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

MISSISSIPPI DIVISION OF
MEDICAID

December 3, 2020 at 1:00pm

ZOOM Meeting

Prepared by:

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

Drug Utilization Review Board

Lauren Bloodworth, PharmD (Chair)
University of MS School of Pharmacy
201D Faser Hall
University, MS 38677
Term Expires: June 30, 2021

Rhonda Dunaway, RPh
Coastal Family Health Center
9113 Hwy 49 Suite 200
Gulfport, MS 39503
Term Expires: December 31, 2020

Tanya Fitts, MD
Lafayette Pediatric Clinic
1300 Access Road, Suite 400
Oxford, MS 38655
Term Expires: June 30, 2021

Ray Montalvo, MD
KDMC Specialty Clinic
940 Brookway Boulevard
Brookhaven, MS 39601
Term Expires: December 31, 2020

Holly R. Moore, PharmD
Anderson Regional Medical Center
2124 14th Street
Meridian, MS 39301
Term Expires: December 31, 2020

Janet Ricks, DO
UMMC, Family Medicine
2500 North State Street
Jackson, MS 39216
Term Expires: June 30, 2021

Cheryl Sudduth, RPh
Funderburk's Pharmacy
134 West Commerce Street
Hernando, MS 38632
Term Expires: June 30, 2022

James Taylor, PharmD (Co-Chair)
North MS Medical Center
830 S. Gloster Street
Tupelo, MS 38801
Term Expires: June 30, 2022

Alan Torrey, MD
Merit Health Medical Group
Pain Management
2080 South Frontage Road
Vicksburg, MS 39180
Term Expires: June 30, 2022

2021 DUR Board Meeting Dates

March 4, 2021
June 10, 2021
September 16, 2021
December 9, 2021

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

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

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

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

MISSISSIPPI DIVISION OF MEDICAID
OFFICE OF THE GOVERNOR
DRUG UTILIZATION REVIEW BOARD
AGENDA
December 3, 2020

Welcome

Old Business

Resource Utilization Review

Follow-up and Discussion from the Board

New Business

Pharmacy Program Update Terri Kirby, RPh

Next Meeting Information
2021 Meeting Dates: March 4, June 10, September 16, and December 9

DUR Board Meeting Minutes

MISSISSIPPI DIVISION OF MEDICAID
DRUG UTILIZATION REVIEW (DUR) BOARD
MINUTES OF THE SEPTEMBER 17, 2020 MEETING

DUR Board Roster: State Fiscal Year 2020* (July 1, 2019- December 31,2020)	Dec 2019	Mar 2020	Jun 2020	Sep 2020
Lauren Bloodworth, PharmD	✓	✓	✓	✓
Beverly Bryant, MD	✓	✓	✓	✓
Rhonda Dunaway, RPh	✓		✓	✓
Tanya Fitts, MD	✓	✓	✓	✓
Ray Montalvo, MD (Chair)	✓	✓	✓	✓
Holly Moore, PharmD	✓	✓	✓	✓
Janet Ricks, DO		✓	✓	✓
Dennis Smith, RPh	✓	✓	✓	
Cheryl Sudduth, RPh	✓		✓	✓
James Taylor, PharmD		✓	✓	✓
Alan Torrey, MD		✓	✓	
TOTAL PRESENT**	**8**	**9**	**11**	**9**

* DUR Board Member Terms extended through December 31, 2020

** *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; Gail McCorkle, RPh, Clinical Pharmacist; Chris Yount, MA, PMP, Staff Officer – Pharmacy;

University of Mississippi School of Pharmacy - MS-DUR Staff:
Eric Pittman, PharmD, MS-DUR Project Director; Kaustuv Bhattacharya, PhD, Research Assistant Professor - CPMM;

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

Change Healthcare Staff:
Paige Clayton, PharmD, On-Site Clinical Pharmacist; Sarah Boydstun, PharmD, PA Pharmacist; Cheryl Rogers, PharmD, PA Pharmacist;

Coordinated Care Organization (CCO) Staff:
Heather Odem, PharmD, Director of Pharmacy - Mississippi, UnitedHealthcare Community & State; Jenni Grantham, PharmD, Director of Pharmacy, Magnolia Health; Mike Todaro, PharmD, Vice President Pharmacy Operations, Magnolia Health; Trina Stewart, PharmD, Pharmacy

Manager, Molina Healthcare; Joseph Vazhappilly, PharmD, MBA, Associate Vice President, Pharmacy Services, Molina Healthcare;

Visitors:

Robert Firnberg, Gilead; Phil Hecht, Abbvie; Evelyn Johnson, Capital Resources; Chris Lauhoff, Genentech; Bryan Leibowitz, Takeda; Nole Mangine, Allergan/Abbvie; David McCullough, Novartis; Jim Musick, GSK; Mike Peoples, Lilly; Michele Shirley, Indivior; Tracey Smalley, Amgen; Jason Swartz, Otsuka; Bruce Wallace, Azurity; Wendy Williams, Supernus; Mycah Wilson, Genentech; Gene Wingo, Biogen; Brent Young, Global Blood Therapeutics; Bradley Hastings, Pharmacy Student; Abigail Pearman, Pharmacy Student.

Call to Order:
Dr. Pittman called the meeting to order at 1:01pm and welcomed everyone to the meeting via Zoom.

OLD BUSINESS:

Dr. Bloodworth moved to approve the minutes from the June 2020 DUR Board Meeting, seconded by Dr. Montalvo, and unanimously approved by the DUR Board.

Resource Utilization Review:
Dr. Pittman presented the resource utilization report for April 2020 – June 2020. Beginning in April 2020, enrollment numbers began to increase while the number of prescription fill and total dollars paid saw a marked decrease. These changes correlate with the beginning of the COVID-19 pandemic. During this same period, an increase in narcotic analgesic utilization as compared to changes in utilization of other drug classes was noted. Change in prescription drug utilization during COVID-19 is an area for potential future research for MS-DUR.

Feedback and Discussion from Board:
No follow-up discussion concerning previous DUR Board topics was held.

NEW BUSINESS:

Election of Co-chair:
With Dr. Lauren Bloodworth transitioning into the role of Chair, the Board had a vacancy at Co-Chair.

Following a brief discussion, Dr. Montalvo nominated Dr. James Taylor to serve as Co-Chair for the state fiscal year (SFY) 2021 term. The motion was seconded by Dr. Bryant and unanimously approved by the Board.

Update on MS-DUR Educational Interventions:
Dr. Pittman provided an overview of all DUR mailings that occurred June 2020 – August 2020.

Special Analysis Projects:

Opioid Prescribing Trends in Mississippi Medicaid

Dr. Pittman presented an overview report of the trends associated with opioid prescribing for the period beginning January 2018 through June 2020. During this period, Medicaid implemented four Opioid Initiatives in August 2019. MS-DUR examined trends in opioid prescribing to assess the potential impact of the initiatives. The data demonstrated that significant improvement occurred in opioid prescribing trends. Following discussion, the following recommendations were proposed.

1. DOM should continue monitoring trends in opioid prescribing related to the Opioid Initiatives and explore other metrics for measuring appropriate opioid prescribing.

2. MS-DUR, at the direction of DOM, should explore the impacts of COVID-19 on the prescribing of opioids.

3. DOM should develop a summary of the Opioid Trends Report to be included in an upcoming Provider Bulletin.

Dr. Montalvo motioned to approve the recommendations, seconded by Ms. Dunaway, and unanimously approved by the Board.

Sedative Hypnotics

Dr. Pittman presented a review of sedative hypnotic use among Medicaid beneficiaries. Increased interest has recently been given to this group of medications with the approval of new agents in this class and with the release of proposed rule changes to the minimum standards for Medicaid State Drug Utilization Review by the Centers for Medicare and Medicaid Services (CMS) to include additional DUR reviews for opioids and sedatives. Results of overall sedative hypnotic use were presented, along with analysis specifically focused on the

concomitant use of opioids and sedative hypnotics. The following recommendations were considered:

1. DOM should implement provider education around the concomitant use of sedative hypnotics and opioids.
    - MS-DUR distribute a one-time letter to all providers that prescribed concomitant sedative hypnotics and opioids to beneficiaries during the previous six months alerting them to the increased risks associated with concomitant use and CMS monitoring recommendations.
    - Develop an educational piece to be included in the next DOM Provider Bulletin.

2. DOM should implement DUR review(s) around the concomitant use of sedative hypnotics and opioids.
    - Pro-DUR edit – create a pro-DUR edit alerting pharmacists to the risks associated with concomitant use but allowing the pharmacist to bypass.
    - Retro-DUR notice – MS-DUR send letters monthly to providers that prescribed concomitant sedative hypnotic/opioid therapy alerting them of the potential dangers.

3. MS-DUR to further evaluate trends and risk factors (racial disparities, comorbidities, prescriber types) associated with long-term use of sedative hypnotics and their concomitant use with opioids.

Following a robust discussion, Dr. Bloodworth motioned to approve both components of recommendation #1, table recommendation #2 until further questions could be answered and feasibility determined, and approve recommendation #3. The motion was seconded by Dr. Bryant, and unanimously approved by the Board.

FDA Drug Safety Updates:
Dr. Pittman presented FDA drug safety communications for July 2020 – September 2020.

Pharmacy Program Update:
Ms. Kirby provided the Board with the following Pharmacy Program Update.

1. Dr. Beverly Bryant is resigning from the Board due to relocation. Ms. Kirby, along with the entire Board, expressed gratitude for Dr. Bryant's service.
2. Dennis Smith has been hired as the new DUR Coordinator in the Office of Pharmacy.
3. Vaccine State Plan Amendment (SPA) – The SPA has been submitted to the Governor's Office for his signature. From there it will be forwarded to CMS for approval. The intent of the SPA is to open up all CDC recommended vaccines to be administered by pharmacists. This will be broken into 2 age groups. For children ages 10- 18 years, pharmacists will be required to be enrolled in the Vaccines For Children Program with the Mississippi State Department of Health. Under this program vaccines are provided at no cost and pharmacists would be reimbursed a $10 administration fee. The second group is for adults 19 years and older. The SPA will open up all CDC recommended

vaccines to pharmacists for administration. Pharmacists will be reimbursed an ingredient cost equal to wholesale acquisition cost (WAC) and an administration fee that is equal to the Medicare rate currently paid. Medicaid is seeking a September 1, 2020 activation date. If CMS approves the September 1, 2020 date and this occurs after September 1, 2020, reimbursement could be retro-dated to September 1, 2020.

Miscellaneous:
2020 Meeting Dates/Times
December 3, 2020
**Meeting time will remain at 1 pm.*

Next Meeting Information:
Dr. Pittman announced that the next meeting of the DUR Board will take place on December 3, 2020 at 1pm.

Dr. Bloodworth motioned to adjourn the meeting at 2:49 pm, seconded by Dr. Fitts, and unanimously approved by the Board.

Submitted,

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

Meeting Location: Woolfolk Building, 501 North West Street, Virtual Meeting, Jackson, MS 39201

Contact Information: Office of Pharmacy:
Chris Yount, 601-359-5253: Christopher.yount@medicaid.ms.gov, or
Jessica Tyson, 601-359-5253; Jessica.Tyson@medicaid.ms.gov

Notice details:

State Agency: MS Division of Medicaid

Public Body: Drug Utilization Board (DUR) Meeting

Subject: Quarterly Meeting

Date and Time: March 19, 2020; June 11, 2020; September 17, 2020; and December 3, 2020 at 1PM

Description: The Mississippi Division of Medicaid's Drug Utilization Review (DUR) Board is a quality assurance body which seeks to assure appropriate drug therapy to include optimal beneficiary outcomes and appropriate education for physicians, pharmacists, and the beneficiary. The Drug Utilization Review (DUR) Board is composed of twelve participating physicians and pharmacists who are active MS Medicaid providers and in good standing with their representative organizations.

The Board reviews utilization of drug therapy and evaluates the long-term success of the treatments.

The Drug Utilization Review (DUR) Board meets quarterly.


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PUBLIC MEETING NOTICES
Mississippi Public Meeting Notices
NOTICE DETAILS
NOTICE DETAILS
State Agency: Division of Medicaid
Public Body: Division of Medicaid
Title: Drug Utilization Review Board Meeting
Subject: Drug Utilization Review Board
Date and Time: 9/17/2020 1:00:00 PM
Description:
The Mississippi Division of Medicaid Drug Utilization Review Board is a quality assurance body whi ch seeks to assure appropriate drug therapy.
Back
MEETING LOCATION
501 North West Street
Jackson MS 39201
Map this!
CONTACT INFORMATION
DOM Pharmacy Bureau
6013595253
dompharmacybureau@medicaid.ms.gov
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DFA Meeting notification 2020.docx
Added 1/8/2020
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Resource Utilizaton Review

TABLE 04A: ENROLLMENT STATISTICS FOR LAST 6 MONTHS
April 1, 2020 through September 30, 2020

			Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
Total enrollment			696,725	703,364	710,332	717,219	723,722	728,385
Dual-eligibles			165,478	165,349	165,036	164,778	164,233	163,640
Pharmacy benefits			583,798	590,267	597,265	604,129	610,448	614,924
	LTC		16,768	16,441	16,136	15,926	15,557	15,179
	PLAN %	**FFS**	26.1%	26.1%	25.6%	25.2%	25.0%	24.9%
		MSCAN-UHC	29.1%	29.2%	29.4%	29.6%	29.7%	29.6%
		MSCAN-Magnolia	32.8%	32.6%	32.6%	32.5%	32.4%	32.2%
		MSCAN-Molina	12.0%	12.1%	12.4%	12.7%	12.9%	13.3%

TABLE 04B: PHARMACY UTILIZATION STATISTICS FOR LAST 6 MONTHS
April 1, 2020 through September 30, 2020

		Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
# Rx Fills	**FFS**	86,293	85,850	93,206	95,105	96,048	99,598
	MSCAN-UHC	125,360	121,247	132,468	131,844	131,660	137,259
	MSCAN-Mag	151,339	146,352	156,026	162,121	161,166	166,810
	MSCAN-Mol	32,570	32,470	36,683	39,196	31,983	42,429
# Rx Fills / Bene	**FFS**	0.6	0.6	0.6	0.6	0.6	0.7
	MSCAN-UHC	0.7	0.7	0.8	0.7	0.7	0.8
	MSCAN-Mag	0.8	0.8	0.8	0.8	0.8	0.8
	MSCAN-Mol	0.5	0.5	0.5	0.5	0.4	0.5
$ Paid Rx	**FFS**	$10,968,565	$10,509,089	$11,285,311	$11,766,954	$11,418,057	$12,342,425
	MSCAN-UHC	$13,646,984	$12,627,740	$13,846,932	$13,418,990	$13,703,907	$13,911,707
	MSCAN-Mag	$17,442,134	$16,506,724	$17,201,327	$17,130,789	$16,920,268	$17,697,862
	MSCAN-Mol	$3,265,746	$2,991,280	$3,404,929	$3,523,304	$2,676,084	$3,809,210
$ /Rx Fill	**FFS**	$127.11	$122.41	$121.08	$123.73	$118.88	$123.92
	MSCAN-UHC	$108.86	$104.15	$104.53	$101.78	$104.09	$101.35
	MSCAN-Mag	$115.25	$112.79	$110.25	$105.67	$104.99	$106.10
	MSCAN-Mol	$100.27	$92.12	$92.82	$89.89	$83.67	$89.78
$ /Bene	**FFS**	$71.99	$68.21	$73.81	$77.29	$74.82	$80.61
	MSCAN-UHC	$80.33	$73.26	$78.86	$75.04	$75.59	$76.43
	MSCAN-Mag	$91.09	$85.78	$88.34	$87.25	$85.55	$89.38
	MSCAN-Mol	$46.62	$41.88	$45.97	$45.92	$33.98	$46.58

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 2020 (FFS AND CCOs)

Category	Month Year	Rank Volume	# RXs	$ Paid	# Unique Benes
CNS stimulants	Sep 2020	1	24,116	$4,520,664	20,749
	Aug 2020	1	22,254	$4,209,980	19,310
	Jul 2020	1	20,441	$3,874,591	17,476
antihistamines	Sep 2020	2	14,143	$204,837	13,482
	Aug 2020	5	12,510	$183,075	11,935
	Jul 2020	6	12,874	$193,227	12,099
nonsteroidal anti-inflammatory agents	Sep 2020	3	14,099	$210,753	13,372
	Aug 2020	4	12,838	$189,249	12,253
	Jul 2020	4	13,118	$190,756	12,463
atypical antipsychotics	Sep 2020	4	13,385	$3,722,953	11,472
	Aug 2020	2	13,220	$3,683,828	11,278
	Jul 2020	2	13,661	$3,801,001	11,545
adrenergic bronchodilators	Sep 2020	5	13,203	$720,457	11,226
	Aug 2020	3	13,194	$765,828	11,257
	Jul 2020	3	13,233	$739,779	11,115
narcotic analgesic combinations	Sep 2020	6	12,685	$564,451	11,645
	Aug 2020	6	12,335	$539,684	11,308
	Jul 2020	5	12,948	$587,705	11,720
SSRI antidepressants	Sep 2020	7	12,621	$161,196	11,812
	Aug 2020	7	12,122	$150,400	11,380
	Jul 2020	7	12,343	$153,072	11,385
proton pump inhibitors	Sep 2020	8	11,911	$434,963	11,373
	Aug 2020	8	11,575	$418,568	11,060
	Jul 2020	8	11,840	$443,537	11,267
antiadrenergic agents, centrally acting	Sep 2020	9	10,593	$209,431	9,648
	Aug 2020	9	10,348	$206,475	9,476
	Jul 2020	9	10,344	$218,031	9,379
aminopenicillins	Sep 2020	10	9,821	$126,154	9,635
	Aug 2020	13	8,023	$101,161	7,891
	Jul 2020	14	7,803	$99,444	7,650

TABLE D: TOP 10 DRUG CATEGORIES BY DOLLARS PAID IN SEP 2020 (FFS AND CCOs)

Category	Month Year	Rank Paid Amt	# RXs	$ Paid	# Unique Benes
CNS stimulants	Sep 2020	1	24,116	$4,520,664	20,749
	Aug 2020	1	22,254	$4,209,980	19,310
	Jul 2020	1	20,441	$3,874,591	17,476
atypical antipsychotics	Sep 2020	2	13,385	$3,722,953	11,472
	Aug 2020	2	13,220	$3,683,828	11,278
	Jul 2020	2	13,661	$3,801,001	11,545
antiviral combinations	Sep 2020	3	853	$2,708,729	785
	Aug 2020	3	823	$2,703,938	756
	Jul 2020	4	846	$2,584,204	768
TNF alpha inhibitors	Sep 2020	4	421	$2,687,251	381
	Aug 2020	4	395	$2,433,821	351
	Jul 2020	3	420	$2,678,162	381
insulin	Sep 2020	5	5,084	$2,352,686	3,790
	Aug 2020	5	5,028	$2,378,718	3,753
	Jul 2020	5	5,154	$2,425,015	3,824
factor for bleeding disorders	Sep 2020	6	129	$1,887,874	94
	Aug 2020	6	102	$1,368,521	80
	Jul 2020	6	123	$1,525,324	95
interleukin inhibitors	Sep 2020	7	222	$1,276,905	211
	Aug 2020	7	229	$1,233,800	205
	Jul 2020	7	222	$1,255,776	200
CFTR combinations	Sep 2020	8	56	$1,122,691	51
	Aug 2020	9	46	$917,914	43
	Jul 2020	9	53	$1,054,415	48
bronchodilator combinations	Sep 2020	9	3,730	$1,022,093	3,414
	Aug 2020	8	3,814	$1,050,909	3,470
	Jul 2020	8	3,841	$1,063,633	3,490
GLP-1 receptor agonists	Sep 2020	10	1,033	$784,145	1,000
	Aug 2020	10	1,044	$802,393	1,006
	Jul 2020	10	1,045	$794,766	994

TABLE E: TOP 25 DRUG MOLECULES
BY NUMBER OF CLAIMS IN SEP 2020 (FFS and CCOs)

Drug Molecule Therapeutic Category	Aug 2020 # Claims	Sep 2020 # Claims	Sep 2020 $ Paid	Sep 2020 # Unique Benes
albuterol / adrenergic bronchodilators	12,298	12,478	$497,991	10,723
amoxicillin / aminopenicillins	7,996	9,801	$125,737	9,616
montelukast / leukotriene modifiers	9,178	9,706	$151,838	9,452
cetirizine / antihistamines	7,071	8,591	$114,788	8,404
gabapentin / gamma-aminobutyric acid analogs	7,846	8,060	$129,837	7,544
acetaminophen-hydrocodone / narcotic analgesic combinations	7,827	8,013	$110,417	7,491
lisdexamfetamine / CNS stimulants	6,746	7,312	$2,285,050	7,107
azithromycin / macrolides	6,638	7,285	$122,831	7,134
fluticasone nasal / nasal steroids	5,876	6,632	$105,062	6,526
clonidine / antiadrenergic agents, centrally acting	6,307	6,428	$88,279	6,031
ibuprofen / nonsteroidal anti-inflammatory agents	5,609	6,184	$78,651	5,998
methylphenidate / CNS stimulants	5,565	6,121	$1,004,613	5,460
amphetamine-dextroamphetamine / CNS stimulants	5,584	5,967	$234,728	5,155
omeprazole / proton pump inhibitors	5,666	5,915	$70,829	5,714
amlodipine / calcium channel blocking agents	5,506	5,636	$69,063	5,352
sertraline / SSRI antidepressants	4,451	4,592	$58,550	4,286
ondansetron / 5HT3 receptor antagonists	3,973	4,504	$65,519	4,336
triamcinolone topical / topical steroids	4,305	4,243	$77,228	4,123
guanfacine / antiadrenergic agents, centrally acting	4,027	4,145	$120,802	3,908
atorvastatin / HMG-CoA reductase inhibitors (statins)	4,112	4,064	$50,855	3,815
hydroxyzine / miscellaneous anxiolytics, sedatives and hypnotics	3,593	3,708	$55,701	3,568
mupirocin topical / topical antibiotics	3,795	3,705	$57,509	3,625
sulfamethoxazole-trimethoprim / sulfonamides	3,606	3,698	$66,801	3,629
ethinyl estradiol-norgestimate / contraceptives	3,504	3,657	$66,900	3,428
pantoprazole / proton pump inhibitors	3,557	3,624	$49,462	3,468

TABLE F: TOP 25 DRUG MOLECULES
BY DOLLARS PAID IN SEP 2020 (FFS and CCOs)

Drug Molecule Therapeutic Category	Aug 2020 $ Paid	Sep 2020 $ Paid	Sep 2020 # Claims	Sep 2020 # Unique Benes
lisdexamfetamine / CNS stimulants	$2,108,922	$2,285,050	7,312	7,107
adalimumab / TNF alpha inhibitors	$1,718,116	$1,888,588	276	251
paliperidone / atypical antipsychotics	$1,466,840	$1,474,160	605	559
bictegravir/emtricitabine/tenofovir / antiviral combinations	$1,084,385	$1,131,941	332	325
methylphenidate / CNS stimulants	$940,322	$1,004,613	6,121	5,460
insulin glargine / insulin	$844,003	$865,564	1,899	1,830
aripiprazole / atypical antipsychotics	$852,584	$859,648	3,354	3,133
elexacaftor/ivacaftor/tezacaftor / CFTR combinations	$503,738	$719,341	34	30
dexmethylphenidate / CNS stimulants	$649,339	$685,114	3,067	2,555
etanercept / TNF alpha inhibitors	$569,048	$637,065	120	107
emicizumab / factor for bleeding disorders	$563,471	$599,661	30	21
somatropin / growth hormones	$555,763	$561,222	136	121
corticotropin / corticotropin	$279,284	$558,512	7	6
antihemophilic factor / factor for bleeding disorders	$372,874	$539,031	25	13
insulin aspart / insulin	$523,510	$527,198	1,329	1,259
albuterol / adrenergic bronchodilators	$495,559	$497,991	12,478	10,723
budesonide-formoterol / bronchodilator combinations	$501,321	$497,281	1,576	1,533
lacosamide / miscellaneous anticonvulsants	$495,259	$488,818	548	487
liraglutide / GLP-1 receptor agonists	$507,721	$486,088	617	602
lurasidone / atypical antipsychotics	$469,345	$468,010	340	324
hydroxyprogesterone / progestins	$417,448	$443,301	137	128
deferasirox / chelating agents	$342,322	$442,433	64	58
dupilumab / interleukin inhibitors	$457,663	$437,485	145	138
cobicistat/elvitegravir/emtricitabine/tenofov / antiviral combinations	$526,742	$435,611	129	124
insulin detemir / insulin	$466,817	$421,529	795	757

TABLE G: TOP 25 DRUG MOLECULES
BY CHANGE IN NUMBER OF CLAIMS FROM JUL 2020 TO SEP 2020 (FFS and CCOs)

Drug Molecule	Jul 2020 # Claims	Aug 2020 # Claims	Sep 2020 # Claims	Sep 2020 $ Paid	Sep 2020 # Unique Benes
amoxicillin / aminopenicillins	7,753	7,996	9,801	$125,737	9,616
cetirizine / antihistamines	7,133	7,071	8,591	$114,788	8,404
influenza virus vaccine, inactivated / viral vaccines	0	225	1,443	$42,919	1,436
lisdexamfetamine / CNS stimulants	6,112	6,746	7,312	$2,285,050	7,107
methylphenidate / CNS stimulants	5,079	5,565	6,121	$1,004,613	5,460
azithromycin / macrolides	6,255	6,638	7,285	$122,831	7,134
amphetamine-dextroamphetamine / CNS stimulants	5,202	5,584	5,967	$234,728	5,155
prednisolone / glucocorticoids	1,939	2,155	2,696	$42,875	2,625
ondansetron / 5HT3 receptor antagonists	3,758	3,973	4,504	$65,519	4,336
cefdinir / third generation cephalosporins	2,554	2,571	3,250	$72,020	3,210
fluticasone nasal / nasal steroids	5,952	5,876	6,632	$105,062	6,526
amoxicillin-clavulanate / penicillins/beta-lactamase inhibitors	2,879	2,888	3,396	$74,469	3,336
dexmethylphenidate / CNS stimulants	2,612	2,866	3,067	$685,114	2,555
famotidine / H2 antagonists	2,349	2,420	2,758	$187,481	2,622
montelukast / leukotriene modifiers	9,362	9,178	9,706	$151,838	9,452
ibuprofen / nonsteroidal anti-inflammatory agents	5,863	5,609	6,184	$78,651	5,998
naproxen / nonsteroidal anti-inflammatory agents	2,391	2,309	2,664	$53,772	2,612
methylprednisolone / glucocorticoids	1,703	1,596	1,939	$29,494	1,909
prednisone / glucocorticoids	2,556	2,406	2,776	$30,190	2,665
metronidazole / miscellaneous antibiotics	2,398	2,387	2,574	$32,002	2,485
fluoxetine / SSRI antidepressants	3,084	3,129	3,227	$41,044	3,037
budesonide / inhaled corticosteroids	1,317	1,376	1,458	$177,689	1,411
diclofenac / nonsteroidal anti-inflammatory agents	1,132	1,134	1,273	$23,112	1,238
meloxicam / nonsteroidal anti-inflammatory agents	2,599	2,625	2,736	$25,151	2,653
ketorolac / nonsteroidal anti-inflammatory agents	710	763	847	$20,367	826

TABLE H: TOP 25 DRUG MOLECULES
BY CHANGE IN AMOUNT PAID FROM JUL 2020 TO SEP 2020 (FFS and CCOs)

Drug Molecule	Jul 2020 $ Paid	Aug 2020 $ Paid	Sep 2020 $ Paid	Sep 2020 # Claims	Sep 2020 # Unique Benes
lisdexamfetamine / CNS stimulants	$1,905,479	$2,108,922	$2,285,050	7,312	7,107
corticotropin / corticotropin	$239,417	$279,284	$558,512	7	6
glycerol phenylbutyrate / urea cycle disorder agents	$166,268	$120,927	$332,535	8	6
elexacaftor/ivacaftor/tezacaftor / CFTR combinations	$575,601	$503,738	$719,341	34	30
coagulation factor ix / factor for bleeding disorders	$86,164	$161,854	$214,335	8	5
methylphenidate / CNS stimulants	$884,556	$940,322	$1,004,613	6,121	5,460
cysteamine / miscellaneous uncategorized agents	$73,073	$188,636	$188,639	3	3
sofosbuvir-velpatasvir / antiviral combinations	$144,152	$240,568	$256,295	32	30
antihemophilic factor / factor for bleeding disorders	$430,022	$372,874	$539,031	25	13
dexmethylphenidate / CNS stimulants	$587,873	$649,339	$685,114	3,067	2,555
emicizumab / factor for bleeding disorders	$506,113	$563,471	$599,661	30	21
palbociclib / CDK 4/6 inhibitors	$162,598	$150,090	$250,165	20	15
anti-inhibitor coagulant complex / factor for bleeding disorders	$321,438	$150,758	$399,724	8	4
everolimus / mTOR inhibitors	$212,952	$217,706	$286,078	23	18
risdiplam / miscellaneous uncategorized agents	$0	$0	$67,042	3	2
famotidine / H2 antagonists	$123,141	$172,392	$187,481	2,758	2,622
bictegravir/emtricitabine/tenofovir / antiviral combinations	$1,072,975	$1,084,385	$1,131,941	332	325
interferon gamma-1b / interferons	$115,272	$57,636	$172,906	3	3
dasatinib / BCR-ABL tyrosine kinase inhibitors	$64,258	$77,776	$120,228	10	9
selumetinib / multikinase inhibitors	$43,797	$52,521	$96,261	5	5
lomitapide / miscellaneous antihyperlipidemic agents	$0	$47,965	$47,965	1	1
gilteritinib / multikinase inhibitors	$0	$0	$46,905	3	2
dapagliflozin / SGLT-2 inhibitors	$155,110	$194,216	$198,591	333	324
influenza virus vaccine, inactivated / viral vaccines	$0	$6,184	$42,919	1,443	1,436
teduglutide / miscellaneous GI agents	$81,019	$121,528	$121,534	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 2020 TO SEP 2020 (FFS and CCOs)

Drug Product Therapeutic Category	Sep 2020 # Claims	Sep 2020 $ Paid	Sep 2020 Avr. Paid Per Rx	Sep 2020 Avr. Units Per Rx	Jul 2020 Paid Per Unit	Aug 2020 Paid Per Unit	Sep 2020 Paid Per Unit	Percent Change
amphetamine-dextroamphetamine 25 mg capsule, extended release / CNS stimulants (P)	297	$13,176	$44.36	30	$1.03	$1.03	$1.09	6.0%
colchicine 0.6 mg capsule / antigout agents (P)	131	$22,984	$175.45	39	$4.07	$4.21	$4.20	3.2%
QuilliChew ER (methylphenidate) 30 mg/24 hr tablet, chewable, extended release / CNS stimulants (P)	426	$153,784	$361.00	31	$10.98	$11.09	$11.14	1.5%
Jardiance (empagliflozin) 10 mg tablet / SGLT-2 inhibitors (P)	205	$125,416	$611.78	38	$16.17	$16.40	$16.39	1.3%
Biktarvy (bictegravir/emtricitabine/tenofovir) 50 mg-200 mg-25 mg tablet / antiviral combinations (P)	332	$1,131,941	$3,409.46	35	$97.55	$98.63	$98.82	1.3%
Farxiga (dapagliflozin) 10 mg tablet / SGLT-2 inhibitors (P)	223	$130,702	$586.11	37	$15.85	$16.09	$16.03	1.1%
Tradjenta (linagliptin) 5 mg tablet / dipeptidyl peptidase 4 inhibitors (P)	192	$112,856	$587.79	40	$14.17	$14.43	$14.33	1.1%
Focalin XR (dexmethylphenidate) 5 mg capsule, extended release / CNS stimulants (P)	117	$42,310	$361.63	29	$11.94	$12.08	$12.07	1.1%
Brilinta (ticagrelor) (ticagrelor) 90 mg tablet / platelet aggregation inhibitors (P)	166	$63,183	$380.62	61	$6.07	$6.13	$6.13	1.0%
Janumet (metformin-sitagliptin) 1000 mg-50 mg tablet / antidiabetic combinations (P)	112	$61,945	$553.08	79	$7.26	$7.52	$7.33	1.0%
Entresto (sacubitril-valsartan) 24 mg-26 mg tablet / angiotensin receptor blockers and neprilysin inhibitors (P)	182	$96,810	$531.92	62	$8.59	$8.66	$8.67	1.0%
Linzess (linaclotide) 145 mcg capsule / guanylate cyclase-C agonists (P)	132	$65,724	$497.91	34	$14.02	$13.93	$14.15	0.9%
Saphris (asenapine) 10 mg tablet / atypical antipsychotics (P)	144	$115,872	$804.67	42	$18.75	$18.72	$18.90	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 2020 TO SEP 2020 (FFS and CCOs)

Drug Product Therapeutic Category	Sep 2020 # Claims	Sep 2020 $ Paid	Sep 2020 Avr. Paid Per Rx	Sep 2020 Avr. Units Per Rx	Jul 2020 Paid Per Unit	Aug 2020 Paid Per Unit	Sep 2020 Paid Per Unit	Percent Change
Xulane (ethinyl estradiol-norelgestromin) 35 mcg-150 mcg/24 hr film, extended release / contraceptives (P)	1,433	$197,420	$137.77	3	$37.91	$38.19	$38.19	0.7%
Farxiga (dapagliflozin) 5 mg tablet / SGLT-2 inhibitors (P)	110	$67,889	$617.18	36	$16.36	$16.29	$16.48	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 2020 – NOVEMBER 2020

Ongoing Intervention(s):

PROVIDER SHOPPING FOR OPIOIDS (≥4 Prescribers AND ≥4 Pharmacies)			
Month	**Prescribers Mailed**	**Pharms Mailed**	**Benes Addressed**
19-Dec	14	9	23
20-Jan	15	12	27
20-Feb	8	6	14
20-Mar	7	4	11
20-Apr	4	3	7
20-May	3	4	7
20-Jun	9	5	14
20-Jul	6	5	11
20-Aug	9	4	13
20-Sep	10	8	18
20-Oct	8	6	14
20-Nov	6	4	10

ADULT AND CHILD CORE SET HEALTH CARE QUALITY MEASURES

BACKGROUND

Health care quality measures are utilized to measure adherence to evidence-based treatment guidelines and to assess the results of care. The application of quality measurement tools supports performance improvement initiatives and fosters accountability. The Centers for Medicare and Medicaid Services (CMS) has adopted a core set of health care quality measures for adults participating in Medicaid programs and children enrolled in Medicaid and the Children's Health Insurance Program (CHIP). Through the use of the Adult and Child Core Sets, CMS seeks to improve the quality of care provided to Medicaid and CHIP beneficiaries.

Annually CMS compiles results submitted by state Medicaid and Chip programs and reports performance. Reporting of these core sets is currently voluntary by state Medicaid and CHIP programs. Each state has the option to pick which Adult and Child Core Set measures they choose to report and which pharmacy programs are reported [i.e. Fee-for-Service, Managed Care Organizations (MCOs), CHIP, Dual Medicaid-Medicare Eligible, etc.]. The yearly performance summary reported by CMS provides an overview for measures reported by at least 25 states.

Within the Adult and Child Core Sets some of the measures can be reported utilizing administrative claims data. MS-DUR assists the Mississippi Division of Medicaid (DOM) in their annual reporting of certain quality measures that can be assessed through administrative claims data.

This report is a summary of the Adult and Child Core Set measures completed by MS-DUR for 2021 annual reporting for federal fiscal year (FFY) 2020. The core set reporting for FFY 2020 covers care furnished to children and adults in Medicaid and CHIP in calendar year 2019. For the measures reported by MS-DUR, performance is reported for FFS and all MCO pharmacy programs. For each measure, a short description of the measure and performance are reported.

MEASURES

Adult and Child Core Set: Asthma Medication Ratio (AMR):

The "Asthma Medication Ratio" is included in both the Medicaid Adult and Child Core Sets for FYY-2020 reporting (AMR-AD, AMR-CH). The AMR assesses the appropriate use of controller medications for beneficiaries with persistent asthma. The AMR measure is defined as the percentage of beneficiaries having persistent asthma and a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year. This measure was developed by the National Collaborative for Innovation in Quality Measurement, and is included in HEDIS® 2019. The measurement specifications are listed in Table 1. Changes made from the prior year included updating drug and condition value sets and clarification of some terms. The measurement specifications are summarized in Table 1[1].

TABLE 1: AMR-AD and AMR-CH Measurement Specifications	
Measurement Year	January 1, 2019 - December 31, 2019
Denominator	Medicaid enrollees 5 - 18 for children and 19 - 64 for adults identified as having persistent asthma. Beneficiaries are identified as having persistent asthma if they meet at least one of the following criteria during both the measurement year and the year prior to the measurement year. - At least one emergency department (ED) visit with a principal diagnosis of asthma. - At least one acute inpatient encounter with a principal diagnosis of asthma. - At least four outpatient visits or observation visits on different dates of service with any diagnosis of asthma and at least two asthma medication dispensing events (only 3 of 4 visits can be telehealth). - At least four asthma medication dispensing events.
Numerator	Beneficiaries with a ratio of controller medications units to total asthma medication units of 0.50 or greater.
Continuous Enrollment	Beneficiary must be enrolled for entire measurement year and the prior year. No more than one gap in continuous enrollment of up to 45 days is allowed during each year.
Exclusions	Beneficiaires are excluded from the denominator if they had no asthma medications dispensed during the measure year or if they had any diagnosis, in any setting, during the observation year or prior year for emphysema, COPD, obstructive chronic bronchitis, chronic respiratory conditions due to fumes/vapors, cystic fibrosis, or acute respiratory failure.
Anchor Date	The anchor date for determining age is December 31 of the measurement year.

Table 2 shows the AMR-CH quality measure rates for CY 2019 for all Mississippi Medicaid beneficiaries meeting the inclusion criteria for the denominator. The overall rate within Mississippi Medicaid for children was 59.2% which was a slight decrease from 64.0% for CY 2018. The rate for Fee-For-Service was significantly higher than the rate for the three Coordinated Care Organizations (CCOs). There was little variation in rates among the CCOs. Rates varied considerably for different racial groups.

TABLE 2: Asthma Medication Ratio (AMR-CH)
by Beneficiary Characteristic
*** Children Only ***
Mississippi Medicaid January 1, 2019 - December 31, 2019
Includes Medicaid ONLY - No CHIP

Beneficiary Characteristics		Denominator	Numerator	Rate
TOTAL		8,757	5,180	59.2%
Age	5 - 11	4,640	3,015	65.0%
	12 - 18	4,117	2,165	52.6%
Gender	Female	3,612	2,173	60.2%
	Male	5,145	3,007	58.4%
Race	Caucasian	2,666	1,944	72.9%
	Afr. Amer.	5,710	2,981	52.2%
	Amer. Indian	26	21	80.8%
	Hispanic	143	83	58.0%
	Other	212	151	71.2%
Pharmacy Program	FFS	642	559	87.1%
	UHC	3,507	2,017	57.5%
	MAG	4,363	2,469	56.6%
	MOL	245	135	55.1%

Table 3 shows the AMR-AD quality measure rates for CY 2019 for all Mississippi Medicaid beneficiaries meeting the inclusion criteria for the denominator. The overall rate for adults within Mississippi Medicaid was 44.3% which was approximately the same as for CY 2018 (44.5%). However, the adult rate was still considerably lower than for children. The rate for Fee-For-Service was significantly higher than the rate for the two Coordinated Care Organizations (CCOs). There was little variation in rates among the CCOs. Rates varied for different racial groups but there was less variability across race than there was for children.

TABLE 3: Asthma Medication Ratio (AMR-AD)
by Beneficiary Characteristic
*** Adults Only ***
Mississippi Medicaid January 1, 2019 - December 31, 2019
Includes Medicaid ONLY - No CHIP

Beneficiary Characteristics		Denominator	Numerator	Rate
TOTAL		2,184	967	44.3%
Age	19 - 50	1,479	652	44.1%
	51 - 64	705	315	44.7%
Gender	Female	1,631	705	43.2%
	Male	553	262	47.4%
Race	Caucasian	655	314	47.9%
	Afr. Amer.	1,320	555	42.0%
	Amer. Indian	3	1	33.3%
	Hispanic	11	6	54.5%
	Other	195	91	46.7%
Pharmacy Program	FFS	220	178	80.9%
	UHC	722	276	38.2%
	MAG	1,196	495	41.4%
	MOL	46	18	39.1%

Adult Core Set: Use of Opioids at High Dosage in Persons without Cancer (OHD):
In March, 2016, the Centers for Disease Control (CDC) released the final version of their Guidelines for Prescribing Opioids for Chronic Pain.[2] One of the CDC recommendations was that high dosages of opioids should be avoided whenever possible. The CDC's clinical evidence review found that higher opioid dosages are associated with increased risks for motor vehicle injury, opioid use disorder, and overdose. The "Use of Opioids at High Dosage in Persons Without Cancer" (OHD-AD) was developed by the Pharmacy Quality Alliance and added to the Medicaid Adult Core Set in 2016. The OHD-AD assesses the potentially inappropriate prescribing of opioids at average morphine milligram equivalents (MME) of 90 or more for treatment periods of 90 or more days. The measurement specifications are summarized in Table 4[1].

TABLE 4: OHD-AD Measurement Specifications	
Measurement Year	January 1, 2019 - December 31, 2019
Denominator	Medicaid enrollees 18 years and older with two or more prescription claims for opioids with unique dates of service, for which the sum of the days' supply is ≥ 15. Beneficiary's treatment period must be 90 or more days.
Continuous Enrollment	Beneficiary must be enrolled for entire observation year with no more than one gap in continuous enrollment of up to 45 days.
Anchor Date for Age	Age is calculated for first day of the measurement year.
Treatment Period	The beneficiary's treatment period begins on the date of the first fill of an opioid prescription and extends through day of the last fill + days supply -1 OR the last day of the measurement year, whichever comes first.
Exclusions	Beneficiaries are excluded if they have any diagnosis of cancer or sickle cell, or receive any hospice services during the observation year.
Numerator	Any beneficiaries in denominator with an average daily dosage ≥ 90 MME over the treatment period.

Table 5 shows the OHD-AD quality measure rates for CY 2019 for all Mississippi Medicaid beneficiaries meeting the inclusion criteria for the denominator. The overall rate within Mississippi Medicaid was 1.7% which was significantly lower than the rate of 2.5% for CY 2018. The rate for FFS was higher than the rates for the three Coordinated Care Organizations (CCOs). There was some variation in rates among the CCOs. The rate for Caucasians was significantly higher than for African Americans or Other race. The rates for American Indians and Hispanics are not reliable due to the small number of beneficiaries in the denominator for these groups.

TABLE 5: Use of Opioids at High Dosage in Persons Without Cancer *Includes all Medicaid Benefiaries Meeting Inclusion Criteria* *Mississippi Medicaid January 1, 2019 - December 31, 2019* *Includes Medicaid ONLY - No CHIP*				
Beneficiary		**Denominator**	**Numerator**	**Rate**
TOTAL		11,112	190	1.7%
Age	18 - 65	11,083	190	1.7%
	65+	29	0	0.0%
Gender	Female	7,884	111	1.4%
	Male	3,228	79	2.4%
Race	Caucasian	4,088	126	3.1%
	Afr. Amer.	5,896	48	0.8%
	Amer. Indian	23	0	0.0%
	Hispanic	28	1	3.6%
	Other	1,077	15	1.4%
Pharmacy Program	FFS	1,686	41	2.4%
	UHC	4,152	71	1.7%
	MAG	4,811	73	1.5%
	MOL	463	5	1.1%

Adult Core Set: Concurrent Use of Opioids and Benzodiazepines:

In March, 2016, the Centers for Disease Control (CDC) released the final version of their Guidelines for Prescribing Opioids for Chronic Pain[2]. One of the CDC recommendations was that concomitant use of opioids and benzodiazepines should be avoided whenever possible. The "Concurrent Use of Opioids and Benzodiazepines" (COB-AD) measure was developed by the Pharmacy Quality Alliance and added to the Medicaid Adult Core Set for FFY 2018 reporting. The COB-AD assesses the percentage of beneficiaries who are taking opioids that have concurrent use of benzodiazepines for 30 or more days. The measurement specifications are summarized in Table 6[1].

TABLE 6: COB-AD Measurement Specifications	
Measurement Year	January 1, 2019 - December 31, 2019
Denominator	Medicaid enrollees 18 years and older with two or more prescription claims for opioids with unique dates of service, for which the sum of the days' supply is ≥ 15.
Anchor Date for Age	Age is calculated for first day of the measurement year.
Continuous Enrollment	Beneficiary must be enrolled for entire measurement year with no more than one gap in continuous enrollment of up to 45 days.
Index Prescripton Start Date (IPSD)	The beneficiary's first fill of an opioid prescription (IPSD) must occur before December 2 of the measurement year.
Exclusions	Beneficiaries are excluded if they have any diagnosis of cancer or sickle cell, or receive any hospice services during the observation year.
Numerator	Any beneficiaries in denominator with concurrent use of opioids and benzodiazepines for 30 or more cumulative days.

Table 7 shows the COB-AD quality measure rates for CY 2019 for all Mississippi Medicaid beneficiaries meeting the inclusion criteria for the denominator. The overall rate within Mississippi Medicaid was 7.5%. This shows a continued significant decrease for this measure (20.0% for CY 2017, 13.7% for CY 2018 and 7.5% for CY 2019). The rates varied slightly for Fee-For-Service, UHC and MAG and were lower for MOL. In the past, rates for females were much higher than males but were only slightly higher this year. Significant racial disparities occurred. The rate for Caucasians continued to be significantly higher than for African Americans or Other race. The rates for American Indians and Hispanics are not reliable due to the small number of beneficiaries in the denominator for these groups.

TABLE 7: COB-AD Concurrent Use of Opioids and Benzodiazepines *Mississippi Medicaid January 1, 2019 - December 31, 2019* *Includes all Medicaid Benefiaries Meeting Inclusion Criteria* *- DOES NOT include CHIP -*				
Beneficiary		**Denominator**	**Numerator**	**Rate**
TOTAL		12,559	937	7.5%
Age	18 - 65	12,523	932	7.4%
	65+	36	5	13.9%
Gender	Female	8,937	682	7.6%
	Male	3,622	255	7.0%
Race	Caucasian	4,601	507	11.0%
	Afr. Amer.	6,656	340	5.1%
	Amer. Indian	24	1	4.2%
	Hispanic	36	4	11.1%
	Other	1,242	85	6.8%
Pharmacy Program	FFS	1,951	176	9.0%
	UHC	4,624	309	6.7%
	MAG	5,412	436	8.1%
	MOL	572	16	2.8%

Child Core Set: Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder Medication (ADD-CH):

The "Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication" is included in the Child Core Sets for FYY-2020 reporting (ADD-CH). The ADD-CH assesses the percentage of children newly prescribed ADHD medication who had at least three follow-up visits within a 10-month period, one of which was within 30 days of when the first ADHD medication was dispensed. Two rates are reported.

Initiation Phase: Percentage of children ages 6 to 12 as of the Index Prescription Start Date (IPSD) with an ambulatory prescription dispensed for ADHD medication, who had one follow-up visit with practitioner with prescribing authority during the 30-day Initiation Phase.

Continuation and Maintenance Phase: Percentage of children ages 6 to 12 as of the IPSD with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who, in addition to the visit in the Initiation Phase, had at least two follow-up visits with a practitioner within 270 days after the Initiation Phase ended.

The only change made from the prior year was updating the exclusions for both rates to indicate that children with an acute inpatient encounter for a behavioral or neurodevelopmental disorder should be excluded from the eligible population. The measurement specifications are summarized in Table 8[3].

TABLE 8: ADD-CH Measurement Specifications	
Measurement Year	January 1, 2019 - December 31, 2019
Data Used	Pharmacy and medical claims for January 1, 2018 - December 31, 2019
Narcolepsy and Hospice Care Exclusion	Exclude all children with diagnosis of narcolepsy or in hospice any time during their history through December 31 of the measurement year.
Denominator (Rate 1 - Initiation Phase)	Medicaid enrollees 6 - 12 with initial prescription start date (IPSD) for an ADHD medication during intake period and meeting the following inclusion/exclusion criteria.
Anchor Date for Age	Age is calculated at IPSD.
Intake Period	The 12-month window starting March 1 of year prior to measurement year and ending last day of February of the measurement year.
Initial Prescription Start Date (IPSD)	The earliest prescription fill for an ADHD medication where the date is in the Intake Period and there is a Negative Medication History.
Negative Medication History	A period of 120 days prior to the IPSD when the beneficiary had no ADHD medication dispensed for either new or refill prescriptions.
Continuous Enrollment (Rate 1)	Beneficiary must be continuously enrolled for 120 days pre-IPSD and during the Initiation Phase (30 days post-IPSD).
Acute Mental Health or Chemical Dependency Exclusion (Rate 1)	Exclude children who had an acute inpatient encounter for mental health or chemical dependency during the Initiation Phase (30 days post-IPSD).
Numerator Rate 1	Beneficiaries in denominator who had one follow-up visit with practitioner with prescribing authority during the 30-day Initiation Phase.
Continuous Enrollment (Rate 2)	Beneficiary must be continuously enrolled for 120 days pre-IPSD and to the end of the Continuation and Maintenance Phase (300 days post-IPSD).
Continuous Medication Treatment (Rate 2)	Beneficiary must have ≥ 120 ADHD medication treatment days within the period 31 days post-IPSD through 300 days post-IPSD (Rate 2 - Continuation and Maintenance Phase)
Acute Mental Health or Chemical Dependency Exclusion (Rate 2)	Exclude children who had an acute inpatient encounter for mental health or chemical dependency within 300 days post-IPSD.
Numerator Rate 2	Beneficiaries in denominator who had at least two follow-up visits with practitioner with prescribing authority during the Continuation and Management Phase (31 - 300 days post-IPSD).

Table 9 shows the ADD-CH quality measure rates for CY 2019 for all Mississippi Medicaid beneficiaries meeting the inclusion criteria for the denominators for each treatment phase. The overall rate within Mississippi Medicaid for children for the Initiation Phase was 60.2% and was 70.7% for the Continuation and Maintenance Phase. For Rate 1 very little variation was observed for gender, pharmacy program, or race categories with sufficient numbers in the denominators. Some variation was observed for Rate 2.

TABLE 9: ADD-CH Follow-Up Care For Children Prescribed ADHD Medication

Includes all Medicaid Beneficiaries Meeting Inclusion Criteria

Mississippi Medicaid January 1, 2019 - December 31, 2019

Includes Medicaid ONLY - No CHIP

Beneficiary		Rate 1 - Initiation Phase			Rate 2 - Continuation and Maintenance Phase		
		Denominator	Numerator	Rate	Denominator	Numerator	Rate
TOTAL		4,630	2,788	60.2%	1,063	752	70.7%
Gender	Female	1,669	1,021	61.2%	406	299	73.6%
	Male	2,961	1,767	59.7%	657	453	68.9%
Race	Caucasian	1,884	1,157	61.4%	678	471	69.5%
	Afr. Amer.	2,579	1,539	59.7%	348	258	74.1%
	Amer. Indian	10	4	40.0%	1	1	100%
	Hispanic	60	33	55.0%	12	7	58.3%
	Other	97	55	56.7%	24	15	62.5%
Pharmacy Program	FFS	502	289	57.6%	144	84	58.3%
	UHC	1,876	1,065	56.8%	407	289	71.0%
	MAG	2,153	1,375	63.9%	492	364	74.0%
	MOL	99	59	59.6%	20	15	75.0%

NOTE: Beneficiaries are reported under the Pharmacy Program they were enrolled in at the IPSD.

Adult and Child Core Set: Contraceptive Care – Postpartum Women (CCP)

The "Contraceptive Care – Postpartum Women" is included in both the Medicaid Adult and Child Core Sets for FFY 2020 reporting (CCP-AD, CCP-CH). The CCP assesses the provision of contraceptive care to postpartum women. The measure is stratified into two age groups: ages 15 to 20 (Child Measure) and 21 to 44 (Adult Measure). For each age group, four measures are reported: percentage of women who had a live birth provided most or moderately effective contraception within 3 and 60 days of delivery and the percentage provided long-acting reversible methods of contraception (LARC) within 3 and 60 days of delivery. No changes were made from the prior year specifications. The measure specifications are outlined in Table 10[1,3].

TABLE 10: CCP-AD and CCP-CH Measurement Specifications	
Measurement Year	January 1, 2019 - December 31, 2019
Denominator	Women 15 - 20 for children and 21 - 44 for adults who had a live birth occurring before October 31 in the measurement year. NOTE: Some women may have more than one delivery in the measurement year; this measure is designed to identify unique live births (defined as those that occur ≥ 180 days apart) rather than women who had a live birth.
Continuous Enrollment	Within the measurement year, women must be enrolled from the date of delivery to 60 days postpartum. No allowable gap during the continuous enrollment period.
Anchor Date	The anchor date for determining age is the date of delivery.
Numerator	Live births where women were provided: (1) Most or moderately effective contraception within 3 days of delivery (2) Most or moderately effective contraception within 60 days of delivery (3) LARC within 3 days of delivery (4) LARC within 60 days of delivery

It is important to note that some women may have more than one delivery in the measurement year. This measure is designed to identify unique live births (defined as those that occur ≥ 180 days apart) rather than women who had a live birth. During the reporting period in CY 2019, 2 children and 9 women had 2 live births included in the measure. Provision of contraception is reported separately for each live birth.

Table 11 shows the CCP-CH quality measure rates for CY 2019 for all live births meeting the inclusion criteria for the denominator. All four rates varied significantly among racial groups. Rates varied slightly for the three Coordinated Care Organizations (CCOs) and the 60-day rates for FFS were lower than the rates for the CCOs.

TABLE 11: Contraceptive Care - Postpartum Women (CCP-CH)
by Beneficiary Characteristic
*** Children 15 - 20 Years Old Only ***
Mississippi Medicaid January 1, 2019 - December 31, 2019
Includes Medicaid ONLY - No CHIP

Beneficiary Characteristics		Denominator (Number of live birth events)	Provided Most or Moderately Effective Contraception				Provided LARC			
			Within 3 days of delivery		Within 60 days of delivery		Within 3 days of delivery		Within 60 days of delivery	
			Numerator	Rate	Numerator	Rate	Numerator	Rate	Numerator	Rate
TOTAL		3,445	58	1.7%	1,520	44.1%	32	0.9%	378	11.0%
Race	Caucasian	1,411	12	0.9%	653	46.3%	3	0.2%	212	15.0%
	Afr. Amer.	1,880	44	2.3%	819	43.6%	28	1.5%	153	8.1%
	Amer. Indian	37	0	0.0%	5	13.5%	0	0.0%	2	5.4%
	Hispanic	53	2	3.8%	21	39.6%	1	1.9%	5	9.4%
	Other	64	0	0.0%	22	34.4%	0	0.0%	6	9.4%
Pharmacy Program	FFS	334	10	3.0%	94	28.1%	7	2.1%	33	9.9%
	UHC	795	17	2.1%	367	46.2%	9	1.1%	91	11.4%
	MAG	968	11	1.1%	451	46.6%	6	0.6%	100	10.3%
	MOL	1,348	20	1.5%	608	45.1%	10	0.7%	154	11.4%

Table 12 shows the CCP-AD quality measure rates for CY 2019 for all live births meeting the inclusion criteria for the denominator. All four rates varied significantly among racial groups. Rates varied slightly for the three Coordinated Care Organizations (CCOs) and the 60-day rates for FFS were lower than the rates for the CCOs.

TABLE 12: Contraceptive Care - Postpartum Women (CCP-AD)
by Beneficiary Characteristic
*** Adults 21 - 44 Years Old Only ***
Mississippi Medicaid January 1, 2019 - December 31, 2019
Includes Medicaid ONLY - No CHIP

Beneficiary Characteristics		Denominator (Number of live birth events)	Provided Most or Moderately Effective Contraception				Provided LARC			
			Within 3 days of delivery		Within 60 days of delivery		Within 3 days of delivery		Within 60 days of delivery	
			Numerator	Rate	Numerator	Rate	Numerator	Rate	Numerator	Rate
TOTAL		15,580	1,744	11.2%	6,900	44.3%	103	0.7%	1,318	8.5%
Race	Caucasian	5,904	725	12.3%	2,732	46.3%	20	0.3%	602	10.2%
	Afr. Amer.	9,025	960	10.6%	3,920	43.4%	80	0.9%	650	7.2%
	Amer. Indian	139	9	6.5%	27	19.4%	1	0.7%	5	3.6%
	Hispanic	113	15	13.3%	50	44.2%	0	0.0%	18	15.9%
	Other	399	35	8.8%	171	42.9%	2	0.5%	43	10.8%
Pharmacy Program	FFS	1,442	123	8.5%	377	26.1%	12	0.8%	76	5.3%
	UHC	3,910	470	12.0%	1,831	46.8%	17	0.4%	341	8.7%
	MAG	4,265	577	13.5%	2,025	47.5%	34	0.8%	376	8.8%
	MOL	5,963	574	9.6%	2,667	44.7%	40	0.7%	525	8.8%

Adult and Child Core Set: Contraceptive Care – All Women (CCW):
The "Contraceptive Care – All Women" is included in both the Medicaid Adult and Child Core Sets for FFY 2020 reporting (CCW-AD, CCW-CH). The CCW assesses the provision of contraceptive care to all women at risk of unintended pregnancy. The measure is stratified into two age groups: ages 15 to 20 (Child Measure) and 21 to 44 (Adult Measure). For each age group, two rates are reported: percentage of women who were provided most or moderately effective contraception and the percentage provided long-acting reversible methods of contraception (LARC). The first rate is an intermediate outcome measure and the second rate is an access measure. No changes were made from the prior year specifications. The measure specifications are outlined in Table 13[1,3].

Table 13 shows the CCW-CH quality measure rates for CY 2019 for all beneficiaries age 15 through 20 meeting the inclusion criteria for the denominator. Both rates varied significantly among racial groups. Rates varied among the pharmacy programs with the FFS program having the highest rate.

TABLE 13: Contraceptive Care - All Women (CCW-CH)
by Beneficiary Characteristic
* Children 15 - 20 Years Old Only *

Mississippi Medicaid January 1, 2019 - December 31, 2019

Includes Medicaid ONLY - No CHIP

Beneficiary Characteristics		Denominator	Provided Most or Moderately Effective Contraception		Provided LARC	
			Numerator	Rate	Numerator	Rate
TOTAL		33,231	10,752	32.4%	782	2.4%
Race	Caucasian	10,396	4,019	38.7%	384	3.7%
	Afr. Amer.	20,737	6,354	30.6%	360	1.7%
	Amer. Indian	214	35	16.4%	7	3.3%
	Hispanic	953	126	13.2%	5	0.5%
	Other	931	218	23.4%	26	2.8%
Pharmacy Program	FFS	5,034	2,023	40.2%	152	3.0%
	UHC	11,927	3,645	30.6%	273	2.3%
	MAG	13,472	4,355	32.3%	299	2.2%
	MOL	2,798	729	26.1%	58	2.1%

Table 14 shows the CCW-AD quality measure rates for CY 2019 for all beneficiaries age 21 through 44 meeting the inclusion criteria for the denominator. Both rates varied a good bit among racial groups. Rates varied slightly among the pharmacy programs with the FFS program having the highest rate on both measures.

TABLE 14: Contraceptive Care - All Women (CCW-AD) by Beneficiary Characteristic * Adults 21 - 44 Years Old Only * *Mississippi Medicaid January 1, 2019 - December 31, 2019* *Includes Medicaid ONLY - No CHIP*						
Beneficiary Characteristics		**Denominator**	**Provided Most or Moderately Effective Contraception**		**Provided LARC**	
			Numerator	**Rate**	**Numerator**	**Rate**
TOTAL		54,904	13,056	23.8%	1,068	1.9%
Race	Caucasian	17,815	3,556	20.0%	425	2.4%
	Afr. Amer.	34,379	8,968	26.1%	587	1.7%
	Amer. Indian	186	17	9.1%	1	0.5%
	Hispanic	384	104	27.1%	21	5.5%
	Other	2,140	411	19.2%	34	1.6%
Pharmacy Program	FFS	23,381	6,104	26.1%	504	2.2%
	UHC	11,824	2,573	21.8%	225	1.9%
	MAG	14,776	3,296	22.3%	242	1.6%
	MOL	4,923	1,083	22.0%	97	2.0%

Adult Core Set: Adherence to Antipsychotic Medications For Individuals with Schizophrenia (SAA):

The "Adherence to Antipsychotic Medications for Individuals with Schizophrenia" is included in the Medicaid Adult Core Set for FFY 2020 reporting (SAA-AD). The SAA assesses the percentage of beneficiaries ages 18 and older during the measurement year with schizophrenia or schizoaffective disorder who were dispensed and remained on an antipsychotic medication for at least 80 percent of their treatment period. The measure specifications are outlined in Table 15[1].

TABLE 15: SAA-AD Measurement Specifications	
Measurement Year	January 1, 2019 - December 31, 2019
Denominator	Medicaid enrollees 18 years and older with diagnosis of schizophrenia or schizoaffective disorder and 2 or more dispensing events for antipsychotic medications.
Continuous Enrollment	Beneficiary must be enrolled for entire observation year with no more than one gap in continuous enrollment of up to 45 days.
Anchor Date for Age	Age is calculated for first day of the measurement year.
Treatment Period	The beneficiary's treatment period is the time between the date of the first dispensing event for an antipsychotic medication and the last day of the measurement year.
Exclusions	Beneficiaries are excluded if: - any hospice services during the observation year. - diagnosis of dementia during the measurement year. - age 66 to 80 with claim/encounter for frailty during measurement year and diagnosis of advanced illness during measurement year or prior year. - age 81 and older with claim/encounter for frailty during measurement year.
Numerator	Any beneficiaries with a Proportion of Days Covered (PDC) for antipsychotic medications of 80% or more during their treatment period.

Table 16 shows the SAA-AD quality measure rates for CY 2019 for all Mississippi Medicaid beneficiaries meeting the inclusion criteria for the denominator. The overall rate within Mississippi Medicaid was 52.7%. This is somewhat lower than the rate of 57.4% reported by DOM for CY 2018. However, any comparison should be done with caution since the rate reported for CY 2018 included CCOs only and several new exclusion criteria were implemented for CY 2019. The rate for Molina was significantly lower than for FFS or the other two CCOs. The only significant differences in rates by race were for American Indians and Hispanics. The rates for these sub-groups should not be considered reliable due to small denominators. The typical standard for reliability is a denominator of $\geq$ 30.

TABLE 16: Adherence to Antipsychotic Medications For Individuals With Schizophrenia

Includes all Medicaid Beneficiaries Meeting Inclusion Criteria
Mississippi Medicaid January 1, 2019 - December 31, 2019
Includes Medicaid ONLY - No CHIP

Beneficiary		Denominator	Numerator	Rate
TOTAL		3,739	1,971	52.7%
Gender	Female	1,741	891	51.2%
	Male	1,998	1,080	54.1%
Race	Caucasian	888	487	54.8%
	Afr. Amer.	2,359	1,229	52.1%
	Amer. Indian	4	1	25.0%
	Hispanic	21	16	76.2%
	Other	467	238	51.0%
Pharmacy Program	FFS	655	349	53.3%
	UHC	1,232	652	52.9%
	MAG	1,651	893	54.1%
	MOL	201	77	38.3%

NOTE: Beneficiaries are reported under the Pharmacy Program they were enrolled in at the end of the measurement year.

CONCLUSIONS/RECOMMENDATIONS

The preceding report was provided for informational purposes only. No recommendations accompany this report.

References:

1. Adult Core Set Technical Specifications and Resources Manual for FFY 2020 Reporting.pdf. Accessed November 9, 2020. https://www.hhs.gov/guidance/sites/default/files/hhs-guidance-documents/ffy-2020-hh-core-set-manual.pd_4.pdf

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3. Child Core Set Technical Specifications and Resources Manual for FFY 2020 Reporting. Accessed November 9, 2020. https://www.hhs.gov/guidance/sites/default/files/hhs-guidance-documents/2020.child%2520core%2520set%2520resource%2520manual_2.pdf

NALOXONE PRESCRIBING AMONG HIGH-RISK INDIVIDUALS IN MISSISSIPPI MEDICAID

BACKGROUND

Opioid overdose is a serious problem in the United States with almost 450,000 people dying from overdoses involving opioids from 1999-2018[1]. In Mississippi, 65% of overdose deaths between 2017 and the first quarter of 2020 were opioid-related[2]. Prescription opioids are highly addictive and misuse can easily occur. It is estimated that the economic burden associated with prescription opioid misuse is approximately $78.5 billion annually in the United States[3]. The use of opioids in the treatment of chronic, non-cancer pain has increased substantially despite the risks associated with their use. In 2016, more than 11.5 million Americans reported misusing prescription opioids in the previous year[1].

Naloxone is an opioid antagonist shown to be safe and effective in preventing opioid overdose deaths by competitively binding mu opioid receptors and reversing signs of opioid intoxication[4]. Since the development of easy-to-use naloxone formulations, improving access to naloxone for patients at high-risk for an overdose has become a primary target for preventing opioid overdoses[5]. In 2016 the CDC Guidelines for Prescribing Opioids for Chronic Pain defined "high-risk" factors for opioid overdose such as history of overdose, history of substance use disorder, higher opioid dosages (≥50 Morphine Equivalent Daily Dose [MEDD]), or concurrent benzodiazepine use[6]. Other factors have also been shown to increase an individual's risk for opioid overdose including chronic opioid use and having mental health issues such as depression[7].

One of the keys to preventing opioid overdose events is getting naloxone into the hands of individuals at high-risk for overdose. Many states, including Mississippi, have adopted standing orders making naloxone available by request directly from a pharmacist without requiring a prescription from a medical provider. In Mississippi, a naloxone standing order was initially implemented by the Mississippi State Department of Health (MSDH) on May 2018 and was renewed in May 2019[2,8]. According to one study, there has been a 9-11% decrease in the number of opioid-related deaths in states that have adopted a naloxone access law[9].

As recently as July 2020, the FDA released a drug safety communication recommending health care professionals discuss naloxone with all patients when prescribing opioid pain relievers or medications to treat opioid use disorder. At the September 2020 DUR Board Meeting, it was recommended that MS-DUR assess the utilization of naloxone among Medicaid beneficiaries at high-risk of experiencing an opioid overdose.

METHODS

A retrospective analysis was conducted using both point-of-sale and medical Mississippi Medicaid administrative claims data for Fee-for-Service (FFS) and the three Coordinated Care Organizations [CCOs: Magnolia (MAG), Molina Health (MOL), and UnitedHealthcare (UHC)] for the period from August 1, 2018, to August 31, 2020 (i.e., study period). Naloxone use was assessed for beneficiaries characterized as high-risk for experiencing an adverse event associated with opioid use. Beneficiaries with a cancer diagnosis were excluded from the analysis. High-risk events for opioid users identified in this analysis included: high MEDD, long-term opioid use, prior opioid overdose event, concomitant use of benzodiazepine, concomitant use of antipsychotic, and presence of other high-risk diagnoses. High MEDD was identified when beneficiaries had any day of opioid use with $\geq$ 90 MEDD. Long-term opioid use was defined as the continuous use of opioids with $\geq$ 50 MEDD for 90 days or more allowing for a 15 day gap during continuous use. Opioid overdose was identified if beneficiaries had any opioid overdose-related diagnosis or opioid-induced respiratory depression (OIRD) diagnosis. Concomitant use of benzodiazepines and concomitant use of antipsychotics were defined as any concomitant use of opioid and benzodiazepines or antipsychotics during the study period. Presence of other high-risk diagnoses included any diagnosis of alcohol dependence, opioid dependence, other substance abuse dependence, and depression. Claims for naloxone were identified using the national drug code (NDC). For each naloxone claim, the provider type was identified. High-risk events and naloxone use before an opioid overdose event were also identified. Naloxone use before opioid overdose was classified according to the months between a naloxone claim and opioid overdose (i.e., < 1 month, 1-3 months, and > 3 months). Moreover, for beneficiaries with claims for any high-risk event, their age, gender, and race were identified.

RESULTS

Table 1a describes the demographic characteristics of beneficiaries prescribed opioids. During the study period there were 113,739 beneficiaries having opioid claims. Of those beneficiaries prescribed opioids, 30.7% (34,912) were classified as high-risk of experiencing an adverse opioid event. For those high-risk beneficiaries:

- 58.2% were between the ages of 18-45 years;
- 75.8% were female;
- Little difference in distribution between African Americans (46.4%) and Caucasians (45.3%).

Table 1a: Demographics of Beneficiaries Prescribed Opioids with High-Risk Event(s) for Opioid Overdose August 2018 - August 2020					
	Plan*				
	FFS	United	Magnolia	Molina	Total
Opioid users	20,380	37,858	42,894	12,607	**113,739**
Any high-risk event	7,627	11,573	13,272	2,440	**34,912**
Age					
< 18	413	851	962	121	**2,347**
18 - 45	4,219	6,533	7,545	2,009	**20,306**
46 - 65	2,854	4,115	4,680	310	**11,959**
65+	141	74	85	0	**300**
Gender					
Female	5,473	8,726	10,170	2,091	**26,460**
Male	2,153	2,847	3,102	349	**8,451**
Race					
Caucasian	3,716	5,332	5,637	1,146	**15,831**
African American	3,279	5,233	6,555	1,147	**16,214**
Other	632	1,008	1,080	147	**2,867**
Note: * Plan on the indext date of the earliest event					

Table 1b details the high-risk event types for beneficiaries classified as high-risk for having an adverse opioid event. A Beneficiary could be classified as having multiple high-risk events. A large majority of beneficiaries (88.7%) were found to have a high-risk diagnosis such as alcohol dependence, opioid dependence, other substance abuse dependence, or depression.

Table 1b: High-Risk Event Type among Beneficiaries Prescribed Opioids August 2018 - August 2020					
	Plan*				
	FFS	United	Magnolia	Molina	Total
Opioid users	20,380	37,858	42,894	12,607	**113,739**
Any high-risk event	7,627	11,573	13,272	2,440	**34,912**
High MEDD	290	604	811	173	**1,878**
Long-term opioid use	74	166	159	11	**410**
Opioid overdose	138	183	201	30	**552**
Concomitant use of benzodiazepine	915	1,959	2,158	239	**5,271**
Concomitant use of antipsychotic	920	1,765	2,066	242	**4,993**
High-risk diagnosis	6,867	10,188	11,668	2,231	**30,954**
Notes: A beneficiary may be represented under more than 1 high-risk event type. High MEDD: ≥ 90 MEDD; Long-term opioid use: ≥ 50 MEDD for 90 days or more (gap allowance: 15 days) ; High-risk diagnosis: alcohol dependence, opioid dependence, other substance use dependence, or depression * Plan on the indext date of the event;					

Naloxone use among high-risk beneficiaries was examined in Table 2. Only a small proportion (<2.0%) of beneficiaries characterized as high-risk had claims for naloxone during the study period.

When examining those naloxone claims, approximately one-fifth occurred prior to the qualifying high-risk event.

Table 2: Number of High-Risk Beneficiaries that Received Naloxone August 2018 - August 2020

Plan	High-risk event type	# of benes	# of benes with naloxone claims	# of benes with naloxone claims prior to high risk event
FFS	High MEDD	290	14	3
	Long-term opioid use	74	5	2
	Opioid overdose	138	4	2
	Concomitant use of benzodiazepine	915	19	3
	Concomitant use of antipsychotic	920	18	10
	High-risk diagnosis	6,867	70	8
United	High MEDD	604	31	7
	Long-term opioid use	166	19	6
	Opioid overdose	183	11	5
	Concomitant use of benzodiazepine	1,959	11	9
	Concomitant use of antipsychotic	1,765	30	7
	High-risk diagnosis	10,188	163	28
Magnolia	High MEDD	811	40	5
	Long-term opioid use	159	20	7
	Opioid overdose	201	3	1
	Concomitant use of benzodiazepine	2,158	3	12
	Concomitant use of antipsychotic	2,066	42	5
	High-risk diagnosis	11,668	182	24
Molina	High MEDD	173	1	0
	Long-term opioid use	11	1	0
	Opioid overdose	30	0	0
	Concomitant use of benzodiazepine	239	3	2
	Concomitant use of antipsychotic	242	2	2
	High-risk diagnosis	2,231	11	2

In Table 3 MS-DUR examined the types of providers prescribing naloxone to beneficiaries classified as high-risk. As part of this analysis MS-DUR attempted to determine the proportion of naloxone claims generated at a pharmacy level through the MSDH's naloxone standing order. Using the national provider identifier (NPI) for physicians associated with the standing order during this time period, MS-DUR was able to distinguish claims executed through the naloxone standing order. Approximately 29% (183) of naloxone claims were processed through the MSDH's naloxone standing order.

Table 3: Number of Naloxone Claims by Prescribing Provider Type					
Provider Type	Plan				Total
	FFS	United	Magnolia	Molina	
Primary Care Physician	10	30	61	8	109
Department of Health*	21	74	73	15	183
Other Physician	17	44	44	3	108
Nurse Practitioner	15	34	32	3	84
Physician Assistant	1	3	4	0	8
Other Provider	3	1	2	0	6
Unkown	16	48	65	3	132
* Department of Health provider type: Providers associated with the MSDH Naloxone Standing Order					

The primary goal in naloxone prescribing is the prevention of opioid overdose events. For those beneficiaries that experienced an opioid overdose event, MS-DUR examined naloxone claims prior to that overdose event. (Table 4a) Of the 552 beneficiaries with an opioid overdose event during the study period:

- **56% (311) had a high-risk event prior to their opioid overdose.**
- **1.4% (8) had a naloxone claim prior to the overdose event.**

Table 4a: Naloxone Claims Prior to Opioid Overdose Events August 2018 - August 2020						
Plan	Opioid overdose events	Any prior high risk events	Prior naloxone claims	Prior naloxone claims timeline		
				< 1 month	1-3 months	> 3 months
FFS	138	74	2	2	0	0
United	183	104	5	2	0	3
Magnolia	201	114	1	0	0	1
Molina	30	19	0	0	0	0
Total	**552**	**311**	**8**	**4**	**0**	**4**

For those 311 individuals with a prior high-risk event that had a subsequent opioid overdose, MS-DUR examined the type of prior high-risk event present. (Table4b) **It was noted that a large proportion (87.8%) of individuals experiencing an opioid overdose had a prior high-risk diagnosis present.**

Table 4b: Type of Prior High-Risk Events Associated with Opioid Overdose Events August 2018 - August 2020							
Plan	Opioid overdose events	Any prior high risk events	Type of prior high-risk event				
			Prior high MEDD	Prior long-term opioid use	Prior concomitant use of benzodiazepine	Prior Concomitant use of antipsychotic	Prior high-risk diagnosis
FFS	138	74	11	5	17	14	63
United	183	104	20	6	30	13	94
Magnolia	201	114	24	7	22	15	99
Molina	30	19	2	1	4	4	17
Total	**552**	**311**	**57**	**19**	**73**	**46**	**273**

CONCLUSIONS

The opioid epidemic has greatly impacted the United States and placed many people at risk of opioid overdose events. Naloxone is an effective treatment for reversing the signs of opioid intoxication. Getting naloxone into the hands of individuals at high-risk of opioid overdose is key to preventing these events. Among Medicaid beneficiaries identified as high-risk of experiencing an opioid overdose, less than 2% had a naloxone claim. For those beneficiaries who experienced an overdose event, although 56% were classified as high-risk prior to their overdose event, only 1.4% had a naloxone claim prior to that overdose event.

RECOMMENDATION

1. DOM should distribute educational reminders to prescribers and pharmacists regarding the FDA's recent recommendation for naloxone, the covered status of naloxone products on the PDL, and the MSDH's Naloxone Standing Order.

References:

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ADULT VACCINATIONS

BACKGROUND

In the United States there are a variety of vaccinations recommended for adults to prevent the spread of serious diseases. Overall, adult vaccination rates in the United States are low.[1] Many adults are at risk of illness and death from vaccine-preventable diseases.[1] Some of these vaccinations are recommended for all adults (seasonal flu vaccine; tetanus, diphtheria, and pertussis (Tdap); and tetanus, diphtheria (Td) booster). Other vaccines may be recommended based on an individual's age, job, lifestyle, travel, or health conditions. See Appendix A for detailed information regarding the Centers for Disease Control and Prevention (CDC) recommended adult vaccine schedule.[2]

The Mississippi Division of Medicaid's (DOM) current Administrative Code Title 23: Medicaid Part 224 Immunizations version 43-13-121 includes language addressing the coverage of vaccines for beneficiaries nineteen (19) years of age and older.[3] Under the current version, DOM covers the following vaccines for beneficiaries 19 years of age or older when billed via medical claims according to the indications and guidelines of the CDC:

· Rabies ·Tetanus ·Influenza ·Pneumococcal ·Varicella ·Herpes Zoster
·Hepatitis B Virus ·Human Papilloma Virus (HPV) ·Measles, Mumps, and Rubella (MMR)

The only vaccines covered through the pharmacy benefit are influenza, pneumococcal, herpes zoster, and varicella. Currently, vaccines billed on pharmacy claims do not count toward the monthly prescription limit of six but co-payments are applicable. Reimbursement is for the vaccine's actual ingredient cost (up to WAC + 0%) and a dispensing fee of $11.29. DOM does not reimburse a fee for administration of vaccines in the pharmacy venue.

DOM is seeking to improve adult vaccination rates among Medicaid beneficiaries. One avenue for improving vaccination rates among adults is to increase beneficiary access. In the third quarter of calendar year 2020 the DOM submitted Medicaid State Plan Amendment (SPA) 20-0013 Vaccines to the Centers for Medicare and Medicaid Services (CMS). If approved by CMS, all CDC recommended vaccines for adults will be covered via the pharmacy benefit. Additionally, pharmacies would be reimbursed for the vaccine's ingredient cost (up to WAC + 0%) and an administration fee equal to that paid to medical providers. A dispensing fee will not be reimbursed because vaccines are not classified as covered outpatient drugs. Additionally, no co-payments will be applied.

To provide a baseline assessment of the current utilization of adult vaccines among Medicaid beneficiaries, MS-DUR conducted an analysis of CDC adult recommended vaccinations among Medicaid beneficiaries for the calendar year (CY) 2019.

METHODS

A retrospective analysis to assess adult vaccination rates was conducted using both Point-of-Sale (POS) and Medical Mississippi Medicaid administrative claims data for Fee-for-Service (FFS) and Coordinated Care Organizations [CCOs: Magnolia (MAG), Molina Health (MOL), and UnitedHealthcare (UHC)] for the period of January 1, 2019 to December 31, 2019. Utilization was assessed for the CDC recommended adult vaccines listed in Figure 1 with the exception of *Haemophilus influenzae* type b vaccine due to its limited use.

Figure 1: CDC Recommended Adult Vaccines[2]

Vaccines in the Adult Immunization Schedule*

Vaccines	Abbreviations	Trade names
Haemophilus influenzae type b vaccine	Hib	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis A and hepatitis B vaccine	HepA-HepB	Twinrix®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB® Heplisav-B®
Human papillomavirus vaccine	HPV vaccine	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Many brands
Influenza vaccine (live, attenuated)	LAIV	FluMist® Quadrivalent
Influenza vaccine (recombinant)	RIV	Flublok® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R® II
Meningococcal serogroups A, C, W, Y vaccine	MenACWY	Menactra® Menveo®
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero® Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax® 23
Tetanus and diphtheria toxoids	Td	Tenivac® Tdvax™
Tetanus and diphtheria toxoids and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Varicella vaccine	VAR	Varivax®
Zoster vaccine, recombinant	RZV	Shingrix
Zoster vaccine live	ZVL	Zostavax®

*Administer recommended vaccines if vaccination history is incomplete or unknown. Do not restart or add doses to vaccine series if there are extended intervals between doses. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Inclusion criteria consisted of beneficiaries age 19 years or older as of January 1, 2019 with continuous Medicaid enrollment for the entire study period (January 1, 2019 – December 31, 2019). For each vaccine, specific CDC listed age recommendations and medical condition contraindications were also considered as part of the inclusion criteria. Assessment for contraindicated medical diagnoses was undertaken for a 2-year period (January 1, 2018-December 31, 2019). Patients flagged for contraindicated medical diagnoses were excluded from the analyses. Vaccinations were identified from POS claims using National Drug Codes (NDCs). Current Procedural Terminology (CPT) codes and NDC codes were used to identify vaccination episodes in Medical claims. Information on the beneficiaries' race, gender, age, plan (FFS/UHC/MAG/MOL), and place of service were summarized in the analyses. Age was calculated as of the date of first vaccine administration for each particular series and plan was assessed as of the date for each vaccination claim during the analysis period.

RESULTS

For each vaccine assessed, tables are presented with demographic characteristics of beneficiaries and place of service for vaccine administration.
(Note: The analysis period for this project was calendar year 2019. The vaccination rates for almost all of these vaccines are likely an underestimation of the true vaccination rates. To determine true vaccine administration rates for almost all of these adult vaccines, multiple years of continuous eligibility would be required to accurately determine. The figures represented in this report are intended to be used as a metric to compare future vaccine administration rates in the Medicaid population and identify opportunities for improving those rates.)

Influenza (Flu) vaccination:
The CDC recommends routine influenza vaccination of 1 dose annually for anyone age 6 months or older with appropriate health status.[2] There are various forms of influenza vaccine available (inactivated; live-attenuated; recombinant). All forms of influenza vaccine were assessed for this analysis. Currently no age restrictions in the adult population (19 years or greater) are noted with any of the various forms of the influenza vaccine. Although there are several health conditions where the live-attenuated form is not recommended, no exclusions for medical conditions were included in this analysis since all forms of influenza vaccines were considered.

TABLE 1-a: Demographics of Beneficiaries Administered Flu Vaccine									
Eligible Population - 259,594*									
Variable	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
Age Category (yrs)									
19-25	326	7.2%	417	8.1%	539	6.6%	306	32.8%	1,588
26-44	779	17.3%	1,769	34.2%	2,732	33.6%	406	43.6%	5,686
45-64	2,314	51.3%	2,970	57.4%	4,823	59.4%	220	23.6%	10,327
65+	1,092	24.2%	21	0.4%	26	0.3%	0	0.0%	1,139
Total	*4,511*		*5,177*		*8,120*		*932*		***18,740***
Gender									
Female	3,016	66.9%	3,599	69.5%	5,702	70.2%	788	84.5%	13,105
Male	1,495	33.1%	1,578	30.5%	2,418	29.8%	144	15.5%	5,635
Total	*4,511*		*5,177*		*8,120*		*932*		***18,740***
Race									
Caucasian	1,613	35.8%	2,115	40.9%	2,986	36.8%	387	41.5%	7,101
African American	2,498	55.4%	2,336	45.1%	4,067	50.1%	461	49.5%	9,362
Other	400	8.9%	726	14.0%	1,067	13.1%	84	9.0%	2,277
Total	*4,511*		*5,177*		*8,120*		*932*		***18,740***

Note: FFS = Fee for Service, UHC = United HealthCare; age calculated as of first vaccination in 2019;
*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019;

TABLE 1-b: Place of Service for Beneficiaries Administered Flu Vaccine									
	FFS		**UHC**		**Magnolia**		**Molina**		**Total**
Place of Service	N	%	N	%	N	%	N	%	N
POS	403	8.9%	1,125	21.4%	1,893	22.9%	116	12.0%	3,537
Medical	4,150	91.1%	4,136	78.6%	6,384	77.1%	848	88.0%	15,518
Telehealth	0		1		1		0		2
School	1		0		0		0		1
Office Visit	3,024		2,585		3,873		627		10,109
Home	8		0		0		0		8
Assisted Living Facility	7		0		0		0		7
Mobile Unit	2		2		13		2		19
Inpatient	1		0		0		0		1
Outpatient	53		14		25		9		101
Urgent Care	12		23		18		1		54
Independent Clinic	0		0		1		0		1
FQHC	225		471		855		65		1,616
CMHC	0		0		0		1		1
Mass Immunization Center	0		1		0		0		1
Public Health Clinic	7		0		1		1		9
Rural Health Clinic	291		608		1,087		84		2,070
Total	4,553		5,261		8,277		964		19,055*

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; CMHC = Community Mental Health Center; POS = point of sale;
*Total number of beneficiaries may be more than number of beneficiaries vaccinated (in Table 1-a), since some beneficiaries may have been vaccinated at multiple places of service and be represented under more than one plan if they changed plans during the study period.

Notes concerning Flu vaccines:

- 18,740 eligible adult beneficiaries received flu vaccine in CY 2019.
- Approximately 7.2% (18,740/259,594) of eligible adults received a documented flu vaccine in CY 2019.
- Only 18.9% (3,537/18,740) of beneficiaries had flu vaccines processed through pharmacy claims.

- Magnolia and United had higher percent of claims through pharmacies compared to FFS and Molina.

Human papillomavirus vaccination (HPV):

HPV vaccination is recommended for all adults through age 26 years. The series consists of 2-3 doses depending on the age at which initial vaccination occurred. For individuals 27 to 45 years of age, shared clinical decision making should guide the decision for vaccination. Vaccination is not recommended in individuals > 45 years of age. If individuals are pregnant, vaccination is not recommended until after the pregnancy.[2]

HPV vaccine

TABLE 2-a: Demographics of Beneficiaries Administered HPV

Eligible Population - 89,290*

Variable	FFS		UHC		Magnolia		Molina		Total
Age Category (yrs)									
19-26	55	90.2%	29	78.4%	52	83.9%	31	93.9%	167
27-45	6	9.8%	8	21.6%	10	16.1%	2	6.1%	26
Total	*61*		*37*		*62*		*33*		***193***
Gender									
Female	59	96.7%	33	89.2%	53	85.5%	30	90.9%	175
Male	2	3.3%	4	10.8%	9	14.5%	3	9.1%	18
Total	*61*		*37*		*62*		*33*		***193***
Race									
Caucasian	13	21.3%	10	27.0%	22	35.5%	14	42.4%	59
African American	48	78.7%	24	64.9%	35	56.5%	15	45.5%	122
Other	0	0.0%	3	8.1%	5	8.1%	4	12.1%	12
Total	*61*		*37*		*62*		*33*		***193***

Note: FFS = Fee for Service, UHC = United HealthCare; age calculated as of first vaccination in 2019;
*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019. Additionally for HPV, the eligible population was limited to beneficiaries no older than 45 years of age at the end of calendar year 2019 and not pregnant during the study period.

TABLE 2-b: Place of Service for Beneficiaries Administered HPV Vaccine

Place of Service	FFS		UHC		Magnolia		Molina		Total
	N	%	N	%	N	%	N	%	N
POS	0	0.0%	0	0.0%	6	9.5%	0	0.0%	6
Medical	62	100.0%	37	100.0%	57	90.5%	33	100.0%	189
Office Visit	26		31		42		31		130
FQHC	2		2		5		2		11
Public Health Clinic	32		0		1		0		33
Rural Health Clinic	0		1		3		0		4
Total	62		37		63		33		195*

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; POS = point of sale;
*Total number of beneficiaries may be more than number of beneficiaries vaccinated (in Table 2-a), since some beneficiaries may have been vaccinated at multiple places of service, and be represented under more than one plan if they changed plans during the study period

Notes concerning HPV vaccines:

- 193 eligible adult beneficiaries received HPV vaccination in CY 2019
- Beneficiaries almost exclusively received HPV vaccination in the Medical setting. Only Magnolia had a few beneficiaries with claims paid through the pharmacy benefit.

Measles, mumps, and rubella vaccination (MMR):

MMR vaccination is a 1 or 2 dose series recommended for adults who do not have evidence of immunity to measles, mumps, or rubella (evidence of immunity consists of being born before 1957, documentation of receipt of MMR vaccine, laboratory evidence of immunity or disease). MMR vaccination is contraindicated during pregnancy or in individuals that are immunocompromised (*individuals with HIV infection and CD4 counts ≥ 200 may still receive MMR vaccination).*

TABLE 3-a: Demographics of Beneficiaries Administered MMR Vaccine

Eligible Population - 231,231*

Variable	FFS		UHC		Magnolia		Molina		Total
Age Category (yrs)									
19 to 25	2	40.0%	1	14.3%	2	7.7%	0	0.0%	5
26 to 44	1	20.0%	3	42.9%	18	69.2%	1	100.0%	23
45 to 64	1	20.0%	3	42.9%	6	23.1%	0	0.0%	10
65+	1	20.0%	0	0.0%	0	0.0%	0	0.0%	1
Total	*5*		*7*		*26*		*1*		***39***
Gender									
Female	4	80.0%	7	100.0%	25	96.2%	1	100.0%	37
Male	1	20.0%	0	0.0%	1	3.8%	0	0.0%	2
Total	*5*		*7*		*26*		*1*		***39***
Race									
African American	4	80.0%	4	57.1%	18	69.2%	0	0.0%	23
Caucasian	1	20.0%	3	42.9%	7	26.9%	1	100.0%	15
Other	0	0.0%	0	0.0%	1	3.8%	0	0.0%	1
Total	*5*		*7*		*26*		*1*		***39***

Note: FFS = Fee for Service, UHC = United HealthCare; age calculated as of first vaccination in 2019;

*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019. Additionally, beneficiaries that were pregnant during calendar year 2019 or had immunocompromising conditions were excluded.

TABLE 3-b: Place of Service for Beneficiaries Administered MMR Vaccine					
Place of Service	Plan at Vaccination				Total
	FFS	UHC	Magnolia	Molina	
POS	**0**	**0**	**17**	**0**	**17**
Medical	**5**	**7**	**9**	**1**	**22**
Office Visit	3	2	7	1	13
Public Health Clinic	2	2	0	0	4
FQHC	0	2	1	0	3
Rural Health Clinic	0	1	1	0	2
Total	***5***	***7***	***26***	***1***	***39***

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; POS = point of sale;

Notes concerning MMR vaccines:

- 39 beneficiaries had documentation of MMR vaccination during the study period.
- Of those 39, 43.6% (17/39) received vaccination in a pharmacy setting. All 17 of those beneficiaries were in Magnolia.

Tetanus and Diphtheria Toxoids and Acellular Pertussis Vaccines (Tdap/Td):

Tdap vaccine is recommended for all adults that have not previously received Tdap at or after age 11 years. For individuals that did not receive the primary vaccination series, a series should be given to include 1 dose of Tdap followed by 1 dose of Td or Tdap at least 4 weeks later and another dose of Td or Tdap 6-12 months after last Td or Tdap. The initial Tdap vaccination should be followed every 10 years with either Td or Tdap. One dose of Tdap is also recommended during each pregnancy.[2]

TABLE 4-a: Demographics of Beneficiaries Administered Tdap Vaccine									
Eligible Population - 259,594*									
Variable	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
Age Category (yrs)									
19 to 25	174	24.3%	315	24.5%	401	23.6%	540	57.3%	1,430
26 to 44	234	32.7%	599	46.6%	785	46.3%	364	38.6%	1,982
45 to 64	245	34.3%	371	28.8%	510	30.1%	38	4.0%	1,164
65+	62	8.7%	1	0.1%	0	0.0%	0	0.0%	63
Total	*715*		*1,286*		*1,696*		*942*		***4,639***
Gender									
Female	499	69.8%	983	76.4%	1,296	76.4%	894	94.9%	3,672
Male	216	30.2%	303	23.6%	400	23.6%	48	5.1%	967
Total	*715*		*1,286*		*1,696*		*942*		***4,639***
Race									
African American	381	53.3%	679	52.8%	942	55.5%	522	55.4%	2,524
Caucasian	284	39.7%	493	38.3%	599	35.3%	377	40.0%	1,753
Hispanic	2	0.3%	9	0.7%	6	0.4%	8	0.8%	25
Other	48	6.7%	105	8.2%	149	8.8%	35	3.7%	337
Total	*715*		*1,286*		*1,696*		*942*		***4,639***

Note: FFS = Fee for Service, UHC = United HealthCare; age calculated as of first vaccination in 2019;
*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019;

TABLE 4-b: Place of Service for Beneficiaries Administered Tdap Vaccine					
Place of Service	**Plan at Vaccination**				**Total**
	FFS	**UHC**	**Magnolia**	**Molina**	
POS	**0**	**0**	**89**	**0**	**89**
Medical	**339**	**671**	**874**	**720**	**2,604**
Office Visit	258	523	598	628	2,007
Rural Health Clinic	56	90	181	69	396
FQHC	12	41	80	12	145
Public Health Clinic	2	4	6	7	19
Outpatient Hospital	4	7	2	2	15
Urgent Care Facility	2	3	6	0	11
Inpatient	5	0	0	2	7
Mass Immunization Center	0	2	0	0	2
Independent Clinic	0	1	1	0	2
Total	***339***	***671***	***963***	***720***	***2,693****

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; POS = point of sale
*1,946 beneficiaries were missing information on the place of service.

TABLE 5-a: Demographics of Beneficiaries Administered Td Vaccine									
Eligible Population - 259,594*									
Variable	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
Age Category (yrs)									
19 to 25	44	26.0%	44	16.4%	27	8.4%	14	21.5%	129
26 to 44	59	34.9%	112	41.6%	163	50.5%	37	56.9%	371
45 to 64	50	29.6%	111	41.3%	132	40.9%	14	21.5%	307
65+	16	9.5%	2	0.7%	1	0.3%	0	0.0%	19
Total	*169*		*269*		*323*		*65*		***826***
Gender									
Female	111	65.7%	172	63.9%	190	58.8%	40	61.5%	513
Male	58	34.3%	97	36.1%	133	41.2%	25	38.5%	313
Total	*169*		*269*		*323*		*65*		***826***
Race									
African American	88	52.1%	128	47.6%	172	53.3%	34	52.3%	422
Caucasian	68	40.2%	94	34.9%	104	32.2%	23	35.4%	289
Hispanic	1	0.6%	2	0.7%	2	0.6%	0	0.0%	5
Other	12	7.1%	45	16.7%	45	13.9%	8	12.3%	110
Total	*169*		*269*		*323*		*65*		***826***

Note: FFS = Fee for Service, UHC = United HealthCare; age calculated as of first vaccination in 2019;

*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019;

TABLE 5-b: Place of Service for Beneficiaries Administered Td Vaccine					
Place of Service	**Plan at Vaccination**				**Total**
	FFS	**UHC**	**Magnolia**	**Molina**	
POS	**0**	**0**	**0**	**0**	**0**
Medical	**39**	**66**	**72**	**13**	**190**
Office Visit	34	44	44	7	129
Rural Health Clinic	4	8	13	4	29
Urgent Care Facility	1	10	5	1	17
FQHC	0	2	9	1	12
Independent Clinic	0	2	1	0	3
Total	***39***	***66***	***72***	***13***	***190****

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; POS = point of sale

*636 beneficiaries were missing information on the place of service

Notes concerning Tdap/Td vaccines:

- 5,438 unique beneficiaries had documentation of Tdap/Td vaccination during the study period.
- Only 1.6% (89/5,438) received Tdap/Td vaccination through pharmacy services, and they were all in Magnolia.

Varicella Vaccine:

Varicella vaccine is recommended for the prevention of chickenpox for any adult with no evidence of immunity to varicella. Evidence of immunity could include documentation of previous vaccination with 2 varicella containing vaccines at least 4 weeks apart, diagnosis or verification of history of varicella or herpes zoster, or laboratory evidence of disease or immunity. Varicella vaccination is contraindicated during pregnancy or in individuals that are immunocompromised (*individuals with HIV infection and CD4 counts ≥ 200 may still receive varicella vaccine).*[2]

TABLE 6-a: Demographics of Beneficiaries Administered VAR Vaccine

Eligible Population - 231,231*									
Variable	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
Age Category (yrs)									
19 to 25	1	100.0%	1	11.1%	2	22.2%	1	50.0%	5
26 to 44	0	0.0%	8	88.9%	7	77.8%	1	50.0%	16
45 to 64	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
65+	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
Total	*1*		*9*		*9*		*2*		***21***
Gender									
Female	1	100.0%	9	100.0%	8	88.9%	2	100.0%	20
Male	0	0.0%	0	0.0%	1	11.1%	0	0.0%	1
Total	*1*		*9*		*9*		*2*		***21***
Race									
African American	0	0.0%	7	77.8%	5	55.6%	1	50.0%	13
Caucasian	1	100.0%	1	11.1%	3	33.3%	1	50.0%	6
Other	0	0.0%	1	11.1%	1	11.1%	0	0.0%	2
Total	*1*		*9*		*9*		*2*		***21***

Note: FFS = Fee for Service, UHC = United HealthCare; age calculated as of first vaccination in 2019;

*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019. Additionally, beneficiaries that were pregnant during calendar year 2019 or had immunocompromising conditions were excluded.

TABLE 6-b: Place of Service for Beneficiaries Administered VAR Vaccine

Place of Service	**Plan at Vaccination**				**Total**
	FFS	**UHC**	**Magnolia**	**Molina**	
POS	**0**	**0**	**3**	**0**	**3**
Medical	**1**	**9**	**6**	**1**	**17**
Office Visit	1	8	3	0	12
FQHC	0	1	1	1	3
Rural Health Clinic	0	0	2	0	2
Total	***1***	***9***	***9***	***1***	***20****

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; POS = point of sale

*One beneficiary was missing information on the place of vaccination

Notes concerning varicella vaccine:

- Only 21 beneficiaries had documentation of varicella vaccination during the study period.
- Of those, only 14.3% (3/21) received their vaccinations through pharmacy services, and they were all in Magnolia.

Pneumococcal Vaccine

There are 2 types of pneumococcal vaccines, pneumococcal 13-valent conjugate vaccine (PCV13) and pneumococcal 23-valent polysaccharide vaccine (PPSV23). PPSV23 vaccine is recommended for all adults 65 years and older. Pneumococcal vaccination is also recommended for adults aged 19 through 64 with certain chronic medical conditions, immunocompromising conditions, alcoholism, or cigarette smoking.[2]

TABLE 7-a: Demographics of Beneficiaries Administered Pneumococcal Vaccine

Eligible Population - 259,594*

Variable	FFS		UHC		Magnolia		Molina		Total
Age Category (yrs)									
19-25	325	12.0%	595	12.1%	747	10.3%	662	43.3%	2,329
26-44	582	21.5%	1,751	35.6%	2,603	36.0%	640	41.9%	5,576
45-64	1,485	54.8%	2,558	52.0%	3,873	53.5%	226	14.8%	8,142
65+	320	11.8%	16	0.3%	14	0.2%	0	0.0%	350
Total	*2,712*		*4,920*		*7,237*		*1,528*		***16,397***
Gender									
Female	1,841	67.9%	3,433	69.8%	5,094	70.4%	1,337	87.5%	11,705
Male	871	32.1%	1,487	30.2%	2,143	29.6%	191	12.5%	4,692
Total	*2,712*		*4,920*		*7,237*		*1,528*		***16,397***
Race									
Caucasian	1,067	39.3%	1,858	37.8%	2,508	34.7%	569	37.2%	6,002
African American	1,421	52.4%	2,396	48.7%	3,829	52.9%	846	55.4%	8,492
Other	224	8.3%	666	13.5%	900	12.4%	113	7.4%	1,903
Total	*2,712*		*4,920*		*7,237*		*1,528*		***16,397***

Note: FFS = Fee for Service, UHC = United HealthCare; age calculated as of first vaccination in 2019;
*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019.

TABLE 7-b: Place of Service for Beneficiaries Administered Pneumococcal Vaccine									
Place of Service	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
POS	30	1.1%	115	2.9%	183	2.9%	7	0.6%	335
Medical	2,709	98.9%	3,897	97.1%	6,036	97.1%	1,231	99.4%	13,873
Telehealth	0		1		1		0		2
School	1		0		0		0		1
Office Visit	2,100		2,723		3,987		926		9,736
Mobile Unit	0		2		13		1		16
Off Campus - Outpatient Hospital	1		0		0		0		1
Urgent Care Facility	15		34		25		3		77
Inpatient Hospital	1		0		0		0		1
Outpatient Hospital	44		28		23		4		99
Independent Clinic	0		0		1		0		1
FQHC	204		505		866		144		1,719
State or Local Public Health Clinic	78		26		32		17		153
Rural Health Clinic	265		578		1,088		136		2,067
Total	**2,739**		**4,012**		**6,219**		**1,238**		**14,208***

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; POS = point of sale;
*2,697 beneficiaries had a missing information for place of service; A beneficiary may be represented more than once if they received multiple vaccinations at different places of service.

Notes concerning pneumococcal vaccine:

- 16,397 adult beneficiaries had documentation of pneumococcal vaccination during the study period.
- Of those, only 2% (335/16,397) received their vaccinations through pharmacy services.

Meningococcal Vaccine:

There are 2 types of meningococcal vaccinations available, meningococcal conjugate vaccine MenACWY) and serogroup B meningococcal vaccine (MenB). MenACWY is a 1 or 2 dose series recommended for adults with anatomical or functional asplenia, HIV infection, persistent complement deficiency, or complement inhibitor use. It is also recommended for travelers to countries with hyperendemic or epidemic meningococcal disease and for first year college students living in residential housing or military recruits. MenB is a 2 or 3 dose series recommended for adults with anatomical or functional asplenia, persistent complement component deficiency, complement inhibitor use, or microbiologists routinely exposed to *Neisseria meningitides*.[2]

TABLE 8-a: Demographics of Beneficiaries Administered Meningococcal Vaccine									
Eligible Population - 259,594*									
Variable	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
Age Category (yrs)									
19-25	6	85.7%	3	6.4%	10	13.5%	1	25.0%	20
26-44	1	14.3%	19	40.4%	25	33.8%	1	25.0%	46
45-64	0	0.0%	25	53.2%	39	52.7%	2	50.0%	66
65+	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
Total	*7*		*47*		*74*		*4*		***132***
Gender									
Female	5	71.4%	26	55.3%	43	58.1%	1	25.0%	75
Male	2	28.6%	21	44.7%	31	41.9%	3	75.0%	57
Total	*7*		*47*		*74*		*4*		***132***
Race									
Caucasian	2	28.6%	4	8.5%	3	4.1%	1	25.0%	10
African American	5	71.4%	31	66.0%	58	78.4%	2	50.0%	96
Other	0	0.0%	12	25.5%	13	17.6%	1	25.0%	26
Total	*7*		*47*		*74*		*4*		***132***

Note: FFS = Fee for Service, UHC = United HealthCare; age calculated as of first vaccination in 2019;
*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019.

TABLE 8-b: Place of Service for Beneficiaries Administered Meningococcal Vaccine									
Place of Service	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
POS	0	0.0%	0	0.0%	2	11.1%	0	0.0%	2
Medical	6	100.0%	2	100.0%	16	88.9%	1	100.0%	25
Office Visit	4		2		11		0		17
Outpatient Hospital	0		0		1		0		1
FQHC	1		0		2		1		4
State or Local Public Health Clinic	1		0		0		0		1
Rural Health Clinic	0		0		2		0		2
Total	**6**		**2**		**18**		**1**		**27***

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; POS = point of sale;
*105 beneficiaries had missing information for place of service;

Notes concerning pneumococcal vaccine:

- 132 adult beneficiaries had documentation of meningococcal vaccination during the study period.
- Of those, 1.5% (2/132) received their vaccinations through pharmacy services, both in Magnolia.

Zoster Vaccine:

There are two types of vaccines recommended for prevention of shingles, recombinant zoster vaccine (RZV) and zoster live vaccine (ZVL). Recombinant zoster vaccine is the preferred shingles vaccine. RZV is a 2 dose series recommended for individuals $\geq$ 50 years and while ZVL is one dose recommended for those $\geq$ 60 years. Both zoster vaccines are not recommended during pregnancy or in individuals that are immunocompromised.[2]

TABLE 9-a: Demographics of Beneficiaries Administered Zoster Vaccine									
Eligible Population - 137,203*									
Variable	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
Age Category (yrs)	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
50-64	49	92%	40	100%	74	99%	1	100%	164
65+	4	8%	0	0%	1	1%	0	0%	5
Total	*53*		*40*		*75*		*1*		***169***
Gender									
Female	29	55%	30	75%	46	61%	1	100%	106
Male	24	45%	10	25%	29	39%	0	0%	63
Total	*53*		*40*		*75*		*1*		***169***
Race									
Caucasian	31	58%	16	40%	29	39%	1	100%	77
African American	21	40%	13	33%	29	39%	0	0%	63
Other	1	2%	11	28%	17	23%	0	0%	29
Total	*53*		*40*		*75*		*1*		***169***
*Eligible beneficiaries were predefined as beneficiaries aged 50 years or older who had 12 months continuous eligibility in 2019. Additionally, beneficiaries that were pregnant during calendar year 2019 or had immunocompromising conditions were excluded.									

TABLE 9-b: Place of Service for Beneficiaries Administered Zoster Vaccine									
Place of Service	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
	N	%	N	%	N	%	N	%	N
POS	39	73.6%	37	92.5%	55	73.3%	1	100.0%	132
Medical	14	26.4%	3	7.5%	20	26.7%	0	0.0%	37
Office Visit	13		2		19		0		34
Rural Health Clinic	1		1		1		0		3
Total	53		40		75		1		169
Note: FFS = Fee for Service, UHC = United HealthCare; POS = point of sale;									

Notes concerning zoster vaccine:

- 169 adult beneficiaries had documentation of zoster vaccination during the study period.
- Of those, 78.1% (132/169) received their vaccinations through pharmacy services.

Hepatitis Vaccines:

Hepatitis A vaccine is a 2 or 3 dose series recommended for adults at risk or who want protection against hepatitis A. At risk individuals include those with chronic liver disease, HIV infection, men who have sex with men, drug use (injection or non-injection), persons experiencing homelessness, individuals who work with hepatitis A virus or in a high risk exposure environment, or travel to foreign countries with endemic hepatitis A.[2]

Hepatitis B vaccine is a 2 or 3 dose series recommended for adults at risk or who want protection against hepatitis B. At risk individuals include those with chronic liver failure, HIV infection, sexual exposure risk, current or recent injection drug use, percutaneous or mucosal risk for exposure to blood, incarcerated persons, or travel to foreign countries with endemic hepatitis B.[2]

TABLE 10-a: Demographics of Beneficiaries Administered Hepatitis Vaccine									
Eligible Population - 259,594*									
Variable	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
Age Category (yrs)	N	%	N	%	N	%	N	%	**N**
19-25	12	5.2%	9	5.0%	21	7.4%	1	3.1%	43
26-44	68	29.4%	61	33.9%	111	38.9%	16	50.0%	256
45-64	111	48.1%	109	60.6%	153	53.7%	15	46.9%	388
65+	40	17.3%	1	0.6%	0	0.0%	0	0.0%	41
Total	*231*		*180*		*285*		*32*		***728***
Gender									
Female	127	55.0%	115	63.9%	172	60.4%	20	62.5%	434
Male	104	45.0%	65	36.1%	113	39.6%	12	37.5%	294
Total	*231*		*180*		*285*		*32*		***728***
Race									
Caucasian	55	23.8%	54	30.0%	103	36.1%	15	46.9%	227
African American	149	64.5%	92	51.1%	145	50.9%	13	40.6%	399
Other	27	11.7%	34	18.9%	37	13.0%	4	12.5%	102
Total	*231*		*180*		*285*		*32*		***728***

Note: All forms of Hep A and Hep B vaccines were included in this analysis;
*Eligible beneficiaries were predefined as beneficiaries aged 19 years or older who had 12 months continuous eligibility in 2019.

TABLE 10-b: Place of Service for Beneficiaries Administered Hepatitis Vaccine									
Place of Service	**FFS**		**UHC**		**Magnolia**		**Molina**		**Total**
	N	%	N	%	N	%	N	%	**N**
POS	0	0.0%	0	0.0%	49	28.7%	4	33.3%	53
Medical	66	100.0%	90	100.0%	122	71.3%	8	66.7%	286
Office Visit	52		59		70		6		187
Outpatient Hospital	0		1		2		0		3
FQHC	8		17		32		1		58
Mass Immunization Center	0		1		0		0		1
State or Local Public Health Clinic	2		3		3		1		9
Rural Health Clinic	4		9		15		0		28
Total	66		90		171		12		339*

Note: FFS = Fee for Service, UHC = United HealthCare; FQHC = Federally Qualified Health Center; POS = point of sale;
*399 beneficiearies had missising information for place of service. A beneficiary may be represented more than once if they received multiple vaccinations at different places of service.

Notes concerning hepatitis vaccines:

- 728 adult beneficiaries had documentation of hepatitis (Hep A or Hep B) vaccination during the study period.
- Of those, 7.2% (53/728) received vaccinations through pharmacy services.

CONCLUSIONS

Increasing vaccination rates among Medicaid beneficiaries is one of DOM's priorities. Through the expansion of the Vaccine SPA, pharmacists will have the opportunity to play a vital role in increasing beneficiary access to vaccines and thus improving vaccination rates. Currently there is limited administration of adult vaccines in the pharmacy setting. This report serves as a reference tool for gauging future pharmacy involvement in adult vaccine administration.

RECOMMENDATIONS

1. Upon CMS approval of the Vaccine SPA, DOM should begin an educational initiative targeting pharmacists. The education should highlight the expanded opportunities granted pharmacists through the updated SPA and serve as a call to action for pharmacists to actively engage in adult immunizations.

References:

1. Vaccination Coverage among Adults in the United States, National Health Interview Survey, 2017. Published May 8, 2019. Accessed August 12, 2020. https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/pubs-resources/NHIS-2017.html

2. CDC Recommended Adult Vaccine Schedule 2020. Accessed August 7, 2020. https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf

3. Mississippi Division of Medicaid, Administrative Code, Title 23: Medicaid Part 224 Immunizations. Accessed August 7, 2020. https://medicaid.ms.gov/wp-content/uploads/2014/01/Admin-Code-Part-224.pdf

Appendix A: CDC Recommended Adult Immunization Schedule[2]

Recommended Adult Immunization Schedule
for ages 19 years or older

UNITED STATES
2020

How to use the adult immunization schedule

1 Determine recommended vaccinations by age **(Table 1)**

2 Assess need for additional recommended vaccinations by medical condition and other indications **(Table 2)**

3 Review vaccine types, frequencies, and intervals and considerations for special situations **(Notes)**

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American College of Physicians (www.acponline.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), and American College of Nurse-Midwives (www.midwife.org).

Vaccines in the Adult Immunization Schedule*

Vaccines	Abbreviations	Trade names
Haemophilus influenzae type b vaccine	Hib	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis A and hepatitis B vaccine	HepA-HepB	Twinrix®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB® Heplisav-B®
Human papillomavirus vaccine	HPV vaccine	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Many brands
Influenza vaccine (live, attenuated)	LAIV	FluMist® Quadrivalent
Influenza vaccine (recombinant)	RIV	Flublok® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R® II
Meningococcal serogroups A, C, W, Y vaccine	MenACWY	Menactra® Menveo®
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero® Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax® 23
Tetanus and diphtheria toxoids	Td	Tenivac® Tdvax™
Tetanus and diphtheria toxoids and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Varicella vaccine	VAR	Varivax®
Zoster vaccine, recombinant	RZV	Shingrix
Zoster vaccine live	ZVL	Zostavax®

*Administer recommended vaccines if vaccination history is incomplete or unknown. Do not restart or add doses to vaccine series if there are extended intervals between doses. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Report
- Suspected cases of reportable vaccine-preventable diseases or outbreaks to the local or state health department
- Clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System at www.vaers.hhs.gov or 800-822-7967

Injury claims
All vaccines included in the adult immunization schedule except pneumococcal 23-valent polysaccharide (PPSV23) and zoster (RZV, ZVL) vaccines are covered by the Vaccine Injury Compensation Program. Information on how to file a vaccine injury claim is available at www.hrsa.gov/vaccinecompensation.

Questions or comments
Contact www.cdc.gov/cdc-info or 800-CDC-INFO (800-232-4636), in English or Spanish, 8 a.m.–8 p.m. ET, Monday through Friday, excluding holidays.

Download the CDC Vaccine Schedules App for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information
- Complete ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual
- Travel vaccine recommendations: www.cdc.gov/travel
- Recommended Child and Adolescent Immunization Schedule, United States, 2020: www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CS310021-A

Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2020

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or **Influenza recombinant** (RIV)	1 dose annually	1 dose annually	1 dose annually	1 dose annually
Influenza live, attenuated (LAIV)	1 dose annually	1 dose annually		
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap, then Td or Tdap booster every 10 years			
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)			
Varicella (VAR)	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV) *(preferred)*			2 doses	2 doses
Zoster live (ZVL)				1 dose
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal conjugate (PCV13)	1 dose			65 years and older
Pneumococcal polysaccharide (PPSV23)	1 or 2 doses depending on indication			1 dose
Hepatitis A (HepA)	2 or 3 doses depending on vaccine			
Hepatitis B (HepB)	2 or 3 doses depending on vaccine			
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, see notes for booster recommendations			
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations			
	19 through 23 years			
***Haemophilus influenzae* type b** (Hib)	1 or 3 doses depending on indication			

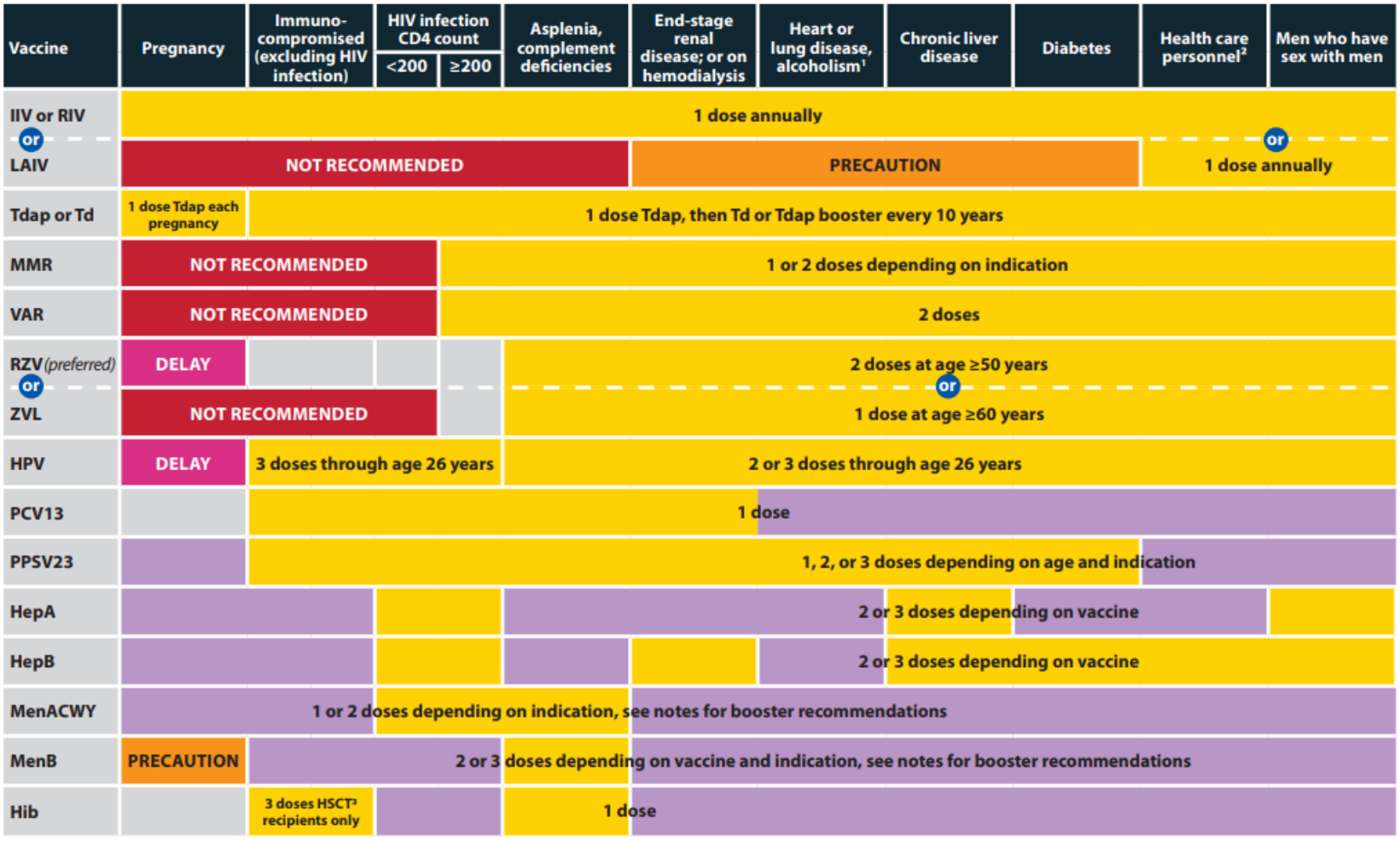
Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended vaccination for adults with an additional risk factor or another indication

Recommended vaccination based on shared clinical decision-making

No recommendation/ Not applicable

Table 2 Recommended Adult Immunization Schedule by Medical Condition and Other Indications, United States, 2020



1. Precaution for LAIV does not apply to alcoholism. **2.** See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. **3.** Hematopoietic stem cell transplant.

Notes Recommended Adult Immunization Schedule, United States, 2020

Haemophilus influenzae type b vaccination

Special situations

- **Anatomical or functional asplenia (including sickle cell disease)**: 1 dose if previously did not receive Hib; if elective splenectomy, 1 dose, preferably at least 14 days before splenectomy
- **Hematopoietic stem cell transplant** (HSCT): 3-dose series 4 weeks apart starting 6–12 months after successful transplant, regardless of Hib vaccination history

Hepatitis A vaccination

Routine vaccination

- **Not at risk but want protection from hepatitis A** (identification of risk factor not required): 2-dose series HepA (Havrix 6–12 months apart or Vaqta 6–18 months apart [minimum interval: 6 months]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: 4 weeks between doses 1 and 2/5 months between doses 2 and 3])

Special situations

- **At risk for hepatitis A virus infection**: 2-dose series HepA or 3-dose series HepA-HepB as above
  - **Chronic liver disease** (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal)
  - **HIV infection**
  - **Men who have sex with men**
  - **Injection or noninjection drug use**
  - **Persons experiencing homelessness**
  - **Work with hepatitis A virus** in research laboratory or with nonhuman primates with hepatitis A virus infection
  - **Travel in countries with high or intermediate endemic hepatitis A**
  - **Close, personal contact with international adoptee** (e.g., household or regular babysitting) in first 60 days after arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee's arrival)
  - **Pregnancy** if at risk for infection or severe outcome from infection during pregnancy
  - **Settings for exposure, including** health care settings targeting services to injection or noninjection drug users or group homes and nonresidential day care facilities for developmentally disabled persons (individual risk factor screening not required)

Hepatitis B vaccination

Routine vaccination

- **Not at risk but want protection from hepatitis B** (identification of risk factor not required): 2- or 3-dose series (2-dose series Heplisav-B at least 4 weeks apart [2-dose series HepB only applies when 2 doses of Heplisav-B are used at least 4 weeks apart] or 3-dose series Engerix-B or Recombivax HB at 0, 1, 6 months [minimum intervals: 4 weeks between doses 1 and 2/8 weeks between doses 2 and 3/16 weeks between doses 1 and 3]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: 4 weeks between doses 1 and 2/5 months between doses 2 and 3])

Special situations

- **At risk for hepatitis B virus infection**: 2-dose (Heplisav-B) or 3-dose (Engerix-B, Recombivax HB) series or 3-dose series HepA-HepB (Twinrix) as above
  - **Chronic liver disease** (e.g., persons with hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice upper limit of normal)
  - **HIV infection**
  - **Sexual exposure risk** (e.g., sex partners of hepatitis B surface antigen [HBsAg]-positive persons; sexually active persons not in mutually monogamous relationships; persons seeking evaluation or treatment for a sexually transmitted infection; men who have sex with men)
  - **Current or recent injection drug use**
  - **Percutaneous or mucosal risk for exposure to blood** (e.g., household contacts of HBsAg-positive persons; residents and staff of facilities for developmentally disabled persons; health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids; hemodialysis, peritoneal dialysis, home dialysis, and predialysis patients; persons with diabetes mellitus age younger than 60 years and, at discretion of treating clinician, those age 60 years or older)
  - **Incarcerated persons**
  - **Travel in countries with high or intermediate endemic hepatitis B**
  - **Pregnancy** if at risk for infection or severe outcome from infection during pregnancy (Heplisav-B not currently recommended due to lack of safety data in pregnant women)

Human papillomavirus vaccination

Routine vaccination

- **HPV vaccination recommended for all adults through age 26 years**: 2- or 3-dose series depending on age at initial vaccination or condition:
  - **Age 15 years or older at initial vaccination**: 3-dose series at 0, 1–2, 6 months (minimum intervals: 4 weeks between doses 1 and 2/12 weeks between doses 2 and 3/5 months between doses 1 and 3; repeat dose if administered too soon)
  - **Age 9 through 14 years at initial vaccination and received 1 dose or 2 doses less than 5 months apart**: 1 dose
  - **Age 9 through 14 years at initial vaccination and received 2 doses at least 5 months apart**: HPV vaccination complete, no additional dose needed.
- **If completed valid vaccination series with any HPV vaccine, no additional doses needed**

Shared clinical decision-making

- **Age 27 through 45 years based on shared clinical decision-making**:
  - 2- or 3-dose series as above

Special situations

- **Pregnancy through age 26 years**: HPV vaccination is not recommended until after pregnancy; no intervention needed if vaccinated while pregnant; pregnancy testing not needed before vaccination

Notes

Recommended Adult Immunization Schedule, United States, 2020

Influenza vaccination

Routine vaccination

- **Persons age 6 months or older**: 1 dose any influenza vaccine appropriate for age and health status annually
- For additional guidance, see www.cdc.gov/flu/professionals/index.htm

Special situations

- **Egg allergy, hives only**: 1 dose any influenza vaccine appropriate for age and health status annually
- **Egg allergy more severe than hives** (e.g., angioedema, respiratory distress): 1 dose any influenza vaccine appropriate for age and health status annually in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions
- **LAIV should not be used** in persons with the following conditions or situations:
  - History of severe allergic reaction to any vaccine component (excluding egg) or to a previous dose of any influenza vaccine
  - Immunocompromised due to any cause (including medications and HIV infection)
  - Anatomic or functional asplenia
  - Cochlear implant
  - Cerebrospinal fluid-oropharyngeal communication
  - Close contacts or caregivers of severely immunosuppressed persons who require a protected environment
  - Pregnancy
  - Received influenza antiviral medications within the previous 48 hours
- **History of Guillain-Barré syndrome within 6 weeks of previous dose of influenza vaccine**: Generally should not be vaccinated unless vaccination benefits outweigh risks for those at higher risk for severe complications from influenza

Measles, mumps, and rubella vaccination

Routine vaccination

- **No evidence of immunity to measles, mumps, or rubella**: 1 dose
  - **Evidence of immunity**: Born before 1957 (health care personnel, see below), documentation of receipt of MMR vaccine, laboratory evidence of immunity or disease (diagnosis of disease without laboratory confirmation is not evidence of immunity)

Special situations

- **Pregnancy with no evidence of immunity to rubella**: MMR contraindicated during pregnancy; after pregnancy (before discharge from health care facility), 1 dose
- **Nonpregnant women of childbearing age with no evidence of immunity to rubella**: 1 dose
- **HIV infection with CD4 count ≥200 cells/μL for at least 6 months and no evidence of immunity to measles, mumps, or rubella**: 2-dose series at least 4 weeks apart; MMR contraindicated in HIV infection with CD4 count <200 cells/μL
- **Severe immunocompromising conditions**: MMR contraindicated
- **Students in postsecondary educational institutions, international travelers, and household or close, personal contacts of immunocompromised persons with no evidence of immunity to measles, mumps, or rubella**: 2-dose series at least 4 weeks apart if previously did not receive any doses of MMR or 1 dose if previously received 1 dose MMR
- **Health care personnel**:
  - **Born in 1957 or later with no evidence of immunity to measles, mumps, or rubella**: 2-dose series at least 4 weeks apart for measles or mumps or at least 1 dose for rubella
  - **Born before 1957 with no evidence of immunity to measles, mumps, or rubella**: Consider 2-dose series at least 4 weeks apart for measles or mumps or 1 dose for rubella

Meningococcal vaccination

Special situations for MenACWY

- **Anatomical or functional asplenia (including sickle cell disease), HIV infection, persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use**: 2-dose series MenACWY (Menactra, Menveo) at least 8 weeks apart and revaccinate every 5 years if risk remains
- **Travel in countries with hyperendemic or epidemic meningococcal disease, microbiologists routinely exposed to *Neisseria meningitidis***: 1 dose MenACWY (Menactra, Menveo) and revaccinate every 5 years if risk remains
- **First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) and military recruits**: 1 dose MenACWY (Menactra, Menveo)

Shared clinical decision-making for MenB

- **Adolescents and young adults age 16 through 23 years (age 16 through 18 years preferred) not at increased risk for meningococcal disease**: Based on shared clinical decision-making, 2-dose series MenB-4C at least 1 month apart or 2-dose series MenB-FHbp at 0, 6 months (if dose 2 was administered less than 6 months after dose 1, administer dose 3 at least 4 months after dose 2); MenB-4C and MenB-FHbp are not interchangeable (use same product for all doses in series)

Special situations for MenB

- **Anatomical or functional asplenia (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use, microbiologists routinely exposed to *Neisseria meningitidis***: 2-dose primary series MenB-4C (Bexsero) at least 1 month apart or 3-dose primary series MenB-FHbp (Trumenba) at 0, 1–2, 6 months (if dose 2 was administered at least 6 months after dose 1, dose 3 not needed); MenB-4C and MenB-FHbp are not interchangeable (use same product for all doses in series); 1 dose MenB booster 1 year after primary series and revaccinate every 2–3 years if risk remains
- **Pregnancy**: Delay MenB until after pregnancy unless at increased risk and vaccination benefits outweigh potential risks

Notes Recommended Adult Immunization Schedule, United States, 2020

Pneumococcal vaccination

Routine vaccination

- **Age 65 years or older** (immunocompetent–see www.cdc.gov/mmwr/volumes/68/wr/mm6846a5.htm?s_cid=mm6846a5_w): 1 dose PPSV23
  - If PPSV23 was administered prior to age 65 years, adminster 1 dose PPSV23 at least 5 years after previous dose

Shared clinical decision-making

- **Age 65 years and older** (immunocompetent): 1 dose PCV13 based on **shared clinical decision-making**
  - If both PCV13 and PPSV23 are to be administered, PCV13 should be administered first
  - PCV13 and PPSV23 should be administered at least 1 year apart
  - PCV13 and PPSV23 should not be administered during the same visit

Special situations

(see www.cdc.gov/mmwr/volumes/68/wr/mm6846a5.htm?s_cid=mm6846a5_w)

- **Age 19 through 64 years with chronic medical conditions (chronic heart [excluding hypertension], lung, or liver disease, diabetes), alcoholism, or cigarette smoking**: 1 dose PPSV23
- **Age 19 years or older with immunocompromising conditions (congenital or acquired immunodeficiency [including B- and T-lymphocyte deficiency, complement deficiencies, phagocytic disorders, HIV infection], chronic renal failure, nephrotic syndrome, leukemia, lymphoma, Hodgkin disease, generalized malignancy, iatrogenic immunosuppression [e.g., drug or radiation therapy], solid organ transplant, multiple myeloma) or anatomical or functional asplenia (including sickle cell disease and other hemoglobinopathies)**: 1 dose PCV13 followed by 1 dose PPSV23 at least 8 weeks later, then another dose PPSV23 at least 5 years after previous PPSV23; at age 65 years or older, administer 1 dose PPSV23 at least 5 years after most recent PPSV23 (note: only 1 dose PPSV23 recommended at age 65 years or older)
- **Age 19 years or older with cerebrospinal fluid leak or cochlear implant**: 1 dose PCV13 followed by 1 dose PPSV23 at least 8 weeks later; at age 65 years or older, administer another dose PPSV23 at least 5 years after PPSV23 (note: only 1 dose PPSV23 recommended at age 65 years or older)

Tetanus, diphtheria, and pertussis vaccination

Routine vaccination

- **Previously did not receive Tdap at or after age 11 years**: 1 dose Tdap, then Td or Tdap every 10 years

Special situations

- **Previously did not receive primary vaccination series for tetanus, diphtheria, or pertussis**: At least 1 dose Tdap followed by 1 dose Td or Tdap at least 4 weeks after Tdap and another dose Td or Tdap 6–12 months after last Td or Tdap (Tdap can be substituted for any Td dose, but preferred as first dose); Td or Tdap every 10 years thereafter
- **Pregnancy**: 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36
- For information on use of Td or Tdap as tetanus prophylaxis in wound management, see www.cdc.gov/mmwr/volumes/67/rr/rr6702a1.htm

Varicella vaccination

Routine vaccination

- **No evidence of immunity to varicella**: 2-dose series 4–8 weeks apart if previously did not receive varicella-containing vaccine (VAR or MMRV [measles-mumps-rubella-varicella vaccine] for children); if previously received 1 dose varicella-containing vaccine, 1 dose at least 4 weeks after first dose
  - Evidence of immunity: U.S.-born before 1980 (except for pregnant women and health care personnel [see below]), documentation of 2 doses varicella-containing vaccine at least 4 weeks apart, diagnosis or verification of history of varicella or herpes zoster by a health care provider, laboratory evidence of immunity or disease

Special situations

- **Pregnancy with no evidence of immunity to varicella**: VAR contraindicated during pregnancy; after pregnancy (before discharge from health care facility) 1 dose if previously received 1 dose varicella-containing vaccine or dose 1 of 2-dose series (dose 2: 4–8 weeks later) if previously did not receive any varicella-containing vaccine, regardless of whether U.S.-born before 1980
- **Health care personnel with no evidence of immunity to varicella**: 1 dose if previously received 1 dose varicella-containing vaccine; 2-dose series 4–8 weeks apart if previously did not receive any varicella-containing vaccine, regardless of whether U.S.-born before 1980
- **HIV infection with CD4 count ≥200 cells/μL with no evidence of immunity**: Vaccination may be considered (2 doses, administered 3 months apart); VAR contraindicated in HIV infection with CD4 count <200 cells/μL
- **Severe immunocompromising conditions**: VAR contraindicated

Zoster vaccination

Routine vaccination

- **Age 50 years or older**: 2-dose series RZV (Shingrix) 2–6 months apart (minimum interval: 4 weeks; repeat dose if administered too soon), regardless of previous herpes zoster or history of ZVL (Zostavax) vaccination (administer RZV at least 2 months after ZVL)
- **Age 60 years or older**: 2-dose series RZV 2–6 months apart (minimum interval: 4 weeks; repeat if administered too soon) or 1 dose ZVL if not previously vaccinated. RZV preferred over ZVL (if previously received ZVL, administer RZV at least 2 months after ZVL)

Special situations

- **Pregnancy**: ZVL contraindicated; consider delaying RZV until after pregnancy if RZV is otherwise indicated
- **Severe immunocompromising conditions (including HIV infection with CD4 count <200 cells/μL)**: ZVL contraindicated; recommended use of RZV under review

Administrative Code

Title 23: Medicaid
Part 224
Immunizations

Table of Contents

Title 23: Division of Medicaid

Part 224: Immunizations

Part 224 Chapter 1: General

Rule 1.1: Reserved

Rule 1.2: Refer to Part 219, Rule 1.10.

Rule 1.3: Vaccines for Children (VFC) Program

A. The Division of Medicaid defines the Vaccines for Children (VFC) Program as a federally funded program that provides vaccines at no cost to Mississippi Medicaid providers registered as VFC providers. The Mississippi State Department of Health (MSDH) is the lead agency in administering the VFC Program and distributing the vaccines to VFC registered providers allowing for eligible children aged eighteen (18) and under to receive free vaccines.

B. The Division of Medicaid covers the administration of VFC vaccines for beneficiaries eighteen (18) years of age and younger according to the indications and guidelines of the Centers for Disease Control and Prevention (CDC).

C. The Division of Medicaid reimburses VFC providers an administration fee for each single or combination VFC vaccine at a rate set by the Division of Medicaid.

    1. The Division of Medicaid reimburses for the administration of vaccines to beneficiaries eighteen (18) years of age and younger only if the vaccines are obtained from the VFC Program through the MSDH.

    2. The Division of Medicaid reimburses for the administration of a VFC vaccine in addition to an Early and Periodic Screening, Diagnosis and Treatment (EPSDT) visit or physician office visit only when a separately identifiable service is provided at the time of the vaccine administration.

    3. The administration of a VFC vaccine is included in a Federally Qualified Health Center (FQHC), Rural Health Clinic (RHC) or the MSDH clinic encounter rate.

D. The Division of Medicaid reimburses for vaccines in long-term care facilities for residents whose only payment source is Medicaid:

    1. If the purchase and administration of the vaccine(s) is reported on the cost report, or

    2. If an outside VFC provider administers the vaccine(s) the Division of Medicaid reimburses the outside provider an administration fee and the long-term care facility cannot claim the cost on the Medicaid cost report.

E. Providers must bill Medicare for vaccine(s) covered by Medicare for dually-eligible beneficiaries.

F. The Division of Medicaid does not reimburse:

1. An RHC, FQHC or MSDH clinic an encounter rate solely for the administration of vaccines, or

2. For the cost of vaccines provided through the VFC program.

G. VFC providers must comply with all federal and state laws and MSDH guidelines and requirements of the VFC program including the following required documentation:

1. The date the beneficiary, or parent or legal representative if the beneficiary is a minor, received a current copy of the relevant federal Vaccine Information Statement (VIS) for each vaccine prior to the administration and confirmation the beneficiary was given an opportunity to discuss concerns,

2. The date of publication of the VIS,

3. The date the vaccination was given,

4. The vaccine manufacturer and lot number of the vaccine administered,

5. The signature and title of the individual who administered the vaccine, and

6. Any adverse events that occurred after vaccination.

Source: 42 USC §§ 1396s, 300aa-26; Miss. Code Ann. §§ 41-23-37, 43-13-121, 43-17-5.

History: Revised eff. 01/01/2016.

Rule 1.4: Vaccines for Beneficiaries Nineteen (19) Years of Age and Older

A. The Division of Medicaid covers the following vaccines according to the indications and guidelines of the Centers for Disease Control and Prevention (CDC):

1. Rabies,

2. Tetanus,

3. Influenza,

4. Pneumococcal,

5. Human Papilloma Virus (HPV),

6. Hepatitis B Virus (HBV),

7. Varicella,

8. Herpes Zoster, and

9. Measles, Mumps, and Rubella (MMR).

B. The Division of Medicaid reimburses:

1. A physician's office for:

   a) Each vaccine and its administration fee if the office visit is only for the administration of the vaccine(s), or

   b) Each vaccine, its administration fee and an Evaluation and Management (E&M) visit only when a separately identifiable service is provided at the time of the vaccine administration.

2. A Federally Qualified Health Center (FQHC), a Rural Health Clinic (RHC), and the Mississippi State Department of Health (MSDH) clinic providers an encounter rate for a core service which includes the vaccine(s) and its administration.

3. A long-term care facility for Medicaid only residents:

   a) On the cost report for the purchase and administration of the vaccine(s), or

   b) If an outside provider administers the vaccine(s) the Division of Medicaid reimburses the outside provider for each vaccine and its administration fee and the long-term care facility cannot claim the cost on the Medicaid cost report.

C. Providers must bill Medicare for vaccine(s) covered by Medicare for dually eligible beneficiaries.

D. The Division of Medicaid does not reimburse:

1. For the administration of the intra-nasal influenza vaccine, or

2. RHC, FQHC or MSDH clinics an encounter rate solely for the administration of the vaccine(s),

3. A long-term care facility for costs on the cost report:

a) Associated with the purchase or administration of vaccines if an outside provider administers the vaccine(s), or

b) For vaccines covered by Medicare.

E. Providers administering vaccines must document the following:

1. The edition date of the Vaccine Information Statement (VIS),

2. The date the VIS was provided,

3. The date the vaccination was given,

4. The vaccine manufacturer and lot number of the vaccine administered,

5. The signature and title of the individual who administered the vaccine, and

6. Any adverse events that occurred after vaccination.

Source: 42 USC § 300aa-26; Miss. Code Ann. 43-13-121.

History: Revised eff. 01/01/2016.

Rule 1.5: Refer to Part 224, Rules 1.3 and 1.4.

Rule1.6: Vaccines for Pregnant and Postpartum Beneficiaries

A. The Division of Medicaid covers the tetanus-diptheria-acellular pertussis (Tdap) vaccine for pregnant and postpartum beneficiaries that is Food and Drug Administration (FDA) approved or that follows medically accepted indications and dosing limits supported by one (1) or more of the official compendia as designated by the Centers for Medicare and Medicaid (CMS) when:

1. Administered to pregnant beneficiaries, during each pregnancy, twenty-seven (27) to thirty-six (36) weeks of the treating physician's expected date of delivery, or

2. Administered to a postpartum beneficiary immediately after delivery only if the beneficiary:

a) Did not get a dose of a Tdap vaccine during her pregnancy, and

b) Has never received a Tdap vaccine.

B. The Division of Medicaid does not reimburse a Tdap vaccine administration fee.

Source: Miss. Code Ann. §§ 43-13-117, 43-13-121.

FDA DRUG SAFETY COMMUNICATIONS

September 2020 – November 2020

- 9/23/2020 FDA requiring Boxed Warning updated to improve safe use of benzodiazepine drug class
- 9/24/2020 FDA warns about serious problems with high doses of the allergy medicine diphenhydramine (Benadryl)
- 10/15/2020 FDA recommends avoiding use of NSAIDs in pregnancy at 20 weeks or later because they can result in low amniotic fluid

APPENDIX

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.

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

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.

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 <u>move to close</u> 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 <u>declare</u> 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