



STATE OF RHODE ISLAND

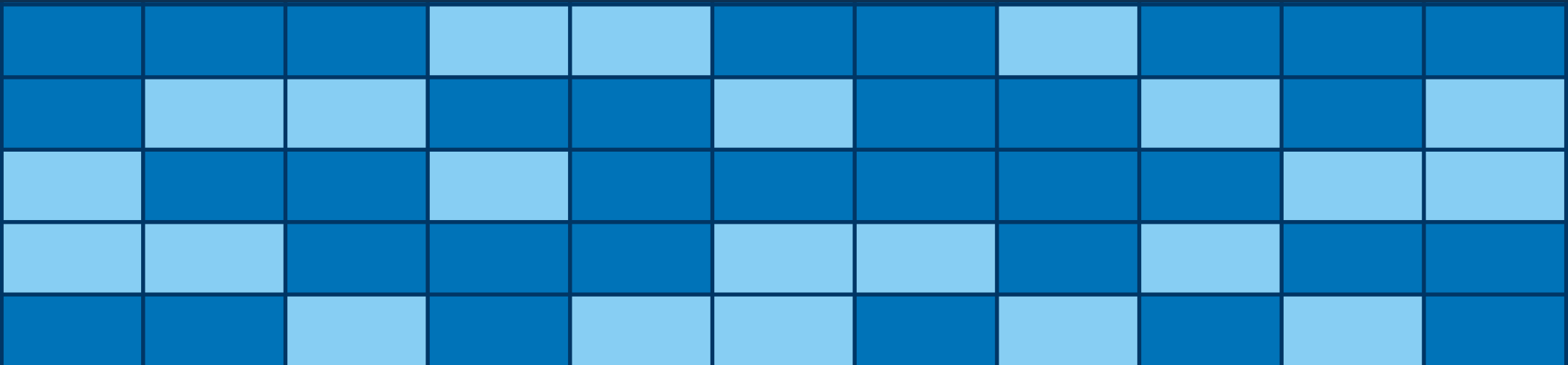
Office of The Health Insurance Commissioner

Department of Business Regulation

CHARTBOOK

# Rhode Island OHIC

2026



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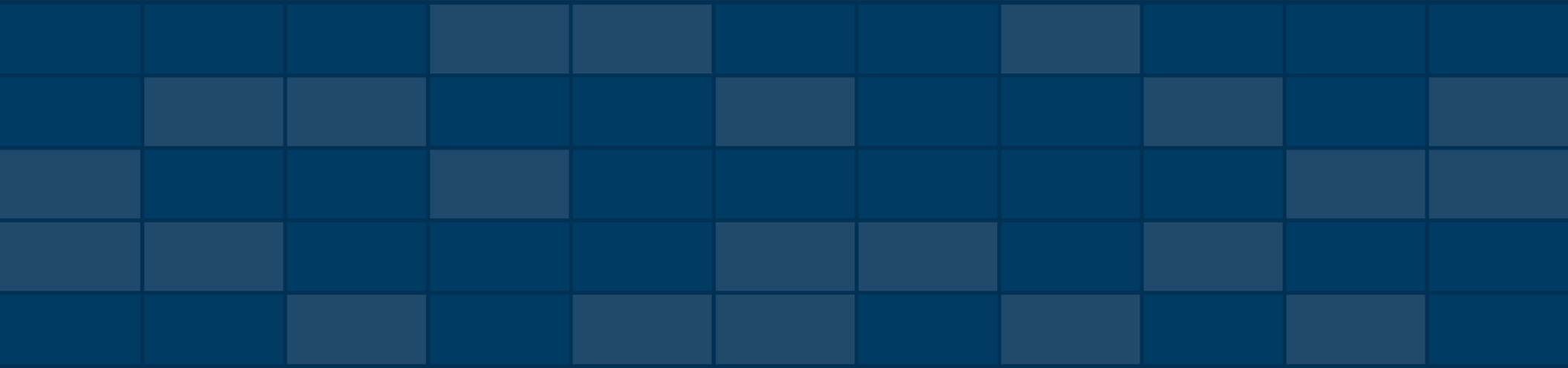
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# Introduction



This chartbook uses data from two sources. The table below compares the two.

	<b>Cost Growth Target data collection (Total Medical Expense (“TME”) Data)</b>	<b>All-Payer Claims Database (APCD) – HealthFacts RI</b>	<b>Notes</b>
<b>Primary Purpose &amp; Key Questions Answered</b>	Used to calculate growth in total health care costs (“total medical expense”) over a given period (to assess performance against the cost growth target); <b>represents all health care spending in the state.</b> <ul style="list-style-type: none"> <li>How much did spending increase or decrease from one year to the next?</li> </ul>	Used to identify cost drivers and cost growth drivers for the purpose of identifying opportunities for cost growth mitigation; does not include all state spending data. <ul style="list-style-type: none"> <li>What is driving overall cost and cost trends?</li> <li>Where are the opportunities to reduce cost growth?</li> </ul>	None.
<b>Level of Detail in Data Submitted by Payers</b>	Aggregated; does not allow for claim-level analyses.	Granular; allows for claim-level analyses.	Data from the cost growth target data collection are publicly reported on an annual basis at the state, market, payer, and provider levels. <sup>1</sup> Payer and provider-level analyses rely on data from the cost growth target data collection.
<b>Populations Included or Excluded in Commercial Market Data</b>	Includes data for all state residents of fully insured plans (individual, small, and large group plans) and self-insured plans.	Includes data for all state residents of fully insured plans (individual, small, and large group plans) and self-insured employers that elect to voluntarily submit data to the APCD.	RI’s APCD (like other states’ APCDs) does not fully contain spending associated with residents with commercial market coverage due to the State’s inability to require claims submissions from self-insured employers (although some do opt in and submit data). Approximately 80 percent of commercially covered lives, and 80 percent of total commercial spending for medical services are represented in the APCD.

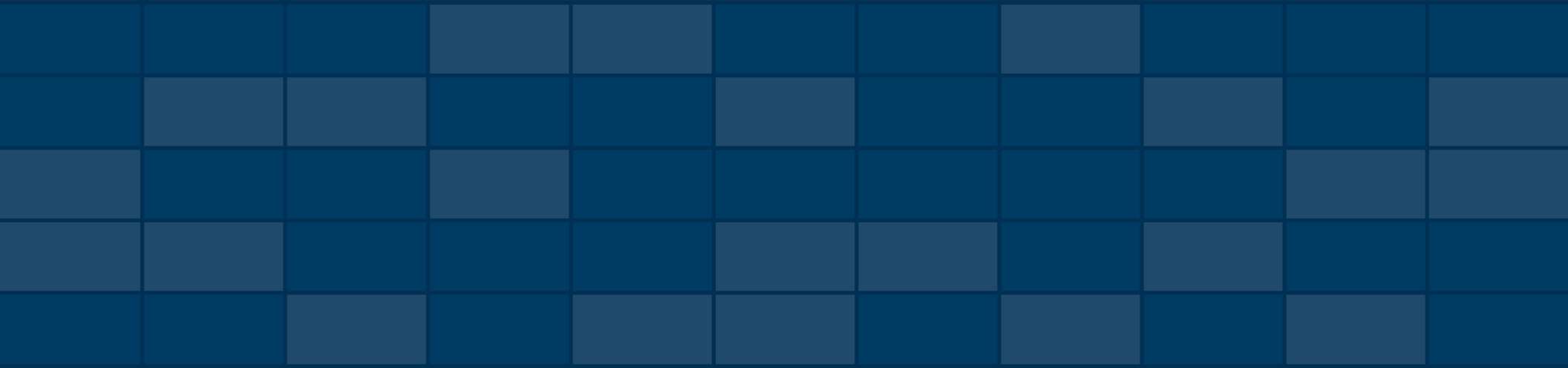
<b>Types of Data Included or Excluded</b>			
<b>Spending on Non-Claims</b>	Included.	Excluded.	None.
<b>Pharmacy Claims Spending</b>	Includes estimated pharmacy spending for members with carved-out benefits (e.g., pharmacy coverage that is not part of their medical health benefits plan).	Includes actual claims from pharmacy benefit managers that administer carve-out pharmacy benefits.	None.
<b>Pharmacy Rebates<sup>2</sup></b>	Insurers provide aggregated pharmacy rebate data in their submissions (i.e., OHIC does not receive drug-specific rebate data). Therefore, OHIC can “net out” these rebates.  These data include pharmaceutical rebates for both drugs administered by a health care provider (i.e., “medical pharmacy”), and for prescription medications obtained by consumers in a retail setting (e.g., drugstore) or via mail order.	Rebate data are not included in calculations of prescription drug spending. Therefore, these pharmacy data are “gross” of rebates.	Analyses using cost growth target data collection are typically reported net of rebates and are specified as such when relevant.

<sup>1</sup> OHIC has published results from its analysis of 2024 performance against the cost growth target in its accompanying report, *2026 Annual Report: Health Care Spending and Quality in Rhode Island*.

<sup>2</sup> Drug rebates are discounts that drug manufacturers give to third-party entities such as health insurers for the cost of prescription drugs.

CHAPTER 1

# Commercial Spending Trends



# Introduction

This chapter provides readers with an overview of commercial market spending and spending trends, using the most recent data available.

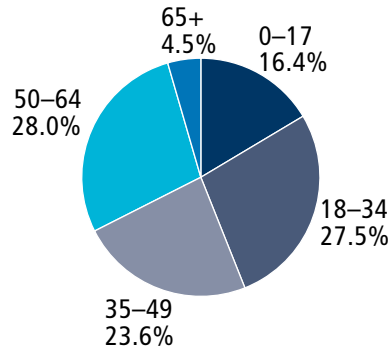
The analyses in this chapter utilize data from Rhode Island's ACPD, HealthFacts RI.

Key terms used in this chapter:

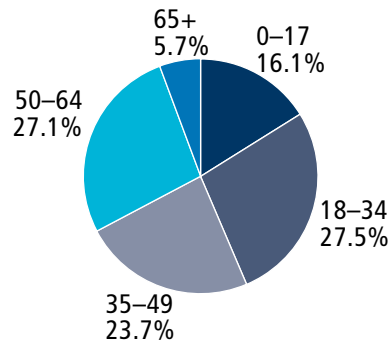
- PMPM = Per Member Per Month, equal to the total spend for the year divided by the number of member months.
- PMPY = Per Member Per Year, equal to the total spend for the year divided by the number of members (also equivalent to PMPM multiplied by 12).
- PPU = Payment Per Unit (also sometimes referenced as "price"), equal to the total spend amount divided by the number of service units.
- UPK = Units per 1,000 Members, calculated as the unit of care divided by the number of members multiplied by 1,000.

# 2024 Commercial Health Care Spending by Age & Sex and Distribution by Age Group

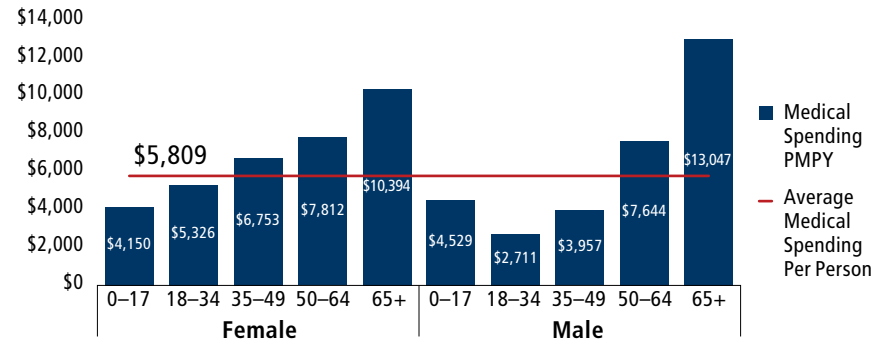
2024 Population Distribution by Medical Services by Age Band



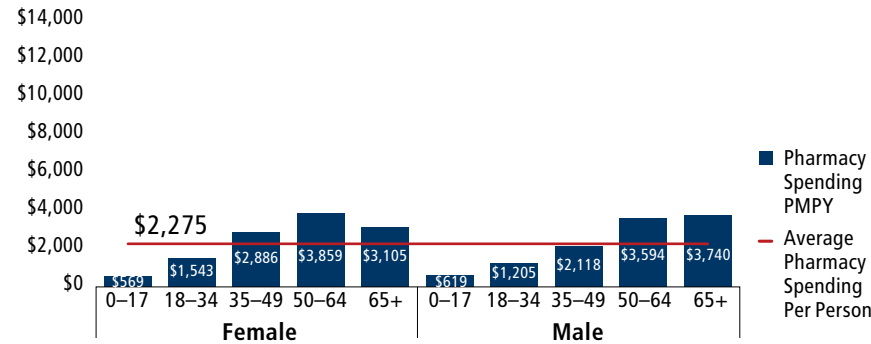
2024 Population Distribution for Retail Pharmacy Services by Age Band



2024 Medical Services Spending PMPY by Age and Sex



2024 Retail Pharmacy Spending PMPY by Age and Sex



## Summary Observations

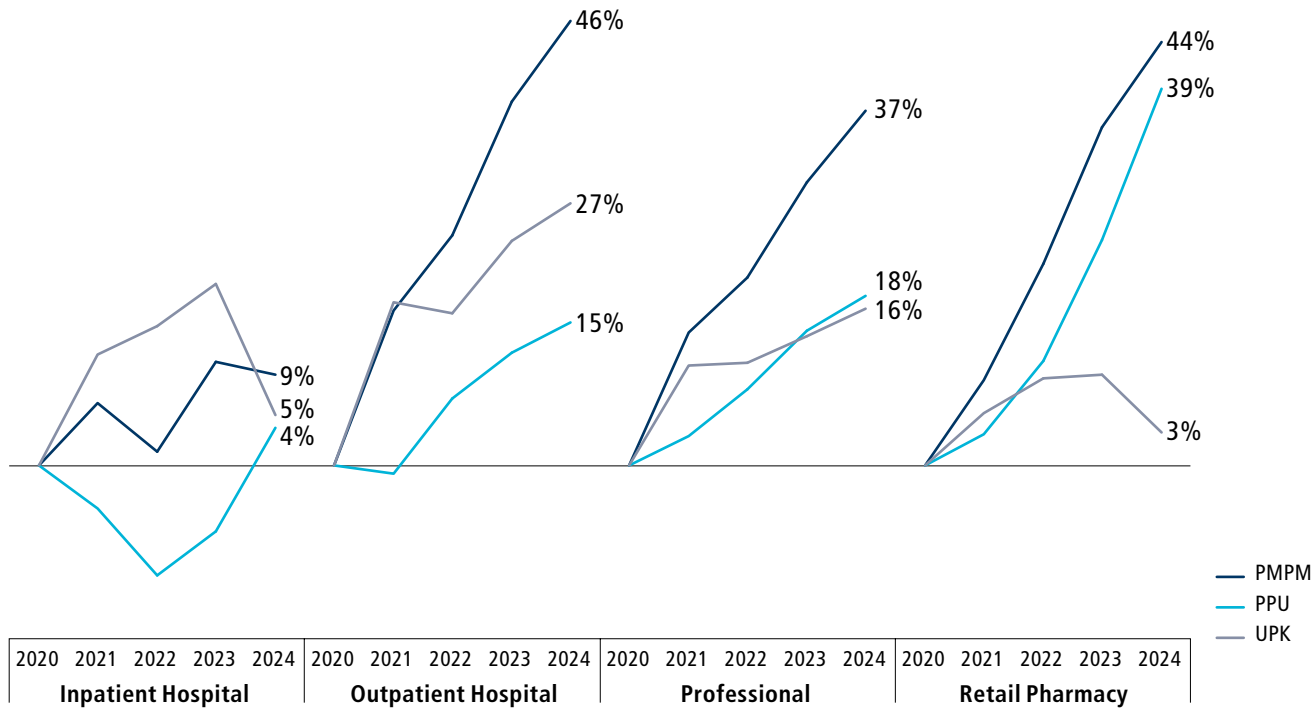
- As Rhode Island residents get older, their medical spending increases (except for males, for whom medical spending decreases between the age bands 0-17 and 18-34). The average medical spending for state residents was \$5,809 in 2024. Spending for females exceeds average spending starting at ages 35-49, whereas spending for males exceeds the average later in life, between ages 50-64.
  - OHIC examined the rates at which men and women access primary care and found that the rate for adult men was much lower than for adult women (41 percent vs. 80 percent in 2024, respectively). This pattern has remained consistent since measurement began for 2016.
- The same general pattern is observed in retail pharmacy spending: spending increases as residents get older (except for females, for whom retail pharmacy spending decreases between the age bands 50-64 and 65+). The average retail pharmacy spending per resident in 2024 was \$2,275. Similar to medical spending, females surpass the average retail pharmacy spend at ages 35-49 whereas males do so at ages 50-64.
- Medical and retail pharmacy spending for women was greater than for men in 2024, except for children and seniors.

**Key takeaway: Spending increased with age in 2024. Spending was greater for women than men, except for the youngest and oldest residents.**

Source: OHIC analysis of HealthFacts RI data.

Notes: 'Medical Services' includes Inpatient Hospital, Outpatient Hospital, Professional Services, Long-Term Care, and Other Claims (includes hospice, dialysis, care management, vision, hearing, and speech). Population distribution and spending for Medical and Retail Pharmacy services are shown separately because of differences in the populations. Members included under 'Medical' had either 1) both medical and pharmacy benefit coverage, or 2) just medical benefit coverage. Members under 'Retail Pharmacy' had either 1) both medical and pharmacy benefits, or 2) just pharmacy benefits. Note: OHIC's 2026 Annual Report on Health Care Spending and Quality in Rhode Island reported that, according to data reported by the four largest commercial insurers in the state (Blue Cross Blue Shield of Rhode Island (BCBSRI), Harvard Pilgrim Health Care and Tufts Health Plan combined (HPHC/THP), Neighborhood Health Plan of Rhode Island (NHPRI), and UnitedHealthcare (UHC)) as part of the Cost Growth Target data collection, per capita spending for all services (both Medical and Retail Pharmacy) in the commercial market was \$7,181 in 2024. For more information, see Office of the Health Insurance Commissioner, *2026 Annual Report: Health Care Spending and Quality in Rhode Island*. The sum of the average PMPY values for Medical and Retail Pharmacy services from the APCD is \$8,084 (given the differences in the population for the two services, this should be understood as a rough estimate for illustrative purposes). The difference in these values can be attributed to the methodological differences between the two data sources outlined in the Introduction (e.g., the cost growth target data are net of pharmacy rebates while data from the APCD are gross of rebates).

# Cumulative Percentage Change in PMPM, PPU, and UPK for Inpatient Hospital, Outpatient Hospital, Professional Services, and Retail Pharmacy (2020–2024)



Source: OHIC analysis of HealthFacts RI data.  
 Note: Data labels correspond to cumulative five-year growth.

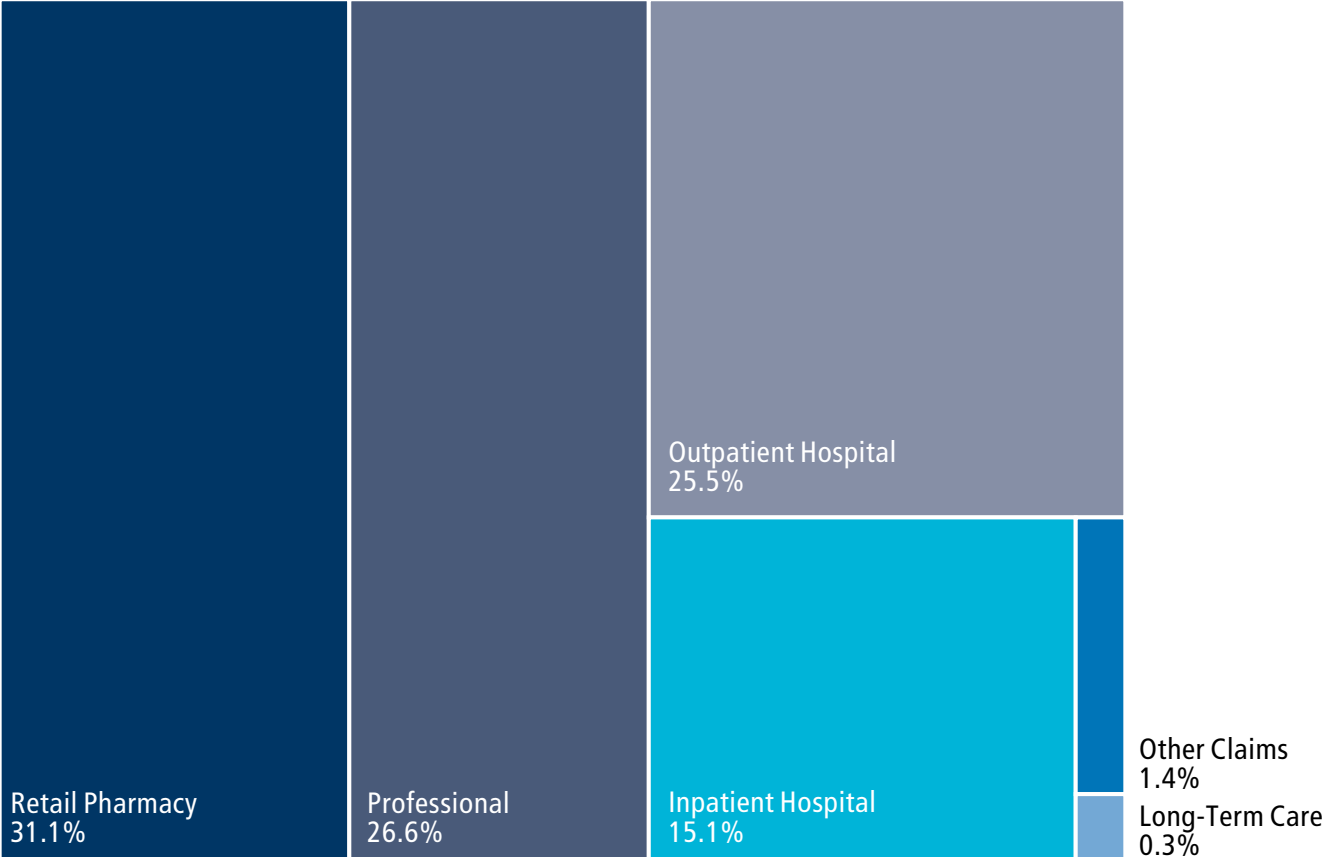
## Summary Observations

Between 2020 and 2024:

- Per person spending increased between 9 and 46 percent for each of the major service categories. The 10 percent spending growth over five years for inpatient hospital services is moderate compared to the three other categories.
- Growth in utilization was the dominant cost growth driver for outpatient hospital services, whereas growth in unit payment was the overwhelming cost growth driver for retail pharmacy. Unit payment and utilization had balanced roles as cost drivers for both inpatient hospital and professional services.
- Utilization growth was high for outpatient hospital services and moderate for professional services from 2020 through 2024. It was modest for inpatient hospital services and retail pharmacy services.
- Unit payments grew much more sharply for retail pharmacy than for the three medical service categories.

**Key takeaway: Outpatient hospital, professional, and retail pharmacy have experienced significant increases in per person spending from 2020 to 2024, averaging a little above or below 10 percent per year. Retail pharmacy stands out among these services as the one with the sharpest rise in unit payments from 2020 to 2024.**

# 2024 Share of Aggregate Commercial Spending by Service Category



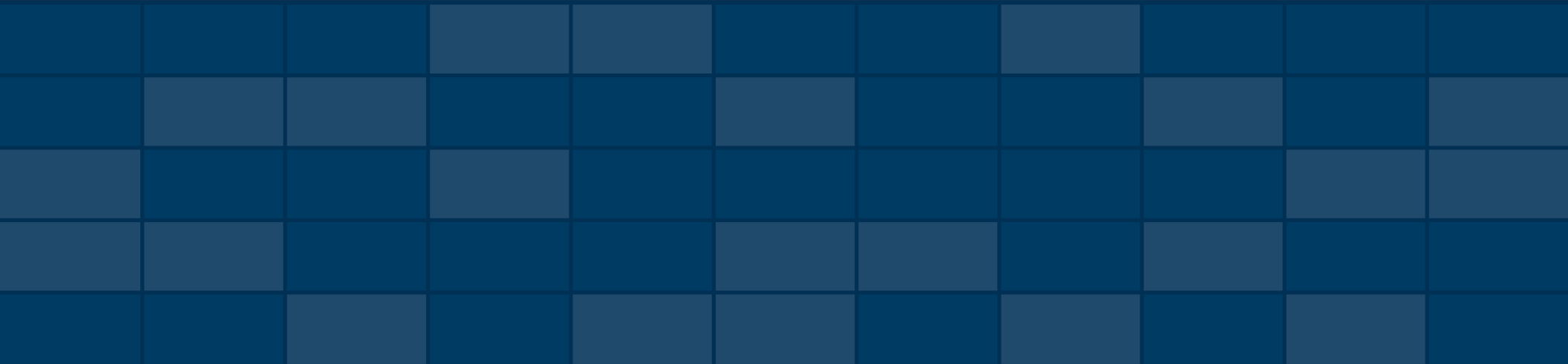
### Summary Observations

- Spending on retail prescription drugs represented the largest share of total spending – nearly a third of total spending – in the commercial market in 2023, although combined inpatient and outpatient hospital spending represented over 40 percent.
- Professional and Outpatient Hospital services each made up about a quarter of total spending.
- Other Claims and Long-Term Care each comprised just a small sliver of commercial spending represented in the APCD.

Source: OHIC analysis of HealthFacts RI data.  
 Note: These data are gross of pharmacy rebates. "Other Claims" includes hospice, dialysis, care management, vision, hearing, and speech. OHIC's *2026 Annual Report: Health Care Spending and Quality in Rhode Island* reported that, according to data for performance year 2024 submitted by the four largest commercial insurers in the state (BCBSRI, HPHC/THP, NHPRI, and UHC) as part of the cost growth target data collection, the service category with the highest spending per person was Outpatient Hospital. If OHIC "mapped" the service categories from the cost growth target data collection to align with how data are aggregated in the APCD (i.e., retail pharmacy spending is gross of rebates, and 'Professional Specialty Care', 'Professional Primary Care', and 'Professional Other' groups are combined into a single 'Professional' category), the order of categories from highest to lowest spend would be the same. For more information, see: *2026 Annual Report: Health Care Spending and Quality in Rhode Island*.

CHAPTER 2

# Commercial Payer and Large Provider Entity (LPE) Spending



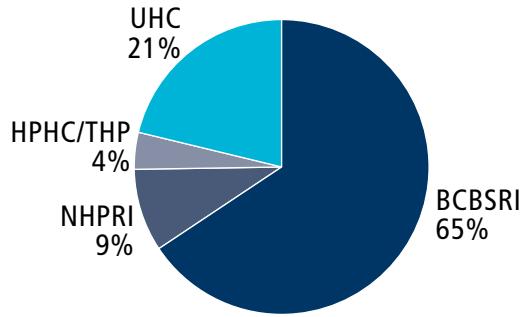
# Introduction

The analyses in this chapter rely on data reported for cost growth target data collection. The analyses shown here are not directly comparable, nor are they entirely consistent with those in Chapter 1, due to these key data source differences:

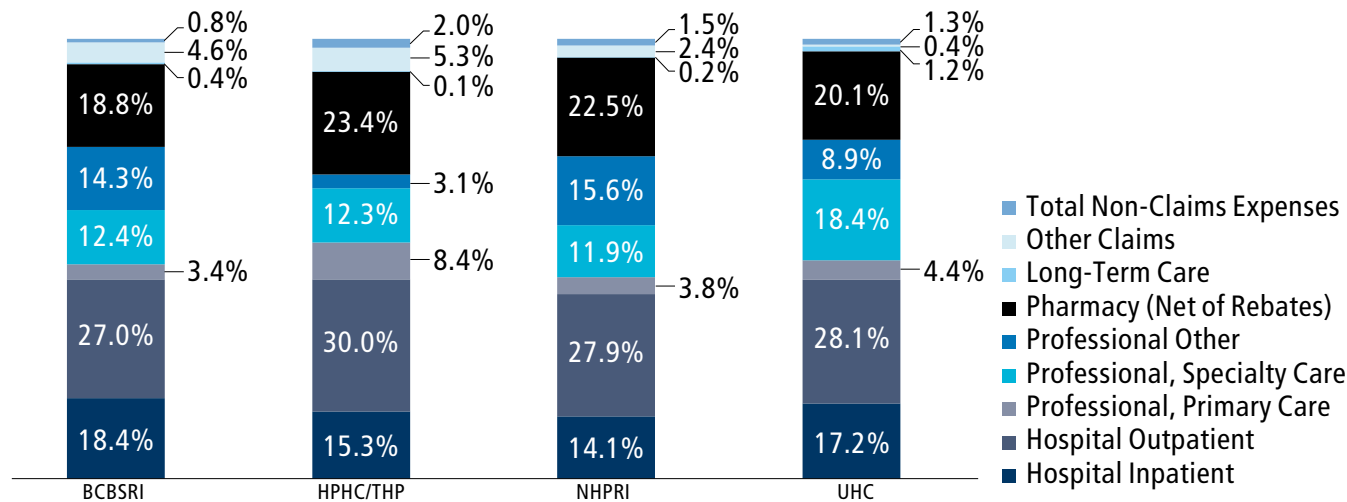
- cost growth target data are for all state residents of fully insured and self-insured plans, while APCD data are for state residents of fully insured plans and for self-insured employers that opt to submit data, and
- pharmacy spending from the cost growth target data are net of pharmacy rebates while data from the APCD are gross of rebates.

# 2024 Attributed Lives and Service Category Contribution to Commercial TME by Payer

## 2024 Commercial Attributed Lives by Payer



## 2024 Service Category Contribution to Commercial TME by Payer



## Summary Observations

For each commercial insurer:

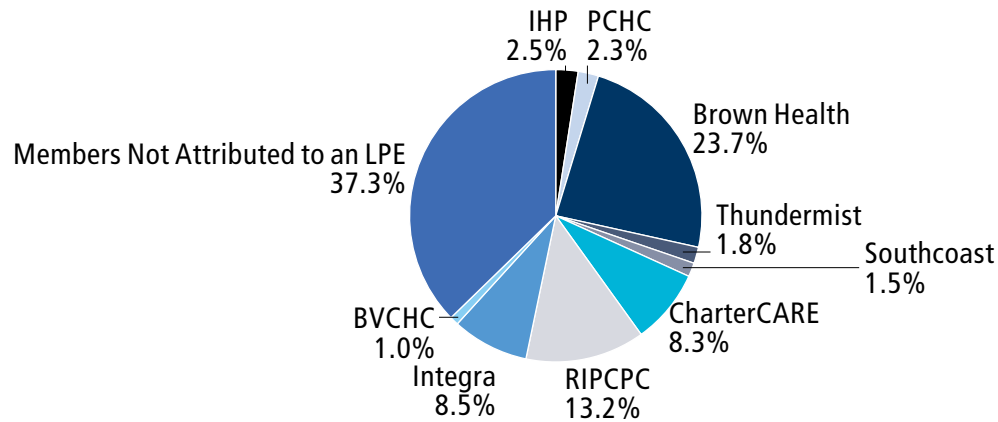
- When combined, inpatient and outpatient hospital services accounted for more than 40 percent of total spending.
- Retail pharmacy represents the second largest component of spending after rebates are netted out.
- Specialty care made up approximately two to three times more spending than primary care.
- Non-claims made up a small proportion of spending.
- Distribution of spending was similar by insurer, but not identical. This may reflect differences in the risk profiles of each insurer's enrollment, and also the smaller and this statistically more volatile enrollments for HPHC/THP and NHPRI.

Source: OHIC analysis of TME data submitted by the four largest commercial insurers in Rhode Island (BCBSRI, HPHC/THP, NHPRI, and UHC) as part of the Cost Growth Target data collection. Notes: There are two other commercial insurers in the state: Aetna and Cigna, both of which have limited presence in the Rhode Island commercial insurance market. Retail pharmacy spending is reported net of total pharmacy rebates. The data in the bar graph are not the same as the data that are used to assess payers against OHIC's Primary Care Spend Obligation, which is a regulatory requirement included in OHIC's Affordability Standards.<sup>1</sup> The data shown in this graph reflect the entirety of the fully insured and self-insured segments of the commercial market, while the Primary Care Spend Obligation is relevant only for the fully insured segment. Additionally, the Primary Care Spend Obligation excludes Long-Term Care in its definition of total medical expense, while the cost growth target data collection includes it. Therefore, commercial insurers' levels of investment in primary care in 2024 under the Primary Care Spend Obligation will differ from what is shown here. For more information, see: *2026 Annual Report: Primary Care Spending and Utilization in Rhode Island*.

<sup>1</sup> OHIC's Affordability Standards, per RICR-20-30-4, directed commercial insurers to annually spend at least 10.7 percent of their annual medical expenses for all fully insured lines of business on primary care in 2024.

# 2024 Attributed Lives and Service Category Contribution to Commercial TME by LPE

## 2024 Commercial Attributed Lives by LPE

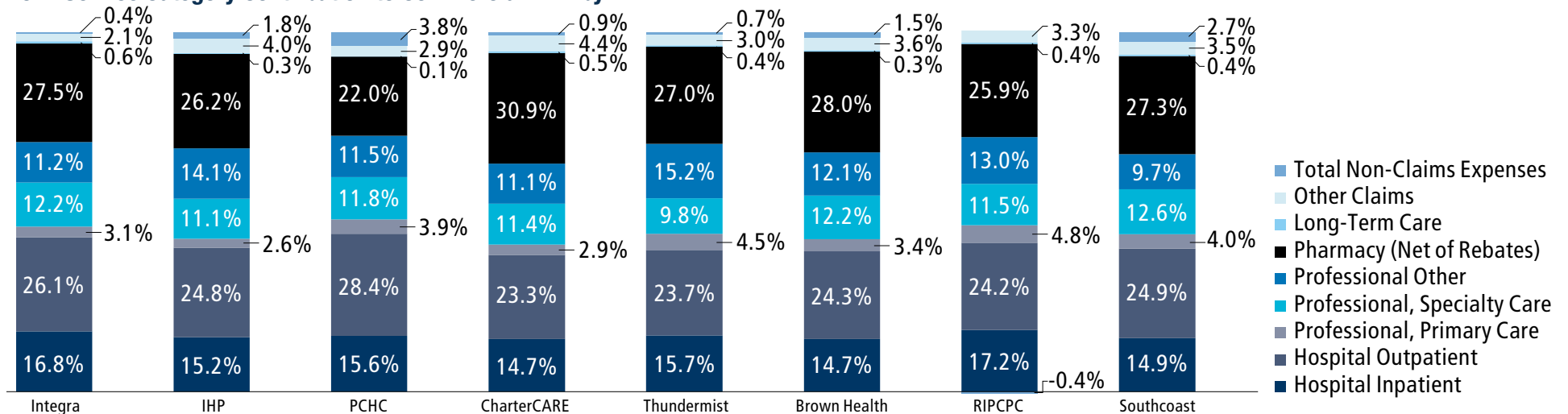


## Summary Observations

For each LPE:

- As was the case for insurers, spending on hospital services represented the largest segment of total spending.
- Spending on prescription drugs made up more than 20 percent of total spending for each of these LPEs in 2024.

## 2024 Service Category Contribution to Commercial TME by LPE



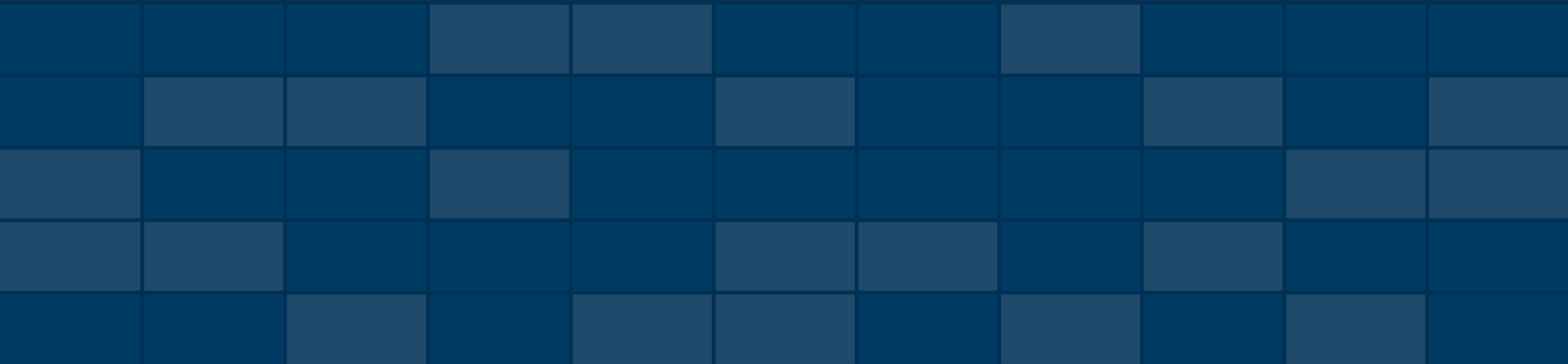
Source: OHIC analysis of TME data submitted by the four largest commercial insurers in Rhode Island (BCBSRI, HPHC/THP, NHPRI, and UHC) as part of the Cost Growth Target data collection.

Note: The eight LPEs shown in the bar graph are those that met the minimum attributed<sup>1</sup> lives for the commercial market requirement for public reporting of 5,000 members (60,000 member months) in 2024. The remaining LPE (Blackstone Valley Community Health Center) did not meet this threshold for public reporting. Retail pharmacy spending data are reported gross of rebates, as payers are unable to attribute pharmacy rebates to specific provider entities. BVCHC = Blackstone Valley Community Health Care; Brown Health = Brown University Health; CharterCARE = CharterCARE Provider Group of RI; Integra = Integra Community Care Network; IHP = Integrated Health Partners; PCHC = Providence Community Health Centers; RIPCCP = Rhode Island Primary Care Physicians Corporation; Southcoast = Southcoast Health; and Thundermist = Thundermist Health Center.

<sup>1</sup> Attribution refers to the process of assigning an enrollee to the clinician principally responsible for their care. Through these relationships, patients are then assigned to provider organizations. This process is used to inform contractual terms between insurers and provider organizations, among other purposes.

CHAPTER 3

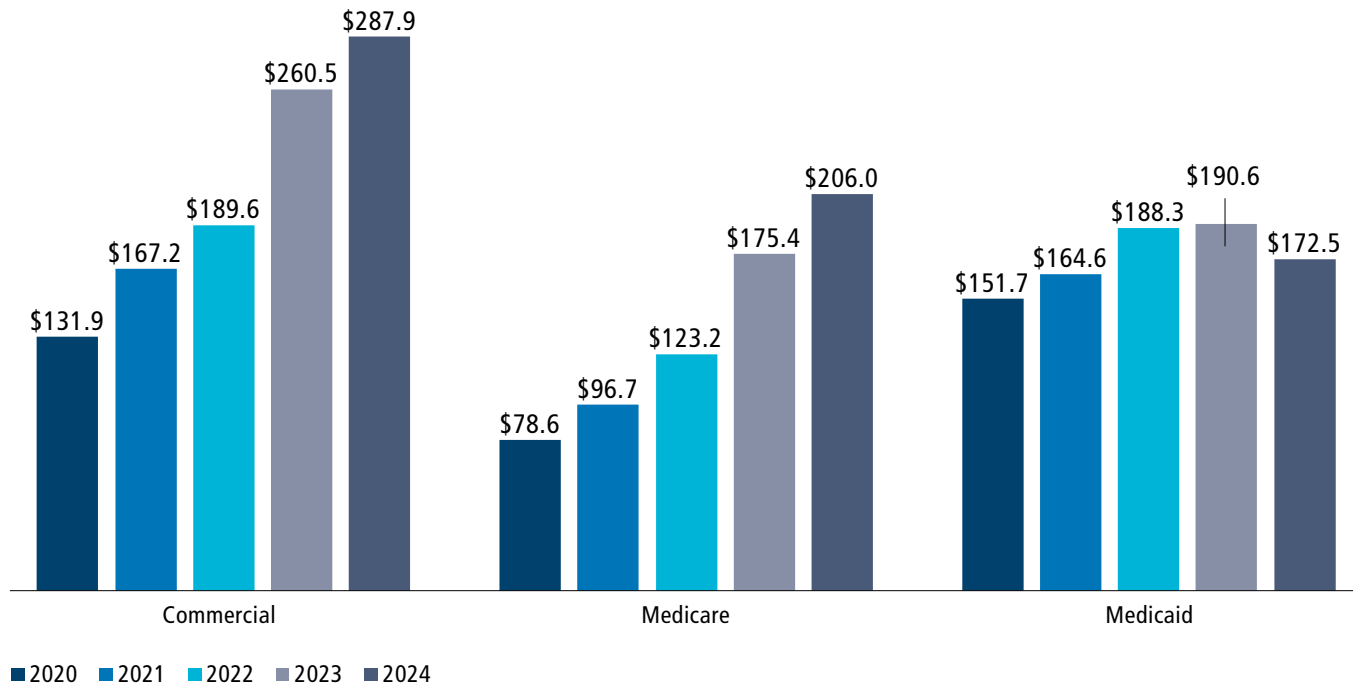
# Pharmacy Rebates



# Introduction

Pharmacy rebates are discounts that drug manufacturers give to third-party entities such as health insurers for the cost of prescription drugs. The analyses in this chapter rely on pharmacy rebate data reported for the cost growth target data collection in aggregate (i.e. OHIC does not receive data on drug-specific rebates). The data in this section reflect total pharmacy rebates for both medical and retail drugs. OHIC is aware that the vast majority of rebates is associated with retail drugs.

# Pharmacy Rebates by Market (in Millions) (2020–2024)



Source: OHIC analysis of pharmacy rebate data submitted by BCBSRI, HPHC/THP, NHPRI, and UHC and by the Rhode Island Executive Office of Health and Human Services as part of the Cost Growth Target data collection.  
 Notes: Payers and EOHHS report these amounts as negative numbers; absolute values are shown here. Medicaid includes data submitted by Medicaid Managed Care Organizations and RI EOHHS. Medicare includes data submitted by health insurers.

## Summary Observations

- Total pharmacy rebates for the Medicaid market are eclipsed by rebates in the Medicare and commercial markets.
- Commercial pharmacy rebates rapidly increased between 2020 and 2024, rising more than \$150 million. The largest annual growth occurred between 2022 and 2023.
- Similar to the commercial market, Medicare pharmacy rebates follow an upwards trend over this time period, increasing more than \$125 million.
- While Medicaid pharmacy rebates increased between 2020 and 2023, the change was more moderate compared to the Commercial and Medicare markets, increasing by approximately \$40 million. Medicaid pharmacy rebates decreased between 2023 and 2024.

# Pharmacy Rebates as a Percentage of Gross Retail Pharmacy Claims (2020–2024)

	2020	2021	2022	2023	2024
<b>Commercial</b>	22%	27%	29%	36%	35%
<b>Medicare</b>	13%	16%	18%	23%	23%
<b>Medicaid</b>	49%	46%	47%	45%	44%

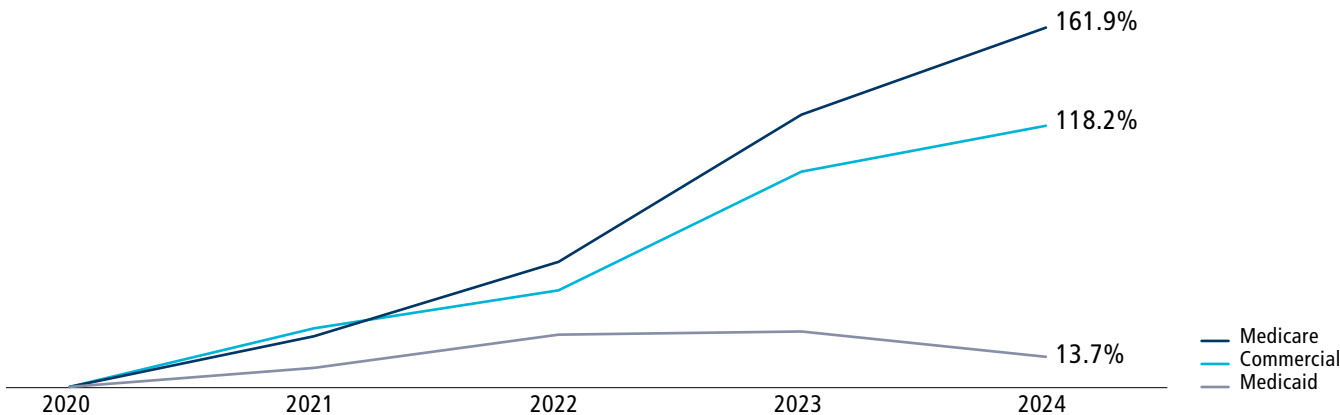
Source: OHIC analysis of pharmacy claims and rebate data submitted by BCBSRI, HPHC/THP, NHPRI, and UHC and by the Rhode Island Executive Office of Health and Human Services as part of the Cost Growth Target data collection.

Notes: Medicaid includes data submitted by the Medicaid Managed Care Organizations and RI EOHHS. Medicare includes data submitted by the health insurers.

## Summary Observations

- When comparing across markets, pharmacy rebates represent the largest percentage of gross pharmacy claims for Medicaid. This is unsurprising due to the Medicaid Drug Rebate Program, which requires drug manufacturers to provide rebates to state Medicaid agencies in exchange for Medicaid drug coverage.
- While pharmacy rebates as a percentage of gross retail pharmacy claims increased significantly between 2020 and 2024 in the commercial and Medicare markets, they have slightly but steadily declined in the Medicaid market.

# Cumulative Percentage Change in Rebates for Commercial, Medicaid, and Medicare (2020–2024)



Source: OHIC analysis of pharmacy rebate data submitted by BCBSRI, HPHC/THP, NHPRI, and UHC and by the Rhode Island Executive Office of Health and Human Services as part of the Cost Growth Target data collection.

## Summary Observations

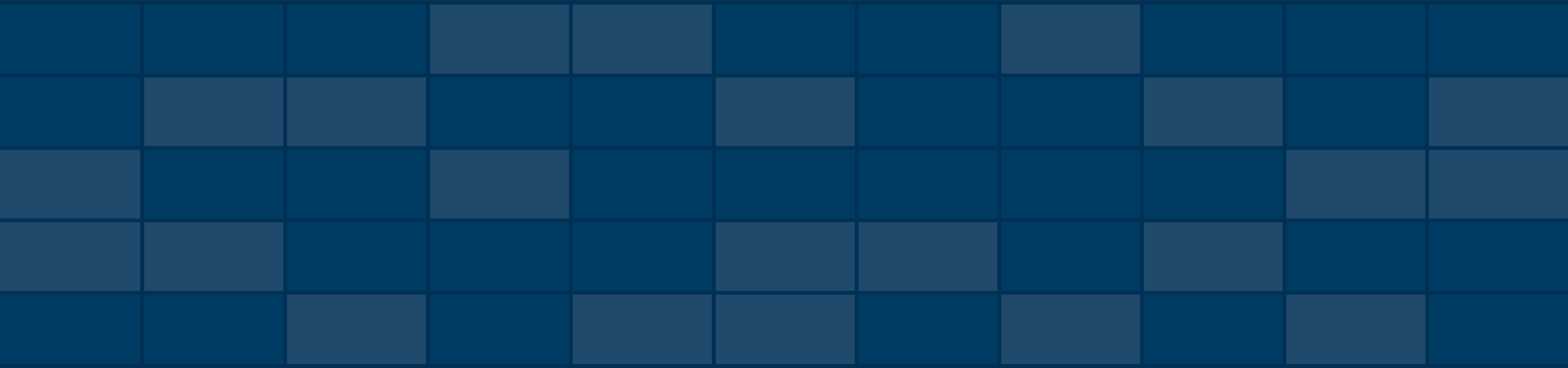
Rebates for the commercial and Medicare markets more than doubled between 2020 and 2024.

# Conclusion

Pharmacy rebates have increased substantially since 2020, both in terms of dollars as well as a percentage of gross pharmacy claims. While traditionally the financial offset has been greatest for Medicaid, rebate amounts have grown substantially in the commercial and Medicare markets. Separate OHIC cost growth target data analysis demonstrates that these increases have not stemmed high levels of retail pharmacy spending growth in both markets. See: *2026 Annual Report: Health Care Spending and Quality in Rhode Island*.

CHAPTER 4

# Examining Humira and Biosimilars



# Introduction

In prior public reporting, OHIC has spotlighted Humira, the best-selling drug of all time, as a prime example of the extremely high prescription drug costs that threaten health care affordability.<sup>1</sup> Leveraging data from the state's All-Payer Claims Database, OHIC has highlighted Humira's high prices and annual price increases – one of its forms, Humira Cf (citrate-free) entered the market in 2019 at nearly \$6,000 in Rhode Island. AbbVie, the manufacturer of Humira, kept the blockbuster's prices high and growing thanks to its patent exclusivity. In early 2023, Humira lost this protection, which allowed biosimilar competitors to enter the market.

OHIC used data for the commercial market from the APCD to understand the impact of this change in Rhode Island.

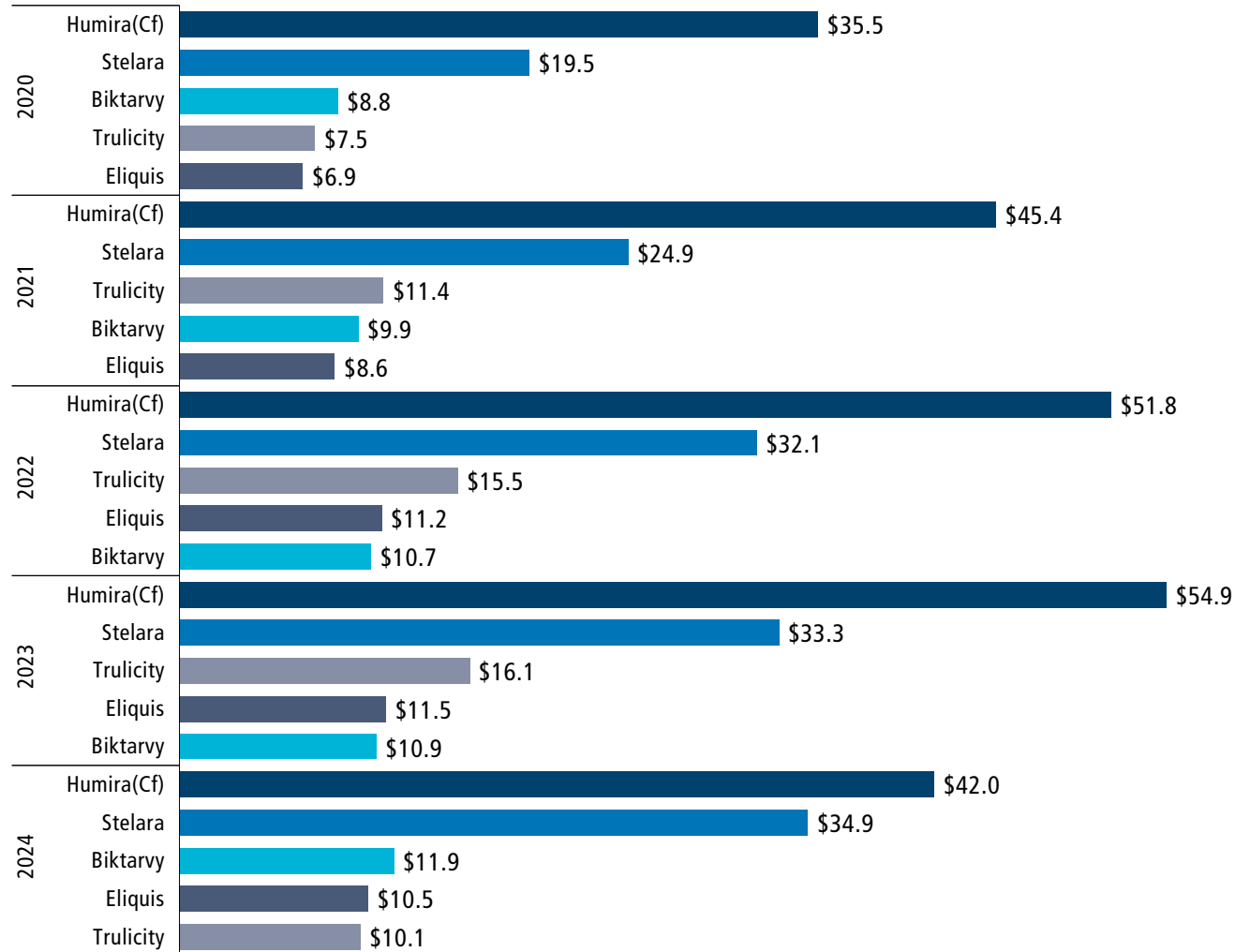
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<sup>1</sup> Rhode Island Office of the Health Insurance Commissioner. [The High Cost of Brand-Name Drugs](#). Accessed March 26, 2026.

# Background

Humira belongs to the drug class known as immunological agents, which are medications that treat autoimmune diseases, treat cancer, and fight infections.<sup>1</sup> This drug class has had the highest spending in the state of RI over the last five years – in 2020, APCD commercial spending on this category amounted to \$147.6M; by 2024, this increased to \$257.7M. From 2020 to 2023, Humira was the drug with the highest spending by a large margin; the drug with the second highest spending, Stelara, trailed behind by about \$20M each year. However, in 2024, total spending on Humira was much lower than in prior years. OHIC dug into this further.

**Exhibit 4.1: Highest-Spend Immunologic Drugs (in Millions) (2020–2024)**



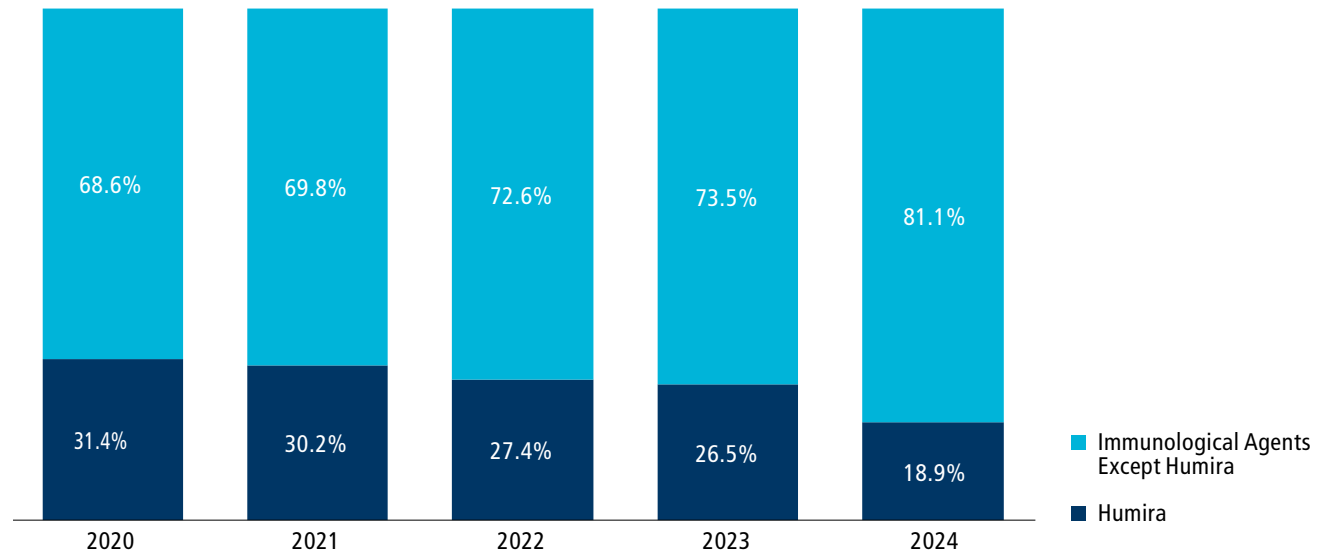
Source: OHIC analysis of HealthFacts RI data.

<sup>1</sup> This drug category includes COVID-19 vaccines, but they have been removed from this analysis.

# Findings

OHIC analysis revealed that there was a reduction in spending for Humira in 2024. In 2021, Humira accounted for 30 percent of spending on immunological agents. By 2024, Humira's share had declined substantially, representing 19 percent of spending.

**Exhibit 4.2: Share of Spending (2020–2024)**



Source: OHIC analysis of HealthFacts RI data.

**Utilization for Humira dropped, but price remained unchanged.** From 2023 to 2024, utilization of Humira dropped 20 percent, equivalent to a decrease of nearly 1,500 units. However, despite this drop in volume, Humira’s average price decreased just under 2 percent – from just over \$8,000 to just under \$8,000. Notably, this follows three consecutive years of increases exceeding 8 percent.

**Table 4.1: Spending, Average Unit Payments, and Utilization for Humira (2020–2024)**

Year	PMPM	PPU	UPK	PMPM % Change	PPU % Change	UPK % Change
2020	\$11	\$6,329	21	–	–	–
2021	\$13	\$6,865	22	14.7%	8.5%	5.8%
2022	\$13	\$7,441	22	7.6%	8.4%	-0.7%
2023	\$15	\$8,080	22	8.0%	8.6%	-0.6%
2024	\$11	\$7,947	17	-21.5%	-1.6%	-20.2%

Source: OHIC analysis of HealthFacts RI data.  
 Note: PMPM = Per Person Per Month; PPU = Payment Per Unit; and UPK = Units per 1,000 members. Units are defined as 30-day equivalents.

At the same time, OHIC observed an uptake in Humira biosimilars in 2024. Across the biosimilars available in OHIC’s data (Hyrimoz, Adalimumababadz, and Hadlima), there were about 1,000 units reported in 2024. These biosimilars appear to account for most of the decline in Humira units. Unsurprisingly, these biosimilars are priced much lower than Humira, at about \$1,500 per unit compared to Humira’s \$8,000 price. This represents a substantial shift in spending on these life-changing medications for patients who suffer with conditions such as Crohn’s Disease and severe plaque psoriasis.

**Table 4.2: PPU for Humira Biosimilars (2024)**

Biosimilar Name	2024 PPU	2024 Units (30-Day Equivalents)
Hyrimoz	\$1,537	658
Adalimumabadz	\$1,695	124
Adalimumab-Ryv(Cf) Autoinject	\$1,221	128
Pushtouch	\$1,356	95

Source: OHIC analysis of HealthFacts RI data.  
 Note: PPU = Payment Per Unit.

## Conclusion

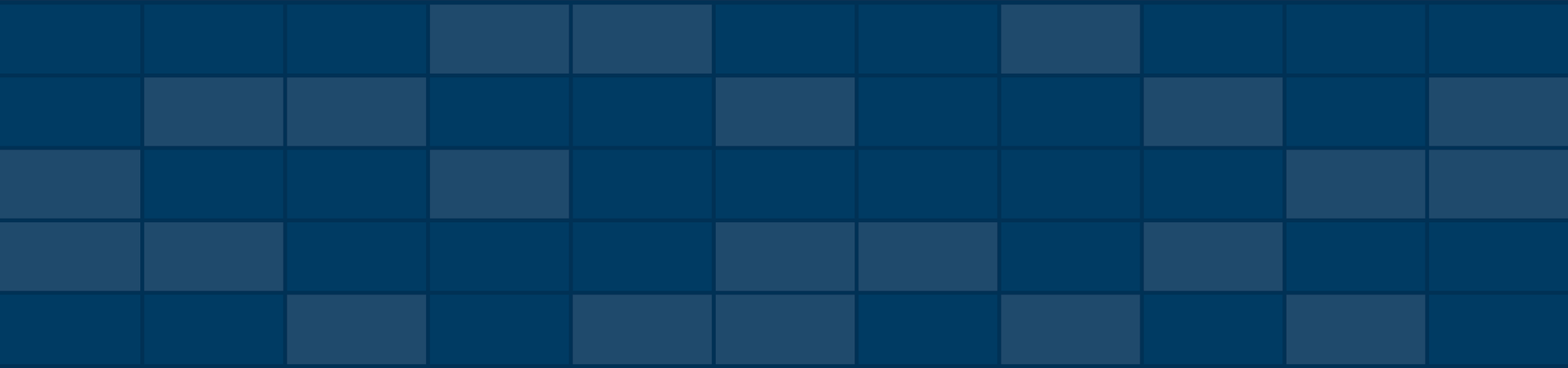
Data from the APCD signal that Rhode Island residents have begun transitioning to biosimilars for treatment of these conditions. OHIC expects this trend to continue. In early 2024, CVS Health took a major step to encourage biosimilar use by removing Humira from its national formulary and replacing it with biosimilars.<sup>1</sup> The state’s 2024 data show the early stages of this transition towards effective, more affordable treatment options for patients.

OHIC will continue to monitor these spending and utilization patterns in the future.

<sup>1</sup> CVS Health. [CVS Caremark accelerates biosimilars adoption through formulary changes](#). January 3, 2024.

CHAPTER 5

# Examining the Drop in Insulin Prices



# Introduction

In 2024, about 12 percent of Rhode Island adults were diabetic. From 2020 to 2024, diabetes medications accounted for the second-highest category of commercial prescription drug spending in Rhode Island's APCD, at \$103M. Unsurprisingly, glucagon – like peptide – 1 receptor agonist drugs (GLP-1s) make up a large share of this spending. When GLP-1s are removed from spending,<sup>1</sup> the trends within the remaining diabetes drug market tell a different story.

In this analysis, OHIC used 2020–2024 commercial market data from the APCD to examine spending, utilization, and prices of insulin and non-insulin diabetes medications, cornerstones of diabetes management and treatment.

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<sup>1</sup> GLP-1s appear in the APCD as either diabetes drugs (“blood glucose regulators”) or weight-loss drugs (“anti-obesity agents”). This analysis only removes the diabetes GLP-1s (Mounjaro, Saxenda, Ozempic, Rybelsus, Trulicity, Victoza, Wegovy, and Zepbound).

# Background

Between 2020 and 2024, spending on diabetes medication overall was driven by increases in unit payments.

**Table 5.1: Spending, Price, and Utilization of Diabetes Medications Overall (2020–2024)**

Year	PMPM	PPU	UPK	PMPM % Change	PPU % Change	UPK % Change
2020	\$13.37	\$191	842	–	–	–
2021	\$14.74	\$206	859	10.3%	8.1%	2.0%
2022	\$17.38	\$229	912	17.9%	11.1%	6.2%
2023	\$21.53	\$270	958	23.8%	17.8%	5.1%
2024	\$24.72	\$312	952	14.8%	15.6%	-0.7%

Source: OHIC analysis of HealthFacts RI data.  
Note: PMPM = Per Person Per Month; PPU = Payment Per Unit; and UPK = Units per 1,000 members. Units are defined as 30-day equivalents.

GLP-1s’ share of diabetes spending grew in this time; in 2020, it made up 20 percent of spending on diabetes medications; in 2024, it made up more than 60 percent of total spending in this category.

**Table 5.2: Spending, Price, and Utilization of GLP-1s (2020–2024)**

Year	PMPM	PPU	UPK	PMPM % Change	PPU % Change	UPK % Change
2020	\$2.52	\$751	40	–	–	–
2021	\$3.66	\$785	56	45.5%	4.5%	39.2%
2022	\$5.87	\$817	86	60.1%	4.1%	53.8%
2023	\$9.31	\$867	129	58.7%	6.2%	49.5%
2024	\$15.16	\$914	199	62.8%	5.4%	54.4%

Source: OHIC analysis of HealthFacts RI data.  
Note: PMPM = Per Person Per Month; PPU = Payment Per Unit; and UPK = Units per 1,000 members. Units are defined as 30-day equivalents.

**When removing GLP-1s from the analysis, we see that the remaining diabetes market shows a different picture.** Growth in spending, price, and utilization for non-GLP-1 diabetes medications was much more modest from 2020 to 2023. Notably, in 2024, spending plummeted, driven by decreases in both unit payments and utilization. OHIC dug into this further.

**Table 5.3: Spending, Price, and Utilization of Diabetes Medications without GLP-1s (2020–2024)**

Year	PMPM	PPU	UPK	PMPM % Change	PPU % Change	UPK % Change
2020	\$10.85	\$162	801	–	–	–
2021	\$11.08	\$166	803	2.1%	2.0%	0.2%
2022	\$11.52	\$167	825	3.9%	1.1%	2.8%
2023	\$12.21	\$177	830	6.1%	5.5%	0.5%
2024	\$9.56	\$152	753	-21.7%	-13.8%	-9.2%

Source: OHIC analysis of HealthFacts RI data.  
Note: PMPM = Per Person Per Month; PPU = Payment Per Unit; and UPK = Units per 1,000 members. Units are defined as 30-day equivalents.

# Findings

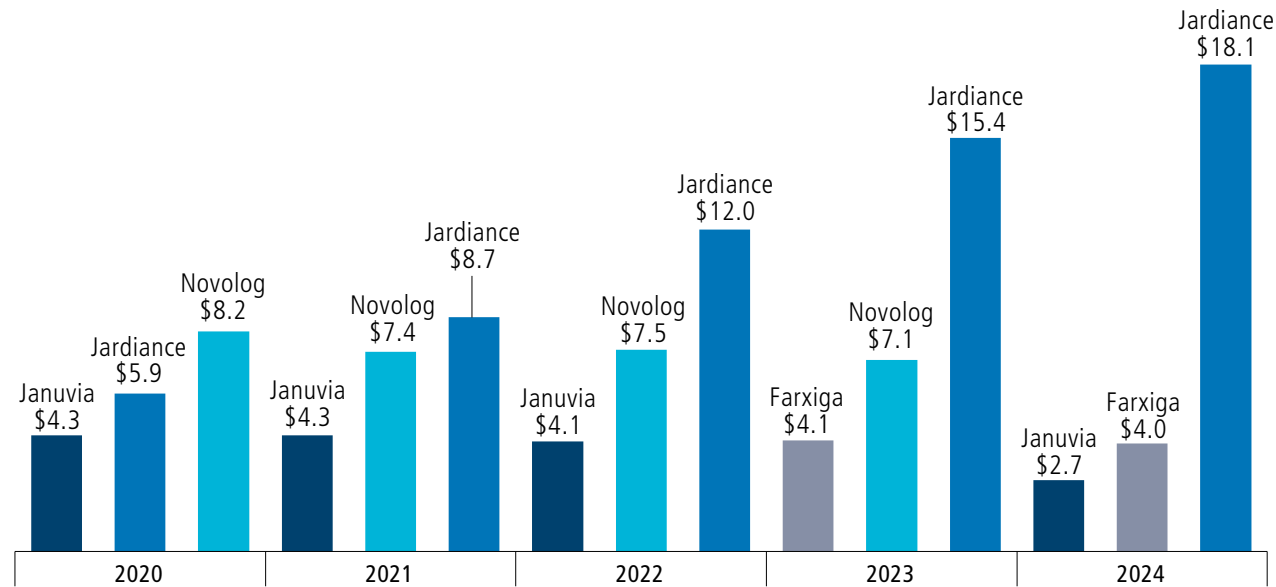
## Examining Diabetes Drugs

### Top Spend Medications

OHIC identified the top three spend, non-GLP-1, diabetes medications each year. From 2020 to 2022, Novolog, Jardiance, and Januvia were the top of the list. In 2023, Januvia was replaced by Farxiga, and in 2024, Januvia came back to replace Novolog, which fell below \$2M in spending. Of these medications, only Novolog is an insulin medication whereas the other three are non-insulin medications primarily used for blood sugar control.

The top 3 drugs each year made up between 40 and 62 percent of total spending for the non-GLP-1 diabetes market.

**Exhibit 5.1: Top Diabetes Medications by Spending (in Millions) (2020–2024)**



Source: OHIC analysis of HealthFacts RI data.

An analysis of spending, price, and utilization patterns for these four top-spend drugs shows year-over-year increases in unit payments for Jardiance, Farxiga, and Januvia between 2023 and 2024, but a substantial decline in unit payments for Novolog in 2024. During the same time, utilization decreased for Farxiga and Januvia, while it increased for Jardiance.

**Table 5.4: Annual Change in (a) Spending, (b) Price, and (c) Utilization for Top Spend Diabetes Medications (2020–2024)**

**(a) Spending**

Drug	PMPM % Change			
	2020–21	2021–22	2022–23	2023–24
Jardiance	47.0%	36.0%	34.6%	16.7%
Farxiga	42.1%	42.1%	11.2%	-3.5%
Januvia	-1.6%	-5.9%	-13.5%	-22.0%
Novolog	-10.4%	0.3%	-0.6%	-76.0%

Source: OHIC analysis of HealthFacts RI data.

**(b) Price**

Drug	PPU % Change			
	2020–21	2021–22	2022–23	2023–24
Jardiance	10.8%	-4.0%	4.6%	2.4%
Farxiga	2.1%	1.0%	2.1%	3.9%
Januvia	4.5%	2.7%	6.5%	4.8%
Novolog	1.5%	-2.2%	-0.8%	-74.2%

Source: OHIC analysis of HealthFacts RI data.

**(c) Utilization**

Drug	UPK % Change			
	2020–21	2021–22	2022–23	2023–24
Jardiance	41.3%	33.1%	28.7%	14.0%
Farxiga	39.2%	40.7%	8.9%	-7.1%
Januvia	-5.8%	-8.4%	-18.7%	-25.6%
Novolog	-11.7%	2.6%	0.2%	-7.2%

Source: OHIC analysis of HealthFacts RI data.

A Rhode Island clinician hypothesized that the decrease in Farxiga, a sodium-glucose cotransporter 2 (SGLT2) inhibitor in 2024 is partially driven by patients switching to using GLP-1s to lose weight. While Farxiga is a standard-of-care medication for heart failure and early kidney disease, using both SGLT2s and GLP-1s can be prohibitively expensive.

## What Happened with Insulin?

Recent events explain the driving force behind this huge drop in price for Novolog, a popular insulin drug. In 2022, the nonprofit drug company Civica announced that it would sell biosimilar insulin at a max price of \$30 per vial and \$55 per box. Civica committed to rolling this out beginning in 2024. Soon after, California shared that it would manufacture biosimilar insulin, and that it would be available to consumers for just \$55 per vial.<sup>1</sup> In 2023, the three top diabetes drug manufacturers, Novo Nordisk, Eli Lilly, and Sanofi, cut their prices on their insulin products. Researchers speculate this move may have been due to a few factors, including: intensified market competition after the lower-cost biosimilars became available and public shaming following a decades-long fight by advocates to lower the price of insulin.

OHIC's APCD data bears this out: for Novolog and other top spend insulin products, price per unit dropped dramatically in 2024.

**Table 5.5: Changes in PPU for Top Insulin Medications (2023–2024)**

Drug	2023 PPU	2024 PPU	PPU % Change
Novolog	\$627	\$162	-74.2%
Lantus Solostar	\$317	\$72	-77.3%
Humalog	\$641	\$156	-75.7%
Lantus	\$323	\$81	-74.9%

Source: OHIC analysis of HealthFacts RI data.

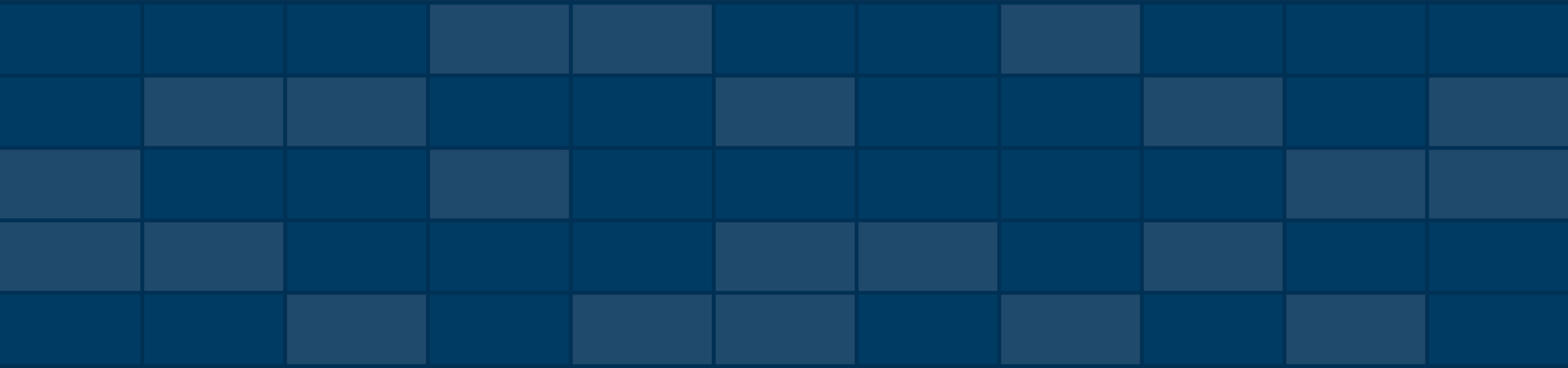
## Conclusion

Consumers can finally get the life-saving medication they need – insulin – at a dramatically lower cost. However, given the multitude of factors necessary to bring prices down, it is obvious that high prices for other brand-name diabetes drugs, such as GLP-1s, will continue to saddle Rhode Islanders with high costs.

<sup>1</sup> Making prescription drugs more affordable for Californians. CalRx. Accessed March 27, 2026.

CHAPTER 6

# Analysis of Inpatient Hospital Services by Severity



# Introduction

Inpatient discharges are primarily reimbursed through diagnosis-based payment system, under which some non-procedural stays are classified by diagnosis, and payments may be tied to severity of illness. This system was intended to control costs and reflect clinical complexity. However, it has created incentives for providers to bill for patients at higher complexity levels to maximize payment. In one recent study, researchers analyzed inpatient discharge data from 2011 through 2019 in five states, and found that the number of discharges coded with the highest severity levels increased by 41 percent.<sup>1</sup> Against this backdrop, OHIC sought to understand whether similar patterns were evident in Rhode Island from 2021 to 2023.<sup>2</sup> Using data from the state's APCD, HealthFacts RI, OHIC set out to answer the question: "to what extent has there been an increasing level of coded severity for inpatient services over time?"

Below are relevant notes for this analysis:

- Rhode Island uses All Patient Refined Diagnosis Related Groups (APR-DRGs) to classify inpatient stays into four severity-of-illness levels – 1 (Minor), 2 (Moderate), 3 (Major), and 4 (Extreme).
- This analysis was conducted using Medicare data from 2021–2023. Medicare data were used for this analysis due to the higher volume of inpatient procedure volume in the Medicare population compared to the commercial and Medicaid populations.

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1 D. Crespín, M. Dworsky, J. Levin, T. Ruder, and C. M. Whaley, "Upcoding Linked to up to Two-Thirds of Growth in Highest-Intensity Hospital Discharges in 5 States, 2011–19," *Health Affairs* 43, no. 12 (2024): 1619–1627, <https://doi.org/10.1377/HLTHAFF.2024.00596>.

2 OHIC's analysis was limited to three years of data, reflecting the period for which complete data were available.

# Background: Top Major Diagnostic Categories

Medicare inpatient spending is highly concentrated among just a few categories. Four Major Diagnostic Category (MDCs) (Diseases and Disorders of the: Circulatory System; Musculoskeletal System; Respiratory System, and Nervous System) made up 58 percent of Medicare inpatient spending, and 54 percent of the discharges each year.

**Table 6.1a: Share of Total Spending Across Top MDCs (2021–2023)**

MDC	2021	2022	2023
Diseases and Disorders of the <b>Circulatory System</b>	22%	22%	23%
Diseases and Disorders of the <b>Musculoskeletal System</b>	14%	13%	14%
Diseases and Disorders of the <b>Respiratory System</b>	12%	11%	10%
Diseases and Disorders of the <b>Nervous System</b>	11%	11%	11%
<b>Total</b>	<b>58%</b>	<b>58%</b>	<b>58%</b>

Source: OHIC analysis of HealthFacts RI data.  
Note: Spending represents allowed amount.

**Table 6.1b: Share of Discharges Across Top MDCs (2021–2023)**

MDC	2021	2022	2023
Diseases and Disorders of the <b>Circulatory System</b>	20%	20%	20%
Diseases and Disorders of the <b>Musculoskeletal System</b>	11%	11%	11%
Diseases and Disorders of the <b>Respiratory System</b>	13%	14%	13%
Diseases and Disorders of the <b>Nervous System</b>	10%	10%	10%
<b>Total</b>	<b>54%</b>	<b>54%</b>	<b>54%</b>

Source: OHIC analysis of HealthFacts RI data.

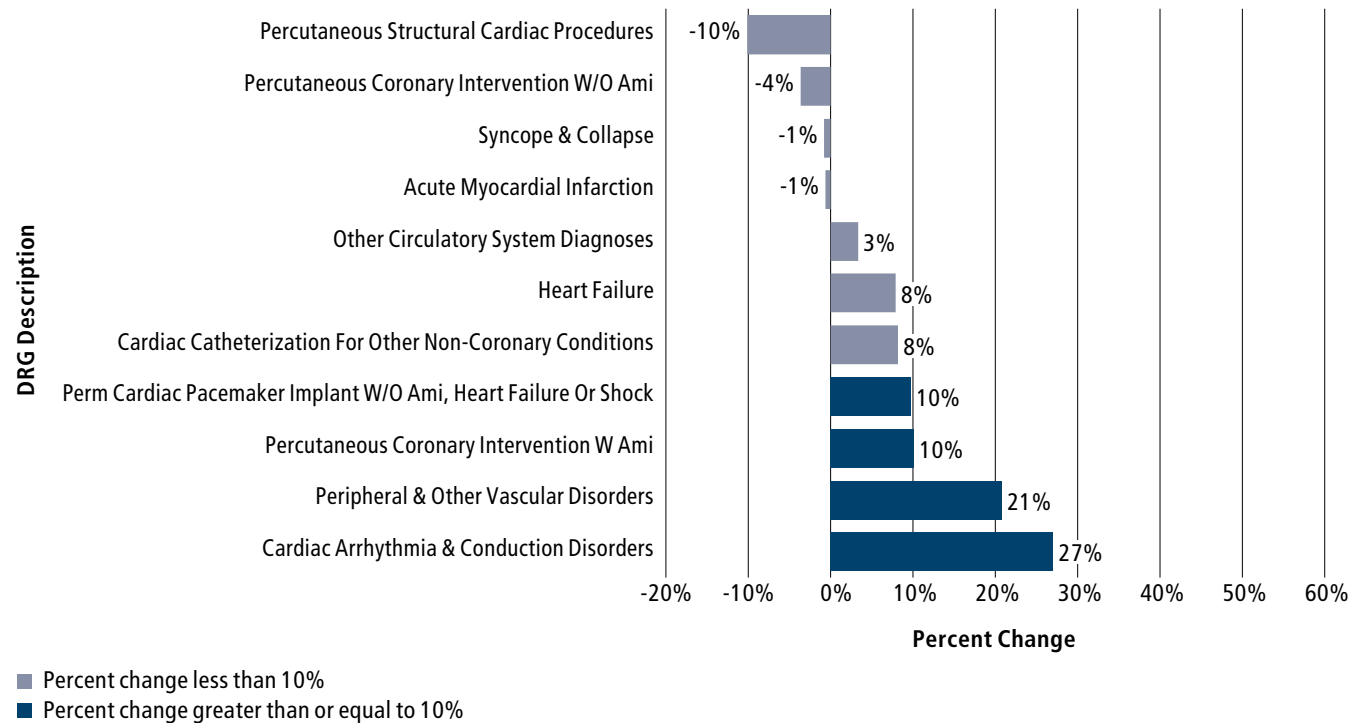
# Findings

In order to detect patterns, the analysis considered DRGs within the four MDCs that had at least 150 Medicare discharges per year. This resulted in 11 Circulatory, four Musculoskeletal, six Respiratory, and six Nervous System DRGs. These DRGs represented substantial portions of spending – about **43 percent** of total spending within the Musculoskeletal MDC and **68–80 percent** of total spending within the Circulatory, Respiratory, and Nervous System MDCs.

For each selected DRG, the analysis measured changes in units by severity level from 2021 to 2023, focusing on whether the share of high severity cases (Levels 3 & 4) increased. A DRG was determined to have a shift in severity if the share of Level 3 and 4 discharges rose by **more than 10 percent** of the 2021 value.

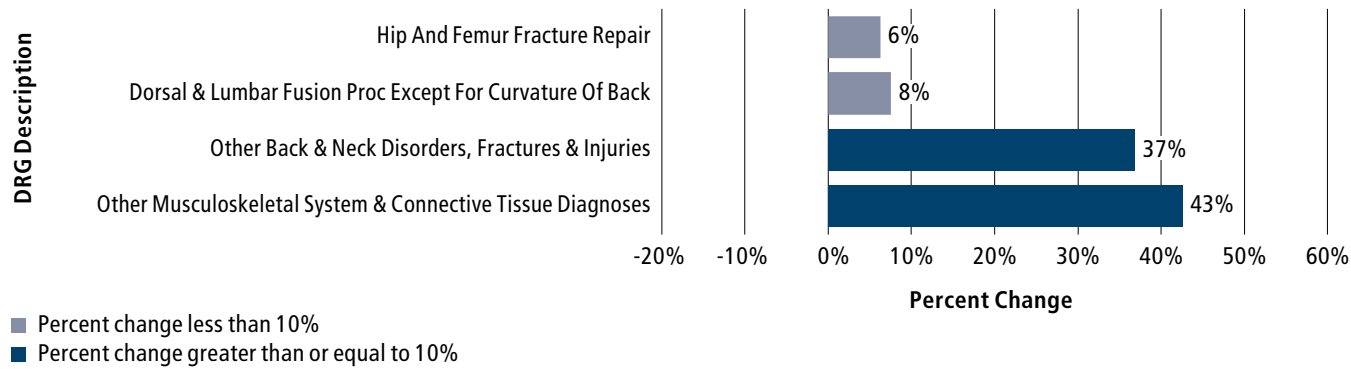
Four of eleven circulatory DRGs showed evidence of increasing severity. Of the four DRGs that did show an increase in severity, two were for “other” or general conditions and disorders (Peripheral and Other Vascular Disorders; Cardiac Arrhythmia and Conduction Disorders)

**Exhibit 6.1: Cumulative Percent Change in Share of High Severity Cases by Circulatory System DRG (2021–2023)**



Source: OHIC analysis of HealthFacts RI data.  
 Note: Only DRGs with at least 150 units per year were included in this analysis.

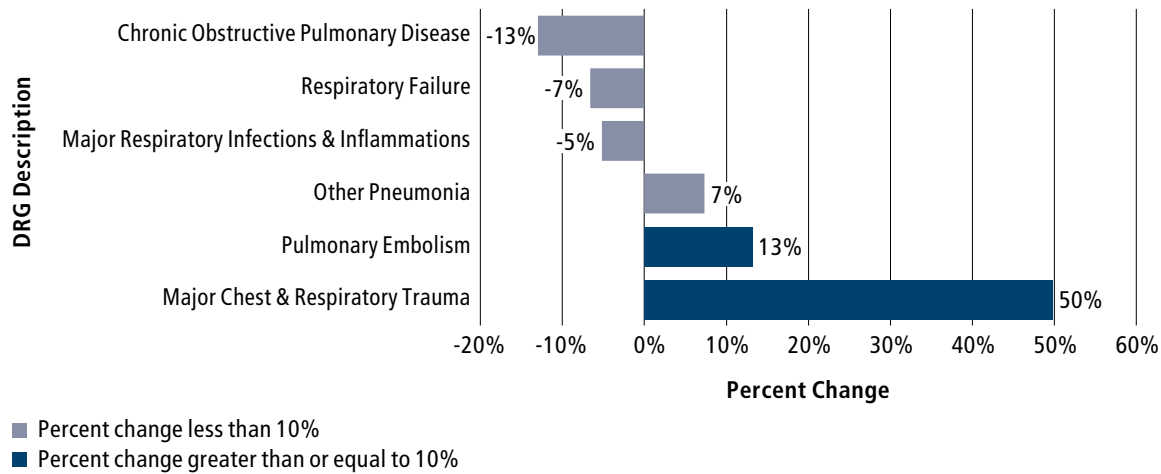
### Exhibit 6.2: Cumulative Percent Change in Share of High Severity Cases by Musculoskeletal System DRG (2021–2023)



Source: OHIC analysis of HealthFacts RI data.  
 Note: Only DRGs with at least 150 units per year were included in this analysis.

Half of musculoskeletal DRGs (two of four DRGs) showed evidence of increasing severity. In particular, “Other” Musculoskeletal DRGs showed evidence of increasing severity, while more specific DRGs did not.

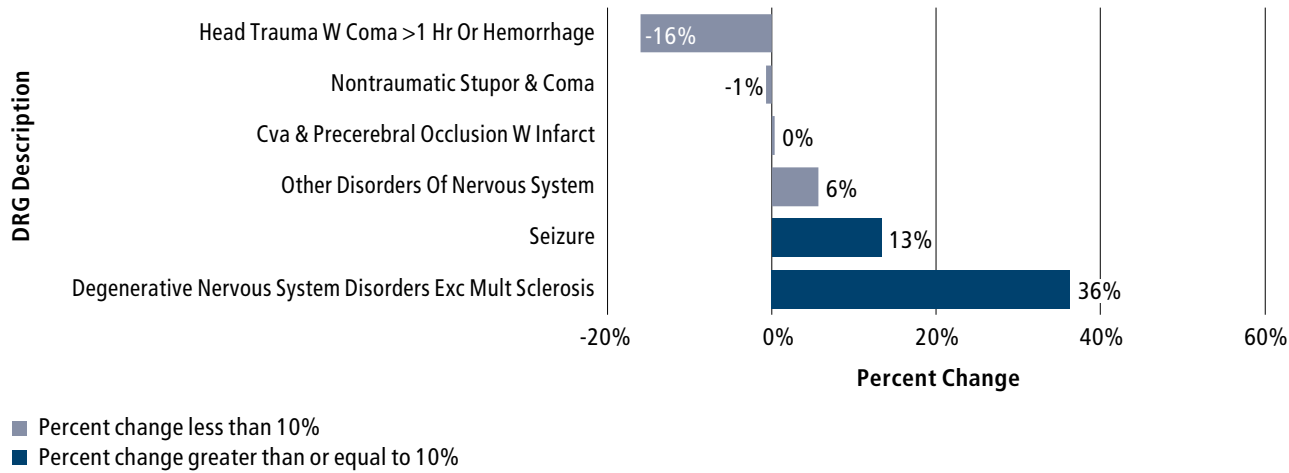
### Exhibit 6.3: Cumulative Percent Change in Share of High Severity Cases by Respiratory System DRG (2021–2023)



Source: OHIC analysis of HealthFacts RI data.  
 Note: Only DRGs with at least 150 units per year were included in this analysis.

Two of six respiratory DRGs had evidence of increasing severity from 2021 to 2023. One of the DRGs that showed increasing severity, Major Chest and Respiratory Trauma, is general while Pulmonary Embolism is specific. Two DRGs that showed decreased severity (Respiratory Failure and Major Respiratory Infections and Inflammations) were likely influenced by the drop in hospitalizations associated with COVID during this time.

**Exhibit 6.4: Cumulative Percent Change in Share of High Severity Cases by Nervous System DRG (2021–2023)**



Source: OHIC analysis of HealthFacts RI data.  
 Note: Only DRGs with at least 150 units per year were included in this analysis.

Two of six nervous system DRGs that showed an increase in severity. Degenerative Nervous System Disorders Excluding Multiple Sclerosis represents a broad category of disorders; Seizures are also considered a class of conditions or symptoms, rather than a specific condition.

# Summary

Across the 27 DRGs examined within the four major diagnostic categories, the data show that levels of severity generally increased from 2021 to 2023. Only ten DRGs exceeded the 10 percent threshold for an increase in the share of Level 3 and Level 4 discharges; however, the magnitude of the increases for these DRGs was much larger than the declines seen across other DRGs. Additionally, there were six other DRGs whose discharges increased between 6 and 8 percent – there were decidedly more DRGs with increases than decreases.

Overall, these findings are consistent with prior research on an earlier period, underscoring how increases in higher-severity cases have been observed over time. The DRGs that were deemed to have increased in severity were often those that were more general, i.e., included “Other” or “Disorders”. This was the case for 7 of the 10 DRGs. This suggests that increases in severity may be concentrated within these broader DRGs. OHIC may consider expanding this analysis to include more years (including those before, during, and after the pandemic) in the future.



STATE OF RHODE ISLAND

# Office of The Health Insurance Commissioner

Department of Business Regulation

Chartbook: Health Care Spending in Rhode Island (2026)

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*Data for this presentation were obtained through an approved request to the Rhode Island All-Payer Claims Database as administered by the Rhode Island Department of Health (RIDOH). Data were obtained for 2020 through 2024. RIDOH is not responsible for the author's analysis, opinions, or conclusions contained in this document.*

