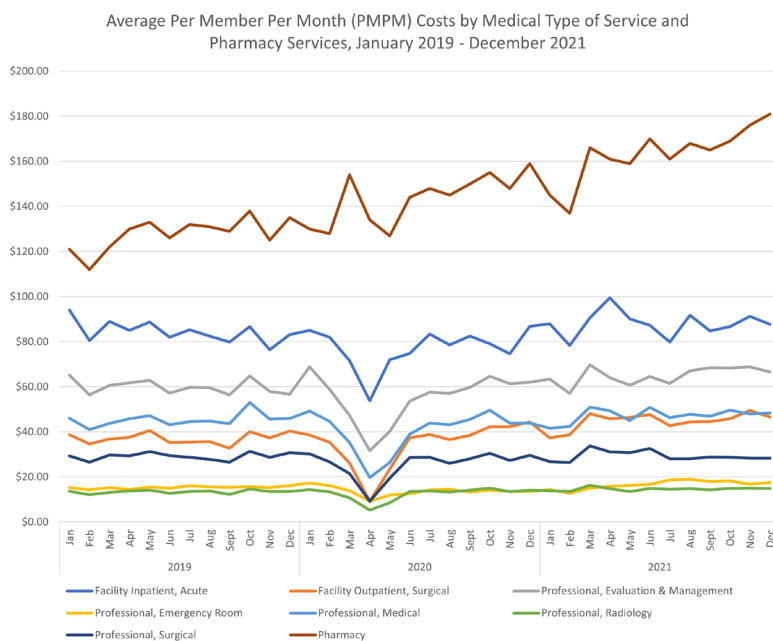


COVID-19 Pharmacy Claims Recovery Analysis

A previous data brief, [COVID-19 Claims Recovery Analysis](#), described the drop in the average per member per month (PMPM) costs¹ for medical services among commercially insured enrollees during the early months of the COVID-19 pandemic, and the subsequent rebound in July 2020. This follow-up data brief focuses on pharmacy claims; the analysis reviews the average PMPM pharmacy costs among commercially insured members from January 2019 through December 2021 (**Figure 1, Table 1**). Findings indicate that, unlike medical services, pharmacy PMPM costs did not experience a drop during the pandemic period.

While the average PMPM cost for medical services [dropped from \\$304 to \\$138 in 2020](#), pharmacy average PMPM costs increased consistently in both 2020 and 2021. Similar analysis in Massachusetts indicated the same experience. The Center for Health Information and Analysis (CHIA) in Massachusetts reported that while most service categories experienced fluctuations from 2019 to 2021, pharmacy spending did not; rather, pharmacy spending increased consistently in 2020 and 2021.²

Figure 1. Average Per Member Per Month (PMPM) Costs by Medical Type of Service and Pharmacy Services³, January 2019-December 2021



Wolter Kluwer's UpToDate[®] software was used to identify Drug Classes.
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DRUG CLASSES⁴

The Drug Classes depicted throughout this report follow the logic of Wolters Kluwer's Lexicomp drug database. The most common drugs in each of the top drug classes are described below.

- **Sex hormones:** Sprintec, Junel, NuvaRing, and Mono-Linyah
- **Proton pump inhibitors:** Pantoprazole, Omeprazole, Esomeprazole, and Lansoprazole
- **Penicillins:** Amoxicillin, Penicillin, Dicloxacillin, and Ampicillin
- **Immunostimulants:** SARS-CoV-2 vaccine(s), influenza virus vaccine, and zoster vaccine
- **Dermatological agents:** Mupirocin, Diclofenac, Triamcinolone, and Ketoconazole
- **Bronchodilators:** Albuterol (ProAir, Ventolin), Advair Diskus, Symbicort, and Spiriva HandiHaler
- **Antihyperlipidemic agents:** Atorvastatin, Simvastatin, Rosuvastatin, and Pravastatin
- **Antidepressants:** Trazodone, Sertraline, Bupropion, and Fluoxetine
- **Anticonvulsants:** Gabapentin, Lorazepam, Clonazepam, and Diazepam
- **Analgesics:** Suboxone, Buprenorphine, Ibuprofen, and Oxycodone
- **Adrenal cortical steroids:** Prednisone, Methylprednisolone, Dexamethasone, and Pulmicort Flexhaler
- **Thyroid hormones:** Levothyroxine, Synthroid, Liothyronine Sodium, and Armour Thyroid

COVID-19 Pharmacy Claims Recovery Analysis

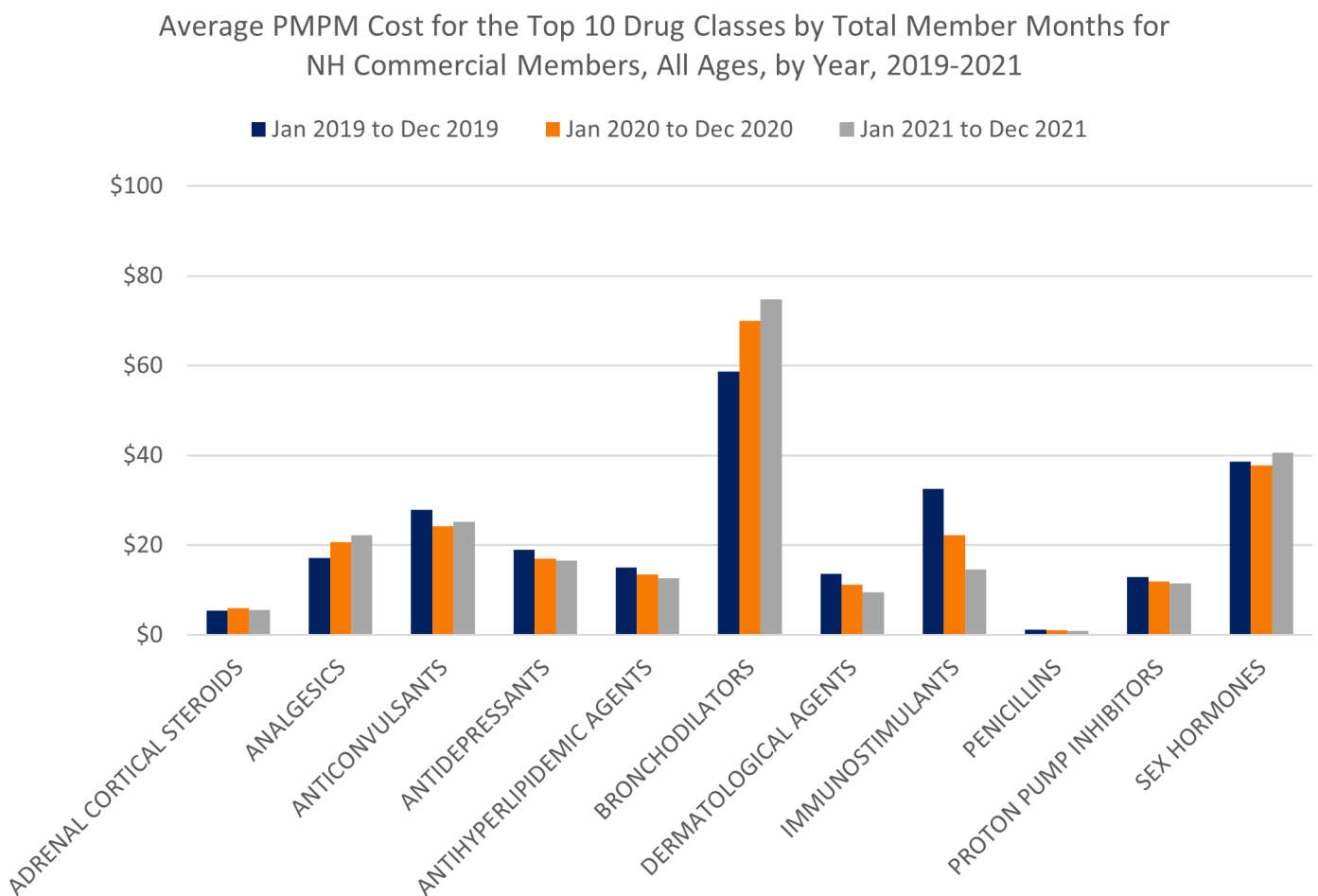
COST AND RATE OF PRESCRIPTION DRUGS IN NH, 2019-2021

The analysis in NH showed that the average PMPM pharmaceutical costs increased consistently in both 2020 and 2021, increasing by more than \$35 over the 3-year period (Figure 1, Table 1). Average PMPM costs for the top 10 drug classes each year remained stable (within \$5 year-to-year) for most drug classes, except for bronchodilators and immunostimulants. The average PMPM cost of bronchodilators increased by \$16 from 2019 to 2021, while the average PMPM cost of immunostimulants decreased by \$18 over the 3 years (Figure 2, Table 2).

Comparatively, when reviewing the types of drug classes in terms of the frequency of prescriptions (versus cost), the rate of prescriptions among several classes increased from 2019 to 2021 (Figure 3, Table 3). The class with the largest increase in the rate of prescriptions was immunostimulants, which increased by more than 200% from 2019 to 2021. This was followed by three drug classes which are often prescribed for mental health conditions;

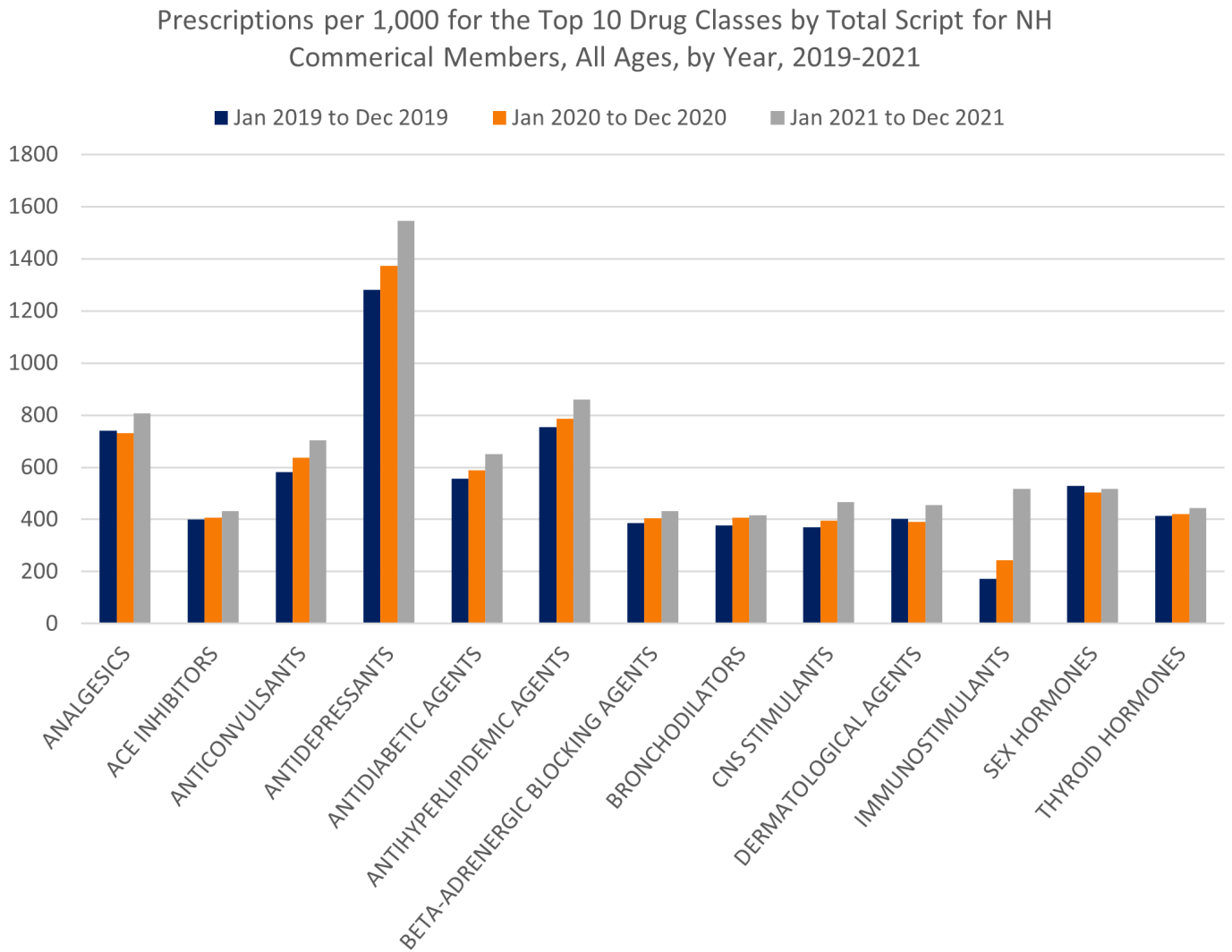
- CNS stimulants, which increased by 26%,
- Anticonvulsants, which increased by 21%, and
- Antidepressants, which increased by 21% over the 3-year period.

Figure 2. Average PMPM Cost for the Top 10 Drug Classes⁵ by Total Member Months for NH Commercial Members, All Ages, by Year, 2019-2021



COVID-19 Pharmacy Claims Recovery Analysis

Figure 3. Prescriptions per 1,000 for the Top 10 Drug Classes⁵ by Total Scripts for NH Commercial Members, All Ages, by Year, 2019-2021



COVID-19 Pharmacy Claims Recovery Analysis

APPENDIX A.

Table 1. Average Per Member Per Month (PMPM) Pharmaceutical Costs, January 2019-December 2021

Average Per Member Per Month (PMPM) Pharmaceutical Costs			
Month	2019	2020	2021
January	\$121	\$130	\$145
February	\$112	\$128	\$137
March	\$122	\$154	\$166
April	\$130	\$134	\$161
May	\$133	\$127	\$159
June	\$126	\$144	\$170
July	\$132	\$148	\$161
August	\$131	\$145	\$168
September	\$129	\$150	\$165
October	\$138	\$155	\$169
November	\$125	\$148	\$176
December	\$135	\$159	\$181
Total, annual average PMPM costs	\$127.83	\$143.50	\$163.17

Table 2. Average Per Member Per Month (PMPM) Cost for the Top 10 Drug Classes^{5,6} by Total Member Months for NH Commercial Members, All Ages, By Year, 2019-2021

Average Per Member Per Month (PMPM) Cost for the Top 10 Drug Classes			
Drug Class	2019	2020	2021
Adrenal Cortical Steroids	\$5	\$6	\$6
Analgesics	\$17	\$21	\$22
Anticonvulsants	\$28	\$24	\$25
Antidepressants	\$19	\$17	\$17
Antihyperlipidemic Agents	\$15	\$13	\$13
Bronchodilators	\$59	\$70	\$75
Dermatological Agents	\$14	\$11	\$10
Immunostimulants	\$33	\$22	\$15
Penicillin	\$1	\$1	\$1
Proton Pump Inhibitors	\$13	\$12	\$12
Sex Hormones	\$39	\$38	\$41

COVID-19 Pharmacy Claims Recovery Analysis

Table 3. Prescriptions per 1,000 for the Top 10 Drug Classes^{5,6} by Total Scripts for NH Commercial Members, All Ages, by Year, 2019-2021

Drug Class	Prescriptions per 1,000 for the Top 10 Drug Classes			% Change from 2019 to 2021
	2019	2020	2021	
Analgesics	740	731	808	+9.2%
Angiotensin Converting Enzyme (ACE) Inhibitors	401	407	432	+7.7%
Anticonvulsants	583	637	705	+20.9%
Antidepressants	1282	1374	1546	+20.6%
Antidiabetic Agents	557	588	650	+16.7%
Antihyperlipidemic Agents	754	787	861	+14.2%
Beta-Adrenergic Blocking Agents	386	404	432	+11.9%
Bronchodilators	376	408	417	+10.9%
CNS Stimulants	371	396	466	+25.6%
Dermatological Agents	401	391	455	+13.5%
Immunostimulants	172	243	517	+200.6%
Sex Hormones	528	503	517	-2.1%
Thyroid Hormones	414	420	444	+7.2%

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COVID-19 Pharmacy Claims Recovery Analysis

REFERENCES

- 1 PMPM reflects the total paid amount for medical services, spread across all the members, for the month.
- 2 <https://www.chiamass.gov/assets/2023-annual-report/2023-Annual-Report.pdf>
- 3 Pharmacy services reflects prescriptions that were filled through a pharmaceutical benefit; does not include prescriptions filled through medical benefit (i.e., prescriptions filled in the hospital).
- 4 Wolter Kluwer's UpToDate® software was used to identify Drug Classes. © 2023 UpToDate, Inc. and/or its affiliates. All rights reserved.
- 5 The top 10 drug classes are analyzed on an annual basis. Combining multiple years of data may result in more than 10 drug classes appearing in the "top 10," due to changes in the top drug classes year over year.
- 6 If a drug class did not appear in the top 10 for all of the consecutive years of data displayed, the corresponding cell has been shaded gray to indicate that drug class did not make up the top 10 in that respective year.