

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



MISSISSIPPI DIVISION OF
MEDICAID

**December 5, 2024 at 1:00pm
Walter Sillers Building, Cobb Conference Room
Jackson, MS**

Prepared by:

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

Drug Utilization Review Board

Joseph Austin, MD

Vicksburg Women's Care
100 Maxwell Drive
Vicksburg, MS 39180
Term Expires: June 30, 2025

Amy Catherine Baggett, PharmD

Love's Pharmacy of Diamondhead
45000 E Aloha Dr., Suite B
Diamondhead, MS 39525
Term Expires: June 30, 2027

Terrence Brown, PharmD

BioScrip Infusion Services
187 Country Place Pkwy, Suite C
Pearl, MS 39208
Term Expires: June 20, 2026

Chrysanthia Davis, PharmD (Chair)

Omicare Pharmacy
100 Business Park Dr, Ste D
Ridgeland, MS 39157
Term Expires: June 30, 2025

Dena Jackson, MD

King's Daughters Specialty Clinic
940 Brookway Blvd
Brookhaven, MS 39601
Term Expires: June 30, 2026

Jessica Lavender, MD

UMMC
2500 N. State Street
Jackson, MS 39216
Term Expires: June 30, 2025

Holly R. Moore, PharmD

Anderson Regional Medical Center
2124 14th Street
Meridian, MS 39301
Term Expires: June 30, 2026

Kristi Phelps, RPh

Burnham Drugs
12500 Hwy 57
Vance, MS 39565
Term Expires: June 30, 2026

Joshua Pierce, PharmD (Vice-Chair)

McGuffee Drugs
102 Main St.
Magee, MS 39111
Term Expires: June 30, 2027

Gaylen Sanders, MD

The Pediatric Clinic
415 South 28th Avenue
Hattiesburg, MS 39401
Term Expires: June 30, 2027

Joshua Trull, DO

UMMC Dept of Psychiatry
2500 N. State Street
Jackson, MS 39216
Term Expires: June 30, 2027

Bobbie West, MD

MEA Medical Clinic
342 Gilchrist Drive
Pearl, MS 39208
Term Expires: June 30, 2025

2024 DUR Board Meeting Dates

March 7, 2024
June 13, 2024

September 12, 2024
December 5, 2024

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 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
December 5, 2024**

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Proposed 2025 Meeting Dates:

March 20, 2025

June 19, 2025

September 18, 2025

December 11, 2025

DUR Board Meeting Minutes

**MISSISSIPPI DIVISION OF MEDICAID
DRUG UTILIZATION REVIEW (DUR) BOARD
MINUTES OF THE SEPTEMBER 12, 2024 MEETING**

DUR Board Roster: State Fiscal Year 2024 (July 1, 2024 – June 30, 2025)	Dec 2023	Mar 2024	Jun 2024	Sep 2024
Joseph Austin, MD	✓		✓	
Amy Catherine Baggett, PharmD	✓	✓		
Terrence Brown, PharmD	✓	✓	✓	
Chrysanthia Davis, PharmD	✓	✓	✓	✓
Dena Jackson, MD	✓	✓		✓
Jessica Lavender, MD	NA	✓	✓	✓
Holly Moore, PharmD		✓		✓
Kristi Phelps, RPh		✓		
Joshua Pierce, PharmD			✓	✓
Gaylen Sanders, MD	NA	NA	NA	✓
Joshua Trull, DO	NA	✓	✓	✓
Bobbie West, MD	✓	✓	✓	
TOTAL PRESENT**	8	10	8	7

*** Total Present may not be reflected by individual members marked as present above due to members who either resigned or whose terms expired being removed from the list.*

Also Present:

Division of Medicaid (DOM) Staff:

Terri Kirby, RPH, CPM, Pharmacy Director; Dennis Smith, RPH, DUR Coordinator; Amy Ly-Ha, PharmD, Pharmacist II;

University of Mississippi School of Pharmacy - MS-DUR Staff:

Eric Pittman, PharmD, MS-DUR Project Director; Kaustuv Bhattacharya, PhD, MS-DUR Research Assistant Professor;

Coordinated Care Organization (CCO) Staff:

Jenni Grantham, PharmD, Director of Pharmacy, Magnolia Health; Trina Stewart, PharmD, Pharmacy Manager, Molina Healthcare;

Gainwell Staff:

Lew Ann Snow, RN, Advisor Business Analyst;

Telligen Staff:

Buddy Ogletree, PharmD, Pharmacist; Bruce Reed, Pharmacy Student;

Visitors: None.

Call to Order/Welcome:

The meeting was called to order at 1:08 pm.

OLD BUSINESS:

Dr. Pierce moved to approve the minutes from the June 2024 DUR Board Meeting, seconded by Dr. Lavender, and unanimously approved by the DUR Board.

Resource Utilization Review

Dr. Pittman presented the resource utilization report for June 2024. Data presented was across all pharmacy programs.

Follow-up and Discussion from the Board

Dr. Pittman presented the Board with a draft version of a provider educational letter addressing the treatment of asthma. This was a recommendation made by the Board at the June 2024 meeting. The letter will be sent to providers treating individuals covered by Medicaid with an asthma diagnosis who had a history of 3 or more short-acting beta agonist prescription claims in the previous six months and did not have a claim for a controller medication. The Board verbalized their support for the mailing.

NEW BUSINESS:**Appointment of Officers**

Dr. Lavender made a motion to appoint Dr. Pierce as the new vice-chair. Dr. Jackson seconded the motion, and the motion was unanimously approved by the Board.

Update on MS-DUR Educational Interventions

Dr. Pittman provided an overview of all DUR mailings and educational notices that occurred between June 2024 through August 2024.

Influenza Annual Update

Dr. Pittman presented the Board with an overview of the utilization of influenza vaccinations and anti-influenza prescription agents between July 1, 2023 and June 30, 2024 (SFY 2024). Dr. Pittman noted that compared to the two previous years, the number of claims for influenza vaccinations administered to individuals covered by Medicaid was down this past year. This corresponds to national data indicating that fewer influenza vaccinations were administered in retail pharmacies and medical offices in the U.S. during the 2023-2024 season compared to the prior year. Dr. Pittman urged DOM to encourage providers to be diligent in their recommendations for influenza vaccination for this upcoming season.

RSV Annual Update:

Dr. Pittman presented an overview of the utilization of agents for the prevention of RSV among Medicaid covered individuals. With the approval of nirsevimab and two RSV vaccines, the landscape for RSV protection dramatically changed this past year. Supply issues prevented the

optimal uptake of nirsevimab last year, but those issues have been resolved. Analysis indicated that approximately 10% of newborn infants covered by Medicaid received RSV protection by receipt of nirsevimab or maternal RSV vaccination during the 2023/2024 RSV season.

Trikafta Initiation and Healthcare Utilization

Dr. Pittman presented an analysis project describing and comparing healthcare resource utilization and total cost of care associated with the initiation of Trikafta (elexacaftor/tezacaftor/ ivacaftor) among the Mississippi Medicaid population. Trikafta, the first triple-therapy cystic fibrosis transmembrane conductance regulator (CFTR) modulator, expanded CFTR therapy options to over 90% of individuals diagnosed with cystic fibrosis. The study findings suggest that while Trikafta leads to increased pharmacy and total costs, it may have a pronounced effect on reducing acute care needs and improving respiratory outcomes regardless of prior CFTR modulator use.

Concomitant Prescribing of Opioids and Psychotropic Agents

The dangers of the concomitant prescribing of opioids and psychotropic medications is well documented. Individuals who take these medications concurrently are at greater risks of experiencing opioid-related adverse events. This study described trends in the concomitant prescribing of opioids and psychotropic medications among the Mississippi Medicaid population over a 5-year period. Follow up analyses will explore the occurrence of adverse events among those concomitantly prescribed opioids and psychotropic agents and will identify factors associated with these adverse events.

FDA Drug Safety Updates:

No new FDA drug safety communications were published between June 2024 and August 2024.

Pharmacy Program Update:

Ms. Kirby provided a pharmacy program update highlighting the following item:

- The use of a single pharmacy benefit administrator (PBA) began July 1, 2024. Since that time, all pharmacy claims have been processed through Gainwell. Ms. Kirby received positive feedback from Board members on their experiences with the single PBA system.

Next Meeting Information:

Remaining meeting dates for 2024:

- December 5, 2024

Dr. Jackson adjourned the meeting at 2:21 pm.

Submitted,

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

DUR Board Meeting Resources

Members

The DUR Board is composed of twelve participating Medicaid providers who are in good standing with their representative organizations.

- [DUR Board Member List](#)

Meetings

Meetings will be held on the following dates at 1:00 pm at the location as noted:

- ~~March 7, 2024~~
- ~~June 13, 2024~~
- Sept. 12, 2024 – Walter Sillers Building, 550 High Street, Jackson, MS – [Map](#)
- Dec. 5, 2024

The September 12 meeting may be viewed virtually by clicking on the following link:
[Click Here for MS Medicaid DUR Live Broadcast on September 12 2024 at 1:00 p.m.](#)

Please note: This link will only be live during the meeting and will not be archived for future viewing.



Resource Utilization Review

TABLE 04A: ENROLLMENT STATISTICS FOR LAST 6 MONTHS

April 1, 2024 through September 30, 2024

		Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
Total enrollment		773,761	755,402	739,561	727,429	726,631	723,605
Dual-eligibles		160,941	160,440	160,348	160,459	160,811	160,957
Pharmacy benefits		615,172	597,150	581,280	569,464	568,106	564,230
PLAN %	LTC	15,747	15,717	15,726	15,738	15,671	15,516
	FFS	29.7%	27.2%	24.5%	23.7%	23.2%	22.6%
	MSCAN-UHC	26.7%	27.6%	28.5%	28.7%	28.8%	29.0%
	MSCAN-Magnolia	27.8%	28.8%	29.8%	30.2%	30.5%	30.7%
	MSCAN-Molina	15.8%	16.4%	17.2%	17.4%	17.5%	17.7%

TABLE 04B: PHARMACY UTILIZATION STATISTICS FOR LAST 6 MONTHS

April 1, 2024 through September 30, 2024

		Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
# Rx Fills	FFS	118,668	103,929	85,127	91,621	100,846	92,038
	MSCAN-UHC	143,479	131,305	112,780	126,315	144,777	131,146
	MSCAN-Mag	161,437	147,314	128,842	135,386	159,172	142,665
	MSCAN-Mol	69,823	64,450	58,189	58,504	69,505	62,573
# Rx Fills / Bene	FFS	0.6	0.6	0.6	0.7	0.8	0.7
	MSCAN-UHC	0.9	0.8	0.7	0.8	0.9	0.8
	MSCAN-Mag	0.9	0.9	0.7	0.8	0.9	0.8
	MSCAN-Mol	0.7	0.7	0.6	0.6	0.7	0.6
\$ Paid Rx	FFS	\$13,825,623	\$12,507,743	\$10,777,753	\$11,836,900	\$12,647,020	\$12,165,385
	MSCAN-UHC	\$18,204,727	\$17,831,211	\$16,636,749	\$19,662,958	\$18,950,259	\$17,515,325
	MSCAN-Mag	\$20,108,509	\$19,491,002	\$18,464,164	\$19,550,286	\$20,689,705	\$18,965,556
	MSCAN-Mol	\$7,528,579	\$7,553,792	\$6,873,392	\$7,371,234	\$7,711,375	\$7,116,375
\$ /Rx Fill	FFS	\$116.51	\$120.35	\$126.61	\$129.19	\$125.41	\$132.18
	MSCAN-UHC	\$126.88	\$135.80	\$147.52	\$155.67	\$130.89	\$133.56
	MSCAN-Mag	\$124.56	\$132.31	\$143.31	\$144.40	\$129.98	\$132.94
	MSCAN-Mol	\$107.82	\$117.20	\$118.12	\$126.00	\$110.95	\$113.73
\$ /Bene	FFS	\$75.67	\$77.01	\$75.68	\$87.70	\$95.96	\$95.40
	MSCAN-UHC	\$110.83	\$108.19	\$100.42	\$120.31	\$115.82	\$107.04
	MSCAN-Mag	\$117.58	\$113.33	\$106.59	\$113.68	\$119.41	\$109.49
	MSCAN-Mol	\$77.46	\$77.13	\$68.75	\$74.39	\$77.56	\$71.26

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 SEP 2024 (FFS AND CCOs)

Category	Month Year	Rank Volume	# RXs	\$ Paid	# Unique Benes
CNS stimulants	Sep 2024	1	22,289	\$3,178,338	19,596
	Aug 2024	1	22,698	\$3,143,232	19,753
	Jul 2024	1	21,036	\$2,906,984	18,163
aminopenicillins	Sep 2024	2	14,334	\$204,969	14,088
	Aug 2024	2	17,574	\$246,394	17,265
	Jul 2024	9	9,967	\$140,697	9,775
atypical antipsychotics	Sep 2024	3	13,250	\$4,741,362	11,246
	Aug 2024	4	13,934	\$5,195,234	11,570
	Jul 2024	2	14,092	\$5,201,345	11,589
adrenergic bronchodilators	Sep 2024	4	13,167	\$610,710	11,469
	Aug 2024	3	15,779	\$819,896	13,549
	Jul 2024	5	11,695	\$684,621	9,979
nonsteroidal anti-inflammatory agents	Sep 2024	5	12,430	\$170,255	11,884
	Aug 2024	6	13,897	\$186,690	13,201
	Jul 2024	4	12,250	\$167,393	11,559
SSRI antidepressants	Sep 2024	6	12,328	\$163,548	11,421
	Aug 2024	8	13,045	\$170,375	11,888
	Jul 2024	3	12,990	\$170,929	11,797
glucocorticoids	Sep 2024	7	11,966	\$374,715	11,534
	Aug 2024	5	13,901	\$407,818	13,426
	Jul 2024	13	8,319	\$323,686	8,015
antihistamines	Sep 2024	8	11,454	\$202,094	11,081
	Aug 2024	9	12,575	\$175,885	12,181
	Jul 2024	11	8,806	\$128,975	8,426
antiadrenergic agents, centrally acting	Sep 2024	9	10,770	\$176,799	9,745
	Aug 2024	10	11,234	\$170,048	10,034
	Jul 2024	6	11,017	\$181,677	9,744
proton pump inhibitors	Sep 2024	10	10,062	\$300,396	9,635
	Aug 2024	11	10,404	\$307,709	9,829
	Jul 2024	8	9,970	\$307,369	9,391

TABLE D: TOP 10 DRUG CATEGORIES BY DOLLARS PAID IN SEP 2024 (FFS AND CCOs)

Category	Month Year	Rank Paid Amt	# RXs	\$ Paid	# Unique Benes
interleukin inhibitors	Sep 2024	1	869	\$5,022,994	828
	Aug 2024	1	921	\$5,420,036	840
	Jul 2024	1	938	\$5,480,455	848
atypical antipsychotics	Sep 2024	2	13,250	\$4,741,362	11,246
	Aug 2024	2	13,934	\$5,195,234	11,570
	Jul 2024	2	14,092	\$5,201,345	11,589
antirheumatics	Sep 2024	3	580	\$3,553,812	529
	Aug 2024	3	621	\$4,054,737	554
	Jul 2024	3	617	\$3,954,354	549
CNS stimulants	Sep 2024	4	22,289	\$3,178,338	19,596
	Aug 2024	4	22,698	\$3,143,232	19,753
	Jul 2024	4	21,036	\$2,906,984	18,163
antiviral combinations	Sep 2024	5	696	\$2,382,373	666
	Aug 2024	5	1,031	\$2,970,629	978
	Jul 2024	5	843	\$2,773,194	797
CFTR combinations	Sep 2024	6	92	\$2,212,992	81
	Aug 2024	6	105	\$2,421,213	87
	Jul 2024	6	99	\$2,254,993	89
GLP-1 receptor agonists for non-obesity indications	Sep 2024	7	2,444	\$2,204,277	2,313
	Aug 2024	7	2,527	\$2,254,378	2,339
	Jul 2024	7	2,416	\$2,166,807	2,233
GLP-1 receptor agonists for obesity	Sep 2024	8	1,563	\$2,008,258	1,466
	Aug 2024	8	1,547	\$1,986,478	1,434
	Jul 2024	8	1,492	\$1,919,011	1,316
SGLT-2 inhibitors	Sep 2024	9	2,112	\$1,582,104	2,015
	Aug 2024	9	2,221	\$1,720,902	2,111
	Jul 2024	9	2,214	\$1,719,370	2,101
miscellaneous uncategorized agents	Sep 2024	10	46	\$1,455,348	38
	Aug 2024	10	50	\$1,498,983	43
	Jul 2024	11	36	\$1,271,891	32

**TABLE E: TOP 25 DRUG MOLECULES
BY NUMBER OF CLAIMS IN SEP 2024 (FFS and CCOs)**

Drug Molecule Therapeutic Category	Aug 2024 # Claims	Sep 2024 # Claims	Sep 2024 \$ Paid	Sep 2024 # Unique Benes
amoxicillin / aminopenicillins	17,541	14,305	\$204,392	14,060
albuterol / adrenergic bronchodilators	14,605	12,472	\$418,382	10,945
azithromycin / macrolides	13,279	9,699	\$157,776	9,559
methylphenidate / CNS stimulants	7,959	7,978	\$1,586,773	7,184
cetirizine / antihistamines	8,795	7,891	\$141,801	7,781
ondansetron / 5HT3 receptor antagonists	8,105	7,592	\$120,940	7,332
amphetamine-dextroamphetamine / CNS stimulants	7,705	7,355	\$246,950	6,524
fluticasone nasal / nasal steroids	8,058	6,720	\$118,060	6,680
montelukast / leukotriene modifiers	7,185	6,548	\$95,335	6,437
clonidine / antiadrenergic agents, centrally acting	6,845	6,508	\$77,442	6,181
ibuprofen / nonsteroidal anti-inflammatory agents	7,400	6,326	\$80,956	6,194
prednisolone / glucocorticoids	6,684	6,044	\$125,900	5,853
gabapentin / gamma-aminobutyric acid analogs	6,405	5,993	\$98,639	5,640
cefdinir / third generation cephalosporins	6,527	5,686	\$129,085	5,616
acetaminophen-hydrocodone / narcotic analgesic combinations	6,093	5,447	\$102,485	5,189
amoxicillin-clavulanate / penicillins/beta-lactamase inhibitors	6,081	5,193	\$110,357	5,136
sertraline / SSRI antidepressants	5,230	4,940	\$63,891	4,571
amlodipine / calcium channel blocking agents	4,967	4,434	\$63,614	4,186
omeprazole / proton pump inhibitors	4,460	4,353	\$54,028	4,255
guanfacine / antiadrenergic agents, centrally acting	4,387	4,261	\$99,233	4,077
ergocalciferol / vitamins	4,231	4,075	\$38,001	3,438
triamcinolone topical / topical steroids	4,842	4,059	\$73,154	3,960
hydroxyzine / miscellaneous anxiolytics, sedatives and hypnotics	4,125	3,999	\$78,811	3,872
pantoprazole / proton pump inhibitors	4,119	3,953	\$51,117	3,751
famotidine / H2 antagonists	4,103	3,822	\$91,688	3,655

**TABLE F: TOP 25 DRUG MOLECULES
BY DOLLARS PAID IN SEP 2024 (FFS and CCOs)**

Drug Molecule Therapeutic Category	Aug 2024 \$ Paid	Sep 2024 \$ Paid	Sep 2024 # Claims	Sep 2024 # Unique Benes
dupilumab / interleukin inhibitors	\$2,535,050	\$2,481,530	643	612
adalimumab / antirheumatics	\$2,877,295	\$2,396,743	266	245
elexacaftor/ivacaftor/tezacaftor / CFTR combinations	\$2,303,316	\$2,116,701	88	78
paliperidone / atypical antipsychotics	\$2,173,862	\$2,014,281	640	600
semaglutide / GLP-1 receptor agonists for obesity	\$1,964,650	\$1,991,982	1,547	1,450
methylphenidate / CNS stimulants	\$1,551,175	\$1,586,773	7,978	7,184
dulaglutide / GLP-1 receptor agonists for non-obesity indications	\$1,534,475	\$1,510,278	1,608	1,527
aripiprazole / atypical antipsychotics	\$1,396,515	\$1,217,125	3,503	3,282
bictegravir/emtricitabine/tenofovir / antiviral combinations	\$1,308,263	\$1,189,838	294	284
cariprazine / atypical antipsychotics	\$807,066	\$796,759	573	546
empagliflozin / SGLT-2 inhibitors	\$874,270	\$795,196	1,002	944
ustekinumab / interleukin inhibitors	\$952,287	\$784,177	30	29
dapagliflozin / SGLT-2 inhibitors	\$838,961	\$777,584	1,093	1,059
emicizumab / factor for bleeding disorders	\$786,674	\$709,230	23	20
etanercept / antirheumatics	\$695,521	\$627,323	104	99
ixekizumab / interleukin inhibitors	\$618,540	\$576,276	73	67
apixaban / factor Xa inhibitors	\$585,055	\$544,290	1,084	963
somatropin / growth hormones	\$477,678	\$522,498	116	109
lisdexamfetamine / CNS stimulants	\$495,291	\$502,779	2,678	2,614
cannabidiol / miscellaneous anticonvulsants	\$505,025	\$482,034	145	134
sacubitril-valsartan / angiotensin receptor blockers and neprilysin inhibitors	\$447,799	\$442,284	712	673
albuterol / adrenergic bronchodilators	\$489,028	\$418,382	12,472	10,945
carglumic acid / miscellaneous uncategorized agents	\$333,524	\$416,911	3	3
secukinumab / interleukin inhibitors	\$406,684	\$393,090	38	36
budesonide-formoterol / bronchodilator combinations	\$394,351	\$387,044	1,722	1,683

**TABLE G: TOP 25 DRUG MOLECULES
BY CHANGE IN NUMBER OF CLAIMS FROM JUL 2024 TO SEP 2024 (FFS and CCOs)**

Drug Molecule	Jul 2024 # Claims	Aug 2024 # Claims	Sep 2024 # Claims	Sep 2024 \$ Paid	Sep 2024 # Unique Benes
amoxicillin / aminopenicillins	9,934	17,541	14,305	\$204,392	14,060
azithromycin / macrolides	5,625	13,279	9,699	\$157,776	9,559
cetirizine / antihistamines	5,164	8,795	7,891	\$141,801	7,781
prednisolone / glucocorticoids	3,402	6,684	6,044	\$125,900	5,853
ondansetron / 5HT3 receptor antagonists	5,424	8,105	7,592	\$120,940	7,332
cefdinir / third generation cephalosporins	3,612	6,527	5,686	\$129,085	5,616
albuterol / adrenergic bronchodilators	10,596	14,605	12,472	\$418,382	10,945
fluticasone nasal / nasal steroids	5,278	8,058	6,720	\$118,060	6,680
amoxicillin-clavulanate / penicillins/beta-lactamase inhibitors	3,814	6,081	5,193	\$110,357	5,136
influenza virus vaccine, inactivated / viral vaccines	8	312	953	\$47,138	953
prednisone / glucocorticoids	2,469	4,033	3,367	\$36,799	3,262
methylphenidate / CNS stimulants	7,277	7,959	7,978	\$1,586,773	7,184
oseltamivir / neuraminidase inhibitors	286	925	697	\$19,479	695
benzonatate / antitussives	601	1,146	977	\$13,485	954
ibuprofen / nonsteroidal anti-inflammatory agents	5,951	7,400	6,326	\$80,956	6,194
sars-cov-2 (covid-19) mna-lnp vaccine (cvx 309) / viral vaccines	14	0	351	\$57,362	350
budesonide / inhaled corticosteroids	1,176	1,514	1,466	\$153,392	1,424
montelukast / leukotriene modifiers	6,262	7,185	6,548	\$95,335	6,437
omeprazole / proton pump inhibitors	4,159	4,460	4,353	\$54,028	4,255
dextroamphetamine / CNS stimulants	675	816	833	\$275,751	820
amphetamine-dextroamphetamine / CNS stimulants	7,205	7,705	7,355	\$246,950	6,524
dexmethylphenidate / CNS stimulants	2,510	2,612	2,642	\$126,909	2,302
sars-cov-2 (covid-19) mna-lnp vaccine (cvx 312) / viral vaccines	6	6	127	\$21,625	127
budesonide-formoterol / bronchodilator combinations	1,607	1,767	1,722	\$387,044	1,683
azelastine nasal / nasal antihistamines and decongestants	356	572	466	\$9,134	465

**TABLE H: TOP 25 DRUG MOLECULES
BY CHANGE IN AMOUNT PAID FROM JUL 2024 TO SEP 2024 (FFS and CCOs)**

Drug Molecule	Jul 2024 \$ Paid	Aug 2024 \$ Paid	Sep 2024 \$ Paid	Sep 2024 # Claims	Sep 2024 # Unique Benes
methylphenidate / CNS stimulants	\$1,392,914	\$1,551,175	\$1,586,773	7,978	7,184
etelirsens / miscellaneous uncategorized agents	\$54,423	\$230,445	\$192,068	6	2
cladribine / antimetabolites	\$0	\$104,070	\$135,299	2	2
sebelipase alfa / lysosomal enzymes	\$0	\$0	\$122,531	1	1
risdiplam / miscellaneous uncategorized agents	\$180,798	\$297,847	\$297,858	14	11
semaglutide / GLP-1 receptor agonists for obesity	\$1,890,660	\$1,964,650	\$1,991,982	1,547	1,450
cysteamine / miscellaneous uncategorized agents	\$165,075	\$316,385	\$261,356	2	2
cabozantinib / VEGF/VEGFR inhibitors	\$87,306	\$110,938	\$172,936	6	6
casimersen / miscellaneous uncategorized agents	\$0	\$0	\$76,823	2	1
dulaglutide / GLP-1 receptor agonists for non-obesity indications	\$1,436,716	\$1,534,475	\$1,510,278	1,608	1,527
cetirizine / antihistamines	\$68,965	\$113,799	\$141,801	7,891	7,781
azithromycin / macrolides	\$88,096	\$206,918	\$157,776	9,699	9,559
antihemophilic factor / factor for bleeding disorders	\$240,322	\$261,304	\$305,531	9	8
amoxicillin / aminopenicillins	\$139,902	\$245,768	\$204,392	14,305	14,060
sars-cov-2 (covid-19) mrna-lnp vaccine (cvx 309) / viral vaccines	\$2,181	\$0	\$57,362	351	350
prednisolone / glucocorticoids	\$71,279	\$137,074	\$125,900	6,044	5,853
dextroamphetamine / CNS stimulants	\$221,960	\$277,985	\$275,751	833	820
nintedanib / multikinase inhibitors	\$39,023	\$65,039	\$91,055	7	7
enzalutamide / antineoplastic hormones	\$35,432	\$84,174	\$84,215	7	7
cefdinir / third generation cephalosporins	\$81,182	\$136,673	\$129,085	5,686	5,616
influenza virus vaccine, inactivated / viral vaccines	\$316	\$17,216	\$47,138	953	953
elacestrant / antineoplastic hormones	\$0	\$0	\$46,137	2	1
albuterol / adrenergic bronchodilators	\$374,417	\$489,028	\$418,382	12,472	10,945
belimumab / selective immunosuppressants	\$113,347	\$163,594	\$157,031	33	29
ponatinib / VEGF/VEGFR inhibitors	\$5,300	\$27,080	\$48,860	3	3

**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 JUL 2024 TO SEP 2024 (FFS and CCOs)**

Drug Product Therapeutic Category	Sep 2024 # Claims	Sep 2024 \$ Paid	Sep 2024 Avr. Paid Per Rx	Sep 2024 Avr. Units Per Rx	Jul 2024 Paid Per Unit	Aug 2024 Paid Per Unit	Sep 2024 Paid Per Unit	Percent Change
dexamethylphenidate 30 mg capsule, extended release / CNS stimulants (Y)	200	\$13,080	\$65.40	30	\$1.31	\$1.49	\$1.80	37.4%
methylphenidate (30/70 release) 20 mg/24 hr capsule, extended release / CNS stimulants (Y)	183	\$9,552	\$52.19	30	\$1.13	\$0.89	\$1.37	21.7%
asenapine 5 mg tablet / atypical antipsychotics (Y)	103	\$11,689	\$113.49	41	\$2.11	\$2.26	\$2.52	19.6%
lisdexamfetamine 70 mg capsule / CNS stimulants (Y)	142	\$24,660	\$173.66	30	\$4.79	\$4.13	\$5.42	13.1%
dexamethylphenidate 20 mg capsule, extended release / CNS stimulants (Y)	413	\$21,927	\$53.09	30	\$1.29	\$0.97	\$1.39	7.5%
lisdexamfetamine 20 mg capsule / CNS stimulants (Y)	298	\$44,603	\$149.68	30	\$4.46	\$4.00	\$4.69	5.2%
lisdexamfetamine 60 mg capsule / CNS stimulants (Y)	185	\$28,809	\$155.72	30	\$4.72	\$4.69	\$4.85	2.8%
scopolamine 1 mg/72 hr film, extended release / anticholinergics/antispasmodics	185	\$11,860	\$64.11	8	\$6.27	\$5.75	\$6.42	2.5%
Januvia (sitagliptin) (as phosphate) 100 mg tablet / dipeptidyl peptidase 4 inhibitors (Y)	211	\$153,179	\$725.97	42	\$17.32	\$17.74	\$17.65	1.9%
Entresto (sacubitril-valsartan) 97 mg-103 mg tablet / angiotensin receptor blockers and neprilysin inhibitors (Y)	191	\$124,768	\$653.23	59	\$10.59	\$10.53	\$10.79	1.8%
Farxiga (dapagliflozin) 5 mg tablet / SGLT-2 inhibitors (Y)	132	\$98,068	\$742.94	41	\$17.92	\$18.02	\$18.22	1.7%
Trintellix (vortioxetine) 20 mg tablet / miscellaneous antidepressants (Y)	140	\$65,548	\$468.20	29	\$15.32	\$15.24	\$15.54	1.5%
Xarelto (rivaroxaban) 20 mg tablet / factor Xa inhibitors (Y)	346	\$174,703	\$504.92	28	\$17.48	\$17.57	\$17.63	0.8%

Products are only included if 100 or more fills in last month and average cost per unit in reference month was >= \$1.

**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 JUL 2024 TO SEP 2024 (FFS and CCOs)**

Drug Product Therapeutic Category	Sep 2024 # Claims	Sep 2024 \$ Paid	Sep 2024 Avr. Paid Per Rx	Sep 2024 Avr. Units Per Rx	Jul 2024 Paid Per Unit	Aug 2024 Paid Per Unit	Sep 2024 Paid Per Unit	Percent Change
Spiriva HandiHaler (tiotropium) 18 mcg capsule / anticholinergic bronchodilators (Y)	148	\$72,814	\$491.98	30	\$15.89	\$15.86	\$16.02	0.8%
Eliquis (apixaban) 2.5 mg tablet / factor Xa inhibitors (Y)	126	\$58,967	\$467.99	49	\$9.17	\$9.27	\$9.23	0.7%

Products are only included if 100 or more fills in last month and average cost per unit in reference month was >= \$1.

New Business

Special Analysis Projects

MISSISSIPPI DIVISION OF MEDICAID
MS-DUR INTERVENTION / EDUCATIONAL INITIATIVE UPDATE
SEPTEMBER 2024 – NOVEMBER 2024

Ongoing Mailings:

PROVIDER SHOPPING FOR OPIOIDS (≥4 Prescribers AND ≥4 Pharmacies)				CONCOMITANT USE OF OPIOIDS AND ANTIPSYCHOTICS		
Month	Prescribers Mailed	Pharms Mailed	Benes Addressed	Month	Prescribers Mailed	Benes Addressed
23-Dec	3	3	6	23-Dec	10	10
24-Jan	1	1	2	24-Jan	17	17
24-Feb	0	0	0	24-Feb	9	9
24-Mar	0	0	0	24-Mar	6	6
24-Apr	4	4	8	24-Apr	67	87
24-May	3	3	6	24-May	42	47
24-Jun	5	5	10	24-Jun	30	32
24-Jul	4	3	7	24-Jul	29	32
24-Aug	4	4	8	24-Aug	52	65
24-Sep	3	4	7	24-Sep	36	40
24-Oct	5	5	10	24-Oct	46	48
24-Nov	4	4	8	24-Nov	59	67

Note: Before April 2024, only FFS data was available for the period presented in this table. Beginning in April 2024, all plans were included.

ZOLGENSMA® UTILIZATION

BACKGROUND

Spinal muscular atrophy (SMA) encompasses a group of autosomal recessive disorders that impair motor neurons in the brain and spinal cord.¹ These neurons control muscle movement essential for breathing, speaking, and walking. SMA predominantly affects muscles in the chest, upper arms, and legs leading to complications such as scoliosis, respiratory infections, and shortening of muscles and tendons.¹ Individuals with SMA have an insufficient amount of survival motor neuron (SMN) protein, which is produced by two genes, SMN1 and SMN2. SMA is most commonly caused by a mutation in the SMN1 gene, the gene primarily responsible for producing normal SMN proteins. Mutations in the SMN1 gene lead to reduced production of the SMN protein needed to maintain motor neuron health.^{1,2} This deficiency results in progressive muscle weakness and atrophy. In 2018, SMA was added to the list of newborn diagnostic screening tests, also known as the Recommended Uniform Screening Panel.² It is estimated that these newborn screenings detect around 364 SMA cases annually, potentially preventing 30 deaths.² Approximately 1 out of every 11,000 individuals has SMA.² In Mississippi (MS), it is estimated three infants are born annually with SMA, and 113 individuals are living with SMA.³

SMA classification depends on the age of onset and severity of symptoms. SMA type 0 has a symptom onset at birth. SMA type 1 (Werdnig-Hoffmann disease), the most common form of SMA, has an onset within the first 6 months of life and affects 60% of individuals with SMA. SMA type 2 (Dubowitz disease) has an onset between 6 to 18 months of age. SMA type 3 (Kugelberg-Welander disease) begins after 18 months of age and SMA type 4 manifests in adulthood.^{1,4} As the type increases, symptoms such as muscle weakness and mobility tend to be less severe.

Treatment involves supportive and pharmacologic therapy. Supportive, nonpharmacologic measures consist of as-needed nutrition and respiratory assistance along with physical therapy. Supportive therapy aims to prevent or treat complications of muscle weakness. Current pharmacological treatments for SMA involve disease-modifying therapies which include SMN2 modifiers and a gene therapy product. Spinraza® was FDA-approved in 2016 to treat children and adults with SMA. As an antisense oligonucleotide, Spinraza® increases the SMN protein production. It is given intrathecally with four loading doses over eight weeks, then once every four months afterward.^{5,6} Evrysdi® (risdiplam) was FDA-approved in 2020 as a daily, oral-reconstituted solution for those with SMA. This medication works by increasing the concentration of SMN protein in the body to treat SMA.^{7,8} Zolgensma® (onasemnogene abeparvovec-xioi) is the first gene therapy designed to treat SMA by addressing the malfunctioning SMN1 gene.⁹ Approved by the FDA in 2019, Zolgensma® provides a unique, one-time treatment option for children younger than two years of age.⁶ It is delivered as a single intravenous infusion that uses a viral vector to introduce a healthy copy of the SMN1 gene directly into the individual's cells. By restoring SMN protein production, Zolgensma® aims to stabilize motor function and potentially minimize some of the disease's effects, offering a significant therapeutic option for young children with SMA.

Each of these therapies is associated with a significant price ranging from an annual cost in the six figures for the SMN2 modifiers to upwards of \$2 million for a one-time treatment of Zolgensma[®].^{10,11} While treatment selection should be individualized, limited data exists supporting the effectiveness and feasibility of combination therapy with these agents.¹² This report aims to describe the utilization of Zolgensma[®] and subsequent administration of Spinraza[®] or Evrysdi[®] among Medicaid members.

METHODS

Study Cohort

A retrospective cohort study was conducted using Mississippi Medicaid administrative claims data spanning May 2019 through June 2024. This analysis included data from both the Fee-for-Service (FFS) program and the Coordinated Care Organizations (CCOs), which encompass Magnolia Health (MAG), Molina Healthcare (MOL), and UnitedHealthcare (UHC). Members who initiated onasemnogene abeparvovec-xioi (Zolgensma[®]) were identified through inpatient and outpatient claims. Demographic characteristics, including age, sex, race, and the type of Medicaid plan at the time of initiation, were collected.

Study Outcome

The primary outcome of interest was the subsequent utilization of SMN2 modifiers, specifically Spinraza[®] (nusinersen) and Evrysdi[®] (risdiplam) during the follow-up period, post-Zolgensma[®] administration. All included members were followed until the end of the study period (June 2024). For individuals who initiated Spinraza[®] or Evrysdi[®], the average (standard deviation) and median (interquartile range) times from the Zolgensma[®] administration to the start of each additional therapy were reported.

RESULTS

A total of 16 individuals were identified as receiving Zolgensma[®] between May 2019 and June 2024. Table 1 summarizes the demographic and program characteristics of the study cohort. The majority of members were under one year of age (n=12, 75%), female (n=10, 62.5%), and White (n=7, 43.8%) at the time of Zolgensma[®] administration. All were enrolled in MCOs at the time of their Zolgensma[®] administration divided between UHC (n=10, 62.5%) and MAG (n=6, 37.5%).

Table 1. Characteristics of Zolgensma® Initiators in Mississippi Medicaid May 2019 - June 2024		
	N	%
Total	16	100%
Gender		
Male	6	37.5%
Female	10	62.5%
Age		
<1	12	75.0%
1_2	3	18.8%
>=2	1	6.3%
Race		
White	7	43.8%
Black	4	25.0%
Other	5	31.3%
Plan		
FFS	0	0.0%
MAG	6	37.5%
MOL	0	0.0%
UHC	10	62.5%
Initiation year		
2019	3	18.8%
2020	3	18.8%
2021	1	6.3%
2022	3	18.8%
2023	3	18.8%
2024	3	18.8%
Note: FFS - Fee-for-Service; UHC - UnitedHealthcare; MAG - Magnolia; MOL - Molina; Plan ascertained as of Zolgensma date of service.		

Table 2 provides a summary of members who initiated SMN2 modifiers following Zolgensma® administration. A total of 7 (43.8%) members received SMN2 modifiers following Zolgensma® administration during the study period. Two members (13.33%) initiated Spinraza® during the follow-up period. The average time from Zolgensma® administration to Spinraza® initiation was 444 days, with a standard deviation (SD) of 43.84 days. A total of 5 members (33.33%) initiated Evrysdi® during the follow-up period. The average time from Zolgensma® administration to Evrysdi® initiation was 776.2 days, with a SD of 666.05 days.

Table 2. Description of SMN2 Modifier Use Following Zolgensma Administration		
	N	%
Spinraza®	2	12.5%
Time to Spinraza® initiation, mean (SD); median(IQR)	444 (43.84); 442 (62)	
Evrysdi®	5	31.25%
Time to Evrysdi® initiation, mean (SD); median(IQR)	776.2 (666.05); 527 (834)	
Note : SMN2 - Survival motor neuron 2; SD - Standard deviation; IQR - Interquartile range		

CONCLUSIONS

Spinal muscular atrophy is a rare, devastating genetic disease that can result in significant impairment and death. Pharmacologic therapy options include SMN2 modifiers and a gene therapy product. Selection of appropriate therapy for patients should be individualized and is associated with significant costs with limited evidence supporting combination therapy. Among Medicaid members treated with the gene therapy, Zolgensma®, 43.8% received subsequent treatment with SNM2 modifiers Spinraza® or Evrysdi®.

RECOMMENDATIONS

This analysis aims to determine how often patients with SMA who received Zolgensma® were subsequently administered an SMN2 modifier. This report is provided to allow the board to discuss the utilization of these treatments.

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ANTI-OBESITY GLP-1 MEDICATION USE AMONG MEDICAID MEMBERS

BACKGROUND

Overweight and obesity are defined by the World Health Organization as “abnormal or excessive fat accumulation that presents a risk to health.”¹ Obesity is a common, chronic disease with a complex pathophysiology that increases the risks of other conditions such as sleep apnea, hypertension, diabetes, cardiovascular disease and certain cancers.² The American Medical Association formally recognized obesity as a disease state requiring prevention and treatment in 2013.³

Currently, Body Mass Index (BMI) is the primary screening tool for identifying overweight and obesity. BMI is calculated by dividing a person’s weight in kilograms by the square of height in meters. Figure 1 displays overweight and obesity classifications for adults as determined by BMI.

Figure 1: Overweight and Obesity Classifications by BMI.⁴



A new framework being proposed by the Lancet Diabetes and Endocrinology Commission is set to reshape the way obesity is defined.⁵ This new frame will consist of a two-part approach: Step one will determine if an individual has excess adiposity. Step two will consist of an organ-by-organ assessment to detect the presence of abnormalities related to excess adiposity. Evidence of abnormalities resulting from excess adiposity will be termed “clinical obesity”. This new definition of obesity will likely drive provider recommendations for preventive vs therapeutic approaches to treatment.

According to the World Health Organization (WHO), obesity among adults worldwide has more than doubled from 7% in 1990 to 16% in 2022. During this same period, obesity among children and adolescents more than quadrupled.¹ In the US, the prevalence of obesity among adults between August 2021 and August 2023 was estimated at 40.3%. Obesity was most prominent among adults 40-59 years of age and those with less education. An estimated 19.7% of children and adolescents in the United States have obesity.⁶ It is predicted that by 2030, nearly 1 in 2 adults in the US will have obesity.⁷ Mississippi is among the states with the highest percentage of adults with obesity in the US.⁸ This trend is projected to continue as the prevalence of adult obesity in Mississippi is projected to be 58.2% by 2030.⁷ The prevalence of obesity has been found to vary across racial and ethnic groups with it being highest among non-Hispanic Black women.⁹

Obesity has been shown to be associated with over 60 comorbidities that include hypertension, type 2 diabetes, coronary artery disease, depression, osteoarthritis, and certain cancers.¹⁰ Additionally, the impact of obesity on the development of comorbidities has been shown to

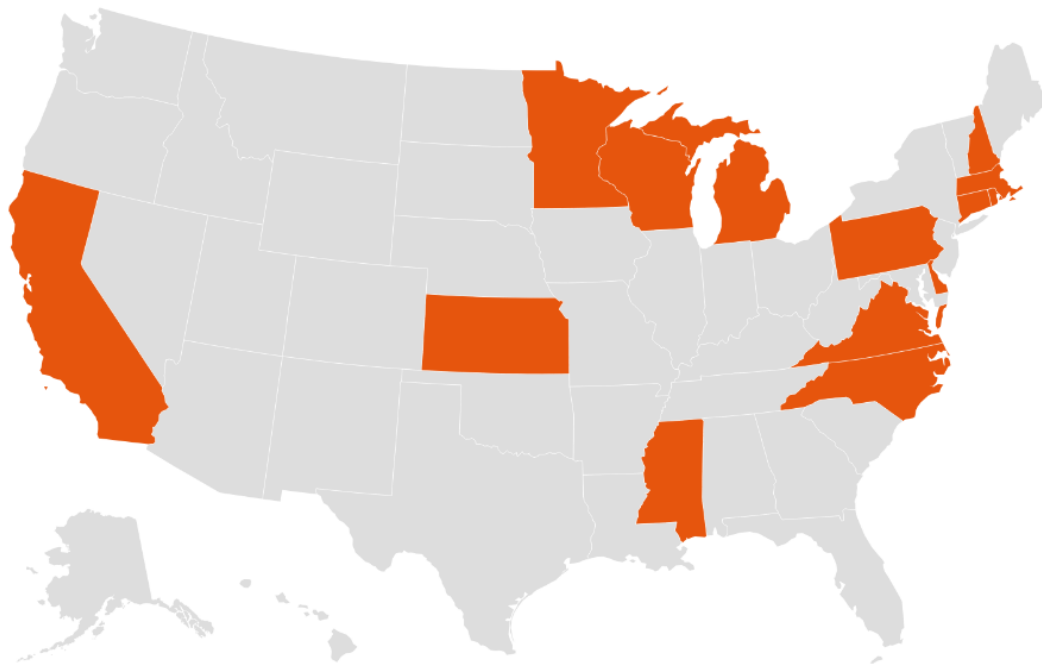
increase over time.¹¹ Obesity has also been found to increase mortality risks. Studies have shown that weight gain throughout early adulthood to midlife is associated with increased mortality.¹²⁻¹⁵

Obesity has a complex pathophysiology with factors such as genetic, metabolic, behavioral, and environmental all playing a role. Although decreased caloric intake and increased physical activity may initially lead to weight loss, a cascade of metabolic and hormonal adaptations make weight loss difficult to sustain.¹⁶ The American Association of Clinical Endocrinologists and American College of Endocrinology (AACE/ACE) Comprehensive Clinical Practice Guidelines recommend the addition of pharmacotherapy to lifestyle therapy for those where diet and exercise alone are unsuccessful in achieving or maintaining weight loss.¹⁷ Additionally, the guidelines recommend the chronic use of pharmacotherapy when potential benefits outweigh the risks.

The growing public health crisis related to obesity and recent advances among anti-obesity medication (AOM) agents have generated much interest in this drug category. In 2023, the Mississippi Division of Medicaid (DOM) received approval from the Centers for Medicare and Medicaid Services (CMS) to amend their State Plan Amendment (SPA) allowing for the coverage of select anti-obesity medications. Beginning July 1, 2023, DOM added anti-obesity select agents to their Universal Preferred Drug List (UPDL). Mississippi is one of 14 state Medicaid programs where GLP-1 drugs are currently covered for obesity management. (Figure 1)

FIGURE 1: Medicaid Coverage of GLP-1 Drugs for Obesity Management¹⁸

- California ● Connecticut ● Delaware ● Kansas ● Massachusetts ● Michigan ● Minnesota ● Mississippi
- New Hampshire ● North Carolina ● Pennsylvania ● Rhode Island ● Virginia ● Wisconsin



Note: Connecticut has not yet implemented coverage
Source: AXIACI Obesity Coverage Nexus

Under the Mississippi Medicaid UPDL, two Glucagon-like peptide-1 (GLP-1) receptor agonists indicated for obesity management, liraglutide (Saxenda®) and semaglutide (Wegovy®), are covered as preferred agents.¹⁹ Approval for all anti-obesity agents requires a manual prior authorization (PA). As part of the PA criteria, initial authorization criteria for adults 18 years and older includes BMI of 30 or greater or a BMI of 27 to 29 with at least one weight-related comorbidity such as hypertension, hyperlipidemia, glucose dysregulation (diabetes or pre-diabetes), obstructive sleep apnea, cardiovascular disease, or non-alcoholic fatty liver disease. For children 12 – 17 years, BMI requirements are specific for each preferred agent. A treatment plan that includes treatment goals and counseling on diet and exercise is also required as part of the initial authorization for all members.²⁰

The primary objective of this study was to provide a comprehensive overview of the demographic and clinical profiles of Mississippi Medicaid members initiating GLP-1 medications for obesity management.

METHODS

A retrospective analysis was conducted using Mississippi Medicaid administrative claims data from July 2023 to September 2024. The analysis included data from the Fee-for-Service (FFS) program and the Coordinated Care Organizations (CCOs), which include Magnolia Health (MAG), Molina Healthcare (MOL), and UnitedHealthcare (UHC). Pharmacy claims data were assessed to identify all initiations of anti-obesity GLP-1 medications during the study period. Key characteristics of the initiators, including demographic and clinical factors, were analyzed.

Demographic characteristics included gender, age, race, and pharmacy program. Age and pharmacy program were determined as of the initiation date of anti-obesity medication (index date).

Clinical characteristics assessed through claims data during the one-year baseline period (prior to the index date) included diagnosis of the following conditions: overweight, obesity, hypertension, hyperlipidemia, prediabetes, type 1 diabetes, type 2 diabetes, obstructive sleep apnea, atherosclerotic cardiovascular disease (ASCVD), nonalcoholic fatty liver disease (NAFLD), heart failure, atrial fibrillation and flutter, and myocardial infarction. Hypertension, hyperlipidemia, type 1 diabetes, and type 2 diabetes were defined in accordance with requirements included in Medicaid's prior authorization form to include the presence of at least one clinical diagnosis and/or corresponding medication use during the baseline period.²⁰

Additional variables analyzed included the type of anti-obesity medication initiated, the use of other GLP-1 medications during the baseline period, and the use of gastrointestinal medications. Medication type was assessed at the index date. Gastrointestinal medication utilization (ondansetron, promethazine, and proton pump inhibitors [PPIs]) was evaluated within a window of 90 days before through 30 days after the index date.

RESULTS

A total of **2,948** individuals were identified as initiators of anti-obesity GLP-1 medications between July 2023 and September 2024. Of these, 403 individuals were excluded from this analysis due to a lack of continuous enrollment in Mississippi Medicaid for 12 months prior to their medication initiation, leaving a final sample size of 2,545. Table 1 summarizes the demographic and clinical characteristics of the final cohort of GLP-1 medication initiators.

The majority of initiators were female (89.8%) and aged between 21 and 40 years (53.1%). Black individuals comprised the largest racial group (48.2%), followed by White individuals (37.3%). A vast majority (90.5%) of initiators had an obesity diagnosis (BMI \geq 30) present in claims data during the baseline period. The majority of members (69.0%) had a comorbid condition present. The most prevalent comorbid conditions identified among initiators were hypertension (43.9%), hyperlipidemia (36.1%), prediabetes (19.2%), and obstructive sleep apnea (17.8%). Wegovy[®] was the most frequently initiated GLP-1 medication, accounting for 91.3% of all initiations. Around 9.5% of individuals had other GLP-1 medication use during the baseline period.

Additionally, 34.4% of GLP-1 initiators used gastrointestinal medications—such as ondansetron, promethazine, or proton pump inhibitors—within 90 days prior to through 30 days following GLP-1 initiation. The use of gastrointestinal medications could be an indication of potential gastrointestinal issues associated with GLP-1 medications, a major reason cited for nonadherence or discontinuation of GLP-1 medications.²¹⁻²⁴

Table 1. Characteristics of Anti-obesity GLP-1 Medication Initiators in Mississippi Medicaid July 2023 - September 2024

	N	%
Total	2545	
Gender		
Male	260	10.2%
Female	2285	89.8%
Age		
<18	296	11.6%
18-20	104	4.1%
21-40	1352	53.1%
41-64	793	31.2%
Race		
Whites	949	37.3%
Blacks	1227	48.2%
Others	369	14.5%
Plan*		
FFS	364	14.3%
MAG	893	35.1%
MOL	460	18.1%
UHC	827	32.5%
Clinical characteristics		
Obesity	2303	90.5%
Overweight	129	5.1%
Presence of any of the following comorbid conditions	1757	69.0%
Hypertension	1116	43.9%
Hyperlipidemia	919	36.1%
Prediabetes	488	19.2%
Obstructive sleep apnea	453	17.8%
Type 2 DM	325	12.8%
ASCVD	270	10.6%
NAFLD	210	8.3%
Heart Failure	136	5.3%
Atrial Fibrillation and Flutter	57	2.2%
Type 1 DM	31	1.2%
Myocardial Infraction	13	0.5%
Anti-obesity medication		
Saxenda	222	8.7%
Wegovy	2323	91.3%
GLP-1 medication use during baseline period**	242	9.5%
Gastrointestinal medication***		
Ondansetron	459	18.0%
Promethazine	127	5.0%
Proton pump inhibitors (PPI)	470	18.5%
Composite (ondansetron, promethazine, PPI)	876	34.4%

Notes: FFS - Fee for Service; MAG - Magnolia Health; MOL - Molina Healthcare; UHC - UnitedHealthcare;
 *1 individual had missing values on plan;
 ** Baseline period - one-year period prior to the index date.
 *** Gastrointestinal medication use assessed from 90 days before through 30 days after index date.

Table 2 compares the characteristics of GLP-1 initiators by the type of medication initiated. Saxenda® initiators included a higher proportion of younger individuals, with 18.0% under 18 years compared to 11% for Wegovy®. A larger percentage of Saxenda® initiators were also enrolled in FFS (22.5%) compared to Wegovy® initiators (13.5%). Clinically, obstructive sleep apnea was more common among Saxenda® initiators (25.7%) than those on Wegovy® (17.0%), while type 2 diabetes was less prevalent among Saxenda® initiators (8.1%) compared to Wegovy® initiators (13.2%). Slightly more individuals used other GLP-1 medications during the baseline period among Saxenda® initiators (12.2%) compared to Wegovy® initiators (9.3%). Gastrointestinal medication use was similar between the two groups.

Table 2. Characteristics of Anti-obesity GLP-1 Medication Initiators in Mississippi Medicaid by Type of Medication July 2023 - September 2024				
	Wegovy		Saxenda	
	N	%	N	%
Total	2323	91.3%	222	8.7%
Gender				
Male	231	9.9%	29	13.1%
Female	2092	90.1%	193	86.9%
Age				
<18	256	11.0%	40	18.0%
18-20	89	3.8%	15	6.8%
21-40	1257	54.1%	95	42.8%
41-64	721	31.0%	72	32.4%
Race				
Whites	854	36.8%	95	42.8%
Blacks	1127	48.5%	100	45.0%
Others	342	14.7%	27	12.2%
Plan*				
FFS	314	13.5%	50	22.5%
MAG	811	34.9%	82	36.9%
MOL	434	18.7%	26	11.7%
UHC	763	32.8%	64	28.8%
Clinical characteristics				
Obesity	2097	90.3%	206	92.8%
Overweight	115	5.0%	14	6.3%
Presence of any of the following comorbid conditions	1596	68.7%	161	72.5%
Hypertension	1016	43.7%	100	45.0%
Hyperlipidemia	841	36.2%	78	35.1%
Prediabetes	443	19.1%	45	20.3%
Obstructive sleep apnea	396	17.0%	57	25.7%
Type 2 DM	307	13.2%	18	8.1%
ASCVD	246	10.6%	24	10.8%
NAFLD	192	8.3%	18	8.1%
Heart Failure	121	5.2%	15	6.8%
Atrial Fibrillation and Flutter	51	2.2%	6	2.7%
Type 1 DM	30	1.3%	1	0.5%
Myocardial Infraction	13	0.6%	0	0.0%
GLP-1 medication use during baseline period**	215	9.3%	27	12.2%
Gastrointestinal medication***				
Ondansetron	424	18.3%	35	15.8%
Promethazine	115	5.0%	12	5.4%
Proton pump inhibitors (PPI)	430	18.5%	40	18.0%
Composite (ondansetron, promethazine, PPI)	804	34.6%	72	32.4%
Notes: FFS - Fee for Service; MAG - Magnolia Health; MOL - Molina Healthcare; UHC - UnitedHealthcare;				
*1 individual had missing values on plan;				
** Baseline period - one-year period prior to the index date.				
*** Gastrointestinal medication use assessed from 90 days before through 30 days after index date.				

Table 3 compares the characteristics of adult and teenage members who initiated anti-obesity medications. A significantly higher proportion of teens were male (34.5%) compared to adults (7.0%), and a larger proportion of teenagers were enrolled in the MAG plan (42.9%) compared to adults (34.1%), while a smaller proportion of teens were enrolled in MOL plan (10.5%) compared to adults (19.1%). Clinically, teenagers had lower prevalence rates for comorbid conditions assessed (54.1%) compared with adults (71.0%). For instance, hypertension was present in only 11.5% of teenagers compared to 48.1% of adults. Teenagers were more likely to initiate Saxenda® (13.5%) than adults (8.1%). Adults were more likely to have utilized other GLP-1 medications during the baseline period compared to teenagers (10.0% vs 5.7%). Gastrointestinal medication use was less common among teenagers (23.6%) compared to adults (35.8%).

TABLE 3. Characteristics of Anti-obesity GLP-1 Medication Initiators in Mississippi Medicaid by Age July 2023 - September 2024				
	Adults (Age 18 years or greater)		Teens (Age less than 18 years)	
	N	%	N	%
Total	2249	88.4%	296	11.6%
Gender				
Male	158	7.0%	102	34.5%
Female	2091	93.0%	194	65.5%
Age				
18-20	104	4.6%		
21-40	1352	60.1%		
41-64	793	35.3%		
Race				
Whites	834	37.1%	115	38.9%
Blacks	1098	48.8%	129	43.6%
Others	317	14.1%	52	17.6%
Plan*				
FFS	336	14.9%	28	9.5%
MAG	766	34.1%	127	42.9%
MOL	429	19.1%	31	10.5%
UHC	718	31.9%	109	36.8%
Clinical characteristics				
Obesity	2026	90.1%	277	93.6%
Overweight	116	5.2%	13	4.4%
Presence of any of the following comorbid conditions	1597	71.0%	160	54.1%
Hypertension	1082	48.1%	34	11.5%
Hyperlipidemia	852	37.9%	67	22.6%
Prediabetes	430	19.1%	58	19.6%
Obstructive sleep apnea	415	18.5%	38	12.8%
Type 2 DM	303	13.5%	22	7.4%
ASCVD	269	12.0%	1	0.3%
NAFLD	194	8.6%	16	5.4%
Heart Failure	134	6.0%	2	0.7%
Atrial Fibrillation and Flutter	57	2.5%	0	0.0%
Type 1 DM	26	1.2%	5	1.7%
Myocardial Infraction	13	0.6%	0	0.0%
Anti-obesity medication				
Saxenda	182	8.1%	40	13.5%
Wegovy	2067	91.9%	256	86.5%
GLP-1 medication during baseline period**	225	10.0%	17	5.7%
Gastrointestinal medication***				
Ondansetron	407	18.1%	52	17.6%
Promethazine	120	5.3%	7	2.4%
Proton pump inhibitors (PPI)	440	19.6%	30	10.1%
Composite (ondansetron, promethazine, PPI)	806	35.8%	70	23.6%
Notes: FFS - Fee for Service; MAG - Magnolia Health; MOL - Molina Healthcare; UHC - UnitedHealthcare;				
*1 individual had missing values on plan;				
** Baseline period - one-year period prior to the index date.				
*** Gastrointestinal medication use assessed from 90 days before through 30 days after index date.				

Table 4 describes anti-obesity medication use only among adult members by their BMI classification in claims data. Of the 2,249 adult members initiated on anti-obesity GLP-1 medications, 2,049 (91.1%) had claims data during the baseline period verifying a BMI status of overweight (BMI 27-29) or obese (BMI \geq 30). As specified in the PA criteria, 100% of those who initiated anti-obesity GLP-1 medications and were classified as overweight had at least 1 comorbid condition present in claims data. The vast majority (73.4%) of those with an obesity diagnosis had a comorbid condition present, however, just under half of those (47.5%) with neither an obesity nor overweight diagnosis in claims data had a comorbid condition present. Those with an overweight diagnosis were all initiated on Wegovy® and were more commonly prescribed gastrointestinal medications (47.8%) compared to the other groups.

TABLE 4. Characteristics of Adult Anti-obesity GLP-1 Medication Initiators in Mississippi Medicaid by BMI Classification July 2023 - September 2024						
	Obese (BMI 30 or more)		Overweight (BMI 27-29)		Neither overweight nor obese diagnosis in claims data	
	N	%	N	%	N	%
Total	2026	90.1%	23	1.0%	200	8.9%
Gender						
Male	158	7.8%	1	4.3%	11	5.5%
Female	1880	92.8%	22	95.7%	189	94.5%
Age						
18-20	90	4.4%	1	4.3%	13	6.5%
21-40	1200	59.2%	12	52.2%	140	70.0%
41-64	736	36.3%	10	43.5%	47	23.5%
Race						
Whites	733	36.2%	16	69.6%	85	42.5%
Blacks	998	49.3%	6	26.1%	94	47.0%
Others	295	14.6%	1	4.3%	21	10.5%
Plan*						
FFS	297	14.7%	4	17.4%	35	17.5%
MAG	699	34.5%	7	30.4%	60	30.0%
MOL	387	19.1%	4	17.4%	38	19.0%
UHC	643	31.7%	8	34.8%	67	33.5%
Clinical characteristics						
Presence of any of the following comorbid conditions	1487	73.4%	23	100.0%	95	47.5%
Hypertension	1008	49.8%	8	34.8%	66	33.0%
Hyperlipidemia	795	39.2%	12	52.2%	45	22.5%
Prediabetes	401	19.8%	3	13.0%	26	13.0%
Obstructive sleep apnea	408	20.1%	0	0.0%	7	3.5%
Type 2 DM	284	14.0%	5	21.7%	14	7.0%
ASCVD	257	12.7%	3	13.0%	9	4.5%
NAFLD	188	9.3%	0	0.0%	6	3.0%
Heart Failure	129	6.4%	2	8.7%	3	1.5%
Atrial Fibrillation and Flutter	56	2.8%	0	0.0%	1	0.5%
Type 1 DM	23	1.1%	1	4.3%	2	1.0%
Myocardial Infraction	12	0.6%	0	0.0%	1	0.5%
Anti-obesity medication						
Saxenda	166	8.2%	0	0.0%	16	8.0%
Wegovy	1860	91.8%	23	100.0%	184	92.0%
GLP-1 medication during baseline period	206	10.2%	2	8.7%	17	8.5%
Gastrointestinal medication						
Ondansetron	367	18.1%	7	30.4%	33	16.5%
Promethazine	108	5.3%	1	4.3%	11	5.5%
Proton pump inhibitors (PPI)	405	20.0%	5	21.7%	30	15.0%
Composite (ondansetron, promethazine, PPI)	733	36.2%	11	47.8%	62	31.0%
Notes: FFS - Fee for Service; MAG - Magnolia Health; MOL - Molina Healthcare; UHC - UnitedHealthcare;						
*1 individual had missing values on plan;						
** Baseline period - one-year period prior to the index date.						
*** Gastrointestinal medication use assessed from 90 days before through 30 days after index date.						

As a point of reference, during the study period from July 2023 through September 2024, 879,569 individuals were enrolled in Medicaid with 162,693 having an overweight or obesity diagnosis in claims data. Of those with an overweight or obesity diagnosis, 93,573 were adults and had full pharmacy benefits. Among those adults eligible to receive anti-obesity medications, 80.4% (75,230) had an obesity diagnosis and 19.6% (18,343) had an overweight diagnosis. Of those with an overweight diagnosis, 42.2% (7,744) had accompanying comorbid condition(s) that would qualify them to receive anti-obesity medications. Therefore, 2.5% (2,049/ 75,230 + 7,744) of eligible, adult Medicaid members identified through claims data initiated anti-obesity GLP-1 medications between July 2023 and September 2024. Among those with an overweight diagnosis only, 23 out of 7,744 (0.3%) eligible adult Medicaid members initiated anti-obesity medications.

CONCLUSIONS

Mississippi Medicaid is one of a handful of state Medicaid programs to begin covering anti-obesity medications. Since coverage began in July 2023, 2,948 individuals initiated medications for obesity management. This study examined the demographic and clinical profiles of Mississippi Medicaid members initiating GLP-1 medications for obesity management. Among members included in this analysis, the majority were Black females between 21-40 years of age with an obesity diagnosis and had chronic, comorbid conditions. Future work will examine outcomes and changes in healthcare resource utilization among individuals initiating anti-obesity GLP-1 medications.

RECOMMENDATIONS

This analysis aims to describe the demographic and clinical characteristics of Medicaid members who initiated GLP-1 medications for obesity management between July 2023 and September 2024. This report is provided to allow the Board to discuss the utilization of these treatments and future clinical considerations.

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ADVERSE EVENTS ASSOCIATED WITH THE CONCOMITANT USE OF OPIOIDS AND PSYCHOTROPIC MEDICATIONS

BACKGROUND

During the 1990s, an influential campaign encouraged providers to offer pain management to patients. Also, during this time, newly reformulated opioid medications were being intensely marketed. The confluence of these developments resulted in what would later come to be known as the first wave of the opioid crisis or opioid epidemic during the late 1990s and early 2000s.¹ Opioid prescribing increased year-over-year reaching its highest point in 2012 with over 255 million opioid prescriptions dispensed that year.² With this increase in opioid prescribing came an increase in the number of overdose deaths and other adverse events. As the U.S. healthcare system grappled with this epidemic, government and institutional policies were implemented in an attempt to curb inappropriate prescribing of opioids.³ The CDC first released the Guideline for Prescribing Opioids for Chronic Pain in 2016 to improve communication between clinicians and patients about opioid therapy, improve the safety and efficacy of pain treatment, and reduce risks associated with opioid therapy.⁴ The guideline recommended that when opioids are prescribed, they should be at the lowest-effective dose, for the shortest duration, combined with non-opioid alternatives as appropriate, and not co-prescribed with benzodiazepines whenever possible to prevent potential adverse events and overdose deaths.⁴

As opioid prescribing trends decreased in recent years, the use of alternative therapies to opioids for managing individuals with chronic pain, such as the concomitant prescribing of psychotropic medications along with opioids, increased.⁵ Psychotropic medications commonly prescribed with opioids include non-benzodiazepine hypnotics, antipsychotics, muscle relaxants, and gabapentinoids. The concomitant prescribing of psychotropic agents with opioids is associated with drug-drug interactions and can increase an individual's likelihood of experiencing adverse effects due to an additive affect with opioids.⁶ Combining opioids and psychotropic agents can increase risks of side effects such as altered mental status, falls, and respiratory depression.⁷⁻⁹

A September 2024 MS-DUR report described patterns of concomitant use of opioids and psychotropic medications among Medicaid members from 2019 through 2023.¹⁰ During that timeframe, concomitant use of psychotropic agents among members prescribed opioids ranged from 31.4% to 35.6%. The most common psychotropic medication classes concomitantly prescribed with opioids among Medicaid members were antidepressants, followed by skeletal muscle relaxants and gabapentinoids. The purpose of this study is to explore the impact of concomitantly prescribed opioids and psychotropic agents on the occurrence of adverse events among those receiving long-term opioid therapy

METHODS

Study design

This study used a case-control study design and utilized Mississippi Medicaid administrative claims data from April 2018 to June 2023. The dataset included claims from both the Fee-for-Service (FFS) program and Coordinated Care Organizations (CCOs), comprising Magnolia Health (MAG), Molina Healthcare (MOL), and UnitedHealthcare (UHC).

Study population

This study included Medicaid beneficiaries who initiated long-term opioid therapy (LTOT) between January 1, 2019, and June 30, 2023. A new LTOT event was defined as having at least three opioid prescription claims with a cumulative 45 days' supply in any 90-day period during the study, preceded by a 90-day period without opioid prescription fills. The 91st day after LTOT initiation was considered the "cohort entry date."¹¹ Beneficiaries were required to be at least 18 years of age as of the cohort entry date and to have at least two claims with diagnoses for chronic non-cancer pain (CNCP) conditions¹² within a 30-day window during the 9 months prior to the cohort entry date to be included in the study. Individuals continuously enrolled in Medicaid who had full pharmacy benefits for at least 9 months prior to the cohort entry date were eligible for inclusion in the study. Participants were excluded if they had a diagnosis of cancer, sickle cell disease, or hospice/ palliative care use in the 9 months prior to cohort entry date. Participants remained in the cohort until the occurrence of an outcome of interest, the first diagnosis of cancer, sickle cell disease, hospice/ palliative care use, disenrollment from Medicaid, or the end of the study period, whichever came first.

Selection of cases and controls

For each outcome of interest, cases were defined as individuals who experienced any of the following events – (1) composite of all-cause mortality^{13–17}, drug-related deaths¹³, or opioid overdose^{13,14}; (2) composite of respiratory failure, acute respiratory distress, apnea, primary central sleep apnea, obstructive sleep apnea, shortness of breath or other abnormalities of breathing, dyspnea, asphyxia or hypoxemia, and respiratory arrest^{18–20}; (3) composite of falls or fractures^{21–23}. The date of the first occurrence of the event was designated as the index date for cases.

Controls were selected from the study cohort and included individuals who had not experienced the outcome of interest at the time of identification. Two controls were matched to each case using incidence density sampling. Cases and controls were matched in a 1:2 ratio based on time of cohort entry (± 30 days). Controls were assigned the same index date as their matched case. To ensure that both cases and controls had exposure to either opioids or psychotropic medications prior to the index date, individuals were required to have either 45 days of opioid possession or 45 days of possession of any one of the psychotropic drug classes in the 90-day period preceding the index date.

Separate case-control analyses were performed for each outcome of interest.

Primary exposure of interest

For all case-control analyses, concomitant use of opioids and any particular psychotropic medication class was the primary exposure of interest. It was operationalized as a binary (yes/no) variable, based on whether an individual had at least 7 days of overlapping concomitant use in the 90-day period prior to the index date.

As sensitivity analyses, we also defined the primary exposure of interest based on: (1) whether individuals had at least 15 days of overlapping concomitant use in the 90-day period prior to the index date, and (2) whether individuals had at least 30 days of overlapping concomitant use in the 90-day period prior to the index date.

Covariates

For all outcomes of interest, covariates included demographic and clinical characteristics of the cases and their matched controls.

Demographic characteristics included gender, age, race, and plan. Age was calculated and pharmacy plan was determined as of the cohort entry date.

Clinical characteristics were assessed using all available claims data between the 9-month baseline period (prior to the cohort entry date) through the outcome date of the event of interest and included multiple CNCP conditions, substance use disorder, and Elixhauser Comorbidity Index (ECI).^{24,25}

Statistical analysis

Descriptive statistics were used to summarize baseline characteristics of the study cohort. Categorical variables were presented as frequencies and percentages, while continuous variables were summarized using means and standard deviations. The association between concomitant use of opioids/ psychotropic medications and multiple adverse events was evaluated using conditional logistic regression to account for the matched case–control study design. Both unadjusted and adjusted odds ratios (aOR) with 95% confidence intervals (CI) were reported.

RESULTS

Table 1 details the attrition resulting from each inclusion/exclusion criteria and the resulting eligible study cohort. Of the 16,346 Medicaid members with long-term opioid therapy between January 2019 and June 2023, 9,702 met the inclusion criteria to be included in the final cohort.

Table 1. Attrition Table for Members Eligible for Study Cohort	
Medicaid members with long-term opioid therapy (LTOT) between January 2019 - June 2023 (3 opioid prescriptions, 45 days cumulative supply in 90 day period)	N = 16,346
LTOT members with continuous enrollment	N = 14,686
LTOT members with Continuous enrollment and age 18 years or greater	N = 14,633
Diagnosed with a chronic non-cancer pain condition	N = 10,887
Eligible members after excluding for cancer diagnosis	N = 9,938
Eligible members after excluding for sickle cell diagnosis	N = 9,754
Eligible members after excluding for hospice/palliative care use	N = 9,704
Eligible members after excluding those whose eligibility ends before cohort entry date	N = 9,702

Exclusion Criteria
Not continuously enrolled N = 1,660
Age less than 18 years N = 53
Members without CNCP condition diagnosis N = 3,746
Cancer diagnosis in baseline N = 949
Sickle cell diagnosis in baseline N = 184
Hospice/ palliative care use in baseline N = 50
End of eligibility before cohort entry date N = 2

Among the 9,702 members included in the study cohort, most were females between the ages of 36 to 65 years of age. (Table 2) Black members were the largest racial group represented in the study, and MAG and UHC were the plans with the largest number of members. A majority of members in the study cohort had multiple chronic non-cancer pain conditions (56.3%) and had a diagnosis of substance use disorder in claims data (54.4%). An overwhelming majority were receiving short-acting opioids (88.6%) for their long-term opioid therapy.

Table 2. Baseline Characteristics of Members with Long-term Opioid Therapy Eligible for the Study Cohort		
	N	%
Total	9702	
Age		
18 to 35 years	1147	11.8%
36 to 65 years	8545	88.1%
Above 66 years	10	0.1%
Gender		
Male	2761	28.5%
Female	6941	71.5%
Race		
Whites	3203	33.0%
Blacks	4173	43.0%
Others	2326	24.0%
Plan		
FFS	1492	15.4%
MAG	3811	39.3%
MOL	363	3.7%
UHC	4036	41.6%
Multiple CNCP		
Yes	5466	56.3%
No	4236	43.7%
Substance Use Disorder		
Yes	5273	54.4%
No	4429	45.7%
Opioid Formulation		
Short acting	8596	88.6%
Long acting	31	0.3%
Both	1075	11.1%

Notes: FFS - Fee-for-Service; MAG - Magnolia Health; MOL - Molina Healthcare; UHC - UnitedHealthcare; CNCP - chronic non-cancer pain.

For this study, cases were identified as individuals who experienced an adverse event in any of the following categories: respiratory complication outcome; fall or fracture outcome; or mortality or opioid overdose outcome. The date of the first occurrence of the event was designated as the index date for cases. Two matched controls were selected from the study cohort for each case identified and included individuals who had not experienced the outcome of interest at the time of identification. The exposure of interest was the concomitant use of opioids and any particular psychotropic medication class. Concomitant use of 7-days, 15-days, and 30-days in the 90-day period prior to the index date of the event was assessed. Separate case-control analyses were performed for each outcome of interest. Table 3 describes the proportion of cases and matched controls exposed to the event of interest, concomitant use of opioids and psychotropic medications, for each adverse event category. During the study period, 156 cases of mortality or opioid overdose events were matched to 312 controls; 247 cases of respiratory complications were matched to 494 controls; and 608 cases of falls or fractures were matched to 1216 controls.

Table 3. Distribution of Concomitant Use Across Cases and Matched Controls for Each Adverse Event						
Concomitant Use Duration	Adverse Event					
	Mortality or Opioid Overdose Outcome		Respiratory Complication Outcome		Fall/Fracture Outcome	
	Cases: N = 156	Controls: N = 312	Cases: N = 247	Controls: N = 494	Cases: N = 608	Controls: N = 1216
≥ 7 days	Cases Exposed: 118 (75.6%)	Controls Exposed: 214 (68.6%)	Cases Exposed: 202 (81.8%)	Controls Exposed: 312 (63.2%)	Cases Exposed: 427 (70.2%)	Controls Exposed: 814 (66.9%)
≥ 15 days	Cases Exposed: 114 (73.1%)	Controls Exposed: 200 (64.1%)	Cases Exposed: 195 (78.9%)	Controls Exposed: 289 (58.5%)	Cases Exposed: 401 (66.0%)	Controls Exposed: 773 (63.6%)
≥ 30 days	Cases Exposed: 99 (63.5%)	Controls Exposed: 171 (54.8%)	Cases Exposed: 176 (71.3%)	Controls Exposed: 251 (50.8%)	Cases Exposed: 355 (58.4%)	Controls Exposed: 667 (54.9%)

Adjusted and unadjusted conditional logistic regression modeling was conducted to assess the relationship between the concomitant use of opioids and psychotropic medications and the occurrence of adverse events (see Table 4 below).

Compared to individuals who did not have 7 days of concomitant use of opioids and psychotropic medications, the odds of experiencing respiratory complications were significantly higher for those who had 7 or more days of concomitant use (aOR = 2.80; 95% Confidence Interval [CI]: 1.91-4.18). Sensitivity analyses conducted using alternate operationalizations for concomitant use yielded similar results, with those having 15 or more days of concomitant use (aOR: 2.87, 95% CI: 1.98 – 4.20) and those having 30 or more days of concomitant use (aOR: 2.55, 95% CI: 1.81 – 3.62) reporting significantly higher odds of experiencing respiratory complications.

The finding, that any duration of concomitant use of psychotropic drugs and opioids are associated with adverse respiratory outcomes (evidenced by similar findings for the 7-day and 15-day thresholds for concomitant use versus 30-day threshold for concomitant use), is consistent with prior research examining the association between transient opioid use and short-term respiratory complications both in the Mississippi Medicaid²⁶ and the national Medicare fee-for-service populations.²⁷

Compared to individuals who did not have 7 days of concomitant use of opioids and psychotropic medications, the odds of experiencing mortality or opioid overdose were numerically higher for those who had 7 or more days of concomitant use (aOR = 1.64; 95% Confidence Interval [CI]: 0.98-2.76), even though this was not statistically significant. Sensitivity analyses conducted using alternate operationalizations for concomitant use yielded similar results, with those having 15 or more days of concomitant use (aOR: 1.92, 95% CI: 1.17 – 3.20) and those having 30 or more days of concomitant use (aOR: 2.42, 95% CI: 1.49 – 3.98) reporting significantly higher odds of experiencing mortality or opioid overdose. This finding seems to be indicative of a dose-response effect for duration of concomitant use on the composite mortality or opioid overdose outcome.

While those who had concomitant use of opioids and psychotropic medications reported numerically higher odds of experiencing falls or fractures than those who did not across all three thresholds for defining concomitant use (7 days, 15 days, 30 days), these results were not statistically significant (Table 4).

Table 4. Association between the Concomitant Use of Opioids/Psychotropic Medications and Adverse Events Among Medicaid Members with Long-term Opioid Therapy

Outcome	Days of concomitant use threshold	Concomitant Exposure	Unadjusted Odds Ratio (95% CI)	p-value	Adjusted Odds Ratio (95% CI)	p-value
Respiratory Complication Outcome	7	unexposed group	Reference		Reference	
		exposed group	2.61 (1.82-3.82)	<.0001	2.80 (1.91 - 4.18)	<0.001
	15	unexposed group	Reference		Reference	
		exposed group	2.66 (1.87-3.81)	<.0001	2.87 (1.98 - 4.20)	<0.001
	30	unexposed group	Reference		Reference	
		exposed group	2.40 (1.73-3.34)	<.0001	2.55 (1.81 - 3.62)	<0.001
Falls or Fractures Outcome	7	unexposed group	Reference		Reference	
		exposed group	1.17 (0.94 - 1.44)	0.156	1.11 (0.88 - 1.38)	0.383
	15	unexposed group	Reference		Reference	
		exposed group	1.11 (0.91 - 1.36)	0.316	1.07 (0.86 - 1.33)	0.536
	30	unexposed group	Reference		Reference	
		exposed group	1.16 (0.95 - 1.41)	0.151	1.12 (0.91 - 1.39)	0.275
Mortality/ Opioid Overdose Outcome	7	unexposed group	Reference		Reference	
		exposed group	1.42 (0.92 - 2.22)	0.114	1.64 (0.98 - 2.76)	0.063
	15	unexposed group	Reference		Reference	
		exposed group	1.52 (1.00 - 2.34)	0.052	1.92 (1.17 - 3.2)	0.011
	30	unexposed group	Reference		Reference	
		exposed group	1.43 (0.97 - 2.13)	0.075	2.42 (1.49 - 3.98)	<0.001

Note : In the adjusted analyses, we controlled for potential confounding factors, including age (continuous), race (categorical), gender, multiple chronic non-cancer pain conditions (binary), substance use disorder (binary), and Elixhauser comorbidity score (categorical).

CONCLUSIONS

The concomitant prescribing of opioids and psychotropic medications is common practice even though evidence exists indicating that individuals concurrently prescribed these combination of medications are more likely to experience opioid-related adverse events. This study examined the association between opioid-related adverse events among Medicaid members on long-term opioid therapy and the concurrent prescribing of opioids and psychotropic medications. Our results found that those individuals with concurrent opioid/psychotropic medication use had statistically greater odds of experiencing both respiratory events and opioid overdose/mortality events.

RECOMMENDATIONS

This analysis examined the association between the concomitant prescribing of opioids and psychotropic medications and adverse events. This report is provided to allow the Board to discuss potential opportunities for reducing risks of members experiencing an opioid-related adverse event. Next steps to consider may include examining the impact of concomitant prescribing on adverse events by specific psychotropic drug class or opioid dosing levels to inform a targeted education campaign focusing on the awareness of the increased risks and strategies to prevent their occurrence among Medicaid members.

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FDA DRUG SAFETY COMMUNICATIONS

September 2024 – November 2024

- 09-12-2024 FDA adds warning about rare occurrence of serious liver injury with use of Veozah (fezolinetant) for hot flashes due to menopause



MISSISSIPPI DIVISION OF
MEDICAID

**Division of Medicaid
Drug Utilization Review Board
By-Laws**

Article I. Purpose

The Drug Utilization Review Board (DUR) is a requirement of the Social Security Act, Section 1927. The purpose of the DUR Board is to provide clinical guidance to the Division of Medicaid (DOM) regarding the utilization of pharmaceutical products within the Mississippi Medicaid program. The DUR Board makes recommendations to DOM to promote patient safety and cost effective care in the Mississippi Medicaid program. The DUR Board shall advise DOM with respect to the content of medical criteria and standards for utilization management strategies including prospective drug prior authorization (PA), concurrent patient management, retrospective drug utilization review, and educational intervention programs. DOM retains the authority to accept or reject the recommendations by the DUR Board.

Article II. Membership

Section 1 – Board Composition

- A. The DUR Board will consist of not less than twelve (12) voting members.
- B. The DUR Board voting members will be comprised of at least one-third (1/3), but no more than fifty-one percent (51%), licensed and actively practicing physicians and at least one-third (1/3) licensed and actively practicing pharmacists. Voting members may consist of health care professionals with knowledge/expertise in one or more of the following:
 - 1) Prescribing of drugs,
 - 2) Dispensing and monitoring of drugs,
 - 3) Drug use review, evaluation, and intervention,
 - 4) Medical quality assurance.
- C. Non-voting board members consist of the Division of Medicaid (DOM) Executive Director, Office of Pharmacy pharmacists, DUR Coordinator, the DUR contractor and Medical Director.

DUR Bylaws V2= updated 12/06/2018

Section 2 – Appointment selection methodology

- A. DOM’s Office of Pharmacy in consultation with officially recognized state professional healthcare associations recommends potential, qualified new candidates for appointment or reappointment of existing board members to DOM’s Executive Director.
- B. Nominations are considered internally and appointments are given final approval by the DOM Executive Director.
- C. Board members are appointed by the Governor of the State of Mississippi, or Governor’s designee, pursuant to state law.

Section 3 - Term of Office

- A. All members are appointed for three year terms following a staggered appointment fulfillment as follows: one-third of DUR Board members shall be appointed each term. All subsequent appointments shall be for terms of three years from the expiration date of the previous term.
- B. Members may serve up to three consecutive three-year terms (for a total of nine consecutive years).
- C. Members may serve for either an extended term or a fourth consecutive term at the discretion of the Executive Director and by recommendation of both the DUR Coordinator and Division of Medicaid Office of Pharmacy in the event that no qualified, willing candidate is found in sufficient time. Members, including those filling vacated positions, may be re-appointed by the Executive Director for a subsequent term.
- D. In the event of an unexpected or expected vacancy, the DUR Coordinator and Office of Pharmacy may recommend a qualified replacement candidate to DOM’s Executive Director for emergency approval.
- E. The Executive Director shall fill any vacancy before the end of the term, and the person appointed to fill the vacancy shall serve for the remainder of the unexpired term. Members, including those filling vacated positions, may be re-appointed by the Executive Director for a subsequent term.

Section 4 - Attendance

- A. Members are required to attend at least fifty percent of the meetings per year. Failure to attend meetings without an explanation of extenuating circumstances will result in the termination of the member’s appointment.
- B. Members are asked to give advance notice regarding any planned absences so that a quorum may be determined prior to meetings.

Section 5 - Resignation

A member of the DUR Board may resign by giving a 30 day written advance notice to the DUR Board Chair and DUR Coordinator.

Section 6 - Removal

A member of the DUR Board may be removed by either the DUR Board Chair or majority vote of the DUR Board for good cause. Good cause may be defined as one or more of the following conditions:

- A. Lack of attendance –failure to attend at least 50% of the scheduled DUR meetings shall constitute a resignation by said DUR Board member,
- B. Identified misconduct or wrongdoing during any DUR Board term, or

DUR Bylaws V2= updated 12/06/2018

- C. Not disclosing a conflict of interest either upon initial disclosure or throughout the rest of the term.

Section 7 - Board Officers

At the first meeting of the state fiscal year, which constitutes July 1 through June 30, board members shall select two members to serve as Chair and Chair-Elect of the board, respectively. The Chair and Chair-Elect shall both serve one year terms. At the end of the serving year, the Chair-Elect assumes the role of Chair, and a new Chair-Elect will be chosen.

If the persons serving as Chair and Chair-Elect have either previously served as Chair or Chair-Elect, that person may be reelected to either posting.

The Chair-Elect will serve as Chair in absentia of the Chair or by the Chair's request.

Section 8 - Reimbursement

The Division of Medicaid will reimburse DUR Board members for travel related expenses.

Article III. Meetings

Section 1 - Frequency

The DUR Board shall meet at least quarterly, and may meet at other times as necessary for the purpose of conducting business that may be required. The DUR Board Chair, a majority of the members of the board, or the Division of Medicaid Office of Pharmacy and DUR Coordinator, shall maintain the authority of calling DUR meetings.

Section 2 - Regular Meetings

The DUR Board will hold regular quarterly meetings in the city of Jackson, Mississippi. Meetings will occur at the predesignated time and place. Dates for the upcoming year's quarterly meetings will be posted before the first quarterly meeting of the upcoming year.

Section 3 - Special Meetings

The DUR Board may meet at other times other than regular quarterly meetings as deemed necessary and appropriate. The DUR Coordinator and Office of Pharmacy must notify DUR Board members of any special meeting at least two weeks, i.e., ten (10) days, prior to the requested meeting date. Special meetings may be requested by the following officials:

- A. Division of Medicaid Executive Director,
- B. DUR Coordinator and Office of Pharmacy,
- C. DUR Board Chair, or
- D. Majority of DUR Board members via communication to DUR Coordinator and/or DUR Board Chair.

Section 4 - Meeting Notice

DUR Board members will be notified of the location for the meeting a minimum of ten (10) days in advance. Notification may include one or a combination of the following methods: e-mail, fax, or other written communication. DUR Board members are required to keep on file with

DOM Office of Pharmacy his or her address, primary phone number, alternate phone number (i.e., cell), fax number, and email address to which notices and DUR related communications may be submitted.

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Meetings may be cancelled due to lack of quorum, severe inclement weather, or other reasons as determined by the DUR Coordinator and Office of Pharmacy. In the event of a cancellation, the DUR Coordinator and DOM Pharmacy staff will communicate with DUR Board members regarding the meeting cancellation as soon as circumstances permit. Notifications shall also be posted with DFA and on DOM's website to ensure that the public is notified of any meeting cancellation.

DUR Board Meetings shall be open to the public and conducted in accordance with state law, specifically the Open Meetings Act. Notice of any meetings held shall be provided at least five (5) days in advance of the date scheduled for the meeting. The notice shall include the date, time, place and purpose for the meeting and shall identify the location of the meeting to the general public.

Section 5 – Meeting Sign-In

All meeting attendees will be required to sign-in at the meeting entrance for DUR meetings. Sign-in sheets will be logged, scanned and transferred to electronic medium for official records. All attendees shall include participant's name and entity represented (as applicable).

Section 6 – Quorum

A simple majority of voting board members shall constitute a quorum and must be present for the transaction of any business of the board. For a fully-appointed 12-person DUR Board as required by state law, seven voting board members constitutes a quorum. If a quorum is not present, the Chair, Chair-Elect or DUR Coordinator maintains the responsibility to conclude meeting proceedings. Meeting minutes shall reflect that a quorum was not present.

Section 7 – Voting

The voting process shall be conducted by the Chair or the Chair-Elect in absentia of the Chair.

All board recommendations shall begin with a motion by a voting board member. The motion may then be seconded by a voting board member. If a recommendation does not receive a second motion, the motion shall not pass. If a recommendation receives a second motion, then the board shall vote on the motion. A motion shall be considered as passed if the motion carries a majority of votes if a quorum of the board is present.

In the event that a motion receives a tie vote in the presence of a quorum, the motion shall not pass. The motion can be brought up for further discussion after which a subsequent motion may be made to vote on the issue again during the same meeting, or a motion can be made to table the issue and discussion until the next quarterly DUR Board meeting.

A vote abstention occurs when a voting member is present for the meeting and the action but has chosen not to vote on the current motion. An abstention is a vote with the majority on the measure. A recusal, on the other hand, is necessitated when a voting member has a conflict of interest or potential pecuniary benefit resulting from a particular measure. In order to properly and completely recuse oneself from a matter, the DUR Board member must leave the room or area where discussions, considerations, or other actions take place

before the matter comes up for discussion. The member must remain absent from the meeting until the vote is concluded. The minutes will state the recusing member left the room before the matter came before the DUR Board and did not return until after the vote.

Section 8 – Minutes

A public body speaks only through its minutes. State law, specifically the Open Meetings Act, requires minutes be kept of all meetings of a public body, whether in open or executive session, showing the following:

- A. Members present or absent,
- B. Date, time and place of meeting,
- C. Accurate recording of any final actions taken,
- D. Record, by individual member, of how s/he voted on any final action, and
- E. Any other information that the public body requests is reflected in the minutes.

The minutes shall be finalized no later than thirty (30) days after the adjournment of the DUR Board meeting and shall be made available for public inspection. DOM Office of Pharmacy posts all DUR Board Minutes on the DUR webpage.

Section 9 – Speakers & Special Topics

DUR Board members may request various healthcare, industry, or specialized professionals to present at DUR meetings regarding a posted topic on an upcoming DUR agenda.

- A. The DUR Board may allow up to 20 minutes for topic presentation by an invited speaker.
- B. DUR Board Members may ask a member of the audience to provide information on a topic being discussed by the Board. Invited participants may be asked to disclose any potential conflicts of interests if applicable. (See Article IV, Section 1).
- C. Members of the audience may not speak unless so designated at the appropriate time by a DUR Board member.
- D. DUR Board Members, both voting and non-voting, maintain speaking privileges at DUR meetings.
- E. Contracted employees of DOM and employees of other DOM vendors are considered members of the audience.

Section 10 – Executive Session

During special circumstances, the DUR Board may go into executive session at the conclusion of normal meeting proceedings; however, all DUR Board meetings must commence as an open meeting. In order for executive session to be called, the following procedure must be followed in accordance with the Open Meetings Act:

- A. A member may move to close the meeting to determine whether board needs to go into executive session; vote in open meeting with vote recorded in minutes, majority rules.
- B. Closed meeting: vote taken on whether to declare executive session, requires 3/5 of all members present.
- C. Board comes back into open session and states statutory reason for executive session. The reason for the executive session shall be recorded in the meeting minutes.
- D. Board members then will go into executive session where action may be taken on stated subject matter only.

- E. Minutes must be kept in accordance with the Open Meetings Act.

Section 11 – Conduct of Participants

Pursuant to state law, specifically the Open Meetings Act, the DUR Board may make and enforce reasonable rules and regulations for the conduct of persons attending the DUR meetings. The following is a non-exhaustive list of rules for DUR Board meetings:

- A. Attendees should please remain silent and allow for the efficient transaction of business.
- B. Cell phones should be placed on silent or vibrate.
- C. Laptop computers are discouraged from being utilized during meetings as frequent typing may distract board members.
- D. Food and drink are not allowed in the meeting room.
- E. Security is provided by the state. Guests not following proper decorum may be asked to leave by security.

Article IV. Public Participation

Section 1 - Disclosure of Persons Appearing Before DUR Board

The DUR Board may ask individuals appearing before the board to disclose either in writing or verbally their relationship, as applicable, including but not limited to pharmaceutical companies or special interest groups. Any such disclosures should be recorded as a matter of public record in the documented meeting minutes.

Article V. Conflicts of Interest

DUR Board members are expected to maintain the highest professional, ethical standards. A conflict of interest may exist when a DUR Board member maintains a financial/pecuniary, personal, or professional interest that may compete or interfere with the DUR Board member's ability to act in a fair, impartial manner while acting in the best interests of the Division of Medicaid and the beneficiaries that it serves.

As such, DUR Board members are required to complete and submit annually a Conflict of Interest disclosure statement with the DOM Office of Pharmacy and DUR Coordinator. Statements shall be maintained by the Office of Pharmacy. Members have an ongoing responsibility to update and revise said statements, disclosing any new conflicts of interest to the DUR Coordinator and DOM Office of Pharmacy.

It is the sole responsibility and requirement of each board member to review the agenda of each forthcoming board meeting to determine any if any potential conflicts of interest exist. If so, an aforementioned Disclosure statement must be updated indicating the conflict of interest. The board member should notify the Chair or Chair-Elect of the conflict of interest prior to the meeting.

A DUR Board member shall recuse himself/herself from any vote, action, or discussion pertaining to any product or product class if there is documentation stating an actual or perceived conflict of interest. Please refer to the procedure outlined in Article III, Section 7.

Article VI. Confidentiality

DUR Board members are required to safeguard all confidential and proprietary information, including but not limited to pricing information, which is disclosed by the Mississippi Division of Medicaid for purposes of conducting DUR Board activities. Any provider or patient specific information discussed by the DUR Board shall also be kept strictly confidential in accordance with state and federal law.

Article VII. Amendments

Proposed Amendments of By-Laws

- A. Proposed amendments must be submitted to the DUR Coordinator at least thirty (30) days prior to the next scheduled DUR meeting and the proposed amendments will be disseminated to the DUR Board en masse for consideration at said DUR Board meeting.
- B. Proposed amendments will be distributed to board members no less than five (5) business days prior to next DUR Board meeting.
- C. Proposed amendments will be initiated by the Chair, or the Chair-Elect in absentia of the Chair, prior to Next Meeting Information announcements.
- D. Proposed amendments will be voted upon at the next scheduled DUR Board meeting. If majority of DUR Board votes to ratify amendment, the amendment will take effect immediately at the conclusion of the meeting.

**MS-DUR BOARD
COMMON ABBREVIATIONS**

AWP	Any Willing Provider, Average Wholesale Price
BENE	Beneficiary
CAH	Critical Access Hospital
CCO	Coordinated Care Organization
CDC	Centers for Disease Control
CHIP	Children’s Health Insurance Program
CMS	Center for Medicare and Medicaid Services
COB	Coordination of Benefits
CPC	Complex Pharmaceutical Care
DME	Durable Medical Equipment
DOC	Department of Corrections
DOM	Division of Medicaid
DUR	Drug Utilization Review
EOB	Explanation of Benefits
EPSDT	Early and Periodic Screening, Diagnosis and Treatment
FA	Fiscal Agent
FFS	Fee For Service
FPW	Family Planning Waiver
FQHC	Federally Qualified Health Clinic
FY	Fiscal Year
HB	House Bill
HCPCS/ HEIDIS	Health Plan Employer Data and Information Set
HHS	Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability
IDD	Intellectual and Developmental Disabilities
LTC	Long Term Care
MAG	Magnolia Health
MEDD	Morphine Equivalent Daily Dose
MOL	Molina Healthcare
MPR	Medication Possession Ratio
MSCAN	Mississippi Coordinated Access Network
MSDH	Mississippi State Department of Health
NADAC	National Average Drug Acquisition Cost

NDC	National Drug Code
P&T	Pharmacy and Therapeutics
PA	Prior Authorization
PBM	Pharmacy Benefit Manager
PDC	Proportion of Days Covered
PDL	Preferred Drug List
PI	Program Integrity
PIP	Performance Improvement Program
POS	Point of Sale, Place of Service, Point of Service
Pro-DUR	Prospective Drug Use Review
OTC	Over the Counter
QI	Quality Indicator
QIO	Quality Improvement Organization
QM	Quality Management
RA	Remittance Advise
REOMB	Recipient’s Explanation of Medicaid Benefits
Retro-DUR	Retrospective Drug Utilization Review
RFI	Request for Information
RFP	Request for Proposal
RHC	Rural Health Clinic
SB	Senate Bill
SCHIP	State Child Health Insurance Program
SMART PA	Conduent’s Pharmacy Application (SmartPA) is a proprietary electronic prior authorization system used for Medicaid fee for service claims
SPA	State Plan Amendment
UHC	United Healthcare
UM/QIO	Utilization Management and Quality Improvement Organization
UPDL	Universal Preferred Drug List
UR	Utilization Review
VFC	Vaccines for Children
WAC	Wholesale Acquisition Cost
WIC	Women, Infants, Children
340B	Federal Drug Discount Program

