

Calendar Year 2020 Annual Review of the SoonerCare Pharmacy Benefit

Oklahoma Health Care Authority
June 2021

Summary^{1,2,3,4,5,6}

During calendar year (CY) 2020, prescription drugs accounted for \$592.5 million of the approximately \$5.28 billion in total SoonerCare spending. According to the Centers for Medicare and Medicaid Services (CMS), the national health expenditure is projected to grow at an average rate of 5.4% annually, and Medicaid expenditures are expected to grow at a rate of 5.7% annually. Comparing SoonerCare pharmacy data from CY 2019, the total reimbursement increased 4.6% from CY 2019 to CY 2020, less than the CMS-estimated Medicaid expenditure increase. The annual pharmacy cost per member decreased from \$701.32 in CY 2019 to \$666.15 in CY 2020, which is a 5% decrease. Although there was a decrease in reimbursement per member, the specialty pharmaceutical products total pharmacy reimbursement continues to be on the incline as a result of orphan drug approvals for rare diseases, as well as numerous new oncology medications and the high costs associated with these therapies.

Indian Health Service (IHS) reimbursement was updated in 2017 to the Federal Office of Management and Budget encounter rate; therefore, in order to more accurately compare CY 2020 with previous years, IHS data was excluded from this analysis. Additionally, costs in this report do not reflect the federal and state supplemental rebates that are provided by medication manufacturers. The coverage and prior authorization criteria of many medications, particularly the anti-infective, attention-deficit/hyperactivity disorder (ADHD), antipsychotic, endocrine, and analgesic classes, are significantly influenced by supplemental rebates, and net costs are substantially lower than the total reimbursement to pharmacies included in this analysis.

Total Pharmacy State Fiscal Year (SFY) Comparison							
SFY	Claims	Members	Utilizers*	Reimbursement	Cost/Claim	Cost/Member	Cost/Day
2018*	5,802,025	1,020,726	535,823	\$543,569,067	\$93.70	\$532.62	\$3.61
2019*	5,508,417	998,209	516,569	\$555,643,845	\$100.87	\$556.64	\$3.80
2020	5,292,429	822,271 ^o	495,722	\$576,735,805	\$108.97	\$701.39	\$3.95

^oAverage monthly enrollment as obtained from OHCA Fast Facts reports

*Total number of unduplicated utilizers.

Reimbursement does not reflect rebated costs or net costs.

State Fiscal Year = July 1 to June 30

^oUtilization data as listed in the previous annual review of the SoonerCare pharmacy benefit report

Total Pharmacy Calendar Year (CY) Comparison							
CY	Claims	Members ^o	Utilizers*	Reimbursement	Cost/Claim	Cost/Member	Cost/Day
2018	5,662,452	816,009	529,885	\$554,467,343	\$97.92	\$679.49	\$3.73
2019	5,467,453	807,530	518,167	\$566,334,267	\$103.58	\$701.32	\$3.88
2020	5,056,276	889,437	469,039	\$592,497,789	\$117.18	\$666.15	\$4.02

^oAverage monthly enrollment as obtained from OHCA Fast Facts reports

*Total number of unduplicated utilizers

Reimbursement does not reflect rebated costs or net costs.

The per member per year (PMPY) value reflects the total pharmacy cost divided by the unduplicated number of members (total enrollees) for each time period. In order to reflect an accurate PMPY value, average monthly enrollment was used in place of annual enrollment, and dual eligible (members eligible for Medicare and Medicaid) and IHS members were excluded. The PMPY value is used across benefit plans with similar populations to accurately assess health care spending. The following table contains the overall PMPY values for the past few years.

Overall PMPY Calendar Year Comparison			
Calendar Year (CY)	CY 2018*	CY 2019*	CY 2020
Overall PMPY Value ^o	\$803	\$856	\$872

PMPY = per member per year

^oPMPY value calculated using average monthly enrollment, excluding dual eligible and IHS members.

*PMPY values as listed in the previous annual review of the SoonerCare pharmacy benefit report

Oklahoma currently uses a fee-for-service (FFS) pharmacy benefit for the SoonerCare program. Pharmacy benefit managers (PBMs) are used by some states for their FFS pharmacy programs, contracting out services such as claims processing and payment, prior authorization processing, drug utilization review (DUR), and formulary management. Similarly, Medicaid managed care organizations (MCOs) frequently subcontract the management of the pharmacy benefit to a separate PBM. The Oklahoma Health Care Authority (OHCA) currently contracts with Pharmacy Management Consultants (PMC), a department within the University of Oklahoma College of Pharmacy, for many of these services.

To measure the success of the SoonerCare pharmacy benefit management, Oklahoma's Medicaid statistics were compared to the Medicaid statistics of the largest PBM in the United States, Express Scripts (ESI). For CY 2020, ESI's Medicaid PMPY was \$1,214, making it 39% higher than OHCA's \$872. At the ESI PMPY rate, it would have cost OHCA over \$232.8 million more than the \$592.5 million spent during CY 2020 for pharmacy reimbursement.

Medicaid PMPY Comparison			
Calendar Year	ESI	OHCA	Percent Difference
2018*	\$1,342	\$803	-67%
2019*	\$1,373	\$856	-60%
2020	\$1,214	\$872	-39%

ESI = Express Scripts; OHCA = Oklahoma Health Care Authority; PMPY = per member per year
PMPY costs do not reflect rebated prices or net costs.

*PMPY values as listed in the previous annual review of the SoonerCare pharmacy benefit report

SoonerCare prior authorization policies, coupled with quantity limits and monthly prescription limits, yield better than average results while still providing a comprehensive pharmacy benefit for approximately 900,000 SoonerCare members. Looking at the cost to manage the pharmacy benefit, the OHCA pharmacy department has a cost of about \$1 million. OHCA's partner, PMC, spent approximately \$5 million of their contract in CY 2020. As a return on investment (ROI), using the overage generated by the ESI PMPY rate, for CY 2020 it is \$39 to \$1.

Medicaid Drug Rebate Program^{7,8,9}

Medicaid coverage of a drug requires the manufacturer to have a federal rebate agreement with the Secretary of Health and Human Services (HHS). Participation in the federal drug rebate program requires Medicaid coverage with limited exceptions (e.g., cosmetic medications, fertility medications). Rebate amounts are based on the "best price" for each drug. Best price refers to the lowest price paid to a manufacturer for a drug by any commercial payer. Best prices are reported to CMS by the manufacturer but are not publicly available.

If a drug's price increases more quickly than inflation, an additional rebate penalty is included based on the change in price compared with the consumer price index (CPI). The CPI penalty of the federal rebate is designed to keep Medicaid net cost relatively flat despite increases in drug prices. Until the first quarter of 2017, the CPI penalty only applied to brand medications; however, following a Senate vote in October 2015 in response to increasing generic drug prices, the Medicaid CPI penalty was extended to generic drugs with an effective date of January 1, 2017. The cost increases found in this report do not reflect net cost increases.

Additionally, many states have negotiated supplemental rebate agreements with manufacturers to produce added rebates. In CY 2020, OHCA collected \$386 million in federal and state supplemental rebates, resulting in a total increase from CY 2019 (\$365 million in federal and state rebates). These rebates are collected after reimbursement for the medication and are not reflected in this report.

Alternative Payment Models^{10,11,12,13,14,15,16}

The introduction of a greater number of costly specialty medications, finite Medicaid budgets, Medicaid policy, and access requirements has resulted in alternative payment arrangements as particularly compelling opportunities. Medicaid programs must provide comprehensive care to vulnerable individuals while operating under limited budgets and regulatory requirements. An alternative payment model (APM) is an agreement between a payer and manufacturer that is intended to provide improved patient care or increased access to evidence-based therapies while lowering costs or improving health outcomes. In general, there are 2 types of APMs:

- **Financial APM:** Caps or discounts are used to provide predictability or limit spending; these type of contracts are intended to lower costs and expand access. Data collection for financial APMs is minimal, making them easier to administer.
 - Examples: Price volume agreements, market share, patient level utilization caps, manufacturer funded treatment initiation
- **Health Outcome-Based APM:** Payments for medications are tied to clinical outcomes or measurements; these type of contracts are often referred to as “value-based contracts.” Health outcome-based APMs require additional planning and data collection, but do have the potential to increase the quality and value of treatments.
 - Examples: Outcomes guarantee, conditional coverage, PMPY guarantees, event avoidance (e.g., hospitalizations)

Since October 2016, PMC and OHCA have been engaged in negotiations with pharmaceutical manufacturers regarding pharmacy value-based contracts. PMC and OHCA have initiated talks with more than 25 companies regarding APMs and have established 7 APM contracts with pharmaceutical manufacturers following CMS approval to participate in value-based payment arrangements in June 2018. Oklahoma was the first Medicaid state to receive approval from CMS to participate in value-based payment arrangements. Future considerations include the expectation that initial value-based contracts will set the precedent for further collaboration among manufacturers and state Medicaid agencies.

Overview of Established APM Contracts	
Manufacturer	Details
Alkermes	<ul style="list-style-type: none"> ▪ Long-acting injectable (LAI) antipsychotic – adherence
Amgen	<ul style="list-style-type: none"> ▪ Tumor necrosis factor (TNF) inhibitor – utilization and cost ▪ Focus on population characterizations to inform future value-based contracts
Avexis	<ul style="list-style-type: none"> ▪ Spinal muscular atrophy (SMA) medication – utilization
Janssen	<ul style="list-style-type: none"> ▪ LAI antipsychotic – adherence; phase 2 will include additional clinical outcomes

Overview of Established APM Contracts	
Manufacturer	Details
Lilly	<ul style="list-style-type: none"> Anti-migraine medication [calcitonin gene-related peptide (CGRP) antagonist] – utilization and cost
UCB	<ul style="list-style-type: none"> Anticonvulsant medication – health resource utilization

APM = alternative payment model

Drug Approval Trends^{17,18,19}

During CY 2020, the U.S. Food and Drug Administration (FDA) approved the first generic product of several key medications that may have a significant impact on SoonerCare reimbursement. Key first-time generics approved by the FDA in CY 2020 included Butrans[®] (buprenorphine transdermal patch), Sklice[®] (ivermectin lotion), Ciprodex[®] (ciprofloxacin/ dexamethasone otic suspension), and Saphris[®] (asenapine sublingual tablet).

A total of 53 novel drugs were approved by the FDA during CY 2020. The active ingredient or ingredients in a novel drug have never before been approved in the United States. Of the novel drugs approved by the FDA in CY 2020, 19 were considered first-in-class and 34 were approved to treat rare or “orphan” diseases. Select novel drugs approved during CY 2020 that are expected to be highly utilized or have a particular impact in the SoonerCare population are included in the following table.

Select Novel Drugs FDA Approved During Calendar Year 2020			
Drug Name	Date Approved	FDA-Approved Indication	Estimated Annual Cost Per Member*
Viltepso [®] (viltolarsen)	08/12/2020	Treatment of DMD	\$586,560 for member weighing 25kg
Evrysdi [™] (risdiplam)	08/07/2020	Treatment of SMA	\$335,112
Zeposia [®] (ozanimod)	03/25/2020	Treatment of relapsing forms of MS	\$88,639
Nurtec [®] ODT (rimegepant)	02/27/2020	Treatment of acute migraine with or without aura	\$19,260
Vyepti [™] (eptinezumab-jjmr)	02/21/2020	Preventative treatment of migraine	\$5,980 – \$17,940

*Costs do not include rebated or net costs. Costs based on National Average Drug Acquisition Costs (NADAC), Wholesale Acquisition Costs (WAC), or State Maximum Allowable Costs (SMAC).

DMD = Duchenne muscular dystrophy; MS = multiple sclerosis; ODT = orally disintegrating tablet; SMA = spinal muscular atrophy

Traditional Versus Specialty Pharmacy Products

Traditional pharmaceuticals include products that are typically non-injectable and do not require special transportation, storage, administration, and are not typically indicated for rare diseases requiring unique management. These products treat many common chronic diseases such as diabetes, hypertension, and chronic obstructive pulmonary disease. Traditional pharmaceuticals carried the bulk of the reimbursement costs, accounting for 68.5% of the total pharmacy reimbursement and more than 99% of utilizers, in CY 2020.

Specialty products, in contrast, are typically injectable and require special handling such as refrigerated transport and special administration techniques or are indicated for rare diseases requiring unique management. These products include treatments for cystic fibrosis (CF), hemophilia, rheumatoid arthritis, and genetic deficiencies. Specialty pharmaceuticals have become a larger part of reimbursement over the last 5 years. Newly FDA approved therapies for spinal muscular atrophy (SMA) and CF led to an increase in specialty pharmaceutical expenditures for CY 2020.

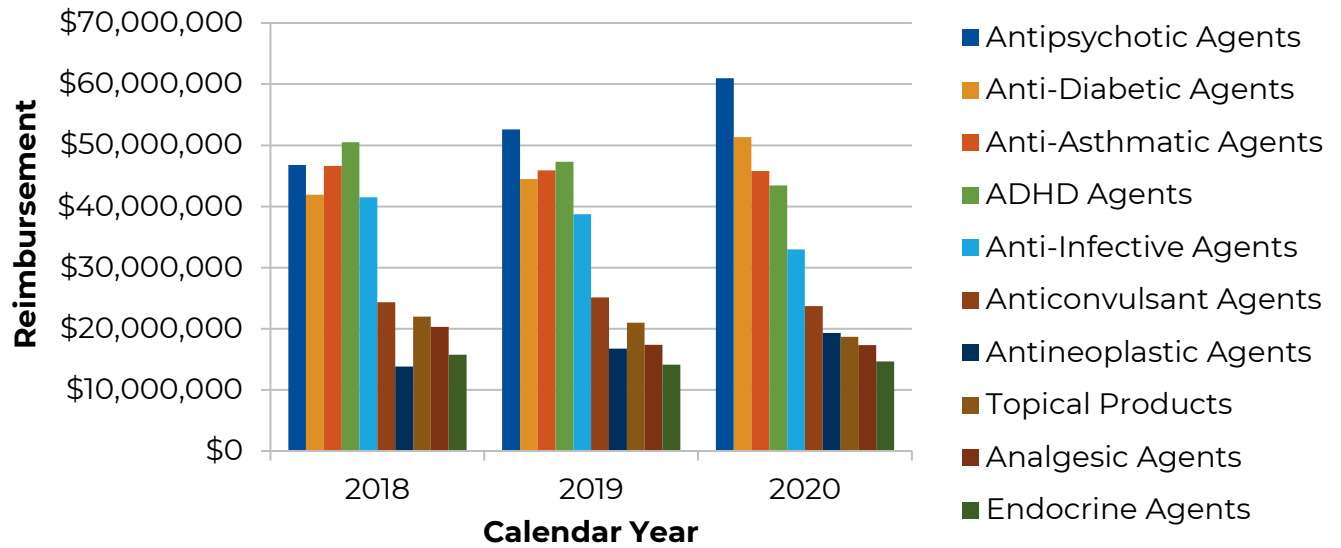
Top 10 Traditional Therapeutic Classes by Reimbursement: CY 2020

2018	2019	2020	Therapeutic Class
\$46,791,370	\$52,616,527	\$60,984,666	Antipsychotic Agents
\$41,908,481	\$44,467,095	\$51,313,829	Anti-Diabetic Agents
\$46,618,211	\$45,871,626	\$45,776,987	Anti-Asthmatic Agents
\$50,497,704	\$47,318,535	\$43,457,614	ADHD Agents
\$41,515,371	\$38,735,389	\$32,950,196	Anti-Infective Agents
\$24,320,286	\$25,110,543	\$23,702,828	Anticonvulsant Agents
\$13,808,895	\$16,730,921	\$19,305,175	Antineoplastic Agents
\$21,957,332	\$20,981,253	\$18,663,423	Topical Products
\$20,318,753	\$17,361,647	\$17,312,286	Analgesic Agents
\$15,737,526	\$14,138,973	\$14,669,985	Endocrine Agents

ADHD = attention-deficit/hyperactivity disorder

Reimbursement does not reflect rebated prices or net costs.

Top 10 Traditional Therapy Classes by Reimbursement



The top 10 traditional pharmaceutical classes that showed the most significant change from CY 2019 to 2020, include the antipsychotic and anti-diabetic agents. Other traditional classes saw minor fluctuations.

- Reimbursement increased by more than \$6.8 million in the anti-diabetic agents, which can be attributed to increased utilization of Tier-2 medications, including glucagon-like peptide 1 (GLP-1) agonists and sodium-glucose cotransporter-2 (SGLT-2) inhibitors, many of which have significant supplemental rebates. Reimbursement in this report does not reflect rebated prices or net costs.
- Antipsychotic agents' reimbursement increased by \$8.4 million; the antipsychotic agents' reimbursement totals include first-generation (typical) and second-generation (atypical) antipsychotics. The increase in reimbursement in this class can be accounted for by increased utilization of long-acting injectable atypical antipsychotics as well as utilization of brand formulation oral medications. It is important to note that many medications in the atypical antipsychotic class have supplemental rebates in place with Oklahoma Medicaid and net cost increases are not reflected in this analysis.
- The ADHD agents saw a \$3.86 million spending decrease from CY 2019, which could be attributed to school occurring online and at home due to COVID-19-related closures and adjusted schedules. Many of these products have significant federal rebates designed to keep Medicaid net cost relatively flat and many products in this class also have supplemental rebates; however, rebates are not accounted for in this analysis.

Costs in this report do not reflect the federal and state supplemental rebates that are provided by medication manufacturers. Many branded agents,

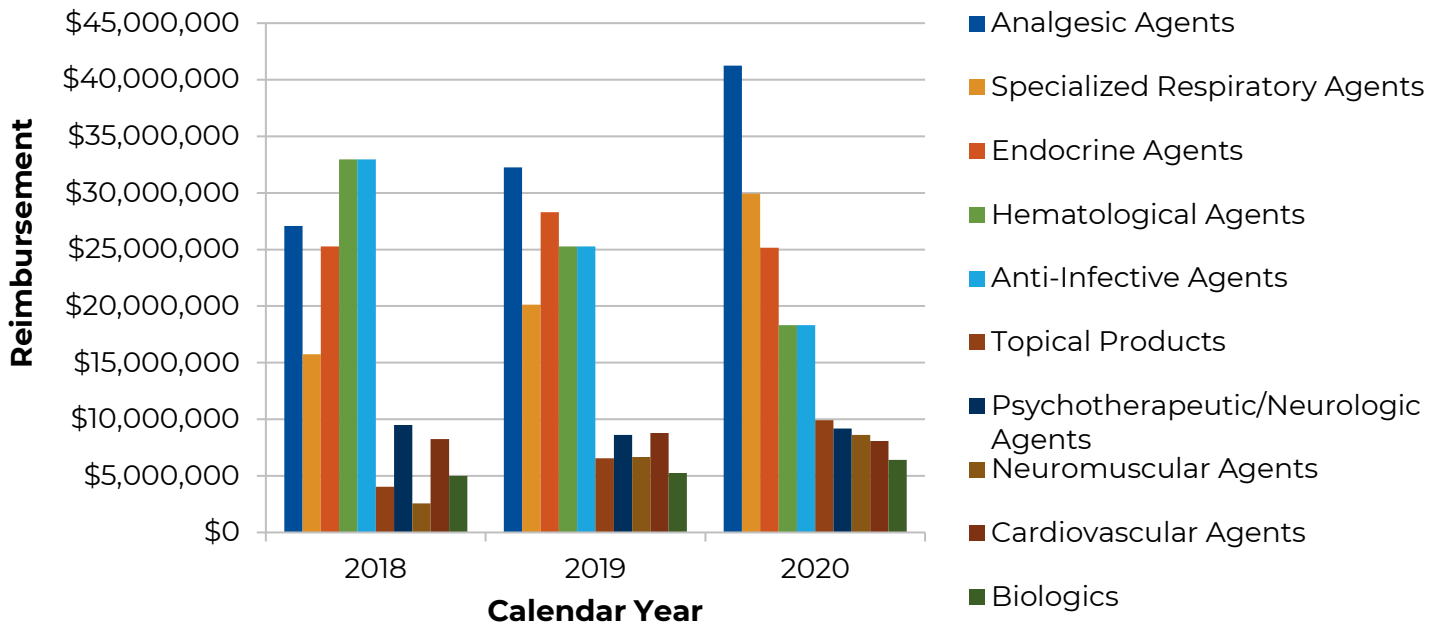
particularly anti-infective, ADHD, antipsychotic, endocrine, and analgesic medications are significantly influenced by supplemental rebates and net costs are substantially lower than the total reimbursement paid to pharmacies included in this analysis.

Top 10 Specialty Therapeutic Classes by Reimbursement: CY 2020

2018	2019	2020	Therapeutic Class
\$27,087,807	\$32,260,764	\$41,244,853	Analgesic Agents
\$15,746,918	\$20,128,396	\$29,933,715	Specialized Respiratory Agents
\$25,281,278	\$28,291,082	\$25,153,127	Endocrine Agents
\$24,533,816	\$23,108,404	\$20,803,778	Hematological Agents
\$32,965,335	\$25,285,075	\$18,313,938	Anti-Infective Agents
\$4,047,085	\$6,549,815	\$9,928,919	Topical Products
\$9,493,022	\$8,631,900	\$9,182,134	Psychotherapeutic/Neurologic Agents
\$2,573,311	\$6,664,209	\$8,605,724	Neuromuscular Agents
\$8,250,814	\$8,799,008	\$8,092,050	Cardiovascular Agents
\$4,986,592	\$5,262,976	\$6,415,482	Biologics

Reimbursement does not reflect rebated prices or net costs.

Top 10 Specialty Therapy Classes by Reimbursement



The cost of specialty therapeutic products is high, largely in part due to biologic therapies and therapies focused on rare diseases, including CF, hemophilia, and SMA. Continuous review and management of biological agents and psychotherapeutic/neurologic agents has promoted minimal reimbursement increases, other than expected yearly price increases by

product manufacturers, and has resulted in declines in reimbursement for hematological, endocrine, anti-infective, and cardiovascular agents.

- The cost of specialty analgesic agents increased this year, with a \$9 million increase in anti-inflammatory agents. Reimbursement in this class is largely attributed to targeted immunomodulatory agents such as Humira® (adalimumab), Enbrel® (etanercept), Ilaris® (canakinumab), Orenzia® (abatacept), Simponi® (golimumab), Xeljanz® (tofacitinib), Otezla® (apremilast), and Kineret® (anakinra). The majority of utilization was seen in Tier-2 medications (Humira® and Enbrel®), which are supplementally rebated medications. The supplementally rebated prices and net costs are not reflected in this analysis.
- Respiratory agents saw a \$9.8 million increase in reimbursement from CY 2019 to CY 2020. This class includes medications indicated for the treatment of CF. Trikafta® (elexacaftor/tezacaftor/ivacaftor and ivacaftor) was FDA approved in October 2019 and contributed to the CY 2020 increase.

Top 10 Medications by Reimbursement: CY 2020

Many of the top 10 medications by reimbursement are still branded at this time and not available in a generic formulation. The top 3 medications by reimbursement have been consistent over the past 3 years; however, in CY 2020, adalimumab moved from the 3rd ranked medication by reimbursement to the top medication by reimbursement. The top products typically come from highly utilized classes such as atypical antipsychotics, ADHD therapies, respiratory medications (including rescue and maintenance therapies), and the anti-infective class (including antiviral medications for hepatitis C). Top drug reimbursement rankings only slightly change from year to year for several reasons: high use, broad use between age demographics, and high costs of new therapies such as those indicated for CF.

Top 10 Medications by Reimbursement*			
Rank	2018	2019	2020
1	lisdexamfetamine	lisdexamfetamine	adalimumab
2	paliperidone inj	paliperidone inj	paliperidone inj
3	adalimumab	adalimumab	lisdexamfetamine
4	albuterol	albuterol	elexacaftor/tezacaftor/ivacaftor
5	sofosbuvir/ledipasvir	sofosbuvir/velpatasvir	lurasidone
6	lurasidone	lurasidone	sofosbuvir/velpatasvir
7	oseltamivir	somatropin inj	albuterol
8	sofosbuvir/velpatasvir	insulin glargine inj	somatropin inj
9	methylphenidate	fluticasone HFA	insulin glargine inj
10	fluticasone HFA	methylphenidate	fluticasone HFA

*Includes brand and generic where applicable.

Rank does not reflect rebated prices or net costs.

Medications are listed by generic name, but may include both generic and brand formulations.

inj = injection; HFA = hydrofluoroalkane

Cost Per Claim

Claims for generic medications made up 84.4% of the volume while only accounting for 23.7% of the reimbursement amount. The SoonerCare cost per claim of traditional medications increased by 12% in CY 2020 in comparison to CY 2019, and the cost per specialty medication claim decreased by 3.5%. As mentioned previously, specialty costs are largely driven by the significant cost associated with medications for rare diseases.

Cost Per Claim			
Drug Class	CY 2018	CY 2019	CY 2020
Traditional	\$69.12	\$72.03	\$80.66
Specialty	\$7,336.86	\$7,043.67	\$6,798.85

CY = calendar year

Reimbursement does not reflected rebated costs or net costs.

Market Projections¹⁴

Specialty medications, including gene therapies, will continue to influence reimbursements. Zolgensma[®] (onasemnogene abeparvovec-xioi), a gene therapy for SMA FDA approved in May 2019, was utilized by more than 1 SoonerCare member in CY 2020. Tecartus[®] (brexucabtagene autoleucel), a chimeric antigen receptor (CAR) T-cell therapy, was FDA approved in July 2020 for the treatment of refractory or relapsed mantle cell lymphoma. There are other gene therapies in the pipeline for hemophilia and DMD, among other diseases. Oncology and autoimmune anti-inflammatory medications that were FDA approved in the third and fourth quarter of CY 2020 for various indications, as shown in the following table, will likely influence future reimbursement trends in CY 2021. With new oncology agents continually entering the market, assessment of the oncology medication classes will need frequent reevaluation.

Oncology Medications FDA Approved in Calendar Year 2020			
Brand	Generic	Indication(s)	Approval Date
Ayvakit [™]	avapritinib	unresectable or metastatic GIST	January 2020
Tazverik [®]	tazemetostat	epithelioid sarcoma	January 2020
Sarclisa [®]	isatuximab-irfc	multiple myeloma	March 2020
Tukysa [®]	tucatinib	advanced unresectable or HER2-positive MBC	April 2020
Pemazyre [®]	pemigatinib	cholangiocarcinoma	April 2020
Trodelvy [®]	sacituzumab govitecan-hziy	triple-negative MBC in patients who received ≥2 prior therapies for metastatic disease	April 2020
Tabrecta [®]	capmatinib	NSCLC	May 2020
Retevmo [®]	selpercatinib	lung and thyroid cancers	May 2020
Qinlock [™]	ripretinib	advanced GIST	May 2020

Oncology Medications FDA Approved in Calendar Year 2020			
Brand	Generic	Indication(s)	Approval Date
Zepzelca™	lurbinectedin	metastatic SCLC	June 2020
Monjuvi®	tafasitamab-cxix	relapsed or refractory DLBCL	July 2020
Gavreto™	pralsetinib	NSCLC	September 2020
Orgovyx™	relugolix	advanced prostate cancer	December 2020

DLBCL = diffuse large B-cell lymphoma; FDA = U.S. Food and Drug Administration; GIST = gastrointestinal stromal tumor; HER2 = human epithelial growth factor receptor 2; MBC = metastatic breast cancer; NSCLC = non-small cell lung cancer; SCLC = small cell lung cancer

Conclusion

New prior authorization categories and continuous evaluation of categories such as oncology and hemophilia medications, along with new respiratory and anti-diabetic medications that continue to be FDA approved, ensure the most clinically appropriate, cost-effective measures are taken. Modifications to Tier structures and other generic categories reduced elevated spending on high-priced generic products. When new drugs are FDA approved and become available on the market, a cost-effectiveness analysis is performed to minimize spending while ensuring appropriate clinical care. The goal of the SoonerCare program is to provide SoonerCare members with the most appropriate health care in a fiscally responsible manner. For the pharmacy benefit, this is accomplished through DUR services, using prior authorization criteria, quantity limits, monthly total prescription limits and brand name prescription limits for non-institutionalized adult members, continuous product pricing maintenance, and provider outreach and education. Constant market review and response to changes, including evolving gene therapies, growth of the specialty market, and introduction of biosimilars, is necessary. SoonerCare will continue to strive to bring value-based pharmacy services to its members.

Top 50 Reimbursed Drugs by Calendar Year

Generic	Brand	CY 2020		CY 2019	
		Rank	Amount Paid	Rank	Amount Paid
adalimumab	Humira®	1	\$26,820,571	3	\$20,238,412
paliperidone inj	Multiple	2	\$24,433,216	2	\$21,553,240
lisdexamfetamine	Vyvanse®	3	\$23,475,202	1	\$24,670,183
elexacaftor/tezacaftor/ivacaftor	Trikafta®	4	\$16,766,241	94	\$1,267,084
lurasidone	Latuda®	5	\$14,472,541	6	\$11,936,600
sofosbuvir/velpatasvir	Epclusa®	6	\$11,848,522	5	\$13,836,412
albuterol	Multiple	7	\$11,343,733	4	\$14,035,234
somatropin	Multiple	8	\$11,055,496	7	\$10,833,029
insulin glargine	Multiple	9	\$10,799,671	8	\$9,644,102
fluticasone	Flovent®	10	\$9,394,049	9	\$9,452,013
dexmethylphenidate	Multiple	11	\$8,297,993	13	\$8,906,477
etanercept	Enbrel®	12	\$8,092,955	15	\$7,246,795
fluticasone/salmeterol	Multiple	13	\$8,010,461	12	\$7,961,041
insulin aspart	NovoLog®	14	\$7,794,606	14	\$7,792,242
methylphenidate	Multiple	15	\$6,930,474	10	\$8,678,336
emicizumab-kxwh	Hemlibra®	16	\$6,865,928	32	\$3,297,671
aripiprazole tab	Abilify®	17	\$6,806,344	19	\$6,341,768
buprenorphine/naloxone	Multiple	18	\$6,392,949	21	\$5,636,730
lacosamide	Vimpat®	19	\$5,529,466	24	\$4,925,623
insulin lispro	Humalog®	20	\$5,484,888	26	\$4,906,369
ciprofloxacin/dexamethasone	Ciprodex®	21	\$5,217,241	20	\$6,149,532
insulin detemir	Levemir®	22	\$5,128,327	23	\$5,107,493
tiotropium	Spiriva®	23	\$4,682,525	30	\$3,582,142
budesonide/formoterol	Symbicort®	24	\$4,104,585	51	\$2,463,803
liraglutide	Victoza®	25	\$4,022,335	39	\$3,019,861
tezacaftor/ivacaftor	Symdeko®	26	\$4,016,726	11	\$8,113,058
hydroxyprogesterone	Makena®	27	\$3,892,441	17	\$6,679,715
blood glucose test strips	Multiple	28	\$3,835,436	27	\$4,076,588
onasemnogene abeparvovec-xioi	Zolgensma®	29	\$3,787,872	44	\$2,840,904
palivizumab	Synagis®	30	\$3,713,086	36	\$3,090,814
apixaban	Eliquis®	31	\$3,712,834	49	\$2,569,474
dupilumab	Dupixent®	32	\$3,707,435	65	\$1,789,396
palbociclib	Ibrance®	33	\$3,702,275	45	\$2,838,229
dornase alfa	Pulmozyme®	34	\$3,687,134	31	\$3,323,036
nusinersen	Spinraza®	35	\$3,574,524	29	\$3,772,094
vigabatrin	Multiple	36	\$3,524,038	37	\$3,043,400
pancrelipase	Multiple	37	\$3,517,255	35	\$3,128,996
oseltamivir	Tamiflu®	38	\$3,455,792	16	\$7,185,520

Generic	Brand	CY 2020		CY 2019	
		Rank	Amount Paid	Rank	Amount Paid
ustekinumab	Stelara®	39	\$3,402,711	52	\$2,417,449
everolimus	Afinitor®	40	\$3,244,559	34	\$3,179,554
aripiprazole inj	Multiple	41	\$3,182,597	54	\$2,265,643
cariprazine	Vraylar®	42	\$3,116,474	78	\$1,577,009
sitagliptin	Januvia®	43	\$3,088,429	41	\$2,929,671
cannabidiol	Epidiolex®	44	\$3,063,397	73	\$1,664,825
valbenazine	Ingrezza®	45	\$2,966,909	58	\$2,126,192
bictegravir/emtricitabine/tenofovir	Biktarvy®	46	\$2,928,801	68	\$1,732,073
lumacaftor/ivacaftor	Orkambi®	47	\$2,867,498	28	\$3,904,072
antihemophilic factor recombinant (rFVII)	Kogenate®	48	\$2,786,349	38	\$3,034,830
glecaprevir/pibrentasvir	Mavyret™	49	\$2,756,997	48	\$2,600,596
darunavir/cobicistat/emtricitabine/tenofovir	Symtuza®	50	\$2,723,582	91	\$1,307,368

Includes brand and generic where applicable.
Reimbursement does not reflect rebated costs or net costs.
CY = calendar year; inj = injection; tab = tablet

Top 50 Medications by Total Number of Claims: Calendar Year 2020

Top 50 Medications by Total Number of Claims								
Rank	Generic Name	Claims	Members	Cost	Units/Day	Claims/Member	Cost/Claim	% Cost
1	albuterol	191,585	75,200	\$11,343,733.12	1.97	2.55	\$59.21	10.56%
2	cetirizine	181,967	73,406	\$2,082,525.51	2.93	2.48	\$11.44	1.94%
3	amoxicillin	132,627	106,835	\$1,727,232.49	11.20	1.24	\$13.02	1.61%
4	montelukast	122,477	32,463	\$1,777,059.49	1.00	3.77	\$14.51	1.65%
5	hydrocodone/APAP	102,789	39,573	\$1,542,034.13	3.81	2.60	\$15.00	1.44%
6	gabapentin	91,393	18,630	\$1,514,510.84	3.10	4.91	\$16.57	1.41%
7	fluticasone nasal	83,738	40,361	\$1,243,574.52	0.42	2.07	\$14.85	1.16%
8	clonidine	80,497	14,129	\$919,909.94	1.46	5.70	\$11.43	0.86%
9	sertraline	80,261	20,044	\$1,025,574.42	1.16	4.00	\$12.78	0.95%
10	lisdexamfetamine	78,831	14,014	\$23,475,201.97	1.00	5.63	\$297.79	21.86%
11	methylphenidate ER	68,947	10,723	\$6,930,473.90	1.30	6.43	\$100.52	6.45%
12	trazodone	66,544	15,052	\$791,782.99	1.22	4.42	\$11.90	0.74%
13	azithromycin	64,690	51,697	\$1,097,514.75	2.59	1.25	\$16.97	1.02%
14	fluoxetine	63,017	14,370	\$831,361.54	1.24	4.39	\$13.19	0.77%
15	omeprazole	62,182	20,100	\$768,729.75	1.22	3.09	\$12.36	0.72%
16	ibuprofen	60,051	40,406	\$749,288.67	3.03	1.49	\$12.48	0.70%
17	guanfacine	56,294	8,605	\$1,194,693.72	1.00	6.54	\$21.22	1.11%
18	ondansetron	55,956	41,827	\$839,640.24	2.41	1.34	\$15.01	0.78%
19	levothyroxine	49,422	10,435	\$1,210,652.34	0.99	4.74	\$24.50	1.13%
20	prednisone	48,328	34,847	\$525,673.48	1.79	1.39	\$10.88	0.49%
21	oseltamivir	47,912	45,757	\$3,455,791.79	11.77	1.05	\$72.13	3.22%
22	lisinopril	47,331	13,674	\$511,942.79	1.09	3.46	\$10.82	0.48%
23	aripiprazole	46,186	9,344	\$6,806,343.62	0.97	4.94	\$147.37	6.34%
24	quetiapine	46,039	8,048	\$737,314.04	1.44	5.72	\$16.01	0.69%
25	cephalexin	44,749	38,810	\$730,993.41	8.84	1.15	\$16.34	0.68%
26	escitalopram	43,427	11,238	\$595,844.83	1.07	3.86	\$13.72	0.55%

Top 50 Medications by Total Number of Claims

Rank	Generic Name	Claims	Members	Cost	Units/Day	Claims/Member	Cost/Claim	% Cost
27	amphetamine/ dextroamphetamine	43,170	6,886	\$1,389,322.66	1.47	6.27	\$32.18	1.29%
28	hydroxyzine	41,980	16,096	\$550,576.98	3.36	2.61	\$13.12	0.51%
29	cefdinir	41,870	34,588	\$880,978.50	6.49	1.21	\$21.04	0.82%
30	triamcinolone	40,947	28,763	\$608,336.37	4.52	1.42	\$14.86	0.57%
31	atorvastatin	39,875	11,618	\$546,575.76	1.00	3.43	\$13.71	0.51%
32	amoxicillin/ clavulanate	39,778	34,673	\$918,227.56	7.41	1.15	\$23.08	0.85%
33	loratadine	39,490	15,967	\$452,051.40	2.70	2.47	\$11.45	0.42%
34	fluticasone HFA	39,365	14,213	\$9,394,049.29	0.33	2.77	\$238.64	8.75%
35	risperidone	37,747	6,161	\$891,603.35	1.53	6.13	\$23.62	0.83%
36	bupirone	37,260	9,641	\$547,295.30	2.26	3.86	\$14.69	0.51%
37	alprazolam	37,128	5,641	\$411,368.13	2.25	6.58	\$11.08	0.38%
38	metformin	36,234	10,727	\$398,578.66	2.03	3.38	\$11.00	0.37%
39	oxycodone/APAP	34,936	13,294	\$724,957.63	3.70	2.63	\$20.75	0.68%
40	mupirocin	34,247	28,949	\$523,467.91	2.40	1.18	\$15.29	0.49%
41	dexmethylphenidate	34,178	4,999	\$8,297,992.92	1.16	6.84	\$242.79	7.73%
42	cyclobenzaprine	33,709	14,720	\$348,480.06	2.34	2.29	\$10.34	0.32%
43	levetiracetam	33,653	5,027	\$971,451.64	5.38	6.69	\$28.87	0.90%
44	sulfamethoxazole/ trimethoprim	33,537	27,050	\$550,644.17	6.51	1.24	\$16.42	0.51%
45	bupropion	31,550	8,066	\$629,325.57	1.22	3.91	\$19.95	0.59%
46	lamotrigine	29,958	5,148	\$1,005,930.78	1.88	5.82	\$33.58	0.94%
47	duloxetine	29,954	7,250	\$452,546.88	1.27	4.13	\$15.11	0.42%
48	atomoxetine	29,931	5,846	\$1,786,340.03	1.11	5.12	\$59.68	1.66%
49	pantoprazole	29,703	9,799	\$396,570.34	1.15	3.03	\$13.35	0.37%
50	amlodipine	29,130	8,519	\$291,361.78	1.04	3.42	\$10.00	0.27%

APAP = acetaminophen; ER = extended-release; HFA = hydrofluoroalkane

Includes brand and generic where applicable.

Reimbursement does not reflect rebated costs or net costs.

Top 10 Traditional and Specialty Therapeutic Categories by Calendar Year

Top 10 Specialty Therapeutic Categories by Calendar Year*						
	2020			2019		
	Total Claims	Total Paid	Cost/Member	Total Claims	Total Paid	Cost/Member
ANALGESIC AGENTS	7,759	\$41,244,853.26	\$33,918.46	6,113	\$32,260,764.11	\$30,492.22
Analgesics - Anti-Inflammatory	6,633	\$40,523,255.00	\$42,432.73	5,544	\$31,928,507.27	\$36,741.67
Migraine Products	942	\$567,908.02	\$3,036.94	375	\$219,670.31	\$2,052.99
Analgesics - Narcotics	113	\$151,679.47	\$6,067.18	117	\$110,668.75	\$3,952.46
Local Anesthetics - Parenteral	71	\$2,010.77	\$41.04	77	\$1,917.78	\$35.51
SPECIALIZED RESPIRATORY AGENTS	2,244	\$29,933,714.55	\$163,572.21	1,807	\$20,128,395.96	\$110,595.58
Misc. Respiratory	2,244	\$29,933,714.55	\$163,572.21	1,807	\$20,128,395.96	\$110,595.58
ENDOCRINE AGENTS	5,178	\$25,153,126.89	\$27,701.68	6,227	\$28,291,082.45	\$23,400.40
Misc. Endocrine	3,773	\$21,260,685.61	\$46,319.58	3,867	\$21,615,393.57	\$44,023.20
Progestins	1,405	\$3,892,441.28	\$8,669.13	2,360	\$6,675,688.88	\$9,297.62
HEMATOLOGICAL AGENTS	1,439	\$20,803,777.92	\$111,848.27	1,269	\$23,108,404.16	\$132,048.02
Misc. Hematological	880	\$19,149,424.37	\$189,598.26	743	\$21,364,019.83	\$237,378.00
Hematopoietic Agents	559	\$1,654,353.55	\$19,462.98	526	\$1,744,384.33	\$20,522.17
ANTI-INFECTIVE AGENTS	1,283	\$18,313,937.62	\$36,554.77	1,464	\$25,285,075.02	\$42,071.67
Antiviral	752	\$16,324,829.05	\$48,441.63	1,014	\$23,621,738.61	\$53,202.11
Aminoglycosides	429	\$1,128,160.48	\$8,116.26	393	\$1,158,986.54	\$8,398.45
Misc. Anti-Infectives	86	\$781,975.21	\$37,236.91	57	\$504,349.87	\$26,544.73
Antifungals	16	\$78,972.88	\$19,743.22	---	---	---
TOPICAL AGENTS	1,792	\$9,928,918.72	\$37,048.20	1,094	\$6,549,814.70	\$36,186.82
Dermatological	1,792	\$9,928,918.72	\$37,048.20	1,094	\$6,549,814.70	\$36,186.82
PSYCHOTHERAPEUTIC/ NEUROLOGICAL AGENTS	1,452	\$9,182,133.74	\$46,609.82	1,434	\$8,631,899.95	\$39,962.50
Misc. Psychotherapeutic & Neurological Agents	1,452	\$9,182,133.74	\$46,609.82	1,434	\$8,631,899.95	\$39,962.50
NEUROMUSCULAR AGENTS	78	\$8,605,724.21	\$344,228.97	38	\$6,664,209.14	\$392,012.30
Neuromuscular Agents	78	\$8,605,724.21	\$358,571.84	38	\$6,664,209.14	\$392,012.30

Top 10 Specialty Therapeutic Categories by Calendar Year*						
	2020			2019		
	Total Claims	Total Paid	Cost/Member	Total Claims	Total Paid	Cost/Member
CARDIOVASCULAR AGENTS	1,924	\$8,092,050.35	\$31,364.54	1,663	\$8,799,008.04	\$38,256.56
Misc. Cardiovascular	1,831	\$7,987,904.64	\$33,847.05	1,576	\$8,592,380.56	\$40,916.10
Vasopressors	4	\$67,223.23	\$67,223.23	10	\$155,765.92	\$155,765.92
Antihyperlipidemic	80	\$36,448.12	\$2,144.01	59	\$49,886.84	\$3,325.79
Antihypertensive	9	\$474.36	\$118.59	18	\$974.72	\$243.68
BIOLOGICAL AGENTS	2,733	\$6,415,482.37	\$8,463.70	2,351	\$5,262,975.60	\$6,961.61
Passive Immunizing Agents	2,733	\$6,415,482.37	\$8,463.70	2,351	\$5,262,975.60	\$6,961.61
TOTAL	25,882	\$177,673,719.63	\$39,483.05	23,460	164,981,629	\$35,671.70

*Table contains top 10 specialty therapeutic categories and is not an all-inclusive list.
Reimbursement does not reflect rebated costs or net costs.

Top 10 Traditional Therapeutic Categories by Calendar Year*						
	2020			2019		
	Total Claims	Total Paid	Cost/Member	Total Claims	Total Paid	Cost/Member
ANTIPSYCHOTICS & ANTIMANIC AGENTS	219,372	\$60,984,665.88	\$2,085.02	215,320	\$52,616,527.90	\$1,795.54
Antipsychotics	219,372	\$60,984,665.88	\$2,085.02	215,320	\$52,616,527.90	\$1,795.54
ANTI-DIABETIC AGENTS	129,360	\$51,313,828.78	\$2,912.08	126,997	\$44,467,095.48	\$2,567.38
Anti-Diabetic	129,360	\$51,313,828.78	\$2,912.08	126,997	\$44,467,095.48	\$2,567.38
ANTI-ASTHMATIC & BRONCHODILATOR AGENTS	428,594	\$45,776,987.84	\$481.23	469,646	\$45,871,626.19	\$404.29
Anti-Asthmatic & Bronchodilatory Agents	428,594	\$45,776,987.84	\$481.23	469,646	\$45,871,626.19	\$404.29
ADHD AGENTS	313,037	\$43,457,614.79	\$1,136.68	332,236	\$47,318,535.90	\$1,173.90
ADHD/Anti-Narcolepsy/Anti-Obesity/Anorexiant	313,037	\$43,457,614.79	\$1,136.68	332,236	\$47,318,535.90	\$1,173.90
ANTI-INFECTIVE AGENTS	565,116	\$32,950,196.05	\$78.11	749,710	\$38,735,389.30	\$71.46
Antiviral	69,972	\$18,733,547.04	\$339.63	90,975	\$20,292,185.83	\$277.92

Top 10 Traditional Therapeutic Categories by Calendar Year*

	2020			2019		
	Total Claims	Total Paid	Cost/Member	Total Claims	Total Paid	Cost/Member
Misc. Anti-Infectives	87,615	\$4,996,028.90	\$83.74	94,985	\$5,496,194.35	\$83.40
Penicillins	179,903	\$2,932,581.63	\$21.58	272,506	\$4,478,813.74	\$23.91
Cephalosporins	91,214	\$1,980,461.57	\$27.17	122,577	\$2,745,125.86	\$29.25
Macrolide Antibiotics	66,797	\$1,651,484.62	\$31.26	97,500	\$2,378,873.56	\$32.01
Antifungals	25,486	\$1,271,901.65	\$74.07	25,330	\$1,850,640.56	\$105.16
Tetracyclines	22,646	\$653,185.01	\$45.20	23,860	\$464,106.34	\$30.52
Anthelmintic	2,172	\$303,712.88	\$164.88	2,328	\$559,929.46	\$288.62
Fluoroquinolones	12,934	\$190,674.68	\$18.77	14,674	\$216,706.27	\$18.93
Antimalarial	5,552	\$165,404.26	\$113.21	4,251	\$191,858.27	\$165.25
Antimycobacterial Agents	410	\$45,352.86	\$298.37	363	\$31,141.90	\$213.30
Aminoglycosides	389	\$20,664.21	\$141.54	344	\$24,392.33	\$161.54
Sulfonamides	24	\$4,630.84	\$1,157.71	12	\$4,070.22	\$1,017.56
Amebicides	2	\$565.90	\$282.95	5	\$1,350.61	\$337.65
ANTICONVULSANTS	314,119	\$23,702,828.42	\$557.39	312,722	\$25,110,543.62	\$584.54
Anticonvulsants	314,119	\$23,702,828.42	\$557.39	312,722	\$25,110,543.62	\$584.54
ANTINEOPLASTICS	10,369	\$19,305,175.19	\$8,142.21	10,472	\$16,730,921.48	\$7,140.81
Antineoplastics	10,369	\$19,305,175.19	\$8,142.21	10,472	\$16,730,921.48	\$7,140.81
TOPICAL PRODUCTS	266,572	\$18,663,423.30	\$113.46	305,238	\$20,981,253.63	\$107.74
Dermatological	176,106	\$10,208,675.04	\$105.11	193,837	\$11,902,840.81	\$108.54
Otic	23,408	\$5,370,118.03	\$273.02	27,813	\$6,306,637.74	\$278.37
Ophthalmic	45,789	\$2,670,594.00	\$86.24	60,069	\$2,309,741.81	\$52.96
Mouth/Throat/Dental Agents	19,958	\$331,265.25	\$21.15	22,168	\$363,315.57	\$20.48
Anorectal	1,311	\$82,770.98	\$77.65	1,351	\$98,717.70	\$92.17
ANALGESIC AGENTS	383,848	\$17,312,285.85	\$124.23	412,008	\$17,361,647.15	\$111.40
Analgesics - Narcotic	233,888	\$14,718,140.44	\$227.06	255,220	\$14,828,246.19	\$196.17
Analgesics - Anti-Inflammatory	127,747	\$1,964,419.00	\$29.69	133,318	\$1,885,238.51	\$26.49
Migraine Products	11,360	\$405,316.33	\$81.05	11,026	\$318,326.09	\$63.99

Top 10 Traditional Therapeutic Categories by Calendar Year*						
	2020			2019		
	Total Claims	Total Paid	Cost/Member	Total Claims	Total Paid	Cost/Member
Gout	5,617	\$113,845.26	\$87.17	5,571	\$166,364.58	\$122.60
Analgesics - Non-Narcotic	5,072	\$108,356.77	\$56.09	6,720	\$161,315.44	\$61.57
Local Anesthetics - Parenteral	164	\$2,208.05	\$17.25	153	\$2,156.34	\$16.59
ENDOCRINE AGENTS	299,929	\$14,669,985.42	\$110.99	347,168	\$14,138,973.69	\$85.33
Contraceptives	96,152	\$6,085,738.58	\$215.98	90,734	\$5,636,581.41	\$203.15
Misc. Endocrine	15,769	\$4,305,524.27	\$1,268.57	16,978	\$3,311,821.06	\$871.07
Corticosteroids	119,514	\$1,865,871.10	\$22.05	173,229	\$2,721,801.65	\$23.03
Thyroid	54,079	\$1,408,508.99	\$125.03	52,172	\$1,380,272.91	\$123.61
Estrogens	7,739	\$709,890.45	\$356.37	7,739	\$735,779.63	\$354.76
Progestin	5,823	\$177,091.37	\$71.96	5,466	\$185,750.11	\$76.92
Androgen-Anabolic	735	\$80,906.82	\$496.36	718	\$124,949.53	\$730.70
Oxytocics	118	\$36,453.84	\$319.77	132	\$42,017.39	\$325.72
TOTAL	2,930,316	\$328,136,991.52	\$302.99	3,281,517	\$323,332,514.34	\$247.96
GRAND TOTAL (TOP 10 SPECIALTY & TRADITIONAL)	2,956,198	\$505,810,711.15	\$465.11	3,304,977	\$488,314,143.47	\$373.15

*Table contains top 10 traditional therapeutic categories and is not an all-inclusive list. Reimbursement does not reflect rebated costs or net costs.

Calendar Year Age Group Comparison

Specialty Pharmacy Reimbursement by Age Group Comparison by Calendar Year			
Age Group (Years)	2018	2019	2020
Age 0 to 2	\$9,092,792.21	\$11,612,209.65	\$10,150,583.46
Age 3 to 5	\$6,787,409.80	\$10,110,090.56	\$8,514,078.39
Age 6 to 9	\$10,796,096.09	\$10,034,038.95	\$16,987,282.65
Age 10 to 14	\$23,252,655.29	\$27,722,518.29	\$32,562,986.35
Age 15 to 18	\$19,922,881.62	\$22,866,402.89	\$30,128,624.82
Age 19 to 25	\$16,640,363.32	\$14,583,198.35	\$13,872,096.27
Age 26 to 34	\$17,056,661.61	\$17,867,757.94	\$17,030,226.89
Age 35 to 54	\$34,233,521.78	\$35,813,690.77	\$37,403,135.82
Age 55 to 64	\$24,446,051.11	\$21,647,289.23	\$18,637,437.98
Age 65+	\$2,373,946.34	\$2,017,339.17	\$1,586,502.20
Total (All Ages)	\$164,602,379.17	\$174,274,535.80	\$186,872,954.83

Reimbursement does not reflect rebated costs or net costs.

Traditional Pharmacy Reimbursement by Age Group Comparison by Calendar Year			
Age Group (Years)	2018	2019	2020
Age 0 to 2	\$12,314,763.76	\$11,397,193.22	\$9,716,285.73
Age 3 to 5	\$19,242,138.14	\$17,342,568.64	\$14,487,831.82
Age 6 to 9	\$42,319,723.23	\$41,144,487.75	\$35,432,461.76
Age 10 to 14	\$59,077,880.29	\$57,246,708.50	\$56,068,019.25
Age 15 to 18	\$39,976,103.52	\$39,019,105.14	\$39,523,270.29
Age 19 to 25	\$22,698,506.72	\$23,201,603.84	\$27,557,479.49
Age 26 to 34	\$36,083,970.91	\$36,313,761.82	\$40,700,793.05
Age 35 to 54	\$87,539,287.18	\$91,100,536.47	\$102,783,813.23
Age 55 to 64	\$61,779,772.61	\$65,153,558.47	\$68,234,587.50
Age 65+	\$8,830,547.04	\$10,139,832.60	\$11,121,940.67
Total (All Ages)	\$389,864,964.05	\$392,060,731.09	\$405,628,220.26

Reimbursement does not reflect rebated costs or net costs.

Total Enrollment by Age Group Comparison by Calendar Year*			
Age Group (Years)	2018	2019	2020
Age 0 to 2	93,532	90,859	94,553
Age 3 to 5	87,962	87,317	92,513
Age 6 to 9	114,299	111,656	118,793
Age 10 to 14	135,601	137,051	146,397
Age 15 to 18	87,627	88,283	97,109
Age 19 to 25	39,511	37,208	49,258

Total Enrollment by Age Group Comparison by Calendar Year*			
Age Group (Years)	2018	2019	2020
Age 26 to 34	54,062	51,992	63,963
Age 35 to 54	78,607	76,076	87,749
Age 55 to 64	43,909	44,619	46,254
Age 65+	61,491	63,889	65,652
Total (All Ages)	796,603	788,958	863,073

*Average monthly enrollment as obtained from OHCA Fast Facts reports

¹ Centers for Medicare and Medicaid Services (CMS). National Health Expenditure Projections 2019-2028. Available online at: <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00094>. Issued 03/24/2020. Last accessed 05/26/2021.

-
- ² CMS. National Health Expenditure Projections 2019-2028. Available online at: <https://www.cms.gov/files/document/nhe-projections-2019-2028-forecast-summary.pdf>. Last accessed 05/26/2021.
- ³ CMS. National Health Expenditure Projections 2017-2026, Forecast Summary. Available online at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/nhe-fact-sheet.html>. Last revised 12/16/2020. Last accessed 05/26/2021.
- ⁴ Evernorth. Express Scripts: 2020 Drug Trend Report. Available online at: <https://www.evernorth.com/drug-trend-report/trend-by-plan-type#main-content>. Issued 04/2021. Last accessed 05/26/2021.
- ⁵ Express Scripts. 2019 Drug Trend Report. Available online at: <https://www.express-scripts.com/corporate/drug-trend-report-2019#2019-in-review>. Issued 02/2020. Last accessed 05/26/2021.
- ⁶ Express Scripts. 2018 Drug Trend Report. Available online at: <https://my.express-scripts.com/rs/809-VGG-836/images/Express%20Scripts%202018%20Drug%20Trend%20Report.pdf>. Issued 02/2019. Last accessed 05/26/2021.
- ⁷ Peters CP. The Basics: The Medicaid Drug Rebate Program. *National Health Policy Forum*. Available Online at: https://www.nhpf.org/library/the-basics/Basics_MedicaidDrugRebate_04-13-09.pdf. Issued 04/13/2009. Last accessed 05/20/2021.
- ⁸ Office of Inspector General (OIG): Department of Health and Human Services. States' Collection of Offset and Supplemental Medicaid Rebates. Available online at: <http://oig.hhs.gov/oei/reports/oei-03-12-00520.pdf>. Issued 12/2014. Last accessed 05/15/2021.
- ⁹ Gibbons DC, Kirschenbaum AM. Bipartisan Budget Bill Extends Medicaid Drug Rebate Program Price Increase Penalty to Generic Drugs. *FDA Law Blog*. Available online at: http://www.fdalawblog.net/fda_law_blog_hyman_phelps/2015/11/bipartisan-budget-bill-extends-medicaid-drug-rebate-program-price-increase-penalty-to-generic-drugs.html. Issued 11/02/2015. Last accessed 05/15/2021.
- ¹⁰ Stuard S, Beyer J, Bonetto M, et al. State Medicaid Alternative Reimbursement and Purchasing Test for High-Cost Drugs (SMART-D): Summary Report. Center for Evidence-Based Policy. Available online at: <http://smart-d.org/research-and-reports/>. Issued 09/2016. Last accessed 05/15/2021.
- ¹¹ Social Security Administration. Payment for Covered Outpatient Drugs. Available online at: https://www.ssa.gov/OP_Home/ssact/title19/1927.htm. Last accessed 05/22/2021.
- ¹² National Association of Medicaid Directors (NAMD). The Role of State Medicaid Programs in Improving the Value of the Health Care System. Bailit Health. Available online at: http://medicaiddirectors.org/wp-content/uploads/2016/03/NAMD_Bailit-Health_Value-Based-Purchasing-in-Medicaid.pdf. Issued 03/22/2016. Last accessed 05/15/2021.
- ¹³ Goodman C, Daniel R, Balch A, Doyle J. Value-Based Health Care for Patients, Providers & Payers – Summary from AMCP Foundation Research Symposium Highlights Webinar. *AMCP Foundation*. Webinar recorded 11/30/2017. Last accessed 04/22/2021.
- ¹⁴ Kenney JT. The Outcome of it All – The Impact and Value of Outcomes Based Contracts. Academy of Managed Care Pharmacy Nexus 2017. October 16-19, 2017. Dallas, TX.
- ¹⁵ CMS. CMS Approves State Proposal to Advance Specific Medicaid Value-Based Arrangements with Drug Makers. Available online at: <https://www.cms.gov/newsroom/press-releases/cms-approves-state-proposal-advance-specific-medicaid-value-based-arrangements-drug-makers>. Issued 06/27/2018. Last accessed 05/22/2021.
- ¹⁶ Pivotal Payer Industry Trends to Watch in 2021. Available online at: <https://healthpayerintelligence.com/news/experts-share-5-pivotal-payer-industry-trends-to-watch-in-2021>. Issued 12/15/2020. Last accessed 05/26/2021.
- ¹⁷ U.S. Food and Drug Administration (FDA). First Generic Drug Approvals. Available online at: <https://www.fda.gov/drugs/first-generic-drug-approvals/2020-first-generic-drug-approvals>. Last accessed 05/14/2021.
- ¹⁸ U.S. FDA. Novel Drug Approvals for 2020. Available online at: <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2020>. Last revised 03/22/2021. Last accessed 05/26/2021.
- ¹⁹ U.S. FDA. 2018 New Drug Therapy Approvals Report. Available online at: <https://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/DrugInnovation/UCM629290.pdf>. Issued 03/2020. Last accessed 04/22/2021.