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

MISSISSIPPI DIVISION OF
MEDICAID

July 27, 2017 at 2:00pm

Woolfolk Building, Room 145

Jackson, MS

Prepared by:

MS | DUR Evidence-Based DUR Initiative
The University of Mississippi School of Pharmacy

Drug Utilization Review Board

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Term Expires: June 30, 2018

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Be Jay PE Pharmacy 1668
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Canton, MS 39047
Term Expires: June 30, 2018

2017 DUR Board Meeting Dates

February 2, 2017
April 27, 2017
July 27, 2017
November 9, 2017 (new date)

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.

Unless otherwise indicated, all MS-DUR analyses are conducted for the entire Mississippi Medicaid program including beneficiaries receiving services through the Medicaid fee-for-service (FFS) and the two Mississippi Medicaid Coordinated Care Organizations (CCOs). When dollar figures are reported, the reported dollar figures represent reimbursement amounts paid to providers and are not representative of final Medicaid costs after rebates. Any reported enrollment data presented are unofficial and are only for general information purposes for the DUR Board.

Please refer to the Mississippi Division of Medicaid website for the current official Universal Preferred Drug List (PDL).

http://www.medicaid.ms.gov/providers/pharmacy/preferred-drug-list/

MISSISSIPPI DIVISION OF MEDICAID
OFFICE OF THE GOVERNOR
DRUG UTILIZATION REVIEW BOARD
AGENDA
July 27, 2017

DUR Board Meeting Minutes

MISSISSIPPI DIVISION OF MEDICAID
DRUG UTILIZATION REVIEW (DUR) BOARD
MINUTES OF THE APRIL 27, 2017 MEETING

DUR Board Members:	Aug 2015	Nov 2015	Jan 2016	Apr 2016	Jul 2016	Sep 2016	Feb 2017	April 2017
Allison Bell, PharmD	✓	✓	✓	✓		✓	✓	✓
Craig Escudé, MD						✓	✓	✓
Juanice Glaze, RPh						✓	✓	✓
Antoinette M. Hubble, MD	✓	✓	✓	✓	✓	✓	✓	✓
Cherise McIntosh, PharmD		✓		✓			✓	
Alice Messer, FNP-BC						✓	✓	✓
Janet Ricks, DO		✓	✓			✓	✓	✓
Sue Simmons, MD	✓		✓	✓		✓	✓	
Dennis Smith, RPh	✓	✓	✓	✓		✓		✓
James Taylor, PharmD						✓	✓	
Cynthia Undesser, MD	✓		✓	✓	✓			✓
Pearl Wales, PharmD (Chair)		✓	✓	✓	✓	✓	✓	✓
TOTAL PRESENT	**9**	**10**	**10**	**11**	**3***	**10**	**10**	**9**

**Only eight members were active due to new appointments to DUR Board not being approved by Governor prior to meeting.*

Dr. Ricks arrived during the presentation on the CPC program and was not present for the votes on the prior minutes or the DUR Board by-laws.

Also Present:

Division of Medicaid (DOM) Staff:
Terri Kirby, RPh, CPM, Pharmacy Director; Cindy Noble, PharmD, MPH, DUR Coordinator; Gail McCorkle, RPh, Clinical Pharmacist; Chris Yount, MA, PMP, Staff Officer - Pharmacy; Sue Reno, DOM Program Integrity

MS-DUR Staff:
Ben Banahan, PhD, MS-DUR Project Director; Eric Pittman, PharmD, MS-DUR Clinical Director

Conduent Staff:
Lew Anne Snow, RN BSN, Pharmacy Services Sr. Analyst, Mississippi Medicaid Project; Leslie Leon, PharmD, Clinical Pharmacist, Mississippi Medicaid Project

Change Healthcare Staff:
Chad Bissell, PharmD, MS Account Manager; Laureen Biczak, DO, Medical Director; Shannon Hardwick, RPh, CPC Pharmacist; Paige Clayton, PharmD, On-Site Clinical Pharmacist

Coordinated Care Organization (CCO) Staff:
Heather Odem, PharmD, Director of Pharmacy-Mississippi, United Healthcare Community & State; Conor Smith, RPh, Director of Pharmacy, Magnolia Health; Mike Todaro, PharmD, Vice President, Pharmacy Operations, Magnolia Health

Visitors:
Judy Clark, Consultant; Phil Hecht, Abbvie; Jason Swartz, Otsuka; Kim Clark, ViiV; Steve Curry, ALK; Jason Schwier, Amgen

Call to Order:
Dr. Wales called the meeting to order at 2:01 pm.

Dr. Banahan introduced Dr. Eric Pittman, Clinical Director MS-DUR. Ms. Kirby introduced Chris Yount, DOM Staff Officer-Pharmacy, and other special attendees in the audience. Ms. Kirby thanked board members rotating off for their service.

Old Business:
Dr. Escude' moved that the minutes of the February 2, 2017 DUR Board Meeting be approved; seconded by Dr. Hubble. The motion was approved unanimously by the DUR Board.

Dr. Wales informed board members they were each provided a conflict of interest statement that needed to be signed and returned by the end of the meeting.

Dr. Noble provided background on the updated DUR by-laws which had been mailed to the Board Members prior to the meeting. Motion for approval of the updated by-laws was made by Dr. Hubble; seconded by Dr. Undesser. The revised by-laws were approved unanimously by the DUR Board.

Pharmacy Program Update:
Ms. Kirby informed the board that new reimbursement methodology has been submitted to CMS for approval. Once approved, CMS requires that DOM process FFS program reimbursement adjustments retroactively to April 1. The CCOs have the option to not make adjustments as long as their reimbursed amounts meet the contract requirement of being not less than the FFS amounts. The FFS adjustments will be completed over time retroactive to April 1, 2017 rather than all at once.

Overview of Complex Pharmaceutical Care Program:
Dr. Biczak presented a general overview of the Complex Pharmaceutical Care (CPC) program provided by Change Healthcare. Ms. Hardwick presented information related to the Mississippi program. She described how patients are identified for the program and provided examples of cases that have been addressed by the CPC program during the first few months. Dr. Wales asked if the CCOs had similar programs. Representatives from both UHC and Magnolia indicated they had similar programs utilizing nurses and pharmacists that do case management for selected disease states.

Resource Utilization Review:
Dr. Banahan informed the board that the CCO encounter data appears to be complete for this report. He noted that enrollment has remained fairly consistent during the last six months. It was noted that a slight increase in the average cost per prescription and beneficiary occurred across all programs due to utilization of some expensive new therapies. Dr. Banahan stated the top drug categories have been consistent with respect to claim volume and amount paid with the exception of the neuraminadase

inhibitors, such as Tamiflu, which have increased sharply due to influenza season. No other significant trends or changes were noted.

Feedback and Discussion from the Board
Dr. Escude' brought up the topic of individuals with intellectual and developmental disabilities (IDD) and the use of multiple antipsychotics. He would like MS-DUR to look into this trend and the appropriateness of antipsychotic use to the degree that it can be determined from claims data. Dr. Escude' particularly was interested in verifying that appropriate medical work up is being done before these medications are prescribed to rule out any underlying medical issues. A follow-up conference call with interested board members was recommended.

N**EW BUSINESS**

Research Reports:

Unique Hepatitis C Treatment Regimens Used Since 2015 in Mississippi Medicaid
MS-DUR presented an analysis showing the utilization of Hepatitis C treatment regimens in Mississippi Medicaid from January 1, 2015 through February 28, 2017. Trends identified were consistent across FFS and the CCOs. There was a sharp increase in the number of beneficiaries starting treatment in the first three quarters of 2015, when the new therapies were released. Since that time the numbers have leveled out to approximately 50 -60 new prescription starts per quarter. The number of individuals who initiated treatment but did not complete the therapy regimen was noted. This is an area where the CPC program should impact and improve therapy completion rates in the FFS individuals.

Celexa® (Citalopram) Utilization and Dosing Management
Dr. Banahan summarized a MS-DUR analysis of citalopram utilization and dosing management. Since 2007, the FDA has made several safety updates regarding antidepressants as a whole and citalopram individually. Currently the MS Medicaid Universal Preferred Drug List (UPDL) has a minimum age limit of 9 years for citalopram and no dosage limits. Based on current FDA labeling, the following changes were proposed by MS-DUR:

1. Limit total daily dose of citalopram to a maximum of 40 mg/day for beneficiaries < 60 years.
2. Limit total daily dose of citalopram to a maximum of 20 mg/day for beneficiaries $\geq$ 60 years.
3. Change citalopram minimum age limit from 9 years to 18 years to be consistent with FDA boxed warning on suicidality and antidepressant drugs found in citalopram's drug label information. (Class). MS-DUR would conduct a one-time educational mailing outlining the proposed changes to include all prescribers writing citalopram prescriptions during the last year that were for (a) children and adolescents <18 years of age, (b) adults age $\geq$ 60 with daily doses > 20 mg, or (c) adults < 60 years of age with daily doses exceeding 40mg.

After discussion, a motion was made by Dr. Undesser and seconded by Mr. Smith to accept items 1 and 2 as proposed. The motion was approved unanimously by roll call vote with no abstentions.

A motion was made by Dr. Undesser and seconded by Mr. Smith to accept item 3 with the addition that ***current individuals would be grandfathered and this proposed clinical edit would apply to new starts only***. The motion was approved unanimously by roll call vote with no abstentions.

A motion was made by Dr. Escude' and seconded by Dr. Undesser to accept item 4 ***with the notification of the grandfathered clause included***. The motion was approved unanimously by roll call vote with no abstentions.

Type 2 Diabetes (T2DM) Treatment Patterns in Mississippi Medicaid

Dr. Banahan reviewed a MS-DUR analysis for DOM's beneficiaries with T2DM regarding diabetes treatment patterns. MS-DUR's analysis depicted T2DM medication regimens across the FFS and CCOs. The 2017 American Diabetes Association's (ADA's) "Standards of Medical Care in Diabetes" antihyperglycemic therapy in T2DM general recommendations was also reviewed and contrasted with the American Association of Clinical Endocrinologist/ American College of Endocrinology)AACE/ACE) 2017 glycemic control algorithm. The study examined prescribing patterns in Mississippi Medicaid for 2016. The goal was to analyze these patterns and determine if any changes should be made to the align Mississippi Medicaid with the 2017 ADA standards. The following recommendations were presented by MS-DUR based on the analysis:

1. DOM should implement an electronic edit to require manual prior authorization (PA) for concomitant use of GLP-1 and DPP-4.
2. DOM should implement an electronic edit to require manual PA for addition of fourth concurrent antihyperglycemic agents.
3. DOM should investigate regimens that do not include metformin.
4. DOM should investigate further T2DM treatment with only a sulfonylurea agent.
5. MS-DUR should conduct a one-time educational mailing highlighting the new ADA guidelines directed to prescribers who have had patients in the last year with regimens that were not consistent with the ADA Standards of Care recommendations.
6. MS-DUR should explore collaboration with the Mississippi Diabetes Coalition for educational initiatives.

After discussion, Dr. Escude' made a motion, seconded by Dr. Ricks, to accept item 1 as presented, accept item 2 with the amendment to read ***fourth concurrent noninsulin agent***, and accept items 4 – 6 as presented. The motion was approved unanimously by roll call vote with no abstentions. The Board noted that further investigation of item 3 was not needed and that any issues related to item 3 could be addressed by the educational mailing.

FDA Drug Safety Information Updates January – March 2017

Dr. Banahan presented a summary of FDA drug safety updates for the first quarter of 2017.

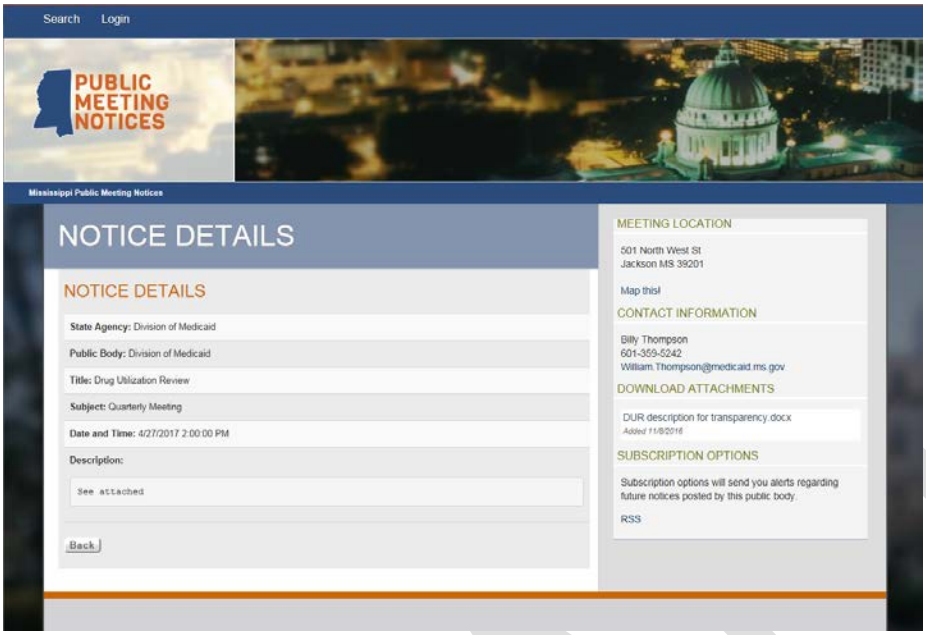
Next Meeting Information:

Dr. Wales announced that the next meeting of the DUR Board will take place on July 27, 2017 at 2:00 p.m. Dr. Wales thanked everyone for their attendance and participation at the April DUR Board meeting. The meeting adjourned at 4:19 pm.

Submitted,

Eric Pittman, PharmD
Evidence-Based DUR Initiative, MS-DUR

PUBLIC MEETING NOTICES



Resource Utilizaton Review

TABLE A: ENROLLMENT STATISTICS FOR LAST 6 MONTHS
December 1, 2016 through May 31, 2017

			Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17
Total enrollment			739,377	741,897	741,310	738,788	736,088	732,394
Dual-eligibles			154,256	155,935	155,911	155,644	155,159	154,805
Pharmacy benefits			632,248	633,404	632,328	630,076	626,322	622,133
	LTC		17,242	17,336	17,302	17,309	17,108	16,881
	PLAN %	FFS	22.8%	22.7%	22.7%	22.5%	22.2%	21.7%
		MSCAN-UHC	38.2%	37.6%	37.6%	37.6%	37.7%	38.0%
		MSCAN-Magnolia	39.0%	39.7%	39.7%	39.9%	40.1%	40.3%

TABLE B: PHARMACY UTILIZATION STATISTICS FOR LAST 6 MONTHS
December 1, 2016 through May 31, 2017

		Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17
# Rx Fills	FFS	108,409	108,999	109,522	113,561	102,030	103,668
	MSCAN-UHC	198,795	204,242	205,880	205,717	188,763	193,061
	MSCAN-Mag	233,967	247,235	247,198	249,966	228,970	229,136
# Rx Fills / Bene	FFS	0.8	0.8	0.8	0.8	0.7	0.8
	MSCAN-UHC	0.8	0.9	0.9	0.9	0.8	0.8
	MSCAN-Mag	0.9	1.0	1.0	1.0	0.9	0.9
$ Paid Rx	FFS	$13,268,658	$12,883,074	$14,456,226	$14,004,056	$12,871,016	$13,330,330
	MSCAN-UHC	$15,270,035	$16,622,965	$16,811,038	$17,300,994	$15,607,826	$16,088,327
	MSCAN-Mag	$17,467,529	$19,051,676	$19,030,071	$20,138,683	$18,616,651	$18,858,243
$ /Rx Fill	FFS	$122.39	$118.19	$131.99	$123.32	$126.15	$128.59
	MSCAN-UHC	$76.81	$81.39	$81.65	$84.10	$82.68	$83.33
	MSCAN-Mag	$74.66	$77.06	$76.98	$80.57	$81.31	$82.30
$ /Bene	FFS	$92.05	$89.60	$100.71	$98.78	$92.57	$98.74
	MSCAN-UHC	$63.23	$69.80	$70.71	$73.03	$66.10	$68.05
	MSCAN-Mag	$70.84	$75.76	$75.81	$80.11	$74.12	$75.22

NOTE: Paid amounts represent amount reported on claims as paid to the pharmacy. These amounts do not reflect final actual costs after rebates, etc.

TABLE C: TOP 10 DRUG CATEGORIES BY NUMBER OF CLAIMS IN MAY 2017 (FFS AND CCOs)

Category	Month Year	Rank Volume	# RXs	$ Paid	# Unique Benes
CNS stimulants	May 2017	1	50,661	$11,289,287	31,891
	Apr 2017	1	52,838	$11,817,065	33,756
	Mar 2016	1	58,929	$13,537,473	35,730
narcotic analgesic combinations	May 2017	2	49,554	$1,215,868	36,993
	Apr 2017	2	47,278	$1,294,912	36,199
	Mar 2016	2	52,619	$1,700,152	39,442
antihistamines	May 2017	3	33,015	$759,640	29,324
	Apr 2017	4	34,401	$784,351	30,939
	Mar 2016	4	37,590	$848,426	33,348
aminopenicillins	May 2017	4	32,276	$330,137	30,829
	Apr 2017	3	34,571	$359,835	32,978
	Mar 2016	3	40,199	$423,381	38,109
nonsteroidal anti-inflammatory agents	May 2017	5	31,213	$424,716	27,883
	Apr 2017	6	31,747	$423,851	28,543
	Mar 2016	6	34,954	$493,366	31,284
adrenergic bronchodilators	May 2017	6	30,639	$2,494,901	23,831
	Apr 2017	5	32,113	$2,543,546	25,289
	Mar 2016	5	35,638	$2,712,855	27,926
glucocorticoids	May 2017	7	26,641	$1,721,196	23,880
	Apr 2017	7	27,542	$1,667,582	24,868
	Mar 2016	8	30,351	$2,013,507	27,070
leukotriene modifiers	May 2017	8	24,867	$1,144,572	20,623
	Apr 2017	9	24,842	$2,022,869	21,083
	Mar 2016	9	26,874	$3,446,590	22,252
SSRI antidepressants	May 2017	9	24,339	$268,288	18,634
	Apr 2017	10	22,782	$291,910	17,790
	Mar 2016	10	24,818	$405,043	18,877
atypical antipsychotics	May 2017	10	23,956	$4,834,882	15,589
	Apr 2017	11	22,580	$6,128,902	15,103
	Mar 2016	11	24,764	$7,632,667	15,797

TABLE D: TOP 10 DRUG CATEGORIES BY DOLLARS PAID IN MAY 2017 (FFS AND CCOs)

Category	Month Year	Rank Paid Amt	# RXs	$ Paid	# Unique Benes
CNS stimulants	May 2017	1	50,661	$11,289,287	31,891
	Apr 2017	1	52,838	$11,817,065	33,756
	Mar 2016	1	58,929	$13,537,473	35,730
antiviral combinations	May 2017	2	1,569	$6,565,974	1,034
	Apr 2017	3	1,451	$6,094,690	1,008
	Mar 2016	3	1,603	$6,063,064	1,045
insulin	May 2017	3	9,616	$4,984,558	5,344
	Apr 2017	4	9,271	$4,794,577	5,224
	Mar 2016	4	9,710	$5,020,622	5,431
factor for bleeding disorders	May 2017	4	193	$4,959,501	121
	Apr 2017	5	192	$4,466,351	125
	Mar 2016	5	206	$4,842,044	132
atypical antipsychotics	May 2017	5	23,956	$4,834,882	15,589
	Apr 2017	2	22,580	$6,128,902	15,103
	Mar 2016	2	24,764	$7,632,667	15,797
antirheumatics	May 2017	6	1,612	$2,542,683	1,119
	Apr 2017	7	1,537	$2,419,480	1,096
	Mar 2016	9	1,602	$2,625,713	1,116
adrenergic bronchodilators	May 2017	7	30,639	$2,494,901	23,831
	Apr 2017	6	32,113	$2,543,546	25,289
	Mar 2016	8	35,638	$2,712,855	27,926
bronchodilator combinations	May 2017	8	6,450	$2,029,819	4,932
	Apr 2017	9	6,170	$1,944,110	4,768
	Mar 2016	11	6,666	$2,078,445	5,083
gamma-aminobutyric acid analogs	May 2017	9	17,646	$1,799,451	12,733
	Apr 2017	10	16,653	$1,753,314	12,224
	Mar 2016	13	17,773	$1,930,342	12,711
glucocorticoids	May 2017	10	26,641	$1,721,196	23,880
	Apr 2017	11	27,542	$1,667,582	24,868
	Mar 2016	12	30,351	$2,013,507	27,070

TABLE E: TOP 25 DRUG MOLECULES
BY NUMBER OF CLAIMS IN MAY 2017 (FFS and CCOs)

Drug Molecule Therapeutic Category	Apr 2017 # Claims	May 2017 # Claims	May 2017 $ Paid	May 2017 # Unique Benes
acetaminophen-hydrocodone / narcotic analgesic combinations	32,831	34,782	$416,737	26,468
amoxicillin / aminopenicillins	34,370	32,068	$326,939	30,637
albuterol / adrenergic bronchodilators	30,576	29,081	$1,702,978	22,701
montelukast / leukotriene modifiers	24,835	24,862	$1,143,366	20,621
cetirizine / antihistamines	23,276	22,027	$512,408	20,022
azithromycin / macrolides	24,368	21,987	$440,302	21,005
lisdexamfetamine / CNS stimulants	17,741	16,895	$4,643,313	12,590
gabapentin / gamma-aminobutyric acid analogs	13,983	14,770	$238,529	10,877
omeprazole / proton pump inhibitors	14,067	14,377	$190,038	11,112
ibuprofen / nonsteroidal anti-inflammatory agents	15,051	14,309	$118,930	13,593
amlodipine / calcium channel blocking agents	13,184	14,131	$69,341	10,563
fluticasone nasal / nasal steroids	15,220	13,321	$719,834	12,364
amoxicillin-clavulanate / penicillins/beta-lactamase inhibitors	13,485	12,624	$622,282	12,231
amphetamine-dextroamphetamine / CNS stimulants	12,574	12,370	$1,241,427	8,100
prednisolone / glucocorticoids	12,672	12,213	$277,995	11,547
methylphenidate / CNS stimulants	13,009	12,203	$2,809,085	8,557
clonidine / antiadrenergic agents, centrally acting	10,928	11,420	$245,942	8,052
sulfamethoxazole-trimethoprim / sulfonamides	10,212	10,882	$205,244	10,474
ondansetron / 5HT3 receptor antagonists	10,140	9,711	$193,693	9,297
lisinopril / angiotensin converting enzyme (ACE) inhibitors	9,244	9,632	$36,222	7,538
ethinyl estradiol-norgestimate / contraceptives	8,932	9,524	$183,993	7,770
cefdinir / third generation cephalosporins	9,916	9,516	$670,792	9,162
triamcinolone topical / topical steroids	8,291	9,032	$142,312	8,355
guanfacine / antiadrenergic agents, centrally acting	8,687	8,949	$272,954	6,421
mupirocin topical / topical antibiotics	7,711	8,910	$128,381	8,613

TABLE F: TOP 25 DRUG MOLECULES
BY DOLLARS PAID IN MAY 2017 (FFS and CCOs)

Drug Molecule Therapeutic Category	Apr 2017 $ Paid	May 2017 $ Paid	May 2017 # Claims	May 2017 # Unique Benes
lisdexamfetamine / CNS stimulants	$4,885,350	$4,643,313	16,895	12,590
ledipasvir-sofosbuvir / antiviral combinations	$2,960,586	$3,226,705	97	90
methylphenidate / CNS stimulants	$2,911,131	$2,809,085	12,203	8,557
antihemophilic factor / factor for bleeding disorders	$2,480,360	$2,655,499	74	33
aripiprazole / atypical antipsychotics	$2,375,246	$1,780,922	5,621	4,267
insulin glargine / insulin	$1,681,812	$1,716,761	3,776	2,811
adalimumab / antirheumatics	$1,566,439	$1,704,934	332	247
albuterol / adrenergic bronchodilators	$1,744,694	$1,702,978	29,081	22,701
somatropin / growth hormones	$1,394,383	$1,643,734	357	236
deferasirox / chelating agents	$1,382,597	$1,480,117	167	119
anti-inhibitor coagulant complex / factor for bleeding disorders	$1,420,498	$1,451,253	11	5
insulin aspart / insulin	$1,382,263	$1,416,734	2,542	1,890
dexmethylphenidate / CNS stimulants	$1,474,456	$1,371,103	5,996	3,986
budesonide / glucocorticoids	$1,277,447	$1,323,884	2,851	2,571
amphetamine-dextroamphetamine / CNS stimulants	$1,306,596	$1,241,427	12,370	8,100
pregabalin / gamma-aminobutyric acid analogs	$1,121,776	$1,202,067	2,849	2,172
lurasidone / atypical antipsychotics	$1,046,790	$1,148,677	960	769
montelukast / leukotriene modifiers	$2,021,327	$1,143,366	24,862	20,621
fluticasone-salmeterol / bronchodilator combinations	$865,073	$910,808	2,439	1,991
esomeprazole / proton pump inhibitors	$1,033,199	$887,675	4,621	3,806
efavirenz/emtricitabine/tenofovir / antiviral combinations	$834,252	$829,588	323	208
insulin detemir / insulin	$748,554	$785,868	1,580	1,217
etanercept / antirheumatics	$770,665	$785,670	186	133
sofosbuvir / miscellaneous antivirals	$443,534	$768,794	26	24
quetiapine / atypical antipsychotics	$1,273,767	$738,828	6,024	4,126

TABLE G: TOP 25 DRUG MOLECULES
BY CHANGE IN NUMBER OF CLAIMS FROM MAR 2016 TO MAY 2017 (FFS and CCOs)

Drug Molecule	Mar 2016 # Claims	Apr 2017 # Claims	May 2017 # Claims	May 2017 $ Paid	May 2017 # Unique Benes
mupirocin topical / topical antibiotics	7,276	7,711	8,910	$128,381	8,613
pantoprazole / proton pump inhibitors	2,056	2,345	2,919	$103,543	2,605
triamcinolone topical / topical steroids	8,440	8,291	9,032	$142,312	8,355
hydrocortisone topical / topical steroids	4,159	4,113	4,698	$111,073	4,486
duloxetine / SSNRI antidepressants	1,440	1,488	1,789	$46,804	1,447
venlafaxine / SSNRI antidepressants	2,036	2,022	2,256	$94,922	1,705
sumatriptan / antimigraine agents	418	487	621	$29,538	553
nitrofurantoin / urinary anti-infectives	3,361	3,208	3,520	$112,563	3,365
furosemide / loop diuretics	4,803	4,629	4,955	$17,202	3,889
rizatriptan / antimigraine agents	398	493	495	$14,867	450
betamethasone topical / topical steroids	490	489	586	$27,988	567
silver sulfadiazine topical / topical antibiotics	312	385	403	$8,682	389
empagliflozin / SGLT-2 inhibitors	102	154	190	$86,414	187
hydrochlorothiazide / thiazide and thiazide-like diuretics	5,143	4,811	5,225	$16,416	4,119
cephalexin / first generation cephalosporins	6,512	6,146	6,589	$128,838	6,412
carvedilol / beta blockers, non-cardioselective	4,157	4,031	4,233	$23,964	3,251
spinosad topical / topical anti-infectives	440	520	509	$131,671	486
nifedipine / calcium channel blocking agents	1,727	1,596	1,795	$69,541	1,376
ciprofloxacin-dexamethasone otic / otic steroids with anti-infectives	2,042	1,938	2,104	$442,551	2,032
rosuvastatin / HMG-CoA reductase inhibitors (statins)	932	938	991	$250,869	779
nystatin-triamcinolone topical / topical steroids with anti-infectives	787	754	844	$109,517	823
ciprofloxacin ophthalmic / ophthalmic anti-infectives	415	406	472	$15,828	464
latanoprost ophthalmic / ophthalmic glaucoma agents	1,197	1,140	1,253	$35,149	953
erythromycin ophthalmic / ophthalmic anti-infectives	814	763	869	$12,403	858
hydroxyprogesterone / progestins	49	55	103	$336,842	98

TABLE H: TOP 25 DRUG MOLECULES
BY CHANGE IN AMOUNT PAID FROM MAR 2016 TO MAY 2017 (FFS and CCOs)

Drug Molecule	Mar 2016 $ Paid	Apr 2017 $ Paid	May 2017 $ Paid	May 2017 # Claims	May 2017 # Unique Benes
ledipasvir-sofosbuvir / antiviral combinations	$2,594,666	$2,960,586	$3,226,705	97	90
antihemophilic factor / factor for bleeding disorders	$2,262,708	$2,480,360	$2,655,499	74	33
sofosbuvir / miscellaneous antivirals	$384,396	$443,534	$768,794	26	24
hydroxyprogesterone / progestins	$169,639	$184,590	$336,842	103	98
antihemophilic factor-von willebrand factor / factor for bleeding disorders	$320,286	$378,604	$465,069	16	7
pyrimethamine / miscellaneous antimalarials	$148,560	$176,320	$285,125	5	3
lurasidone / atypical antipsychotics	$1,052,459	$1,046,790	$1,148,677	960	769
ranitidine / H2 antagonists	$333,832	$371,445	$419,737	8,518	7,371
secukinumab / interleukin inhibitors	$39,337	$94,777	$124,090	17	15
sofosbuvir-velpatasvir / antiviral combinations	$184,215	$236,851	$263,164	10	9
cobicistat/elvitegravir/emtricitabine/tenofov / antiviral combinations	$645,848	$594,809	$716,719	252	199
eltrombopag / platelet-stimulating agents	$77,291	$105,506	$140,612	18	14
vigabatrin / gamma-aminobutyric acid analogs	$297,847	$320,201	$358,856	27	19
sildenafil / impotence agents	$167,891	$171,342	$226,444	107	74
clobazam / benzodiazepine anticonvulsants	$545,151	$527,219	$601,696	389	228
teriflunomide / selective immunosuppressants	$241,464	$202,668	$294,510	48	35
desonide topical / topical steroids	$68,088	$95,261	$118,701	703	653
mifepristone / progesterone receptor modulators	$0	$0	$50,055	1	1
nystatin-triamcinolone topical / topical steroids with anti-infectives	$60,786	$84,205	$109,517	844	823
bexarotene / miscellaneous antineoplastics	$0	$0	$48,304	1	1
glatiramer / other immunostimulants	$392,210	$398,235	$438,893	68	45
daclatasvir / NS5A inhibitors	$110,885	$88,708	$155,240	7	6
dimethyl fumarate / selective immunosuppressants	$423,108	$353,665	$467,056	69	45
empagliflozin / SGLT-2 inhibitors	$46,186	$69,766	$86,414	190	187
glycerol phenylbutyrate / urea cycle disorder agents	$132,244	$204,207	$168,226	4	2

TABLE I: TOP 15 DRUG SOLID DOSAGE FORM HIGH VOLUME (100+ RX FILLS LAST MONTH) PRODUCTS WITH UNIT COST > $1
BY PERCENT CHANGE IN AMOUNT PAID PER UNIT MAR 2016 TO MAY 2017 (FFS and CCOs)

Drug Product Therapeutic Category	May 2017 # Claims	May 2017 $ Paid	May 2017 Avr. Paid Per Rx	May 2017 Avr. Units Per Rx	Mar 2016 Paid Per Unit	Apr 2017 Paid Per Unit	May 2017 Paid Per Unit	Percent Change
promethazine 12.5 mg suppository / antihistamines (U)	169	$14,486	$85.71	9	$3.95	$6.78	$8.15	106.4%
promethazine 25 mg suppository / antihistamines (U)	236	$21,406	$90.71	12	$4.06	$5.61	$7.02	73.0%
aripiprazole 20 mg tablet / atypical antipsychotics (P)	1,101	$362,717	$329.44	20	$10.29	$17.37	$16.95	64.8%
cefuroxime 500 mg tablet / second generation cephalosporins (P)	407	$16,046	$39.42	18	$1.16	$1.64	$1.82	57.8%
amphetamine-dextroamphetamine 10 mg capsule, extended release / CNS stimulants (P)	450	$65,104	$144.67	30	$3.80	$4.70	$4.69	23.6%
isotretinoin 40 mg capsule / miscellaneous uncategorized agents (P)	117	$68,378	$584.43	49	$10.13	$13.27	$11.92	17.7%
metolazone 5 mg tablet / thiazide and thiazide-like diuretics	145	$5,271	$36.35	25	$1.05	$1.05	$1.20	14.7%
Onfi (clobazam) 10 mg tablet / benzodiazepine anticonvulsants (N)	178	$204,870	$1,150.95	77	$13.30	$14.40	$14.99	12.7%
mycophenolate mofetil 500 mg tablet / selective immunosuppressants (P)	152	$20,431	$134.41	100	$1.16	$1.10	$1.28	10.1%
Brintellix (vortioxetine) (vortioxetine) 10 mg tablet / miscellaneous antidepressants (P)	198	$66,205	$334.37	30	$10.06	$10.70	$11.06	9.9%
Dexilant (dexlansoprazole) 60 mg delayed release capsule / proton pump inhibitors (N)	240	$63,556	$264.82	30	$8.09	$8.43	$8.72	7.8%
methotrexate 2.5 mg tablet / antimetabolites ((P- -)	636	$22,866	$35.95	26	$1.09	$1.08	$1.17	6.8%
Latuda (lurasidone) 40 mg tablet / atypical antipsychotics (N)	331	$367,635	$1,110.68	31	$34.15	$35.58	$36.19	6.0%
propranolol 60 mg capsule, extended release / group II antiarrhythmics (P)	126	$5,831	$46.28	32	$1.17	$1.20	$1.24	5.9%
Saphris Black Cherry (asenapine) 5 mg tablet / atypical antipsychotics (N)	133	$103,526	$778.39	42	$17.22	$18.12	$18.22	5.8%

New Business

Special Analysis Projects

ANTIPSYCHOTIC USE IN INDIVIDUALS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES IN MISSISSIPPI MEDICAID

BACKGROUND

At the April 27, 2017, DUR Board Meeting Dr. Escude', the Board Co-chair, asked MS-DUR to research antipsychotic use among beneficiaries diagnosed with intellectual and development disabilities (IDD). He indicated that in this population antipsychotics are sometimes prescribed to treat behaviors that actually may be attempts by the patient to communicate about other underlying health problems. Some underlying health issues of the IDD population could be misinterpreted as behavioral issues; therefore, the patient could be treated with antipsychotics instead medications for the physical or neurological health problem.

The use of antipsychotic medications in individuals with IDD is common due to the significantly higher rate of psychosis among adults with IDD when compared with the general population[1]. These medications are used to not only treat functional psychiatric illnesses such as schizophrenia but also may be used to treat problem behaviors in the IDD population. However, not all problem behaviors have a psychopathology origin. Some problem behaviors, such as aggression and self-injury, could be a symptom of a health-related disorder or other circumstance where certain needs of the individual are not being met. Since beneficiaries with IDD often cannot verbally express their health problem, they sometimes exhibit behaviors that may signal underlying health problems. Thus, it is important to carefully assess the possible cause(s) of problem behaviors before prescribing antipsychotics. Adults with IDD have a higher rate of physical conditions such as sensory impairments, cerebral palsy, epilepsy, and cardiovascular or gastrointestinal problems that can influence the choice of medication. The lack of careful assessment may lead to unnecessary prescribing of antipsychotic medications and the failure to correctly identify and address the underlying health issue causing the problem behavior.

Antipsychotic medications are effective for individuals with a functional psychiatric diagnosis but their use can be problematic in the IDD population and should be used judiciously. Some adults with IDD may have atypical responses or side effects at low doses to antipsychotic medications. Some patients may be taking multiple medications and be at increased risk of adverse medication events[2]. The goal of treatment should not only be symptom control but improvement in the quality of life of the individual with IDD.

[1] Deb S, Thomas M & Bright C. Mental Disorder in Adults with Intellectual Disability. Journal of Intellectual Disability Research 2001; 45 (6): 506-514.

[2] Vanderbilt Kennedy Center for Excellence in Developmental Disabilities. Health Care for Adults with Intellectual and Developmental Disabilities. Psychotropic Medication Issues. http://vkc.mc.vanderbilt.edu/etoolkit/mental-and-behavioral-health/psychotropic-medication-therapy/. Accessed 6/27/2017.

METHODS

A retrospective study was conducted using Mississippi Medicaid medical and pharmacy claims for the period January 2016 – June 2017. The analysis included data from the fee-for-service (FFS) and coordinated care organizations (CCOs). Beneficiaries with any outpatient or inpatient medical claim having an IDD diagnosis were identified as the target population. The ICD-10 codes used to identify beneficiaries with IDD are listed in Table 1. Beneficiaries were identified using both a "limited" set of codes and a broader set of codes, referred to as "any" diagnosis in the results.

TABLE 1: ICD-10 Codes Used to Identify ANY IDD Diagnosis and LIMITED IDD Diagnosis

ICD-10 Code	Description	Any	Limited
F84.0	Autistic disorder	X	X
F84.2	Rett's syndrome	X	X
F84.3	Other childhood disintegrative disorder	X	X
F84.5	Asperger's syndrome	X	X
F84.8	Other pervasive developmental disorders	X	X
F84.9	Pervasive developmental disorder, unspecified	X	X
F70	Mild intellectual disabilities	X	X
F71	Moderate intellectual disabilities	X	X
F72	Severe intellectual disabilities	X	X
F73	Profound intellectual disabilities	X	X
F78	Other intellectual disabilities	X	X
F79	Unspecified intellectual disabilities	X	X
Q86.0	Fetal alcohol syndrome	X	
Q87.1	Congenital malformation syndromes predominantly associated with short stature (Prader-Willie syndrome)	X	
Q90	Down syndrome	X	
Q91.3	Trisomy 18, unspecified (Edward's syndrome)	X	
Q93.4	Deletion of short arm of chromosome 5 (Cri-Due-Chat syndrom)	X	
Q91.7	Trisomy 13, unspecified (Patau's syndrome)	X	
Q98.4	Klinefelter syndrome, unspecified	X	
Q99.2	Fragile X chromosome	X	

TABLE 2: Codes to Identify Primary Indications for Antipsychotic Medication Use

ICD-10 Code	Description
F20	Schizophrenia
F22	Delusional disorders
F23	Brief psychotic disorder
F28	Other psychotic disorder not due to a substance or known physiological condition
F29	Unspecified psychosis not due to a substance or know physiological condition
F30	Manic episode
F31	Bipolar disorder
F32.3	Major depressive disorder, single episode, severe with psychotic features
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms
F44.89	Other dissociative and conversion disorders
F84	Pervasive developmental disorders
F95	Tic disorder

Draft Document for NCINQ 2013 Public Comment.
http://www.chcs.org/media/NCINQ_2013_Public_Comment_4-30-13.pdf

All prescriptions for antipsychotic medications filled during the observation period were extracted for the beneficiaries identified as potential IDD patients. Medical claims were extracted for beneficiaries with IDD and taking antipsychotics to determine whether the beneficiaries had diagnoses that were identified as being primary indications for antipsychotic medication use (Table 2). Codes to identify primary indications for antipsychotic medication use were determined based on the technical specifications for the "Use of Antipsychotics in Children without a Primary Indication" quality measure proposed in 2013 by the National Collaborative for Innovation in Quality Measurement.[3]

[3] AHRQ-CMS CHIPRA National Collaborative for Innovation in Quality Measurement. Antipsychotic Medication Use Measures for Children and Adolescents – Draft Document for NCINQ 2013 Public Comment. http://www.chcs.org/media/NCINQ_2013_Public_Comment_4-30-13.pdf. Accessed 5/7/2013.

RESULTS

Prevalence of IDD and Treatment with Antipsychotics

Using the broader any IDD related diagnosis, 17,183 beneficiaries were classified as having IDD. The number decreased to 16,031 when the more limited IDD diagnosis classification was used (Table 3). Overall, 22-23% of beneficiaries with IDD were treated with an antipsychotic. The percentage using antipsychotics was highest among beneficiaries 12-20 years of age and dropped significantly for beneficiaries ≥ 46 years of age.

TABLE 3: Characteristics of Beneficiaires With IDD Diagnosis* and Treatment With Antipsychotic Medication
(January 2016 - June 2017)

		Any IDD Related Diagnosis*		Limited IDD Diagnosis*	
		Number With IDD Diagnosis	Treated With Antipsychotic	Number With IDD Diagnosis	Treated With Antipsychotic
TOTAL		17,183	3,794 (22.1%)	16,031	3,739 (23.3%)
Age	< 12 years	4,716	1,005 (21.3%)	4,069	983 (24.2%)
	12-20 years	3,474	1,213 (34.9%)	3,231	1,192 (36.9%)
	21-45 years	5,332	1,172 (22.0%)	5,146	1,161 (22.6%)
	46-64 years	2,870	399 (13.9%)	2,804	398 (14.2%)
	65+ years	791	5 (0.6%)	781	5 (0.6%)
Pharmacy Program	FFS	9,763	1,666 (17.1%)	9,272	1,644 (17.7%)
	UHC	3,797	1,099 (28.9%)	3,488	1,087 (31.2%)
	MAG	3,623	1,029 (28.4%)	3,271	1,008 (30.8%)

** See Table 1 for list of diagnosis codes classified as any and limited IDD diagnosis.*

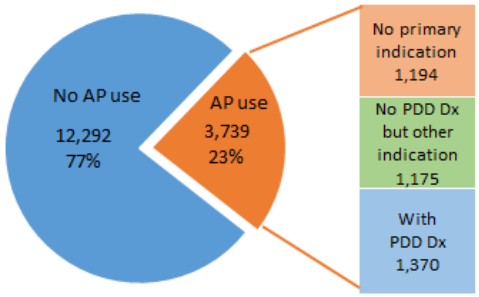
Beneficiaries with IDD were disproportionately enrolled in the FFS program. Despite each CCO having almost twice as many enrollees as the FFS program, there were ~2.5 times as many beneficiaries with IDD in the FFS program as in either CCO. The percentage of beneficiaries with IDD being treated with antipsychotics was lower in FFS (17%) than in the CCOs (28-31%). A detailed analysis within each pharmacy program found that the percentage of beneficiaries with IDD receiving antipsychotics was similar across programs for beneficiaries less than 21 years of age. Use of antipsychotics among adults in the FFS program decreased with age but increased in the CCOs.

Prevalence of Primary Indications for Antipsychotics Use

Approximately two-thirds of beneficiaries that were treated with antipsychotics had diagnoses in their medical claims that were primary indications for the use of antipsychotics (Table 4). ICD-10 code F84 – pervasive developmental disorders- is one of the primary diagnoses for which antipsychotics are indicated. This ICD-10 code was included in the primary diagnosis set for identifying IDD patients. The use of an antipsychotic with primary indications was examined using the full list of primary indication codes (referred to as "Any Primary Diagnosis") and the primary diagnosis list excluding F84. The results can be summarized as follows:

- Approximately 37% of the beneficiaries with IDD appear to be treated with antipsychotics to manage behaviors that are related to pervasive developmental disorder,
- Approximately 31% are being treated with antipsychotics to manage conditions that are primary indications for use excluding pervasive developmental disorder, and
- Approximately 32% are being treated with antipsychotics without a diagnosis that is a primary indication for it use.

FIGURE 1: Use of Antipsychotics Among Beneficiaries With IDD



These treatment patterns were consistent across the three pharmacy programs.

TABLE 4: Prevalence of Primary Indication for Antipsychotic Use Among Beneficiaires With IDD Diagnosis* Being Treated With Antipsychotic Medication
(January 2016 - June 2017)

		Any IDD Related Diagnosis*			Limited IDD Diagnosis*		
			Having Primary Indication for Antipsychotic Use**			Having Primary Indication for Antipsychotic Use**	
		Treated With Antipsychotic	Any Primary Diagnosis	Primary Diagnosis Other Than F84	Treated With Antipsychotic	Any Primary Diagnosis	Primary Diagnosis Other Than F84
TOTAL		3,794	2,554 (67.3%)	1,184 (31.2%)	3,739	2,545 (68.1%)	1,175 (31.4%)
Age	< 12 years	1,005	721 (71.7%)	67 (6.7%)	983	717 (72.9%)	64 (6.5%)
	12-20 years	1,213	835 (68.8%)	312 (25.7%)	1,192	833 (69.9%)	309 (25.9%)
	21-45 years	1,172	731 (62.4%)	543 (46.3%)	1,161	728 (62.7%)	540 (46.5%)
	46-64 years	399	263 (65.9%)	258 (64.7%)	398	263 (66.1%)	258 (64.8%)
	65+ years	5	4 (80.0%)	4 (80.0%)	5	4 (80.0%)	4 (80.0%)
Pharmacy Program	FFS	1,666	1,095 (65.7%)	452 (27.1%)	1,644	1,092 (66.4%)	449 (27.3%)
	UHC	1,099	769 (70.0%)	371 (33.8%)	1,087	767 (70.6%)	369 (34.0%)
	MAG	1,029	690 (67.1%)	361 (35.1%)	1,008	686 (68.0%)	357 (35.4%)
Provider Type for Initial Antipsychotic Prescription	Psych	1,284	917 (71.4%)	493 (38.4%)	1,271	913 (71.8%)	489 (38.5%)
	NP-Mental	733	525 (71.6%)	309 (42.2%)	726	524 (72.2%)	308 (42.4%)
	MD-Other	1,443	901 (62.4%)	279 (19.3%)	1,420	898 (63.2%)	276 (19.4%)
	NP-Other	285	177 (62.1%)	87 (30.5%)	276	176 (63.8%)	86 (31.2%)

** See Table 1 for list of diagnosis codes classified as any and limited IDD diagnosis.*
*** See Table 3 for list of diagnosis codes considered to be primary indications for antipsychotic medication use.*

Table 4 also shows the prevalence of a primary indication for antipsychotic use by the type of provider writing the initial antipsychotic prescription filled during the observation period. Approximately half of the beneficiaries had their initial antipsychotic prescription written by a provider other than a mental health specialist. There were significant differences in the prevalence of primary indications for antipsychotics by type of provider.

When mental health providers wrote the initial antipsychotic prescription, ~32% of the time IDD was the primary indication, ~40% of the time other mental health conditions were the primary indication, and ~38% of the time no primary indication was found. When other providers wrote the initial antipsychotic prescription, ~63% of the time IDD was the primary indication, ~17% of the time other mental health conditions were the primary indication, and ~20% of the time no primary indication was found.

Analysis of Providers Writing Initial Antipsychotic Prescriptions for IDD Patients

Although the number of initial prescriptions for antipsychotics were similar between mental health providers and other providers, there were more than twice as many non-mental health providers writing these prescriptions (Table 5).

TABLE 5: Provider Types Writing Initial Antipsychotic Prescriptions for IDD Patients

Provider Type for Initial Antipsychotic Prescription	Number of Providers	Number of Beneficiaries With Any IDD Diagnosis* Prescribed Antipsychotic	
		Average for Provider Type	Total for Provider Type
Psych	152	8.4	1,284
NP-Mental	77	9.5	733
MD-Other	402	3.6	1,443
NP-Other	112	2.5	285

** See Table 1 for list of diagnosis codes classified as any and limited IDD diagnosis.*

CONCLUSIONS AND RECOMMENDATIONS

The major findings from this analysis include:

- There are a large number of Medicaid beneficiaries with diagnoses of IDD.
- Almost one-fourth of these beneficiaries are being treated with antipsychotics.
- More than one-third of the beneficiaries with IDD being treated with antipsychotics have pervasive developmental disorder as the primary indication for their use of antipsychotics.
- Almost one-third of the beneficiaries taking antipsychotics have no primary indication for the use of an antipsychotic.
- More than half of these beneficiaries are being prescribed antipsychotics by non-mental health providers.

The IDD population is difficult to treat appropriately due to communication issues that frequently exist. The frequent use of antipsychotics in this population without mental health diagnoses and without primary indicators for the use of antipsychotics could signal inappropriate use of antipsychotics.

MS-DUR recommends that an educational intervention be initiated to provide education to providers initiating therapy with antipsychotics for IDD patients who do not have other mental health diagnoses that are primary indicators for use. MS-DUR would work with Dr. Escude' to develop the educational materials for this intervention.

USE OF CODEINE AND TRAMADOL IN MISSISSIPPI MEDICAID

BACKGROUND

In April 2017, the FDA issued a notice restricting the use of codeine and tramadol medications in children. Both medications are classified as opioid narcotics. Codeine is approved to treat pain and cough. It is often used in combination with other medications in both prescription and OTC cough and pain medications. Tramadol is a prescription medication approved to treat moderate to moderately severe pain. Single ingredient codeine medications and all tramadol containing medications are FDA-approved only for use in adults.

Codeine and tramadol medications have been shown to carry serious risks such as slowed or difficult breathing and death, especially in children under 12 years of age. Since 2013, the FDA has made multiple safety updates to the labeling of both codeine and tramadol containing medications in regards to their use in children and adolescents. The new FDA drug safety announcement stated they were adding the following to the labeling of these products:[1]

- FDA's strongest warning, called a *Contraindication*, to the drug labels of codeine and tramadol alerting that codeine should not be used to treat pain or cough and tramadol should not be used to treat pain in children younger than 12 years.
- A new *Contraindication* to the tramadol label warning against its use in children younger than 18 years to treat pain after surgery to remove the tonsils and/or adenoids.
- A new *Warning* to the drug labels of codeine and tramadol to recommend against their use in adolescents between 12 and 18 years who are obese or have conditions such as obstructive sleep apnea or severe lung disease, which may increase the risk of serious breathing problems.
- A strengthened *Warning* to mothers that breastfeeding is not recommended when taking codeine or tramadol medicines due to the risk of serious adverse reactions in breastfed infants. These can include excess sleepiness, difficulty breastfeeding, or serious breathing problems that could result in death.

The Mississippi Division of Medicaid (DOM) Universal Preferred Drug List (UPDL) currently does not include any age limits for short-acting narcotics and has a minimum age limit of 18 for selected long-acting narcotics (Xartemis® XR and Zohydro® ER). As shown in the Universal Preferred Drug List (UPDL) excerpt below, there are no current age restrictions for codeine and tramadol medications.

[1] U.S. Food and Drug Administration. FDA MedWatch Codeine and Tramadol Medicines: Drug Safety Communication Restricting Use in Children, Recommending Against Use in Breastfeeding Women. April 20, 2017.

Figure 1: Mississippi Medicaid UPDL Narcotic Analgesics[2]

PREFERRED AGENTS	NON-PREFERRED AGENTS		PA CRITERIA
ANALGESICS, NARCOTIC - SHORT ACTING			
Acetaminophen/codeine codeine dihydrocodeine/ APAP/caffeine hydrocodone/APAP hydromorphone IBUDONE (hydrocodone/ibuprofen) meperidine morphine oxycodone capsules oxycodone/APAP oxycodone/aspirin oxycodone/ibuprofen pentazocine/APAP tramadol tramadol/APAP	ABSTRAL (fentanyl) ACTIQ (fentanyl) butalbital/APAP/caffeine/codeine butalbital/ASA/caffeine/codeine butorphanol tartrate (nasal) DEMEROL (meperidine) DILAUDID (hydromorphone) fentanyl FENTORA (fentanyl) FIORICET W/ CODEINE (butalbital/APAP/caffeine/codeine) FIORINAL W/ CODEINE (butalbital/ASA/caffeine/codeine) hydrocodone/ibuprofen LAZANDA NASAL SPRAY (fentanyl) levorphanol LORCET (hydrocodone/APAP) LORTAB (hydrocodone/APAP) MAGNACET (oxycodone/APAP) NORCO (hydrocodone/APAP) NUCYNTA (tapentadol)	ONSOLIS (fentanyl) OPANA (oxymorphone) OXECTA (oxycodone) oxycodone tablets pentazocine/naloxone PERCOCET (oxycodone/APAP) PERCODAN (oxycodone/ASA) REPREXAINE (hydrocodone/ibuprofen) ROXICET (oxycodone/acetaminophen) RYBIX (tramadol) SUBSYS (fentanyl) SYNALGOS-DC (dihydrocodeine/ aspirin/caffeine) TYLENOL W/CODEINE (APAP/codeine) TYLOX (oxycodone/APAP) ULTRACET (tramadol/APAP) ULTRAM (tramadol) VICODIN (hydrocodone/APAP) VICOPROFEN (hydrocodone/ibuprofen) XODOL (hydrocodone/acetaminophen) ZAMICET (hydrocodone/APAP) ZOLVIT (hydrocodone/APAP) ZYDONE (hydrocodone/acetaminophen)	Quantity Limits Applicable quantity limit in 31 rolling days. • **62 tablets** - codeine, oxycodone/ibuprofen, meperidine, hydromorphone, fentanyl, butalbital/codeine combinations, morphine, tapentadol, dihydrocodeine combinations, tramadol, pentazocine • **62 tablets CUMULATIVE** - hydrocodone combinations, oxycodone combinations • **124 tablets** - butalbital/APAP 750 • **145 tablets** - butalbital/APAP 650 • **186 tablets** - butalbital/APAP 325, butalbital/ASA 325 • **5mL (2 x 2.5 bottles)** - butorphanol nasal • **180 mL CUMULATIVE** - oxycodone liquids • **480 mL CUMULATIVE** - hydrocodone liquids

PREFERRED AGENTS	NON-PREFERRED AGENTS		PA CRITERIA
ANALGESICS, NARCOTIC - LONG ACTING			
BUTRANS (buprenorphine) EMBEDA (morphine/naltrexone) fentanyl patches morphine ER tablets	ARYMO ER (morphine) NR BELBUCA (buprenorphine) CONZIP ER (tramadol) DOLOPHINE (methadone) DURAGESIC (fentanyl) EXALGO (hydromorphone) hydromorphone ER HYSINGLA ER (hydrocodone) KADIAN (morphine) methadone MORPHABOND (morphine) NR morphine ER capsules MS CONTIN (morphine) NUCYNTA ER (tapentadol) OPANA ER (oxymorphone) oxycodone ER OXYCONTIN (oxycodone) oxymorphone ER RYZOLT (tramadol)	tramadol ER ULTRAM ER (tramadol) XARTEMIS XR (oxycodone/APAP) XTAMPZA (oxycodone myristate) ZOHYDRO ER (hydrocodone bitartrate)	Minimum Age Limit • 18 years - Xartemis XR, Zohydro ER Quantity Limits Applicable quantity limit per rolling days • 31 tablets/31 days - Conzip ER, Exalgo ER, Hysingla ER, Ryzolt , Ultram ER • 62 tablets/31 days - Arymo ER, Embeda, Kadian, Methadone, Morphine ER, Opana ER, oxycodone ER, Oxycontin, Xtampza ER, Zohydro ER • 10 patches/31 days – Duragesic • 4 patches/31 days – Butrans • 40 tablets/10 days - Xartemis XR Xartemis XR MANUAL PA • Have tried 2 different preferred agents in the past 30 days • Maximum duration of therapy = 20 days per calendar year

MS-DUR examined the use of prescription medications containing codeine and tramadol during 2016 to determine their prevalence of use in the Mississippi Medicaid population.

2 Mississippi Division of Medicaid. Universal Preferred Drug List. Short/Long Acting Narcotic Analgesics. Effective July 1, 2017.

METHODS

A retrospective analysis was conducted using Mississippi Medicaid medical and pharmacy claims for the period January 2016 – December 2016. The analysis included data from the fee-for-service (FFS) program and the coordinated care organizations (CCOs). National drug codes (NDCs) for the drugs containing codeine or tramadol listed in the FDA safety alert were identified. All claims for these drugs were extracted. Beneficiary age was calculated at the end of the observation period (December 31, 2016). Medical claims were used to identify beneficiaries with a diagnosis of sleep apnea (ICD codes 327.2, 780.57, 780.53, 786.03, R06.81, G47.3) or having a tonsillectomy/adenoidectomy (CPT codes 42820, 42821, 42825, 42826, 42830, 42831, 42835, 42836, 42960, 42961, 42962, 42970, 42971, 42972). All beneficiaries who were enrolled for at least one month during the study period were included in the analysis. Beneficiaries were classified as receiving codeine or tramadol for pain after a tonsillectomy/adenoidectomy if there was a prescription claim for these medications within 3 days of the procedure. The list of prescription codeine and tramadol medicines published by the FDA was utilized for the analysis (Figure 2)

Figure 2: FDA List of Prescription Codeine and Tramadol Medicines[1]

Medicines Containing Codeine	Medicines Containing Tramadol
Codeine Sulfate	Conzip
Butalbital, Acetaminopen, Caffeine, and Codeine phosphate	Ultracet
Fiorinal with codeine	Ultram
Soma Compound with codeine	Ultram ER
Tylenol with codeine	Generic products containing tramadol
Promethazine with codeine (cough)	
Prometh VC with codeine (cough)	
Triacin-C (cough)	
Tuxarin ER (cough)	
Tuzistra-XR (cough)	
Generic products containing codeine	
Medicines Containing Dihydrocodeine	
Synalgos-DC	

RESULTS

Codeine and Tramadol Use in Children Under 12

Across all age groups, 4.9% of beneficiaries had claims for at least one prescription for codeine and 2.2% had claims for at least one prescription for tramadol (Table 1). Use of both medications was highest in adults 18 to 44 years of age (6.8% for codeine and 5.4% for tramadol) and adolescents 12 to 17 years of age (5.9% for codeine and 1.0% for tramadol). Only 58 children under age 12 had prescriptions for tramadol. However, 16,007 children under the age of 12 had prescription claims for codeine products.

TABLE 1: Use of Codeine and Tramadol by Age Group and Selected Conditions
(FFS and CCOs for Calendar Year 2016)

		Beneficiaries				
			Filling Codeine Prescription		Filling Tramadol Prescription	
	Age Group	Total				
Overall	TOTAL	863,709	42,663	4.9%	19,254	2.2%
	0 to 5	159,809	5,997	3.8%	4	0.0%
	6 to 11	158,281	10,010	6.3%	54	0.0%
	12 to 17	132,171	7,848	5.9%	1,288	1.0%
	18 to 44	207,754	14,182	6.8%	11,206	5.4%
	45 and above	205,694	4,626	2.3%	6,702	3.3%
Beneficiaries Having Tonsillectomy or Adenoidectomy*	TOTAL	5,507	371	6.7%	1	0.0%
	0 to 5	2,593	127	4.9%	0	0.0%
	6 to 11	1,989	203	10.2%	0	0.0%
	12 to 17	641	37	5.8%	0	0.0%
	18 to 44	270	4	1.5%	1	0.4%
	45 and above	14	0	0.0%	0	0.0%
Beneficiaries With Sleep Apnea Diagnois	TOTAL	11,542	1,037	9.0%	1,069	9.3%
	0 to 5	1,673	99	5.9%	0	0.0%
	6 to 11	1,169	116	9.9%	3	0.3%
	12 to 17	622	57	9.2%	11	1.8%
	18 to 44	2,789	368	13.2%	462	16.6%
	45 and above	5,289	397	7.5%	595	11.3%

** Prescription was filled within 3 days after the procedure was completed.*

Tramadol Use Following Tonsillectomy/Adenoidectomy

A total of 5,223 beneficiaries under the age of 18 had a tonsillectomy or adenoidectomy during 2016. Of these beneficiaries, 367 (7.0%) had prescription claims for codeine within three days of the procedure. None of these beneficiaries had claims for a tramadol prescription.

Codeine and Tramadol Use in Children/Adolescents with Sleep Apnea

Based on medical claims, 3,464 beneficiaries under age 18 were identified as having a diagnosis of sleep apnea. Of these beneficiaries, 272 (7.9%) had prescriptions for codeine products and 11 (0.3%) had prescriptions for tramadol. Other conditions listed in the FDA warning for codeine and tramadol such as obesity and severe lung disease, or cough were not included in this analysis due to difficulties identifying these conditions using administrative claims.

CONCLUSIONS AND RECOMMENDATIONS

It is important to note that the observation period was prior to the updated FDA safety notice. The prescribing behaviors reported indicate changes that will need to be made in order to be compliant with the new safety warning. Tramadol use in children and adolescents was not very common, but some cases did occur that were in conflict with the FDA recommended contraindications and warnings. Codeine use in children under 12 and in children/adolescents with sleep apnea was fairly high. Based on current utilization patterns for these products, MS-DUR proposes the following recommendations for the DUR Board.

Recommendations:

1. DOM should set a minimum age limit of 12 years for tramadol and codeine products.

2. DOM should modify the short and long-acting narcotic electronic PA rules to require a manual PA for beneficiaries under age 18 with diagnosis of sleep apnea prescribed codeine or tramadol.

3. MS-DUR should implement an educational initiative to notify providers of the recent (April 20, 2017) FDA recommendations and the new clinical edits being implemented.

CYTOKINE AND CAM ANTAGONIST UTILIZATION IN MISSISSIPPI MEDICAID

BACKGROUND

Cytokine and cell-adhesion molecule (CAM) antagonists have a major role in the treatment of chronic inflammatory diseases such as rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, plaque psoriasis and inflammatory bowel disease. Utilization of this class of medications continues to increase. Pharmacy payers across the United States are tasked with the responsibility of ensuring these medications are appropriately prescribed.

Mississippi Division of Medicaid's (DOM) current Universal Preferred Drug List (UPDL) for this class of medications is shown below. Presently, Cosentyx®, Enbrel®, Humira® and generic methotrexate are preferred products.

DOM Universal Preferred Drug List – Effective 7-1-2017

CYTOKINE & CAM ANTAGONISTS			
	COSENTYX (secukinumab) SmartPA ENBREL (etanercept) HUMIRA (adalimumab) methotrexate	ACTEMRA (tocilizumab) CIMZIA (certolizumab) ENTYVIO (vedolizumab) ILARIS (canakinumab) INFLECTRA (infliximab) KINERET (anakinra) ORENCIA (abatacept) OTEZLA (apremilast) OTREXUP (methotrexate) RASUVO (methotrexate) REMICADE (infliximab) RHEUMATREX (methotrexate) SILIQ (brodalumab) NR SIMPONI (golimumab) STELARA (ustekinumab) TALTZ (ixekizumab) TREXALL (methotrexate) XELJANZ (tofacitinib) XELJANZ XR (tofacitinib)	Orencia IV Infusion, Remicade IV Infusion and Stelara (first dose) are for administration in hospital or clinic setting. PA will not be issued at Point of Sale without justification. Cosentyx • ≥ **18 years** = Minimum Age • Documented diagnosis of plaque psoriasis, psoriatic arthritis or ankylosing spondylitis in the past 2 years **AND** • 90 consecutive days of Humira in the past year

MS-DUR reviewed prior authorization (PA) criteria for cytokine and CAM antagonists across Medicaid programs and health plans in several states. Many of these programs require a prior authorization process for these medications. All PA forms examined included requirements for approved diagnoses and for many conditions, required prior failure with other products (step-therapy). Step therapy examples included the following: 1) for Crohn's and ulcerative colitis-failure on corticosteroids, aminosalicylates, or immunomodulators; 2) for rheumatoid arthritis-failure on methotrexate and/or disease-modifying antirheumatic drugs (DMARDs).

Due to increasing utilization for this category, MS-DUR examined cytokine and CAM antagonist utilization to determine if additional criteria might be needed to appropriately manage this class of medications.

METHODS

A retrospective analysis was conducted using Mississippi Medicaid medical and pharmacy claims for the period January 2016 – May 2017. The analysis included data from the fee-for-service (FFS) program and the coordinated care organizations (CCOs). Pharmacy and office-administered medical claims for all drugs listed in the Cytokine & CAM Antagonists class in the UPDL were extracted. Utilization and program payments were examined monthly. Since there is not a current diagnosis check, beneficiaries with paid claims for Enbrel® and Humira® were evaluated for the presence of an approved diagnosis in the medical claims during the time period examined.

RESULTS

Type of Claims

Table 1 provides the number of claims from this class with the majority accounted for in the pharmacy point-of-sale (POS) system. Remicade® was almost exclusively office-administered. Simponi®, Orencia® and methotrexate had both medical and pharmacy claims. Enbrel® and Humira® are almost always paid through the POS system and can be easily managed through an electronic or manual PA.

TABLE 1: Number of Claims by Type and Drug
(January 2016 - May 2017)

	FFS		UHC		MAG	
	Type of Claim		Type of Claim		Type of Claim	
Drug	Medical	Pharmacy	Medical	Pharmacy	Medical	Pharmacy
TOTAL for class	263	2,441	124	3,668	523	4,725
Actemra (tocilizumab)	9	3	22	26	50	4
Cimzia (certolizumab)	0	6	0	15	16	30
Cosentyx (secukinumab)	0	5	0	22	0	79
Enbrel (etanercept)	0	308	0	494	0	682
Entyvio (cwsoliumV)	3	2	8	0	13	0
Humira (adalimumab)	1	504	0	1,086	0	1,081
Ilaris (canakinumab)	0	7	0	6	0	0
Kineret (anakinra)	0	19	0	4	0	4
Orencia (abatacept)	23	28	17	18	24	34
Otezla (apremilast)	0	35	0	59	0	75
Otrexup/Rrasuvo/Trexall/ Rheumatrex (methotrexate)	0	2	0	26	0	15
Remicade (infliximab)	90	0	53	3	245	0
Simponi (golimumab)	20	12	0	21	4	23
Stelara (ustekinumab)	5	3	0	4	3	23
Taltz (ixekizumab)	0	0	0	1	0	8
Xeljanz/Xeljanz XR (tofacitinib)	0	50	0	97	0	70
methotrexate	112	1,457	24	1,796	169	2,597

Utilization and Payment Trends

Table 2 shows the total number of claims for each drug in this class by month. From January 2016 to May 2017 there has been a 37% increase in total claims for this class. This has been primarily driven by a 54% increase in claims for Humira® and a 43% increase in claims for Enbrel®.

TABLE 2: Number of Prescriptons and Office-Administered Claims by Drug and Month
(Includes FFS and CCOs)

	Month Filled / Administered																
Drug	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17
TOTAL for class	571	633	644	589	649	682	668	735	702	769	697	699	728	702	791	742	742
methotrexate	315	362	357	324	370	384	371	388	359	404	360	339	365	354	382	361	360
Humira (adalimumab)	123	136	137	129	141	143	136	158	156	183	157	176	176	172	193	173	183
Enbrel (etanercept)	72	65	81	82	75	78	85	94	94	93	93	82	89	81	117	98	105
Remicade (infliximab)	19	24	26	17	15	24	17	23	26	25	22	24	30	27	25	27	20
Orencia (abatacept)	8	8	7	5	2	7	7	12	6	4	6	11	8	7	9	14	13
Xeljanz/Xeljanz XR (tofacitinib)	11	6	10	8	13	11	15	15	14	16	15	17	9	15	16	15	11
Otezla (apremilast)	3	7	6	6	10	8	9	11	15	13	14	12	11	10	10	12	12
Cosentyx (secukinumab)	2	2	2	5	8	8	10	9	8	5	7	4	5	5	6	11	9
Stelara (ustekinumab)	0	2	0	0	1	2	2	1	3	2	1	5	2	4	5	2	6
Simponi (golimumab)	6	7	4	4	6	4	2	4	4	4	5	5	4	6	4	4	7
Actemra (tocilizumab)	4	5	8	3	1	5	4	9	5	10	7	12	10	9	9	10	6
Cimzia (certolizumab)	4	6	3	4	2	3	4	5	6	3	3	4	4	4	3	2	3
Otrexup/Rrasuvo/Trexall/ Rheumatrex (methotrexate)	0	0	0	0	1	2	2	4	2	5	3	4	5	3	4	5	3
Kineret (anakinra)	2	2	1	1	2	2	2	1	1	1	2	1	2	1	1	3	2
Entyvio (cwsoliumV)	0	0	0	1	0	0	0	0	2	0	2	2	5	3	6	4	1
Taltz (ixekizumab)	0	0	0	0	0	0	0	1	1	1	0	1	2	0	1	1	1
Ilaris (canakinumab)	2	1	2	0	2	1	2	0	0	0	0	0	1	1	0	0	0

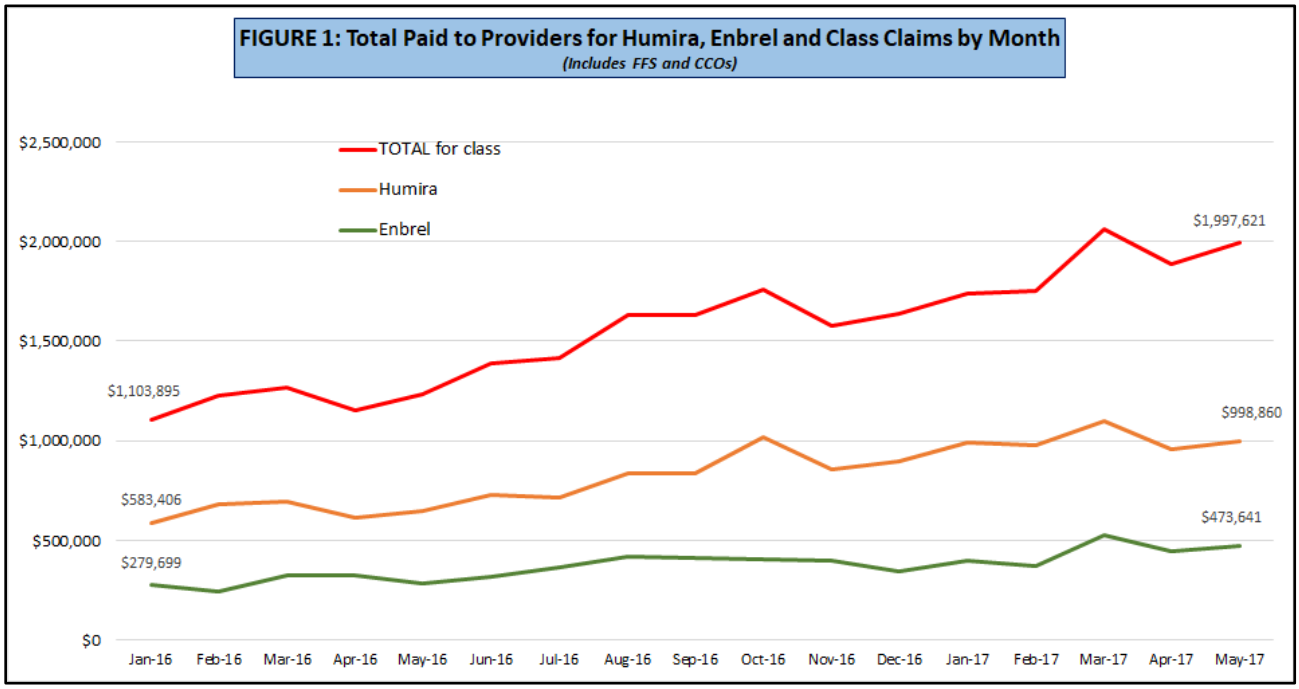
Table 3 provides details regarding the total monthly payment for each drug in this class. From January 2016 to May 2017 there has been a 97% increase in the total amount paid for drugs in this class. Increased utilization shown in Table 2 accounts for some of the increase. However, increases in the average cost per prescription and the introduction of newer more costly medications have been responsible for most of the increase in the total paid. The cost per prescription for Humira® increased 16.6% from $4,743 to $5,528 and Enbre®l had a 16.1% increase from $3,885 to $4,512 per prescription. Although Stelara® is currently used by only a few beneficiaries, at an average prescription cost of $15,000 to $18,000, its use has contributed significantly to the total amount paid in this category.

TABLE 3: Total Paid to Providers for Prescriptions and Office-Administered Claims by Drug and Month
(Includes FFS and CCOs)

	Month Filled / Administered																
Drug	**Jan-16**	**Feb-16**	**Mar-16**	**Apr-16**	**May-16**	**Jun-16**	**Jul-16**	**Aug-16**	**Sep-16**	**Oct-16**	**Nov-16**	**Dec-16**	**Jan-17**	**Feb-17**	**Mar-17**	**Apr-17**	**May-17**
TOTAL for class	$1,103,895	$1,225,921	$1,270,043	$1,154,342	$1,231,575	$1,386,378	$1,417,200	$1,631,434	$1,633,154	$1,758,197	$1,574,970	$1,636,473	$1,738,241	$1,749,602	$2,064,574	$1,890,590	$1,997,621
methotrexate	$9,926	$11,059	$11,465	$10,578	$13,562	$13,624	$11,646	$12,284	$11,028	$11,998	$10,399	$9,773	$10,716	$10,391	$11,205	$10,203	$10,367
Humira (adalimumab)	$583,406	$680,532	$693,888	$612,169	$649,784	$725,964	$713,295	$839,060	$834,714	$1,020,817	$855,316	$899,491	$990,264	$980,189	$1,099,057	$956,773	$998,860
Enbrel (etanercept)	$279,699	$244,931	$322,765	$324,299	$285,225	$316,942	$366,097	$417,458	$411,134	$404,676	$398,082	$346,133	$401,116	$370,515	$527,315	$446,367	$473,641
Remicade (infliximab)	$68,903	$92,466	$89,509	$59,559	$54,931	$78,179	$64,855	$85,231	$109,045	$92,689	$100,149	$91,291	$109,167	$101,771	$106,977	$174,583	$149,280
Orencia (abatacept)	$27,515	$27,513	$22,466	$17,349	$3,356	$19,632	$21,252	$41,436	$22,308	$13,039	$20,959	$36,156	$27,408	$24,781	$31,778	$43,922	$49,437
Xeljanz/Xeljanz XR (tofacitinib)	$33,636	$20,085	$33,476	$26,781	$43,519	$40,299	$54,953	$54,953	$51,289	$58,616	$54,953	$62,280	$36,083	$60,139	$64,148	$60,139	$44,102
Otezla (apremilast)	$7,600	$17,732	$15,199	$15,597	$27,320	$21,856	$24,588	$30,051	$40,979	$35,515	$38,247	$32,783	$30,811	$29,218	$29,218	$37,091	$37,497
Cosentyx (secukinumab)	$7,723	$8,256	$8,256	$45,403	$70,168	$61,914	$54,487	$51,514	$34,345	$34,342	$30,052	$17,172	$21,465	$38,634	$31,081	$49,375	$53,922
Stelara (ustekinumab)	$0	$26,699	$0	$0	$9,336	$25,657	$28,008	$15,241	$43,248	$16,572	$9,336	$71,256	$10,616	$63,395	$77,275	$30,220	$105,900
Simponi (golimumab)	$22,695	$29,539	$12,513	$16,166	$24,968	$16,917	$8,051	$25,312	$19,088	$17,743	$19,137	$21,661	$19,383	$18,339	$20,118	$15,582	$30,508
Actemra (tocilizumab)	$7,170	$4,301	$11,946	$3,611	$119	$12,301	$12,442	$22,815	$12,237	$26,154	$13,463	$18,582	$15,250	$16,390	$13,380	$14,811	$9,695
Cimzia (certolizumab)	$13,813	$21,197	$10,598	$14,131	$7,066	$10,598	$14,831	$16,771	$20,479	$10,239	$10,239	$13,947	$14,613	$14,613	$10,726	$6,823	$10,710
Otrexup/Rrasuvo/Trexall/ Rheumatrex (methotrexate)	$0	$0	$0	$0	$412	$886	$886	$2,456	$1,035	$3,079	$1,982	$2,132	$2,992	$1,721	$2,447	$3,188	$1,500
Kineret (anakinra)	$7,699	$7,699	$3,849	$3,849	$7,699	$7,699	$7,699	$3,849	$3,849	$3,849	$7,699	$3,849	$7,814	$3,907	$3,907	$15,625	$11,717
Entyvio (cwsoliumV)	$0	$0	$0	$4,851	$0	$0	$0	$0	$9,707	$0	$4,957	$5,246	$26,184	$15,402	$31,224	$21,171	$5,439
Taltz (ixekizumab)	$0	$0	$0	$0	$0	$0	$0	$13,001	$8,668	$8,668	$0	$4,720	$14,160	$0	$4,720	$4,720	$5,046
Ilaris (canakinumab)	$34,112	$33,912	$34,112	$0	$34,112	$33,912	$34,112	$0	$0	$200	$0	$0	$200	$200	$0	$0	$0

NOTE: Total paid are reimbursement amounts paid to providers and are not representative of final Medicaid costs after rebates.

Figure 1 provides a graphical presentation of the increases in the total amount paid for this category of drugs from Jan 2016 through May 2017.



Presence of Diagnoses to Support Use of Enbrel® and Humira®

Table 4 summarizes the various FDA approved indications for Enbrel® and Humira®. Medical claims for beneficiaries taking these two products were examined to determine whether diagnoses were present that supported use for an approved indication. Of note, medical diagnoses searches can only be reviewed for the previous two years within the current electronic PA system. Consequently, only diagnoses that appeared in the last two years and occurred during the observation period were examined for the utilization of these products.

TABLE 4: Approved Indications for Enbrel and Humira

Indication	Enbrel	Humira
Rheumatoid arthritis	X	X
Juvenile idiopathic arthritis	X	X
Psoriatic arthritis	X	X
Plaque psoriasis	X	X
Alkylosing spondylitis	X	X
Adult Crohn's disease		X
Pediatric Crohn's disease		X
Ulcerative colitis		X
Hidradenitis suppurativa		X
Uveitis		X

As shown in Table 5, no supporting diagnosis was found for approximately 5% of Humira® users. There was a significant variation between the FFS program (17%) and the two CCOs (3%). No supporting diagnosis was found for approximately 24% of beneficiaries taking Enbrel®. There was little variation in the rate of Enbrel® use among the three pharmacy programs.

TABLE 5: Number of Beneficiaries With Diagnoses for Approved Indications in Medical Claims					
Diagnosis for Approved Indication		Pharmacy Program			
		FFS	UHC	MAG	TOTAL
Humira	No	15 (17.0%)	7 (3.3%)	7 (3.1%)	29 (5.5%)
	Yes	73 (83.0%)	202 (96.7%)	22 (96.9%)	497 (94.5%)
Enbrel	No	19 (23.8%)	51 (25.0%)	51 (23.0%)	121 (23.9%)
	Yes	61 (76.3%)	153 (75.0%)	171 (77.0%)	385 (76.1%)

CONCLUSIONS AND RECOMMENDATIONS

The Cytokine & CAM class experienced a 37% increase in utilization and a 97% increase in total amount paid for claims for the observation period. The increase in total paid can be attributed to an increase in utilization, price increases for the leading products, and the introduction of newer and more expensive medications. With the introduction of new medications and a focused effort from pharmaceutical manufacturers on product marketing, this trend will continue. As an initial focus for management of these products, MS-DUR suggests the following recommendations to the DUR Board.

Recommendations:

1. DOM should implement an electronic PA edit to add a diagnosis check for utilization all medications in the Cytokine & CAM Antagonists class.

2. MS-DUR should continue to monitor this category of drugs to determine whether step-therapy requirements would be appropriate for additional drugs.

MISSISSIPPI MEDICAID
FDA DRUG SAFETY INFORMATION UPDATES
April - June 2017

1. **Codeine and tramadol medicines: Restricting use in children, recommending against use in breastfeeding women.**
   Message: In April 2017, the FDA approved labeling changes for codeine and tramadol products to include the following:
   - FDA's strongest warning, called a Contraindication, to the drug labels of codeine and tramadol alerting that codeine should not be used to treat pain or cough and tramadol should not be used to treat pain in children younger than 12 years.
   - A new Contraindication to the tramadol label warning against its use in children younger than 18 years to treat pain after surgery to remove the tonsils and/or adenoids.
   - A new Warning to the drug labels of codeine and tramadol to recommend against their use in adolescents between 12 and 18 years who are obese or have conditions such as obstructive sleep apnea or severe lung disease, which may increase the risk of serious breathing problems.
   - A strengthened Warning to mothers that breastfeeding is not recommended when taking codeine or tramadol medicines due to the risk of serious adverse reactions in breastfed infants. These can include excess sleepiness, difficulty breastfeeding, or serious breathing problems that could result in death.

2. **Increased risk of leg and foot amputations with the diabetes medicine canagliflozin (Inkovana, Invokamet, Invokamet XR)**
   Message: In May 2017, the FDA required new warnings, including a Boxed Warning, to be added to the canagliflozin drug labels to describe the increased risk of leg and foot amputation.

3. **FDA has requested the voluntary removal of reformulated Opana ER from the market.**
   Message: In June 2017, the FDA requested Endo Pharmaceuticals remove its opioid pain medication, reformulated Opana ER (oxymorphone hydrochloride), from the market based on its concerns of misuse and abuse of the reformulated product.