have been reported both in clinical trials and in the post-marketing experience. The most common signs and symptoms include rashes, hives, and pruritus. Cases of bronchospasm, angioneurotic edema, and anaphylactic shock have been reported.

Use in Ambulatory Patients – Suboxone and Subutex may impair the mental or physical abilities required for the performance of potentially dangerous tasks, such as driving a car or operating machinery.

Head Injury and Increased Intracranial Pressure – Suboxone and Subutex, like other opioids, may elevate cerebrospinal fluid pressure and should be used with caution in patients with head injury, intracranial lesions and other circumstances where cerebrospinal pressure may be increased.

Opioid Withdrawal effects – Suboxone is highly likely to produce marked and intense withdrawal symptoms if misused parenterally by individuals dependent on opioid agonists such as heroin, morphine, or methadone. Sublingually, Suboxone may cause opioid withdrawal symptoms in such persons if administered before the agonist effects of the opioid have subsided.

V. Drug Interactions

CYP3A4 Inhibitors – subjects receiving Subutex and Suboxone should be closely monitored and may require dose-reduction if inhibitors of CYP3A4 (e.g., azole antifungal agents, macrolide antibiotics, HIV protease inhibitors) are co-administered.

CYP3A4 Inducers – the interaction of buprenorphine with CYP3A4 inducers has not been investigated; therefore it is recommended that patients receiving Subutex or Suboxone should be closely monitored if inducers of CYP3A4 (e.g., phenobarbital, carbamazepine, phenytoin, rifampin) are co-administered.

Benzodiazepines – based on anecdotal reports, there may be an interaction between buprenorphine and benzodiazepines. There have been a number of reports of coma and death associated with concomitant intravenous misuse of buprenorphine and benzodiazepines by addicts. Patients should be warned of the potential danger.

VI. Adverse Events \geq 2% in short term studies

Adverse Events (\geq 5%) by Body System and Treatment Group in a 4-week Study			
Adverse Event	Suboxone 16mg/day n=107	Subutex 16mg/day n=103	Placebo n=107
Asthenia	7 (6.5%)	5 (4.9%)	7 (6.5%)
Chills	8 (7.5%)	8 (7.8%)	8 (7.5%)
Headache	39 (36.4%)	30 (29.1%)	24 (22.4%)
Infection	6 (5.6%)	12 (11.7%)	7 (6.5%)
Pain	24 (22.4%)	19 (18.4%)	20 (18.7%)
Pain Abdomen	12 (11.2%)	12 (11.7%)	7 (6.5%)
Pain Back	4 (3.7%)	8 (7.8%)	12 (11.2%)
Withdrawal Syndrome	27 (25.2%)	19 (18.4%)	40 (37.4%)
Vasodilation	10 (9.3%)	4 (3.9%)	7 (6.5%)
Constipation	13 (12.1%)	8 (7.8%)	3 (2.8%)
Diarrhea	4 (3.7%)	5 (4.9%)	16 (15.0%)
Nausea	16 (15.0%)	14 (13.6%)	12 (11.2%)
Vomiting	8 (7.5%)	8 (7.8%)	5 (4.7%)
Insomnia	15 (14.0%)	22 (21.4%)	17 (15.9%)
Rhinitis	5 (4.7%)	10 (9.7%)	14 (13.1%)
Sweating	15 (14.0%)	13 (12.6%)	11 (10.3%)

VII. Dosage and Administration

Suboxone or Subutex is administered sublingually as a single daily dose in the range of 12 to 16mg/day. When taken sublingually, Suboxone and Subutex have similar clinical effects and are interchangeable. Subutex contains no naloxone and is preferred for use during induction. Following induction, Suboxone, due to the presence of naloxone, is preferred when clinical use includes unsupervised administration. The use of Subutex for unsupervised administration should be limited to those patients who cannot tolerate Suboxone, for example, those patients who have been shown to be hypersensitive to naloxone.

VIII. Conclusion

Sublingual buprenorphine (Suboxone, Subutex), like methadone, is approved for the treatment of opioid detoxification. Injectable buprenorphine is indicated for the treatment of moderate to severe pain, and although not indicated, sublingual buprenorphine has been studied for treatment of both acute and chronic pain. There is very little data on buprenorphine use for cancer pain compared to other opioids. Treatment of cancer pain usually requires high doses of opioids, whereas buprenorphine appears to have an analgesic ceiling at higher doses.

Since buprenorphine has a lower abuse potential and is less dangerous in an overdose, some clinicians prefer to use it for pain management. Because Suboxone and Subutex are considerably more expensive than traditional generically available opioids, these agents might best be reserved for their FDA approved indication.

References

1. Suboxone/Subutex for pain. Pharmacist's Letter/Prescriber's Letter 2009;25(1):250101.
2. Johnson RE, Fudala PJ, Payne R. Buprenorphine: considerations for pain management. J Pain Symptom Manage 2005;29:297-326.
3. Suboxone[®] Prescribing Information, September 2006, Reckitt Benckiser, Inc.
4. Subutex[®] Prescribing Information, September 2006, Reckitt Benckiser, Inc.
5. Wolters Kluwer Health, Inc, ed. Drug Facts and Comparisons. St Louis, MO. 2009.

Top Drugs by Dollar Total 2009
Reimbursed Amount > \$1,000/Rx

Description	Rx Count	Dollar Total	Dollar/Rx
FEIBA VH IMMU 1,750-3,250 UNIT	10	\$428,134.84	\$42,813.48
NUTROPIN AQ PEN CARTRIDGE	146	\$364,550.18	\$2,496.92
PULMOZYME 1 MG/ML AMPUL	155	\$304,166.97	\$1,962.37
TOBI 300 MG/5 ML SOLUTION	101	\$256,568.42	\$2,540.28
ARCALYST 220 MG INJECTION	10	\$222,007.50	\$22,200.75
REMODULIN 10 MG/ML VIAL	11	\$216,731.75	\$19,702.89
OXYCONTIN 80 MG TABLET	168	\$210,283.52	\$1,251.69
LIORESAL IT 40 MG/20 ML KIT	145	\$168,745.14	\$1,163.76
ENBREL 50 MG/ML SURECLICK SYR	89	\$165,714.67	\$1,861.96
ATRIPLA TABLET	106	\$164,244.67	\$1,549.48
HUMIRA 40 MG/0.8 ML PEN	88	\$156,790.20	\$1,781.71
HELIXATE FS 1,000 UNIT VIAL	10	\$156,348.82	\$15,634.88
COPAXONE 20 MG INJECTION KIT	59	\$154,162.84	\$2,612.93
HUMATROPE 24 MG CARTRIDGE	29	\$148,955.50	\$5,136.40
REBIF 44 MCG/0.5 ML SYRINGE	57	\$140,048.06	\$2,456.98
BETASERON 0.3 MG KIT	54	\$135,668.86	\$2,512.39
HELIXATE FS 2,000 UNIT VIAL	2	\$133,301.06	\$66,650.53
XOLAIR 150 MG VIAL	57	\$129,563.17	\$2,273.04
HUMIRA 40 MG/0.8 ML SYRINGE	72	\$124,001.39	\$1,722.24
XENAZINE 25 MG TABLET	21	\$119,577.80	\$5,694.18
AVONEX PREFILLED SYR 30 MCG	44	\$106,393.22	\$2,418.03
RECOMBINATE 801-1,240 UNIT VL	5	\$88,835.71	\$17,767.14
GENOTROPIN 12 MG CARTRIDGE	31	\$80,092.69	\$2,583.64
ENBREL 50 MG/ML SYRINGE	46	\$78,742.46	\$1,711.79
VENTAVIS 10 MCG/1 ML SOLUTION	8	\$72,699.65	\$9,087.46
NUTROPIN AQ 5 MG/ML VIAL	24	\$70,020.27	\$2,917.51
SUPPRELIN LA 50 MG KIT	7	\$69,696.75	\$9,956.68
XELODA 500 MG TABLET	46	\$67,862.30	\$1,475.27
REVATIO 20 MG TABLET	35	\$62,860.07	\$1,796.00
NUTROPIN AQ 20 MG/2ML PEN CART	25	\$61,988.84	\$2,479.55
ZYVOX 600 MG TABLET	40	\$61,596.40	\$1,539.91
GLEEVEC 100 MG TABLET	10	\$58,289.67	\$5,828.97
KUVAN 100 MG TABLET	25	\$56,704.56	\$2,268.18
TRACLEER 125 MG TABLET	10	\$54,039.70	\$5,403.97
HUMATE-P 2,400 UNITS KIT	3	\$53,369.95	\$17,789.98
GENOTROPIN MINIQUICK 1 MG	40	\$53,076.01	\$1,326.90
GENOTROPIN 5 MG CARTRIDGE	44	\$52,420.52	\$1,191.38
TEV-TROPIN 5 MG VIAL	6	\$49,999.62	\$8,333.27
GENOTROPIN MINIQUICK 2 MG	14	\$47,815.96	\$3,415.43
ENBREL 25 MG KIT	30	\$46,251.37	\$1,541.71
RECOMBINATE 401-800 UNIT VIAL	5	\$44,038.81	\$8,807.76
PEGASYS 180 MCG/0.5 ML CONV.PK	23	\$43,428.34	\$1,888.19
HUMATROPE 12 MG CARTRIDGE	16	\$38,235.09	\$2,389.69
VALCYTE 450 MG TABLET	17	\$33,756.20	\$1,985.66

Top Drugs by Dollar Total 2009
Reimbursed Amount > \$1,000/Rx

Description	Rx Count	Dollar Total	Dollar/Rx
XYREM 500 MG/ML ORAL SOLUTION	21	\$33,444.30	\$1,592.59
NEUPOGEN 300 MCG/ML VIAL	18	\$26,627.68	\$1,479.32
GLEEVEC 400 MG TABLET	8	\$25,056.01	\$3,132.00
REMODULIN 5 MG/ML VIAL	4	\$24,082.48	\$6,020.62
SIMPONI 50 MG/0.5 ML PEN INJEC	13	\$23,460.95	\$1,804.69
HUMIRA CROHN'S STARTER PACK	5	\$22,800.36	\$4,560.07
NEXAVAR 200 MG TABLET	4	\$22,662.48	\$5,665.62
MEPRON 750 MG/5 ML SUSPENSION	18	\$21,234.79	\$1,179.71
NORDITROPIN NORDIFLX 15 MG/1.5	7	\$21,211.90	\$3,030.27
VENTAVIS 10 MCG/1 ML SOLUTION	2	\$20,342.37	\$10,171.19
PANCRECARB MS-16 CAPSULE EC	13	\$20,259.24	\$1,558.40
TOBI 300 MG/5 ML SOLUTION	5	\$19,066.32	\$3,813.26
DESOXYN 5 MG TABLET	18	\$18,154.08	\$1,008.56
CAFFEINE CIT 20 MG/ML ORAL SOL	18	\$18,052.12	\$1,002.90
TRIZIVIR TABLET	13	\$17,618.62	\$1,355.28
LUPRON DEPOT 11.25 MG 3MO KIT	9	\$17,269.54	\$1,918.84
GENOTROPIN MINIQUICK 1.6 MG	6	\$16,897.11	\$2,816.19
LUPRON DEPOT-PED 11.25 MG KIT	12	\$16,744.23	\$1,395.35
LOVENOX 150 MG PREFILLED SYR	6	\$16,168.65	\$2,694.78
ZYVOX 600 MG TABLET	6	\$15,828.01	\$2,638.00
KINERET 100 MG/0.67 ML SYR	11	\$15,386.29	\$1,398.75
VFEND 40 MG/ML SUSPENSION	11	\$15,375.95	\$1,397.81
GENOTROPIN MINIQUICK 0.8 MG	10	\$14,153.24	\$1,415.32
ORENCIA 250 MG VIAL	8	\$14,097.66	\$1,762.21
SENSIPAR 90 MG TABLET	13	\$13,882.92	\$1,067.92
GENOTROPIN MINIQUICK 1.8 MG	4	\$12,931.56	\$3,232.89
HUMATROPE 5 MG VIAL	10	\$12,899.26	\$1,289.93
APTIVUS 250 MG CAPSULE	12	\$12,709.04	\$1,059.09
PROCRIT 20,000 UNITS/ML VIAL	5	\$12,332.90	\$2,466.58
REBIF TITRATION PACK	5	\$12,271.43	\$2,454.29
REMODULIN 2.5 MG/ML VIAL	3	\$12,043.00	\$4,014.33
ARANESP 300 MCG/0.6 ML SYRINGE	5	\$11,614.68	\$2,322.94
CUBICIN 500 MG VIAL	5	\$11,424.50	\$2,284.90
CIMZIA KIT	5	\$10,900.21	\$2,180.04
HUMATE-P 1,200 UNITS KIT	1	\$10,715.31	\$10,715.31
PROGRAF 5 MG CAPSULE	4	\$10,555.88	\$2,638.97
VFEND 200 MG TABLET	6	\$10,390.13	\$1,731.69
GENOTROPIN MINIQUICK 1.4 MG	2	\$9,948.86	\$4,974.43
DRONABINOL 10 MG CAPSULE	8	\$9,803.00	\$1,225.38
TEMODAR 140 MG CAPSULE	9	\$9,737.28	\$1,081.92
TEMODAR 180 MG CAPSULE	4	\$9,384.36	\$2,346.09
ARANESP 60 MCG/ML VIAL	7	\$9,246.68	\$1,320.95
TEMODAR 250 MG CAPSULE	7	\$9,152.13	\$1,307.45
PEGINTRON REDIPEN 120 MCG	5	\$9,105.12	\$1,821.02
PEGINTRON REDIPEN 150 MCG	4	\$8,919.58	\$2,229.90

Top Drugs by Dollar Total 2009
Reimbursed Amount > \$1,000/Rx

Description	Rx Count	Dollar Total	Dollar/Rx
ULTRASE MT 20 CAPSULE EC	6	\$7,875.47	\$1,312.58
TEMODAR 140 MG CAPSULE	1	\$7,751.57	\$7,751.57
ARANESP 200 MCG/0.4 ML SYRINGE	7	\$7,724.98	\$1,103.57
SUTENT 50 MG CAPSULE	1	\$7,656.81	\$7,656.81
TARCEVA 100 MG TABLET	2	\$6,976.72	\$3,488.36
VANCOCIN HCL 250 MG PULVULE	4	\$6,963.51	\$1,740.88
SPRYCEL 50 MG TABLET	1	\$6,799.62	\$6,799.62
NEULASTA 6 MG/0.6 ML SYRINGE	2	\$6,743.48	\$3,371.74
SPRYCEL 70 MG TABLET	1	\$6,739.25	\$6,739.25
NEUMEGA 5 MG VIAL	2	\$6,582.38	\$3,291.19
HUMIRA PSORIASIS STARTER PACK	2	\$6,527.61	\$3,263.81
PANCRECARB MS-16 CAPSULE EC	5	\$6,454.45	\$1,290.89
INVEGA SUSTENNA 234 MG PREF SY	4	\$6,375.12	\$1,593.78
LUPRON DEPOT-PED 15 MG KIT	4	\$6,121.18	\$1,530.30
SUCRAID 8,500 UNITS/ML SOLN	1	\$6,073.96	\$6,073.96
EXJADE 500 MG TABLET	1	\$6,003.34	\$6,003.34
CANCIDAS IV 50 MG VIAL	2	\$5,298.92	\$2,649.46
BENEFIX 500 UNIT VIAL	2	\$4,811.00	\$2,405.50
BOTOX 100 UNITS VIAL	4	\$4,697.15	\$1,174.29
BETASERON 0.3 MG KIT	2	\$4,448.56	\$2,224.28
INVEGA SUSTENNA 156 MG PREF SY	4	\$4,255.36	\$1,063.84
LUPRON DEPOT-PED 11.25 MG KIT	3	\$4,131.24	\$1,377.08
HUMATE-P 600 UNITS KIT	1	\$4,107.35	\$4,107.35
LUPRON DEPOT 11.25 MG 3MO KIT	3	\$4,017.09	\$1,339.03
NEUPOGEN 480 MCG/1.6 ML VIAL	1	\$3,857.50	\$3,857.50
ARIXTRA 10 MG SYRINGE	1	\$3,811.04	\$3,811.04
TEMODAR 100 MG CAPSULE	1	\$3,622.00	\$3,622.00
CAFCIT 20 MG/ML ORAL SOLN	3	\$3,524.25	\$1,174.75
THALOMID 50 MG CAPSULE	1	\$3,399.15	\$3,399.15
GENOTROPIN MINIQUICK 0.6 MG	3	\$3,206.81	\$1,068.94
NEUPOGEN 300 MCG/0.5 ML SYR	3	\$3,154.44	\$1,051.48
FEIBA VH IMMUNO 651-1,200 UNIT	1	\$3,032.21	\$3,032.21
NAGLAZYME 5 MG/5 ML VIAL	1	\$2,992.18	\$2,992.18
NEUPOGEN 300 MCG/ML VIAL	2	\$2,820.26	\$1,410.13
COLISTIMETHATE 150 MG VIAL	2	\$2,769.50	\$1,384.75
NEUMEGA 5 MG VIAL	1	\$2,743.45	\$2,743.45
ELAPRASE 6 MG/3 ML VIAL	2	\$2,706.56	\$1,353.28
TARCEVA 25 MG TABLET	2	\$2,434.55	\$1,217.28
PEGINTRON 150 MCG KIT	1	\$2,298.82	\$2,298.82
EPOGEN 10,000 UNITS/ML VIAL	2	\$2,156.65	\$1,078.33
TEMODAR 250 MG CAPSULE	1	\$2,090.94	\$2,090.94
PULMOZYME 1 MG/ML AMPUL	1	\$1,861.11	\$1,861.11
OCTREOTIDE ACET 200 MCG/ML VL	1	\$1,355.09	\$1,355.09
PROGRAF 1 MG CAPSULE	1	\$1,332.16	\$1,332.16
ARANESP 60 MCG/0.3 ML SYRINGE	1	\$1,298.49	\$1,298.49

Top Drugs by Dollar Total 2009
Reimbursed Amount > \$1,000/Rx

Description	Rx Count	Dollar Total	Dollar/Rx
VFEND 50 MG TABLET	1	\$1,251.66	\$1,251.66
RABAVERT RABIES VACCINE KIT	1	\$1,112.31	\$1,112.31
AZACTAM 1 GM VIAL	1	\$1,095.96	\$1,095.96
Totals	2,414	\$6,262,804.94	\$2,594.37