



2024

Health Care Cost and Utilization in the Texas Workers' Compensation System

Per Chapter 405 of the Texas Labor Code, the Workers' Compensation Research and Evaluation Group (REG) at the Texas Department of Insurance, Division of Workers' Compensation (DWC) is responsible for conducting professional studies and research on various system issues, including:

- Delivery of benefits.
- Litigation and controversy related to workers' compensation.
- Insurance rates and rate-making procedures.
- Rehabilitation and reemployment of injured employees.
- Quality and cost of medical benefits.
- Employer participation in the workers' compensation system.
- Workplace health and safety issues.
- Other matters related to the cost, quality, and operational effectiveness of the workers' compensation system.

This report is online at www.tdi.texas.gov/wc/reg/index.html.

For more information, email WCResearch@tdi.texas.gov.

Acknowledgements

Vivian Meng managed the project, conducted the analyses, interpreted the results, and authored the report. Director Botao Shi provided overall guidance and valuable feedback in preparing this report. Researchers Dr. Hari Luintel and Conrado Garza provided review and editorial support.

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Executive summary

Health care is one of the major benefits provided to injured employees in the Texas workers' compensation system. Injured employees receive medically necessary professional, hospital, pharmacy, and dental services for their work-related injuries or illnesses. In a healthy workers' compensation system, health care should be easily accessible, prompt, appropriate, and cost effective. This report provides medical cost and utilization data, showing trends over time (from 2018 to 2023) and patterns across claim types, health care provider types, service types, claim maturities, facility types, and drug types in the Texas workers' compensation system.

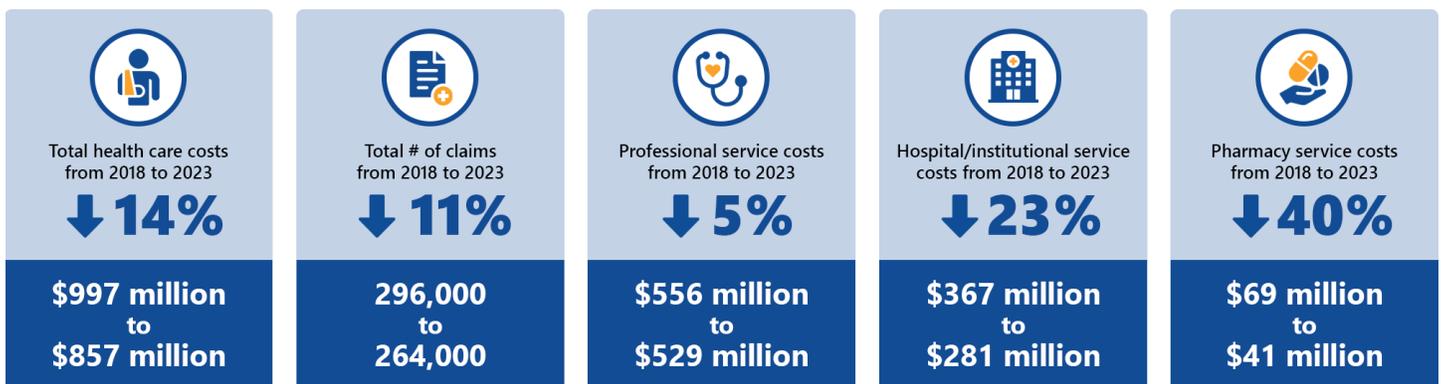
Overall health care costs decreased from 2018 to 2023. Total health care costs declined 14%, from \$997 million for services in 2018 to \$857 million for services in 2023. The total number of claims decreased 11%, from 296,000 to 264,000. The average cost per claim also dropped 4%, from \$3,367 to \$3,245.

Professional cost and utilization decreased from 2018 to 2023. Total professional costs decreased 5%, from \$556 million in 2018 to \$529 million in 2023. The number of claims receiving professional services decreased 11%, from 281,000 to 251,000. The average cost for professional services increased 7% from \$1,976 per claim to \$2,105.

Hospital/institutional cost and utilization decreased from 2018 to 2023. Total hospital/institutional costs decreased 23%, from \$367 million in 2018 to \$281 million in 2023. The number of claims receiving hospital/institutional services decreased 25%, from 84,000 to 63,000. The average cost for hospital/institutional services per claim increased about 2%, from \$4,392 to \$4,482.

Pharmacy cost and utilization decreased from 2018 to 2023. Total cost of pharmacy services decreased 40%, from \$69 million in 2018 to \$41 million in 2023. The number of claims receiving pharmacy services dropped 35%, from 108,000 to 70,000. The average cost of pharmacy services per claim decreased 7%, from \$638 to \$595.

Key findings



Introduction

The primary purpose of this report is to provide system participants with a set of complete, general, and consistent data for monitoring and analyzing the trends in health care cost and utilization. This report also provides drill-down analyses by claim type, health care provider type, service type, maturity, facility type, and drug type.

Data and methods

This report uses administrative data from DWC reported by insurance carriers as of June 2024 for claims with injury dates or service dates from January 2018 through December 2023. Medical data collected by DWC contains direct payments to health care providers. When analyzing cost and utilization by non-network and network claims, the analysis is limited to injury dates and service dates from January 2018 through December 2022.

Data in this report is presented by injury year and service year and grouped by all claims, lost-time claims, and medical-only claims. Claim counts represent unique work-related injuries or illness.

- **Service year** – service year statistics account for all services and payments in a given calendar year for all claims regardless of their injury date.
- **Injury year** – injury year statistics are organized by the year of the injury, and account for all payments up to a set period of maturity.
- **Lost-time claims** – claims that have more than seven days of lost time away from work and receive medical benefits as well as income benefits.
- **Medical-only claims** – claims that may have no lost time or a maximum of seven days of lost time and receive only medical benefits.

The payment data used in this report shows trends over time and patterns across claim and bill types. The analysis presented in this report (particularly for the recent few years' data) may change as insurance carriers report more data. The cost measures in this report were based on payments by insurance carriers, meaning claims with zero payments are excluded. Similarly, the utilization measures in this report represent the amount and types of services that health care providers billed for an injured employee's claim, regardless of whether insurance carriers ended up paying for those services. Claim outliers are excluded from this study.

Analysis by service year

Service year statistics account for all services and payments in a given calendar year for all claims regardless of their injury date. This data shows a complete overview of the Texas workers' compensation system for a specific year.

Overall health care cost

Costs by claim type

Overall, the number of claims decreased 11%, from around 296,000 in 2018 to 264,000 in 2023 (Table 1). The total cost decreased 14%, from almost \$1 billion in 2018 to \$857 million in 2023. The average cost per claim decreased 4%, from \$3,367 per claim to \$3,245.

Following this trend, lost-time claims decreased 6%, from about 102,000 in 2018 to 95,000 in 2023. The total cost of lost-time claims decreased 17%, from a little over \$757 million to \$629 million in the same period. The average cost per claim decreased 11%, from \$7,462 per claim to \$6,626.

Medical-only claims had the largest decrease in the number of claims, dropping 13% from about 195,000 in 2018 to 169,000 in 2023, while the total cost of medical-only claims decreased 5%, from \$239 million to \$227. This resulted in an increase in the average cost per claim of 9% from \$1,232 to \$1,346.

Table 1: Overall number of claims and costs, by claim type

Service year	All claims			Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	296,180	\$997,322	\$3,367	101,507	\$757,463	\$7,462	194,673	\$239,859	\$1,232
2019	295,408	\$961,840	\$3,256	99,186	\$722,340	\$7,283	196,222	\$239,499	\$1,221
2020	240,326	\$826,402	\$3,439	90,798	\$637,818	\$7,025	149,528	\$188,584	\$1,261
2021	251,082	\$857,047	\$3,413	94,852	\$654,423	\$6,899	156,230	\$202,624	\$1,297
2022	258,731	\$840,468	\$3,248	94,590	\$631,868	\$6,680	164,141	\$208,600	\$1,271
2023	263,961	\$856,562	\$3,245	94,943	\$629,106	\$6,626	169,018	\$227,455	\$1,346

Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs by bill type

This report organizes the data into the following bill types:

- **Professional** – includes any services of a medical professional, durable medical equipment provider, independent laboratory (not part of a hospital), ambulance provider, and ambulatory surgical center. The professional category also includes examinations ordered by DWC.

- **Hospital/institutional** – includes all services billed by an outpatient or inpatient hospital.
- **Pharmacy** – includes services of dispensing pharmacies.
- **Dental** – includes professional dental services.

The total number of claims significantly reduced from around 296,000 in 2018 to 240,000 in 2020 during the COVID-19 pandemic, before picking up slowly to nearly 264,000 in 2023 (Table 2). The number of claims for professional services decreased 11%, from about 281,000 in 2018 to 251,000 in 2023. Hospital/institutional services dropped 25%, from about 84,000 to 63,000, and pharmacy services saw a 35% decrease from 108,000 to 70,000. Overall, around 95% of claims received at least one professional service, 24 to 28% received at least one hospital/institutional service, and 26 to 36% received at least one pharmacy service in each service year.

Table 2: Number of claims and percentage of claims receiving services, by bill type

Service year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	281,183 (95%)	83,558 (28%)	1,492 (1%)	107,739 (36%)	296,180
2019	280,443 (95%)	81,587 (28%)	1,523 (1%)	100,561 (34%)	295,408
2020	228,310 (95%)	64,281 (27%)	1,176 (0%)	76,544 (32%)	240,326
2021	238,189 (95%)	63,771 (25%)	1,049 (0%)	71,927 (29%)	251,082
2022	246,186 (95%)	63,513 (25%)	1,205 (0%)	70,410 (27%)	258,731
2023	251,259 (95%)	62,660 (24%)	1,236 (0%)	69,577 (26%)	263,961

Source: Workers' Compensation Research and Evaluation Group, 2024.

All bill types saw a decrease in total cost, with the largest from hospital/institutional costs at around \$86 million, followed by pharmacy and professional services costs at about \$27 million each, and dental service costs at about \$760,000 (Table 3).

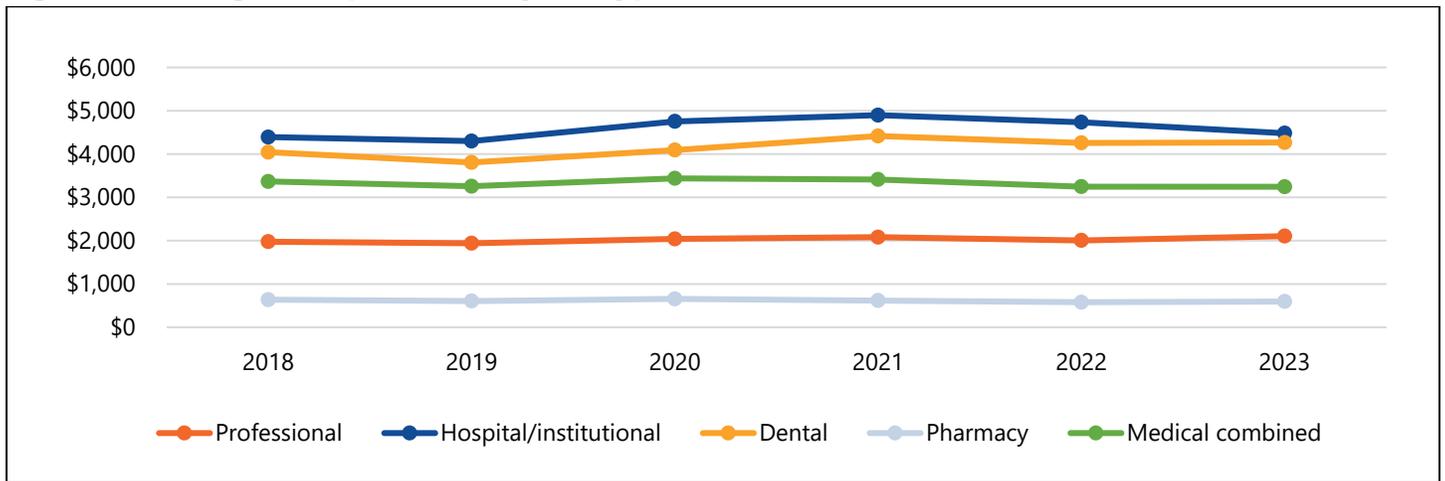
Table 3: Total cost by bill type (in thousands)

Service year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	\$555,581	\$367,008	\$6,032	\$68,701	\$997,322
2019	\$544,130	\$350,834	\$5,797	\$61,080	\$961,840
2020	\$465,788	\$305,533	\$4,813	\$50,268	\$826,402
2021	\$495,646	\$312,404	\$4,633	\$44,363	\$857,047
2022	\$493,788	\$300,721	\$5,131	\$40,828	\$840,468
2023	\$528,983	\$280,872	\$5,274	\$41,433	\$856,562

Source: Workers' Compensation Research and Evaluation Group, 2024.

From 2018 to 2023, total costs decreased by 14% and the number of claims decreased slightly slower by 11%, resulting in a 4% decrease in average cost of all medical bill types combined (Figure 1).

Figure 1: Average cost per claim, by bill type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs for non-network claims by claim type

The number of non-network claims decreased 17%, from about 158,000 in 2018 to 131,000 in 2022 (Table 4). The total cost of non-network claims decreased 19%, from nearly \$571 million to \$462 million, with the average cost per claim decreasing by 3%, from \$3,605 to \$3,513. The number of claims and the total cost of claims for both lost-time and medical-only claims show a similar trend. The average cost of lost-time claims decreased 6% while the average cost for medical-only claims increased 2%. Network data for service year 2023 is not available and therefore not included in the analysis.

Table 4: Number of non-network claims and costs, by claim type

Service year	All claims			Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	158,300	\$570,594	\$3,605	55,000	\$434,262	\$7,896	103,300	\$136,332	\$1,320
2019	157,647	\$549,856	\$3,488	53,461	\$413,306	\$7,731	104,186	\$136,550	\$1,311
2020	130,651	\$478,638	\$3,663	47,975	\$365,630	\$7,621	82,676	\$113,008	\$1,367
2021	131,874	\$481,212	\$3,649	48,291	\$365,186	\$7,562	83,583	\$116,026	\$1,388
2022	131,487	\$461,950	\$3,513	46,871	\$348,135	\$7,428	84,616	\$113,815	\$1,345

Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs for non-network claims by bill type

The number of non-network claims for professional services decreased 17%, from about 149,000 claims in 2018 to 124,000 in 2022. Hospital/institutional services decreased 28%, from almost 48,000 to 34,000, and pharmacy services saw a 36% decrease, from a little over 55,000 to 35,000 (Table 5).

Table 5: Number of non-network claims, by bill type

Service year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	148,563	47,887	811	55,129	158,300
2019	147,763	46,968	804	51,057	157,647
2020	122,749	36,039	637	40,116	130,651
2021	123,743	34,964	570	36,793	131,874
2022	123,644	34,247	645	35,398	131,487

Source: Workers' Compensation Research and Evaluation Group, 2024.

The cost of non-network claims for professional services decreased 14%, from around \$307 million in 2018 to \$263 million in 2022. Hospital/institutional services saw a 20% decrease from about \$211 million to \$168 million, and pharmacy services decreased 44%, from \$50 million to \$28 million (Table 6).

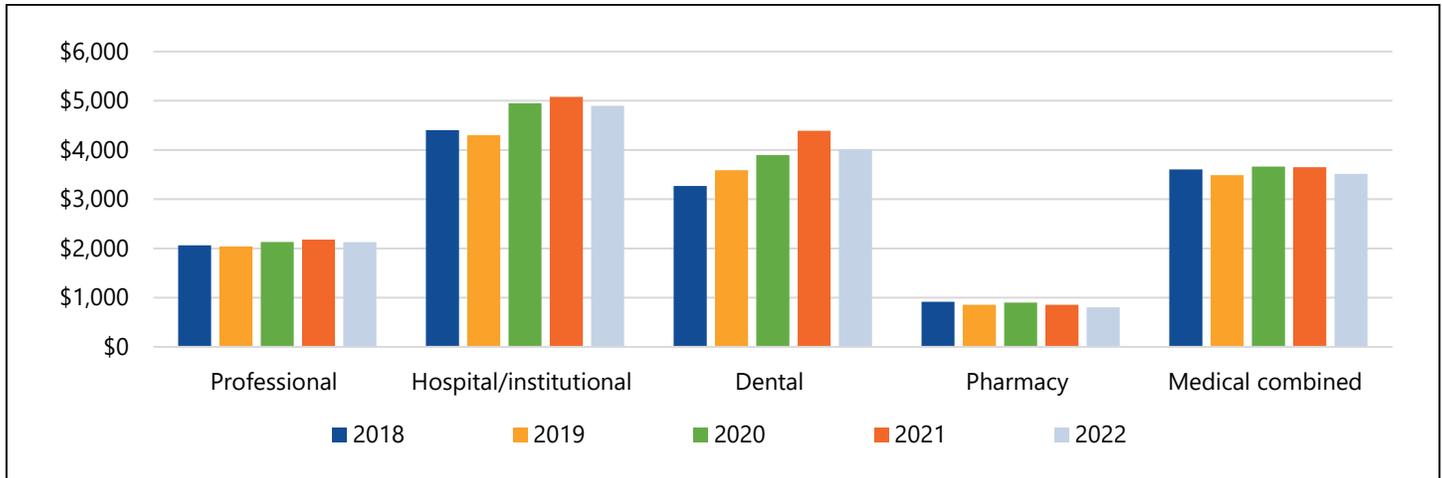
Table 6: Non-network costs (in thousands) by bill type

Service year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	\$306,647	\$210,845	\$2,651	\$50,452	\$570,594
2019	\$301,438	\$201,885	\$2,886	\$43,647	\$549,856
2020	\$261,696	\$178,397	\$2,482	\$36,063	\$478,638
2021	\$269,651	\$177,584	\$2,503	\$31,474	\$481,212
2022	\$263,154	\$167,779	\$2,585	\$28,432	\$461,950

Source: Workers' Compensation Research and Evaluation Group, 2024.

The decrease in average cost per claim of all non-network bill types is mainly due to a decrease in pharmacy services, from \$915 per claim in 2018 to \$803 per claim in 2022 (Figure 2). This was offset by the increase of average cost of professional services (3%), hospital/institutional services (11%), and dental services (23%).

Figure 2: Average cost per claim for non-network claims, by bill type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs for network claims by claim type

The number of network claims decreased 8%, from around 138,000 in 2018 to 127,000 in 2022 (Table 7). The total cost of network claims also decreased 11%, from about \$427 million to \$379 million. The average cost per claim decreased 4%, from \$3,095 per claim to \$2,975. The number of lost-time claims increased 3%, from around 47,000 to 48,000, while the total cost of claims decreased 12%, from \$323 million to \$284 million. As a result, the average cost of lost-time claims decreased 14%. Similarly to non-network claims, network medical-only claims have the same downward trend for number of claims and total cost, with the average cost increasing 5%.

Table 7: Number of network claims and costs

Service year	All claims			Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	137,880	\$426,728	\$3,095	46,507	\$323,201	\$6,950	91,373	\$103,527	\$1,133
2019	137,761	\$411,983	\$2,991	45,725	\$309,034	\$6,759	92,036	\$102,950	\$1,119
2020	109,675	\$347,764	\$3,171	42,823	\$272,188	\$6,356	66,852	\$75,576	\$1,131
2021	119,208	\$375,835	\$3,153	46,561	\$289,238	\$6,212	72,647	\$86,597	\$1,192
2022	127,244	\$378,518	\$2,975	47,719	\$283,733	\$5,946	79,525	\$94,785	\$1,192

Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs for network claims by bill type

The number of network claims decreased for professional services by 8%, from around 133,000 claims in 2018 to 123,000 in 2022. Hospital/institutional services saw an 18% decrease, from 36,000 to 29,000, and pharmacy services decreased 33%, from 53,000 to 35,000 (Table 8).

Table 8: Number of network claims, by bill type

Service year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	132,620	35,671	681	52,610	137,880
2019	132,680	34,619	719	49,504	137,761
2020	105,561	28,242	539	36,428	109,675
2021	114,446	28,807	479	35,134	119,208
2022	122,542	29,266	560	35,012	127,244

Source: Workers' Compensation Research and Evaluation Group, 2024.

The cost of network claims decreased for professional services by 7%, from about \$249 million in 2018 to \$231 million in 2022. Hospital/institutional services decreased by 15%, from \$156 million to \$133 million, and pharmacy services dropped 32%, from \$18 million to \$12 million (Table 9).

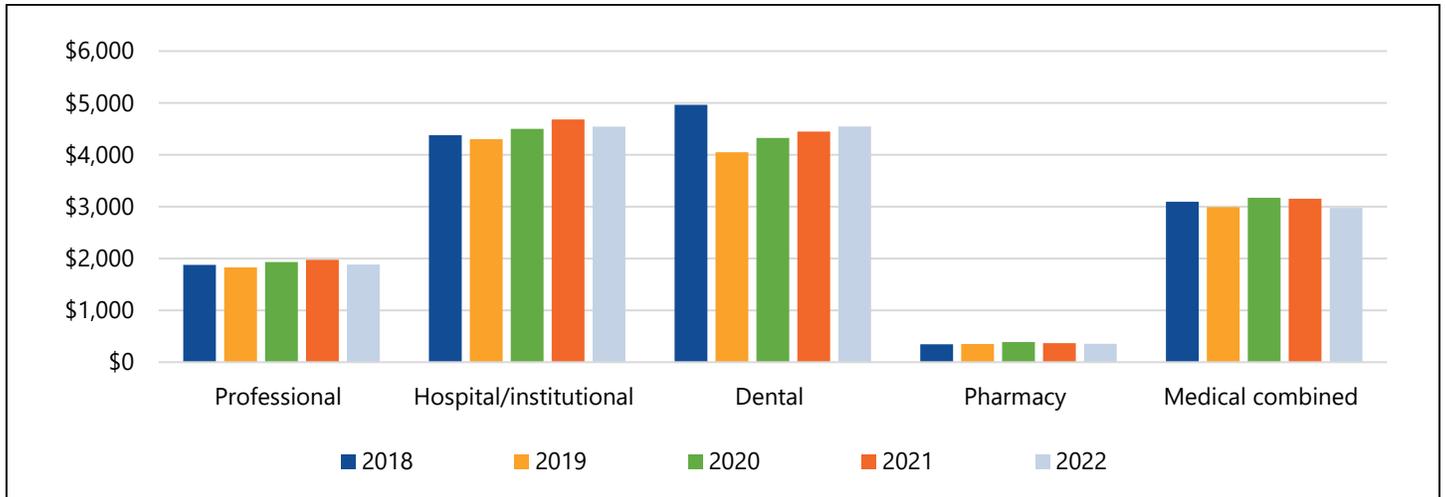
Table 9: Network costs (in thousands), by bill type

Service year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	\$248,934	\$156,164	\$3,381	\$18,249	\$426,728
2019	\$242,691	\$148,949	\$2,911	\$17,432	\$411,983
2020	\$204,091	\$127,136	\$2,332	\$14,205	\$347,764
2021	\$225,995	\$134,820	\$2,130	\$12,889	\$375,835
2022	\$230,634	\$132,941	\$2,547	\$12,396	\$378,518

Source: Workers' Compensation Research and Evaluation Group, 2024.

The average cost per pharmacy service claim stayed flat between 2018 and 2022 for network users (Figure 3). The average cost per network claim for hospital/institutional services increased 4% and pharmacy services increased 2% during the same period. The average cost per network claim for dental services dropped about 8%.

Figure 3: Average cost per claim for network claims, by bill type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Professional services

Cost and utilization by claim type

Professional services include physician and therapy services, durable medical equipment, and ambulatory surgical center services.

More than 70% of professional care costs were for lost-time claims (Table 10). The number of professional services lost-time claims decreased 6%, from around 99,000 in 2018 to 93,000 in 2023. Additionally, the total cost of lost-time claims reduced by 8%, from about \$397 million to \$367 million. The total average cost for lost-time claims stayed around \$4,000 per claim since 2018.

The number of medical-only claims remained stable, around 182,000 from 2018 to 2019, dropping 22% to around 140,000 in 2020, then gradually increasing in the last three years. The total cost for medical-only claims declined from about \$159 million in 2018 to \$145 million in 2022 then jumped more than 12% to \$162 million in 2023. Lastly, the average cost per medical-only claim increased 17%, from \$870 to \$1,022.

Table 10: Number of professional service claims and costs, by claim type

Service year	Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	98,983	\$396,995	\$4,011	182,200	\$158,585	\$870
2019	96,815	\$385,019	\$3,977	183,628	\$159,110	\$866
2020	88,484	\$339,709	\$3,839	139,826	\$126,078	\$902
2021	92,199	\$355,339	\$3,854	145,990	\$140,308	\$961
2022	92,157	\$349,269	\$3,790	154,029	\$144,519	\$938
2023	92,606	\$366,794	\$3,961	158,653	\$162,189	\$1,022

Source: Workers' Compensation Research and Evaluation Group, 2024.

Lost-time claims had more than three times as many visits per claim (13.5–15.0) as medical-only claims (4.2–4.3) (Table 11). Lost-time claims saw an average of three services per visit to a health care provider in 2018, reducing to 2.8 in 2023. Similarly, medical-only claims averaged 2.8-2.9 services per visit throughout the report period.

Table 11: Number of professional service visits and services per visit per claim

Service year	Visit per claim		Services per visit	
	Lost-time claims	Medical-only claims	Lost-time claims	Medical-only claims
2018	15.0	4.3	3.0	2.9
2019	14.9	4.3	2.9	2.9
2020	14.3	4.3	2.9	2.8
2021	13.8	4.3	2.9	2.9
2022	13.5	4.2	2.8	2.9
2023	13.7	4.3	2.8	2.9

Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization by health care provider type

This report splits health care provider types into seven categories:

- **APRN** – advanced practice registered nurses.
- **ASC** – ambulatory surgical centers.
- **DC** – doctors of chiropractic.
- **DME** – durable medical equipment.
- **MD/DO** – medical doctors.
- **PA** – physician assistants.

- **Other** – other health care provider types that don't fit into the other six categories, such as physical therapy and occupational therapists.

About 88% of claims that received professional services saw MD/DOs in 2018. That percentage went down to 80% in 2023 (Table 12). PA professional services picked up from 19% in 2018 to 27% in 2023, and APRNs increased from 19% to 22% in the same period.

Table 12: Percent of claims receiving professional services, by health care provider type

Service year	MD/DO	PA	APRN	ASC	DC	DME	Other
2018	88%	19%	19%	4%	9%	5%	30%
2019	87%	21%	21%	4%	9%	4%	29%
2020	86%	21%	21%	4%	10%	5%	31%
2021	84%	23%	21%	4%	9%	4%	33%
2022	82%	25%	21%	3%	9%	4%	34%
2023	80%	27%	22%	4%	10%	4%	37%

Source: Workers' Compensation Research and Evaluation Group, 2024.

The cost of services from PAs increased 73%, from \$18.2 million in 2018 to \$31.5 million in 2023 (Table 13). Services from APRNs increased 15%, from \$22.1 million to \$25.4 million. DC service costs decreased 21%, followed by MD/DO and DME costs, which decreased 11% from 2018 to 2023.

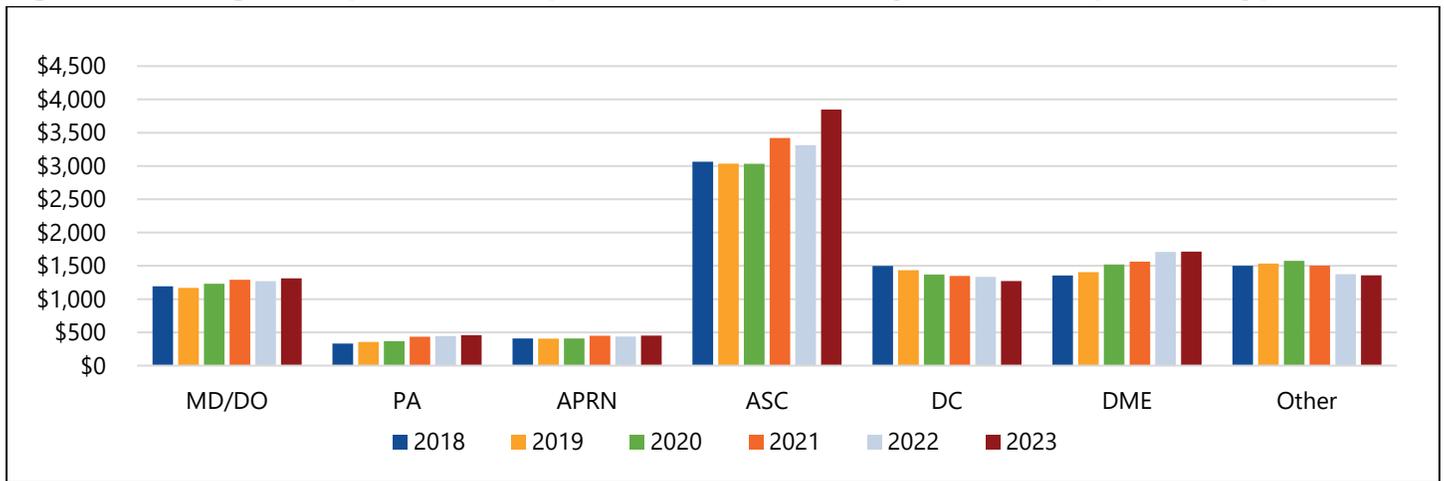
Table 13: Total professional service cost (in thousands), by health care provider type

Service year	MD/DO	PA	APRN	ASC	DC	DME	Other
2018	\$294,196	\$18,200	\$22,130	\$35,905	\$39,389	\$18,859	\$126,902
2019	\$284,782	\$20,607	\$23,645	\$35,355	\$36,333	\$17,318	\$126,090
2020	\$241,875	\$17,752	\$19,485	\$28,431	\$29,813	\$16,520	\$111,912
2021	\$256,777	\$23,835	\$22,648	\$29,784	\$29,276	\$16,207	\$117,118
2022	\$255,442	\$27,514	\$22,330	\$27,981	\$30,091	\$16,520	\$113,911
2023	\$262,181	\$31,455	\$25,441	\$36,529	\$31,154	\$16,712	\$125,510

Source: Workers' Compensation Research and Evaluation Group, 2024.

The average cost per claim increased for some types of health care providers (Figure 4). The average cost per claim increased for PAs by 38% from 2018 to 2023, for ASC and DME services by 26%, for MD/DOs and APRNs by 10%. However, the average cost for DC services decreased by 15% in the same period.

Figure 4: Average cost per claim for professional services, by health care provider type



Source: Workers' Compensation Research and Evaluation Group, 2024.

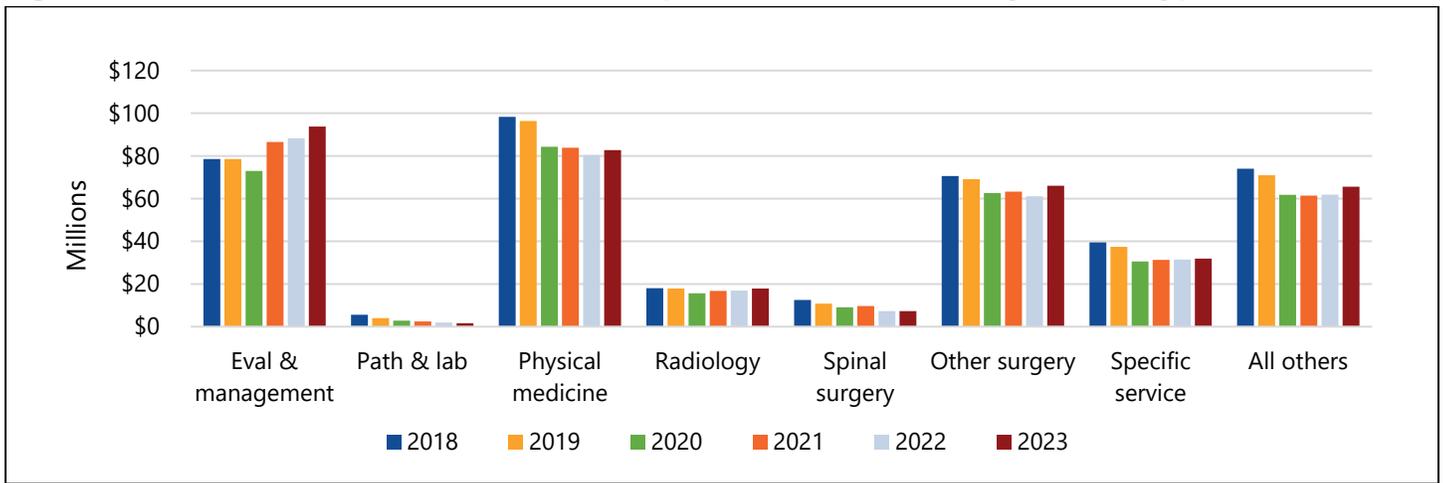
Cost and utilization by service type

This report organizes service types into the following eight groups:

- **Pathology and lab** – Pathology and laboratory services.
- **Evaluation and management** – Evaluation and management services, like an office visit.
- **Physical medicine** – All manipulative and physical therapies and exercises provided by chiropractors, physical or occupational therapists, and medical doctors.
- **Radiology** – Radiology services.
- **Spinal surgery** – Specific spinal surgeries including, arthrodesis, laminectomy, exploration and decompression, spine procedures, incision, excision, osteotomy, fracture and dislocation, and instrumentation.
- **Other surgery** – Other surgery services besides spinal surgeries.
- **Specific service** – Workers' compensation specific services including maximum medical improvement, impairment rating, extent of injury, return to work, disability and functional capacity examinations, work hardening or work conditioning, chronic pain management, case management, and DWC Form-073.
- **Other services** – Any services that do not fit into the other seven groups.

The total cost for lost-time claims has decreased since 2018 for most services (Figure 5). Costs decreased the most for pathology and lab services, at about 70%, followed by spinal surgery (42%), workers' compensation specific services (19%), physical medicine (16%), and other surgery (6%). Evaluation and management services were the only type of service with increased costs, from about \$79 million in 2018 to \$94 million in 2023.

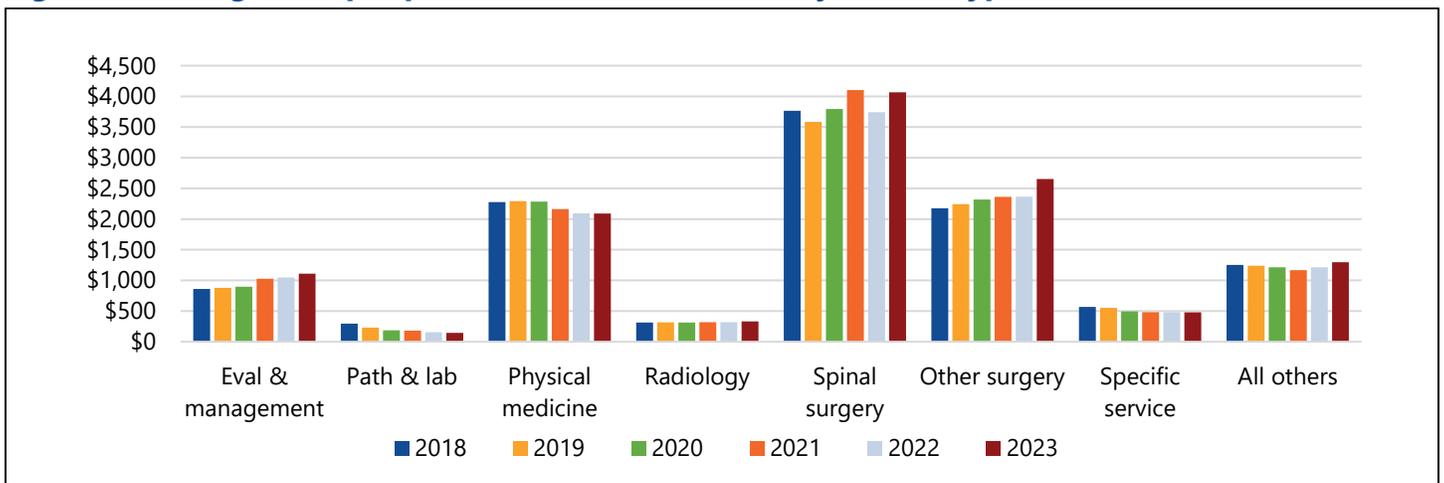
Figure 5: Total costs for lost-time claims for professional services, by service type



Source: Workers' Compensation Research and Evaluation Group, 2024.

The average cost per claim increased significantly for evaluation and management services at 29%, followed by other surgeries at 22%, spinal surgeries at 8%, and radiology services at 6% (Figure 6). However, pathology and lab's average cost per claim decreased 51% from 2018 to 2023, followed by workers' compensation specific services (16%) and physical medicine (8%) across the study period.

Figure 6: Average cost per professional service claim by service type, for lost-time claims



Source: Workers' Compensation Research and Evaluation Group, 2024.

Most service types saw a decrease in the percentage of lost-time claims receiving those services over the years, except for workers' compensation specific services, which increased from 70.2% in 2018 to 72.1% in 2023 (Table 14). For medical-only claims, the percentage of claims receiving each service remained stable for most services.

Table 14: Percent of claims receiving certain professional services, by claim type

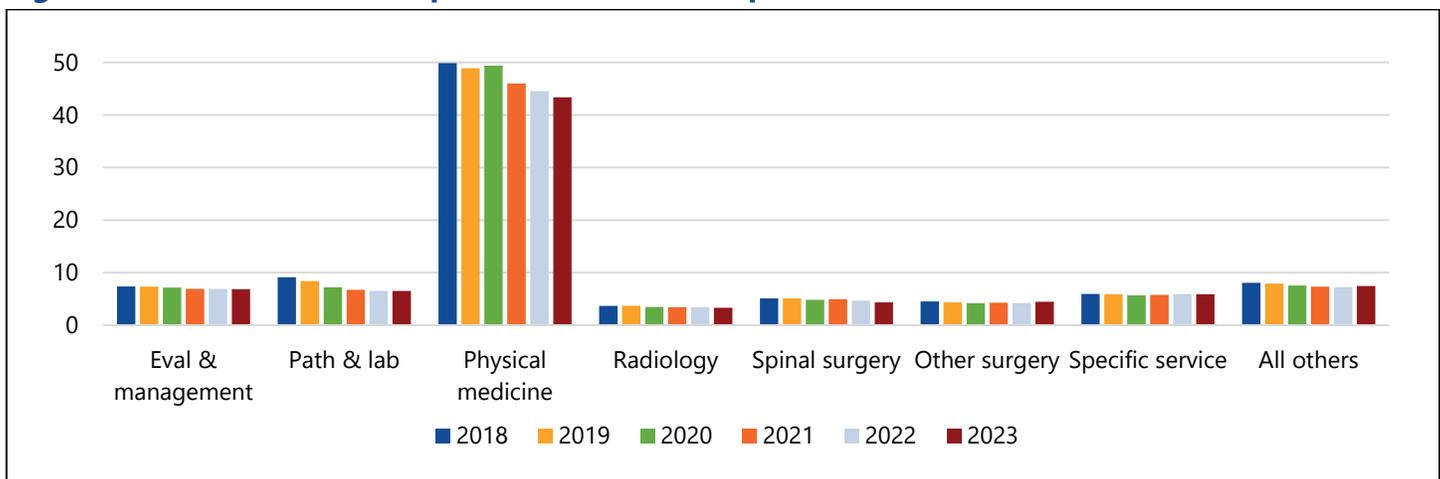
Lost-time claims								
Service year	Evaluation & management	Pathology & lab	Physical medicine	Radiology	Spinal surgery	Other surgery	Specific services	All others
2018	92.2%	19.0%	43.6%	58.1%	3.4%	32.8%	70.2%	59.7%
2019	92.2%	18.1%	43.4%	58.5%	3.1%	31.8%	70.1%	59.1%
2020	91.8%	17.0%	41.7%	56.3%	2.7%	30.5%	69.7%	57.5%
2021	91.6%	14.6%	42.1%	57.4%	2.6%	29.0%	70.5%	57.0%
2022	91.4%	13.2%	41.7%	57.5%	2.1%	28.0%	70.7%	55.3%
2023	91.3%	12.3%	42.7%	58.3%	1.9%	26.9%	72.1%	54.7%

Medical-only claims								
Service year	Evaluation & management	Pathology & lab	Physical medicine	Radiology	Spinal surgery	Other surgery	Specific services	All others
2018	93.5%	8.7%	20.7%	49.1%	0.2%	15.3%	65.1%	41.4%
2019	93.6%	9.4%	19.8%	49.0%	0.2%	14.3%	65.4%	41.6%
2020	93.2%	9.4%	20.8%	47.2%	0.2%	14.6%	65.5%	41.5%
2021	93.2%	8.0%	21.4%	48.8%	0.1%	14.1%	67.7%	42.1%
2022	93.4%	7.7%	21.1%	48.8%	0.1%	13.5%	68.0%	40.7%
2023	93.2%	7.4%	21.5%	50.4%	0.1%	13.2%	69.7%	40.1%

Source: Workers' Compensation Research and Evaluation Group, 2024.

The number of pathology and lab services per lost-time claim decreased 29% from nine in 2018 to seven in 2023, followed by physical medicine (13%) from 50 per claim to 43 (Figure 7). Other services remained relatively stable throughout the study period.

Figure 7: Number of certain professional services per claim, for lost-time claims



Source: Workers' Compensation Research and Evaluation Group, 2024.

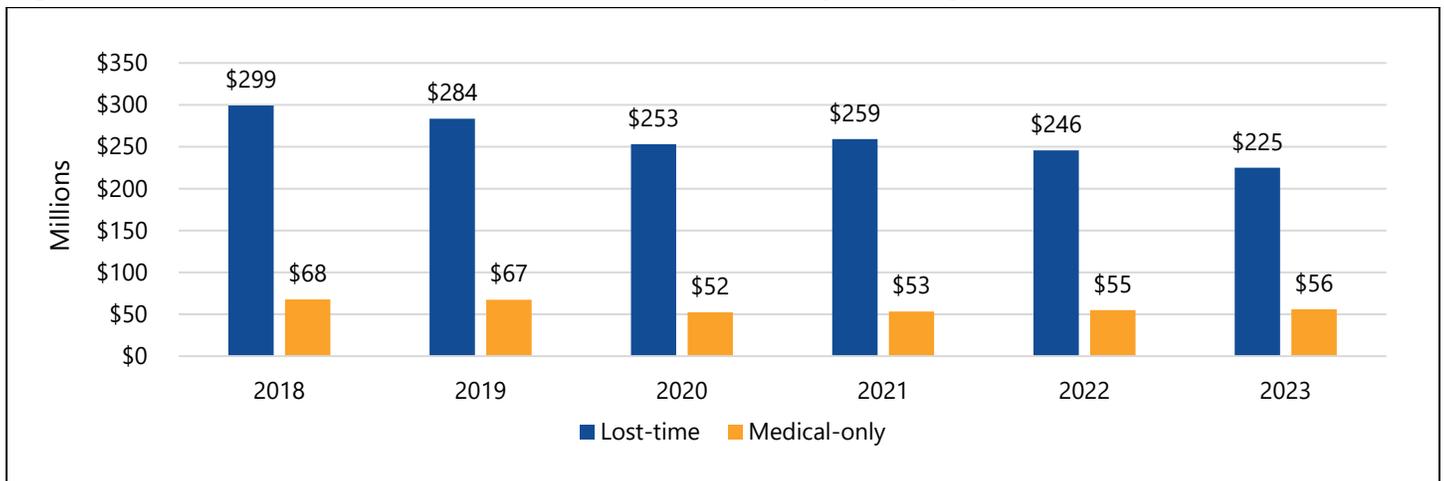
Hospital/institutional services

Cost and utilization by claim type

Hospital/institutional services include hospital inpatient and outpatient services, services in skilled nursing facilities, home health care, and other services provided at special facilities.

The total hospital/institutional cost for both lost-time and medical-only claims showed a downward trend over the years, decreasing from almost \$367 million in 2018 to \$281 million in 2023 (Figure 8).

Figure 8: Total cost for hospital/institutional services by claim type



Source: Workers' Compensation Research and Evaluation Group, 2024.

The number of hospital/institutional lost-time claims dropped 20%, from about 36,000 in 2018 to 29,000 in 2023 (Table 15). The total hospital/institutional cost for these claims reduced by 25%, from \$299 million to \$225 million, and the average cost per hospital/institutional lost-time claim decreased 6% from \$8,316 to \$7,852 in the same period. The number of medical-only claims decreased 29%, from around 48,000 to 34,000. The total cost for medical-only claims also decreased 18%, from \$68 million to \$56 million. The average cost per hospital/institutional medical-only claim was \$1,424 in 2018 and gradually increased to \$1,643 in 2023.

Table 15: Number of hospital/institutional claims and costs, by claim type

Service year	Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	35,987	\$299,275	\$8,316	47,571	\$67,733	\$1,424
2019	34,561	\$283,505	\$8,203	47,026	\$67,329	\$1,432
2020	29,763	\$253,140	\$8,505	34,518	\$52,393	\$1,518
2021	30,104	\$259,090	\$8,606	33,667	\$53,314	\$1,584
2022	29,694	\$245,643	\$8,272	33,819	\$55,078	\$1,629
2023	28,655	\$224,996	\$7,852	34,005	\$55,877	\$1,643

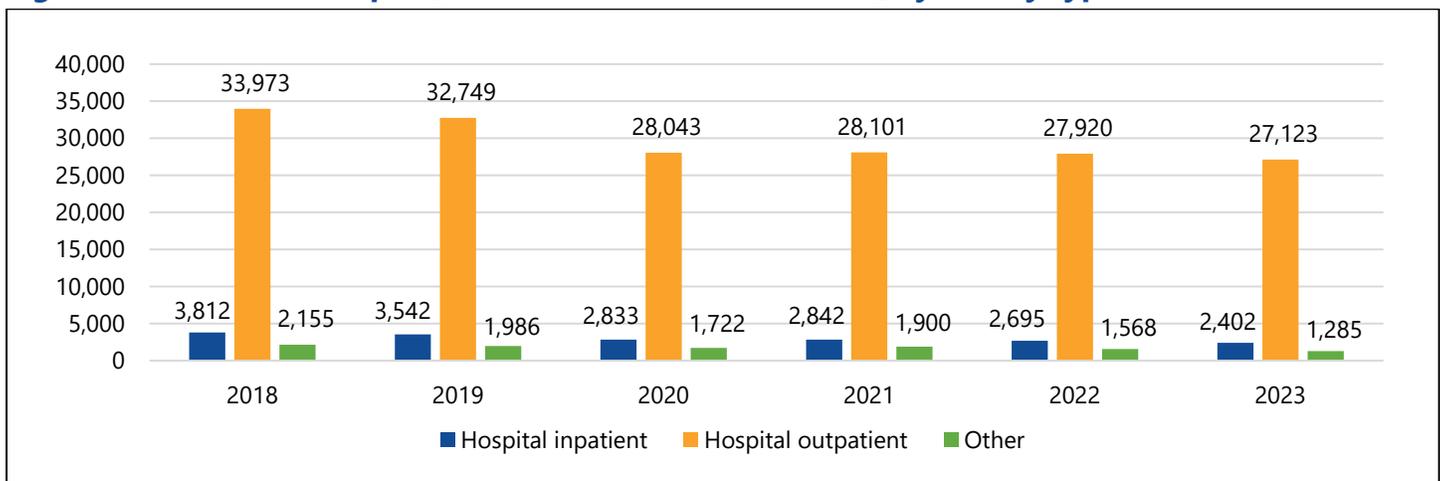
Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization by facility type

Injured employees receive hospital/institutional care at either inpatient or outpatient facilities. Those receiving inpatient care meet a certain set of clinical criteria and stay at a health care facility overnight, while injured employees receiving outpatient care may return home the same day.

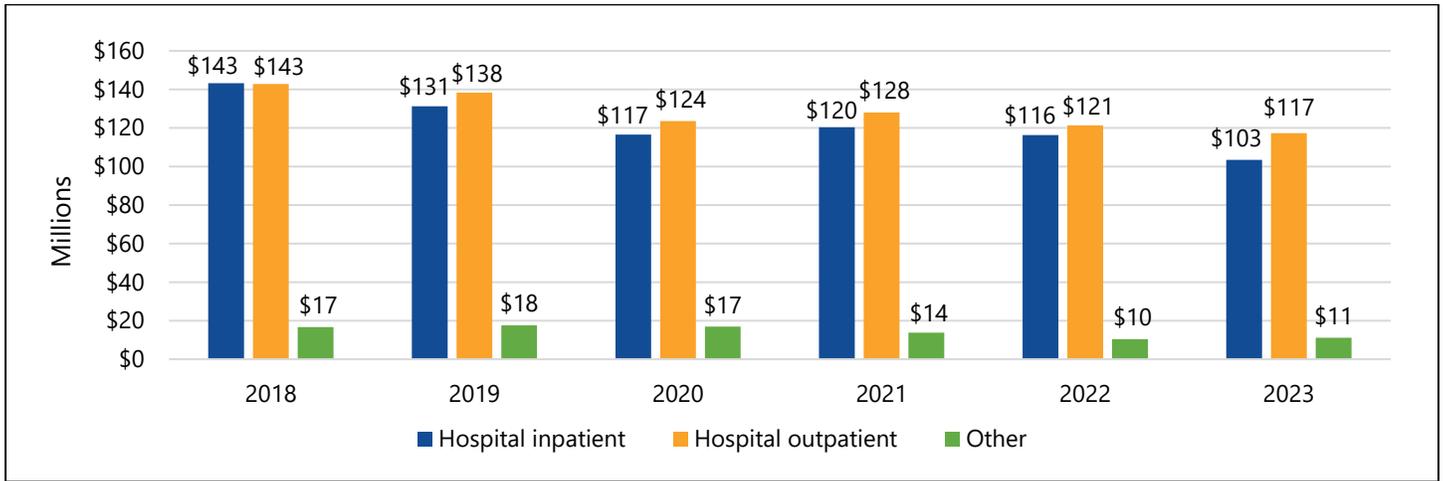
Since 2018, around 94% of all hospital/institutional claims received outpatient services for lost-time claims (Figure 9). Inpatient services represented only 11% of all hospital/institutional claims in 2018 and 8% in 2023. The total cost of outpatient services exceeded inpatient services after 2018 (Figure 10). As expected, inpatient services cost more because they require longer care and a facility stay. The average cost per claim for inpatient care showed an upward trend especially after 2019 (Figure 11). The cost per claim for outpatient facilities remained more stable.

Figure 9: Number of hospital/institutional lost-time claims, by facility type



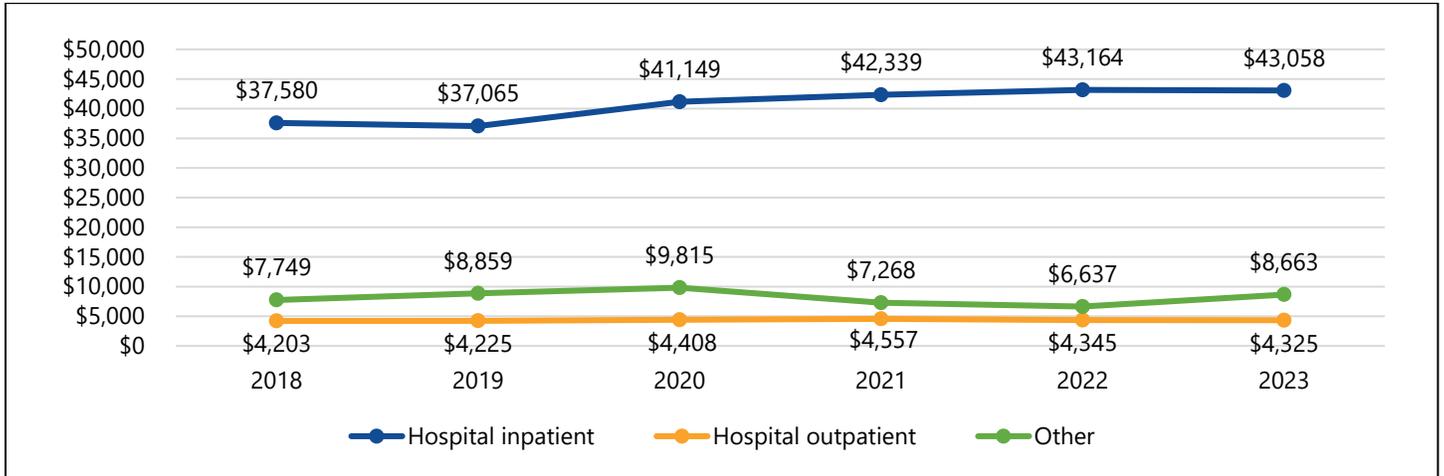
Source: Workers' Compensation Research and Evaluation Group, 2024.

Figure 10: Total cost for hospital/institutional lost-time claims, by facility type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Figure 11: Average cost per hospital/institutional lost-time claim, by facility type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Dental services

Cost and utilization by claim type

The total cost of lost-time dental service claims decreased 9%, from around \$260,000 in 2018 to \$240,000 in 2023 (Table 16). The average cost per claim decreased 7%, from \$6,313 to \$5,857. Following a similar trend, the total cost and number of medical-only claims also decreased, 15% and 23%, during the same period. However, the average dental cost per medical-only claim increased 10%, from \$3,136 in 2018 to \$3,458 in 2023.

Table 16: Number of dental services claims and costs, by claim type

Service year	Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	426	\$2,689	\$6,313	1,066	\$3,343	\$3,136
2019	435	\$2,321	\$5,336	1,088	\$3,475	\$3,194
2020	372	\$2,045	\$5,497	804	\$2,769	\$3,443
2021	370	\$2,193	\$5,926	679	\$2,440	\$3,594
2022	406	\$2,270	\$5,591	799	\$2,862	\$3,581
2023	417	\$2,442	\$5,857	819	\$2,832	\$3,458

Source: Workers' Compensation Research and Evaluation Group, 2024.

Pharmacy services

Cost and utilization by claim type

The number of lost-time pharmacy service claims decreased 32%, from about 55,000 in 2018 to 37,000 in 2023 (Table 17). The total cost of pharmacy service claims drastically decreased 40%, from about \$59 million to \$35 million, and the average cost per lost-time pharmacy service claim decreased 12%, from \$1,069 to \$938. For medical-only pharmacy service claims, the total number of claims and total cost decreased about 39% and 36%, respectively, while the average cost per claim increased 5%.

Table 17: Number of pharmacy service claims and costs, by claim type

Service year	Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	54,732	\$58,503	\$1,069	53,007	\$10,198	\$192
2019	51,251	\$51,494	\$1,005	49,310	\$9,585	\$194
2020	42,959	\$42,924	\$999	33,585	\$7,344	\$219
2021	40,235	\$37,802	\$940	31,692	\$6,561	\$207
2022	38,417	\$34,687	\$903	31,993	\$6,142	\$192
2023	37,182	\$34,875	\$938	32,395	\$6,558	\$202

Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization by drug group

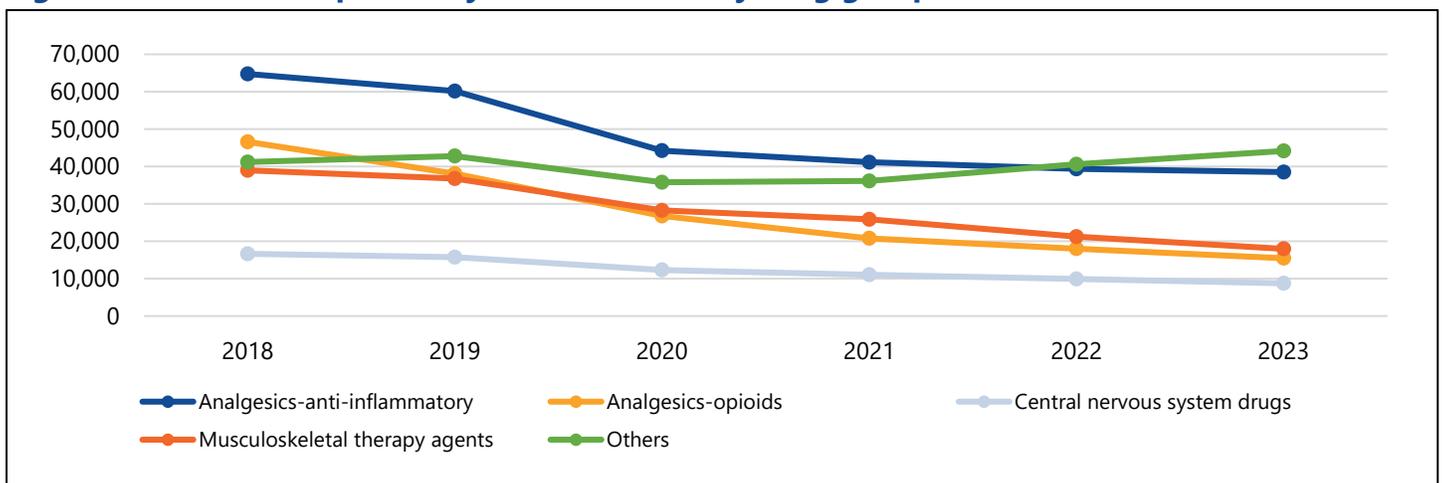
This report classifies drugs into five major groups:

- **Analgesics-anti-inflammatory** – includes drugs like ibuprofen, meloxicam, and naproxen.

- **Analgesics-opioids** – includes drugs like hydrocodone/acetaminophen, tramadol HCL, and acetaminophen/codeine.
- **Central nervous system drugs** – includes drugs like gabapentin, lyrica, and amitriptyline.
- **Musculoskeletal therapy agents** – includes drugs like cyclobenzaprine hydrochloride and methocarbamol.
- **Other** – includes anticonvulsants, antidepressants, anti-anxiety agents, and more.

The total number of claims that prescribe analgesics-anti-inflammatories, analgesics-opioids, central nervous system drugs, or musculoskeletal therapy agents are decreasing over time. The number of claims with opioid prescriptions dropped 67%, from around 47,000 in 2018 to 15,000 in 2023 (Figure 13).

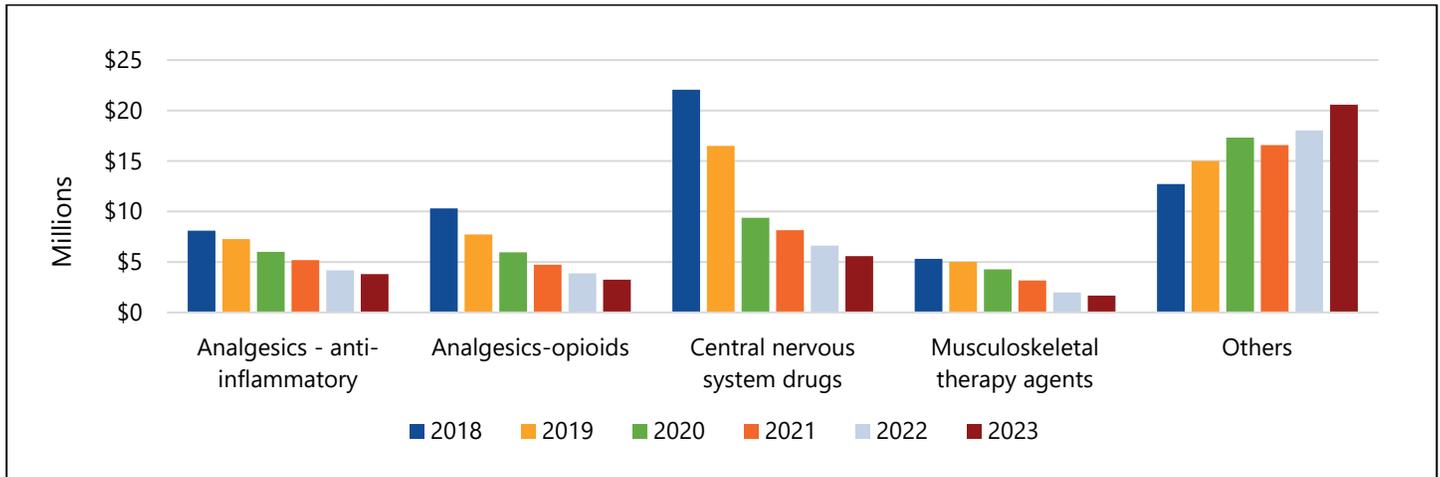
Figure 13: Number of pharmacy service claims, by drug group



Source: Workers' Compensation Research and Evaluation Group, 2024.

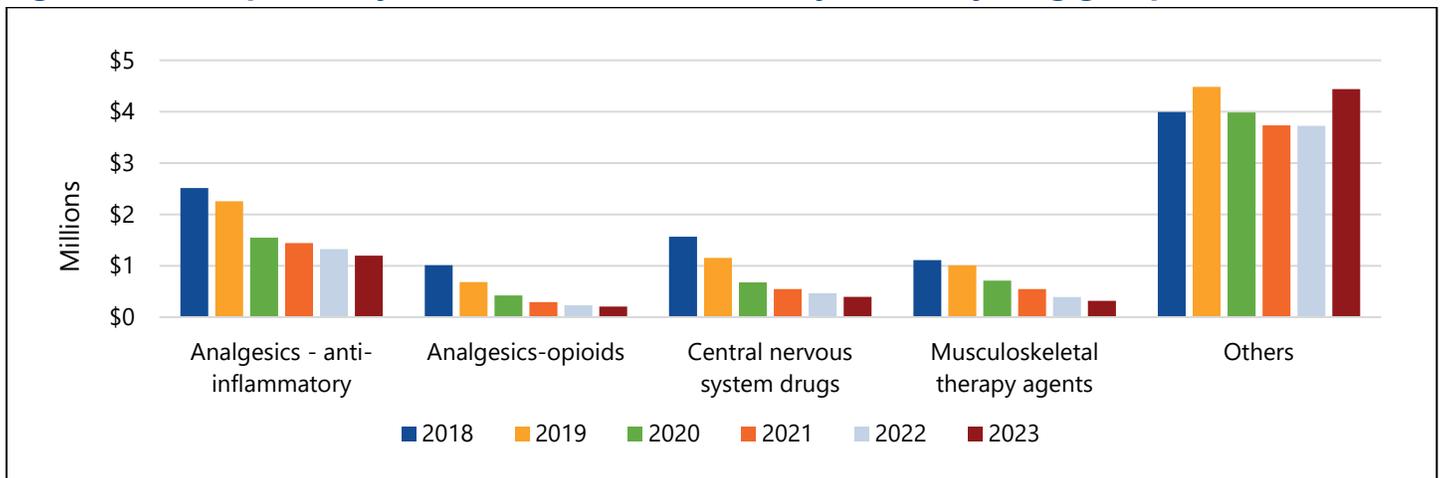
The four specified drug groups accounted for 78% of total pharmacy costs for lost-time claims and 61% of costs for medical-only claims in 2018 (Figure 14 and Figure 15). In 2023, the same four group's costs represented 41% of total pharmacy costs for lost-time claims and 32% of medical-only claims. The total cost of analgesics-opioids decreased the most, with a 69% reduction for lost-time claims and 79% reduction in medical-only claims. Analgesics-anti-inflammatories, central nervous system drugs, and musculoskeletal therapy agents also saw an overall decrease during the study period.

Figure 14: Total pharmacy service costs for lost-time claims, by drug group



Source: Workers' Compensation Research and Evaluation Group, 2024.

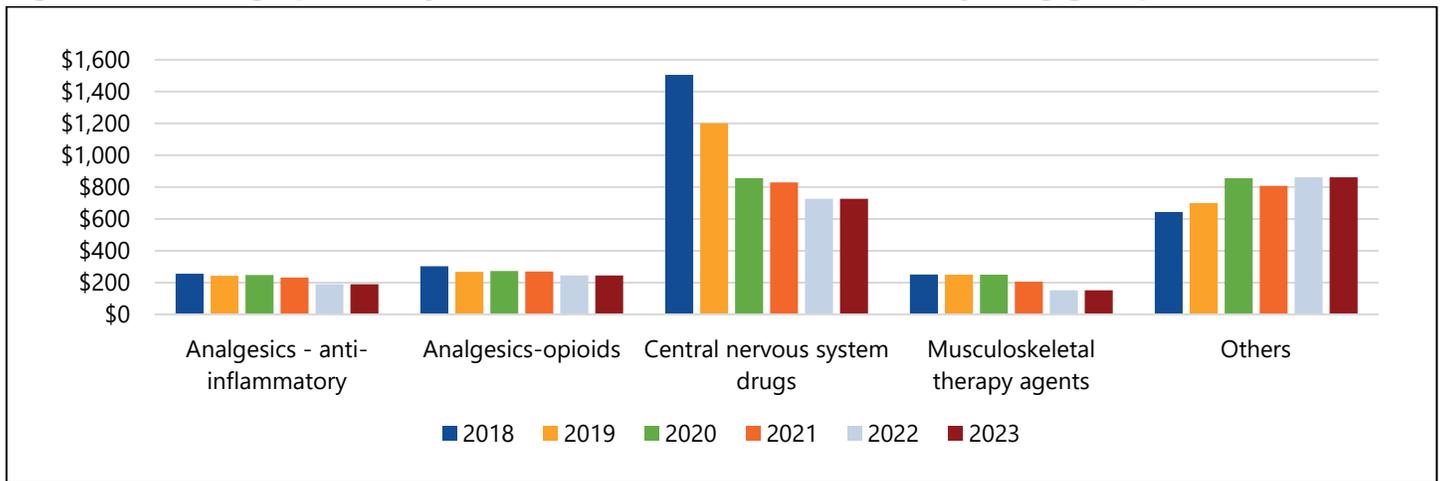
Figure 15: Total pharmacy service cost for medical-only claims, by drug group



Source: Workers' Compensation Research and Evaluation Group, 2024.

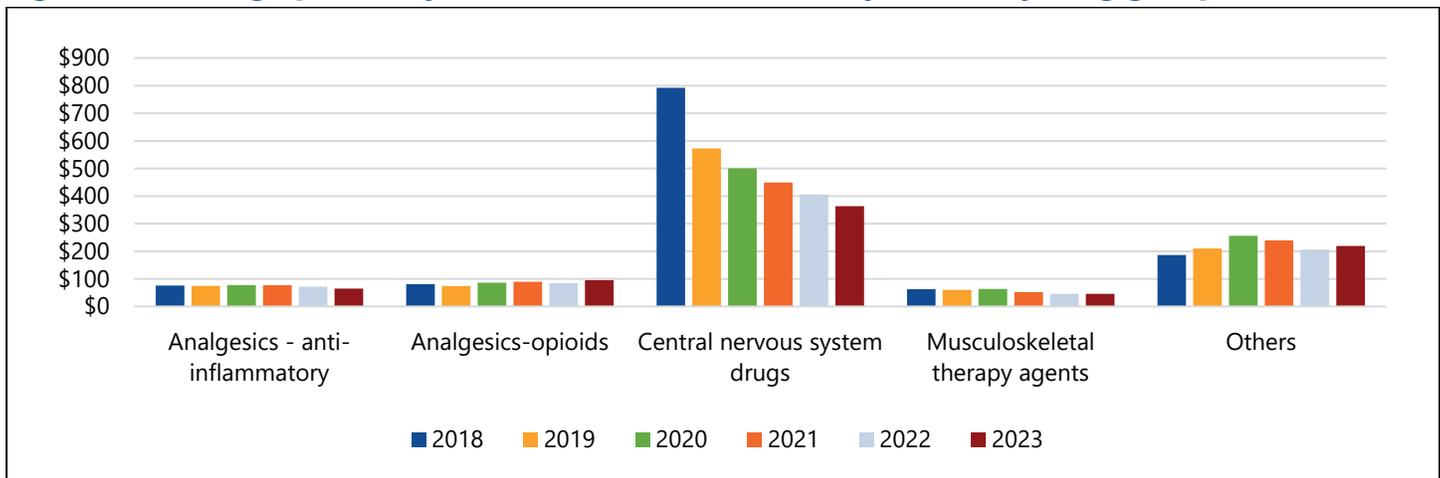
The average pharmacy cost per claim also showed a reduction over the years (Figure 16 and Figure 17). The average cost of central nervous agents saw more than 50% decrease for both lost-time claims and medical-only claims.

Figure 16: Average pharmacy service cost for lost-time claims, by drug group



Source: Workers' Compensation Research and Evaluation Group, 2024.

Figure 17: Average pharmacy service cost for medical-only claims, by drug group



Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization of N status drugs

N status drugs are drugs with "N" status identified in the current edition of the Official Disability Guidelines (ODG) and are not recommended by ODG as a first-line treatment.

Overall, claims with at least one N status drug decreased from 3,154 in 2018 to 2,984 in 2022 but increased to 3,422 in 2023 (Table 18). The number of N status drug prescriptions decreased 20% over the study period, from around 10,900 to 8,700. The total cost of N status drugs reached over \$2 million in 2018 and decreased 49% to about \$1.1 million in 2023 (Table 19).

Table 18: Number of N status drug claims and prescriptions

Service year	N status drug			Other drugs		
	Number of claims	Number of prescriptions	Average prescriptions per claim	Number of claims	Number of prescriptions	Average prescriptions per claim
2018	3,154	10,895	3.5	110,380	667,863	6.1
2019	3,774	11,000	2.9	102,792	591,691	5.8
2020	3,293	9,726	3.0	77,491	486,437	6.3
2021	3,233	8,987	2.8	73,219	440,764	6.0
2022	2,984	8,292	2.8	71,806	412,717	5.7
2023	3,422	8,743	2.6	70,744	396,965	5.6

Source: Workers' Compensation Research and Evaluation Group, 2024.

Table 19: Number of N status drug claims and costs

Service year	Total cost (in thousands)	Percent of total claims	Average cost
2018	\$2,127	3%	\$716
2019	\$1,758	3%	\$501
2020	\$1,461	4%	\$466
2021	\$1,308	4%	\$433
2022	\$1,106	4%	\$398
2023	\$1,092	5%	\$333

Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization of Schedule II drug

Schedule II drugs are drugs with a high abuse risk that also have safe and accepted medical uses in the United States. These drugs can cause severe psychological or physical dependence and include certain narcotics, stimulants, and depressant drugs. Some examples are morphine, oxycodone (OxyContin®), methylphenidate (Ritalin®), and dextroamphetamine (Dexedrine®).

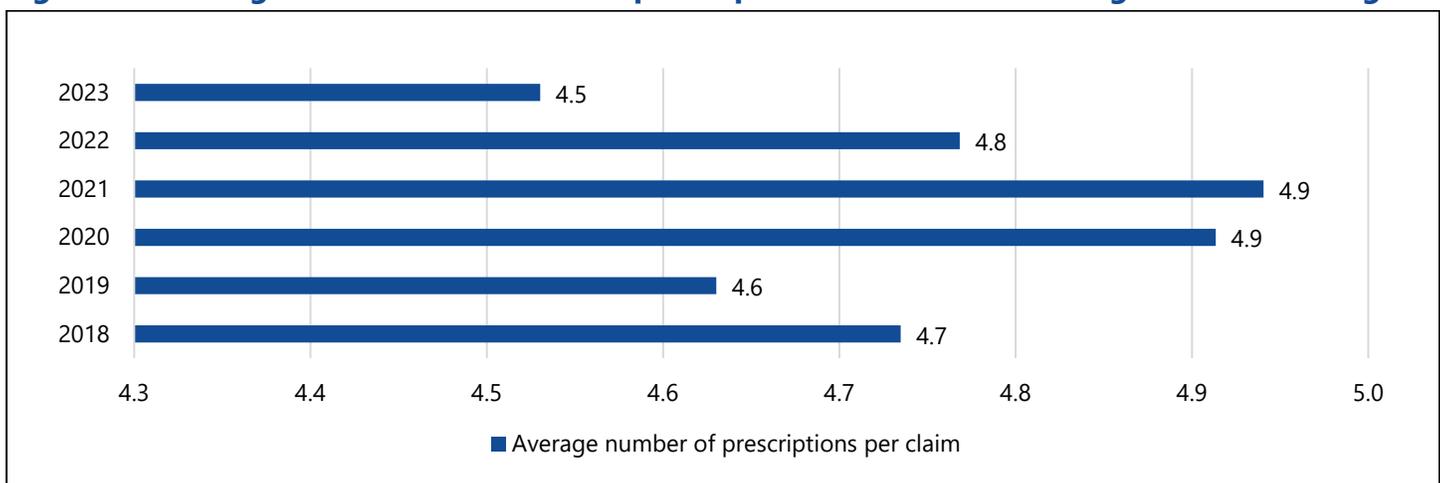
The number of claims with at least one Schedule II prescription decreased 47%, from around 19,000 in 2018 to below 10,000 in 2023 (Table 20). In 2018 17% of claims had at least one Schedule II drug. This number reduced to 14% by 2023. The total cost of Schedule II drugs also decreased 67%, from about \$7.8 million to \$2.6 million during the report period. The average number of Schedule II drug prescriptions per claim fluctuated but remained above 4.5 since 2018 (Figure 18).

Table 20: Number of Schedule II drug claims and cost

Service year	Number of claims	Total cost	Percent of total claims	Average cost
2018	18,841	\$7,758,095	17%	\$412
2019	15,621	\$5,624,271	16%	\$360
2020	12,159	\$4,235,066	16%	\$348
2021	10,337	\$3,322,684	14%	\$321
2022	9,455	\$2,712,789	13%	\$287
2023	9,999	\$2,554,065	14%	\$255

Source: Workers' Compensation Research and Evaluation Group, 2024.

Figure 18: Average number of Schedule II prescriptions for claims receiving Schedule II drugs



Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization of compound drugs

Drug compounding is a specialty service that provides injured employees with certain pharmaceutical products in dosage forms, strength, or delivery methods that are not available commercially. Compound drugs are created by combining one or more active ingredients such as gabapentin, flurbiprofen, ketamine HCL and an inactive ingredient with creams, syrups, or other delivery systems.

Chemicals and pharmaceutical adjuvants are also indicators for compounding. The closed formulary was amended in April 2018 to exclude any prescription drug created through compounding. Consequently, all new prescriptions for compound drugs created after July 1, 2018, will require preauthorization.

The downward trend of compound drug use after the introduction of the 2018 rule can be seen by the number of bills with compound drugs decreasing 92%, from 1,917 in 2018 to 150 in 2022 (Table 21). In 2023 the number of prescribed compound drugs tripled compared to 2022 but still represented less than one quarter of those prescribed in 2018. The total cost of compound drugs decreased from about

\$536,000 in 2018 to \$88,000 in 2022, increasing to \$425,000 in 2023. The average cost per compound drug stayed at less than \$300 before 2020, then doubled in 2021 and 2022 and then tripled to \$897 per compound drug in 2023.

Table 21: Compound drug cost by service year

Service year	Number of compound drugs	Total cost	Average cost per compound drug
2018	1,971	\$535,594	\$272
2019	100	\$28,381	\$284
2020	113	\$42,013	\$372
2021	82	\$50,968	\$622
2022	150	\$88,468	\$590
2023	474	\$425,395	\$897

Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization by brand/generic status

In 2023, generic drugs accounted for 48% of the total pharmacy service costs, followed by drugs with unknown status at 33%, and brand drugs at 18% (Table 22). The number of claims that received brand drugs decreased 75% from around 17,000 in 2018 to 4,000 in 2023. However, the average cost per claim for brand drug prescriptions increased 22%, from \$1,457 to \$1,783.

Table 22: Number of prescriptions and costs, by drug brand/generic status

Service year	Brand			Generic			Unknown		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	17,016	\$24,790	\$1,457	104,402	\$43,710	\$419	1,716	\$201	\$117
2019	12,734	\$17,795	\$1,397	97,940	\$39,441	\$403	5,097	\$3,843	\$754
2020	5,896	\$9,671	\$1,640	74,433	\$31,708	\$426	10,397	\$8,889	\$855
2021	5,126	\$8,320	\$1,623	68,583	\$25,897	\$378	15,931	\$10,146	\$637
2022	4,086	\$7,069	\$1,730	65,173	\$21,334	\$327	24,155	\$12,425	\$514
2023	4,254	\$7,586	\$1,783	62,920	\$19,980	\$318	28,742	\$13,867	\$482

Source: Workers' Compensation Research and Evaluation Group, 2024.

Analysis by injury year

Injury year statistics are organized by the year of the injury, and account for all payments up to a set period of maturity. In contrast to service year data, which looks at old and new injuries in a given year, injury year data only considers injuries that occurred in the studied year.

For the purpose of comparison, payments up to 12-months maturity are studied.

Overall health care cost

Costs by claim type

Overall, the number of claims 12 months after injury decreased 11% from around 225,000 injuries in 2018 to a little over 200,000 in 2022 (Table 23). Total health care costs also decreased 9%, from about \$729 million to \$661 million. The average cost per claim increased 2% from \$3,241 to \$3,301 during the same period.

The number of lost-time claims increased 5%, from about 49,000 in injury year 2018 to 51,000 in 2022. Total health care costs decreased 9%, from \$510 million to close to \$465 million, and the average cost per lost-time claim decreased 13%, from \$10,445 to \$9,049.

On the other hand, medical-only claims decreased 15%, from around 176,000 in 2018 to 149,000 in 2022. Total health care costs decreased 10%, from \$219 million to \$197 million, with the average cost per medical-only claim increasing 6%, from \$1,243 in injury year 2018 to \$1,320 in 2022.

Table 23: Number of claims and cost 12 months after injury, by claim type

Injury year	All claims			Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	225,002	\$729,120	\$3,241	48,845	\$510,168	\$10,445	176,157	\$218,951	\$1,243
2019	225,598	\$708,680	\$3,141	47,955	\$490,065	\$10,219	177,643	\$218,615	\$1,231
2020	174,522	\$597,938	\$3,426	42,978	\$429,738	\$9,999	131,544	\$168,200	\$1,279
2021	193,175	\$658,594	\$3,409	50,660	\$470,486	\$9,287	142,515	\$188,108	\$1,320
2022	200,349	\$661,285	\$3,301	51,335	\$464,549	\$9,049	149,014	\$196,736	\$1,320

Source: Workers' Compensation Research and Evaluation Group, 2024.

Ninety-nine percent of injured employees received at least one service within the first six months after their injury. About 12% to 13% of claims continued to receive services six months after their injury and only 1% of claims continued to receive services after four years or more (Table 24).

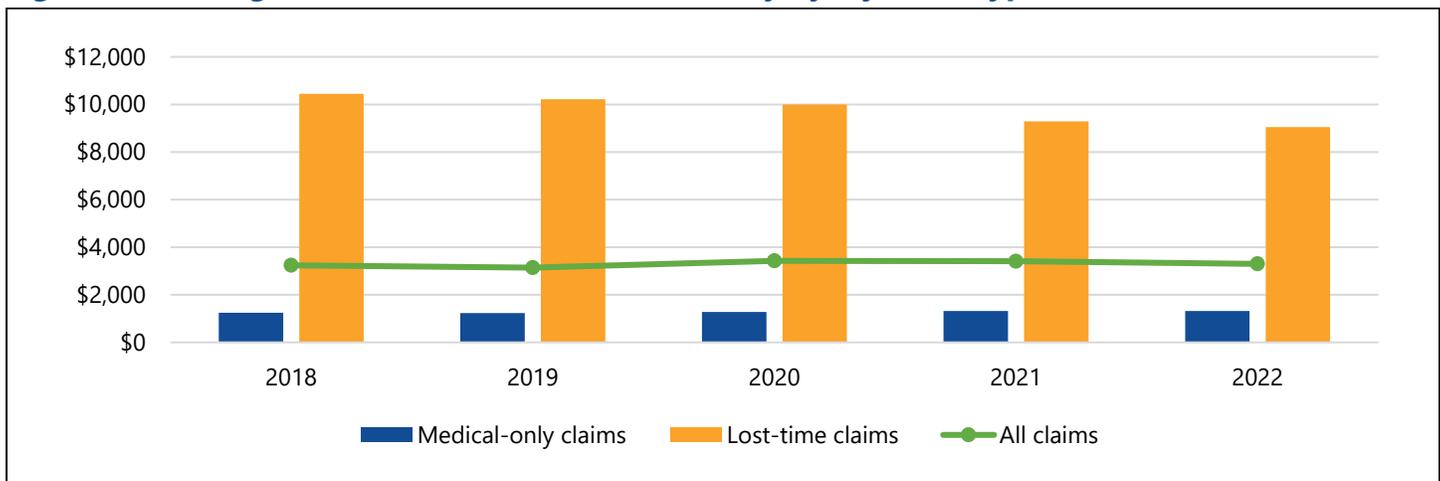
Table 24: Number of claims and costs by injury year, by maturity

Injury year	6 months maturity		6 months – 1 year maturity		2nd year maturity		3rd year maturity		4+ years maturity	
	Number of claims	Total cost (in thousands)	Number of claims	Total cost (in thousands)	Number of claims	Total cost (in thousands)	Number of claims	Total cost (in thousands)	Number of claims	Total cost (in thousands)
2018	224,161	\$619,888	28,975	\$109,232	14,510	\$81,129	5,516	\$26,909	2,949	\$20,590
2019	224,876	\$606,547	28,101	\$102,133	14,985	\$83,732	5,450	\$29,341	2,572	\$14,997
2020	173,785	\$508,252	23,350	\$89,686	11,862	\$66,695	4,061	\$21,361		
2021	192,365	\$563,716	25,303	\$94,878	12,406	\$68,182				
2022	199,564	\$561,276	26,045	\$100,009						
2023	205,436	\$571,035								

Source: Workers' Compensation Research and Evaluation Group, 2024.

The average health care cost per claim 12 months after injury increased from \$3,241 in 2018 to \$3,409 in 2022. The average cost per lost-time claim decreased 13%, from \$10,445 in 2018 to \$9,049 in 2022, and the average cost per medical-only claim increased 6%, from \$1,243 to \$1,320 (Figure 19).

Figure 19: Average medical cost 12 months after injury, by claim type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs by bill type

There were about 225,000 claims in injury year 2018 with medical service 12 months after injury. That number dropped sharply to approximately 175,000 in 2020, slowly picking up to about 200,000 in 2022 (Table 25). Pharmacy service claims had the largest decrease at 34%, followed by claims with hospital/institutional services (23%), dental services (18%), and professional services (11%) between injury years 2018 to 2022.

Table 25: Number of claims 12 months after injury, by bill type

Injury year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	214,059	71,386	1,049	78,218	225,002
2019	214,309	69,676	1,111	72,958	225,598
2020	165,861	53,582	683	51,479	174,522
2021	183,402	54,736	713	51,195	193,175
2022	190,821	54,821	858	51,933	200,349

Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs for non-network claims by claim type

The number of non-network claims 12 months after injury decreased 16%, from around 116,000 in 2018 to 98,000 in 2022 (Table 26). The total cost of non-network claims also decreased 12%, from \$384 million to \$338 million.

Overall, the average cost of non-network claims increased 4%, from \$3,304 per claim in 2018 to \$3,445 in 2022. The number of claims and total cost of claims for both lost-time and medical-only claims showed a similar trend. The average cost of lost-time claims decreased 7%, while medical-only claims saw a 6% increase.

Table 26: Number of non-network claims and costs 12 months after injury, by claim type

Injury year	All claims			Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	116,227	\$383,976	\$3,304	23,343	\$264,280	\$11,322	92,884	\$119,695	\$1,289
2019	116,368	\$378,996	\$3,257	22,847	\$257,785	\$11,283	93,521	\$121,211	\$1,296
2020	91,769	\$319,776	\$3,485	19,578	\$221,984	\$11,338	72,191	\$97,792	\$1,355
2021	97,601	\$343,362	\$3,518	22,355	\$239,221	\$10,701	75,246	\$104,140	\$1,384
2022	98,016	\$337,617	\$3,445	22,139	\$233,983	\$10,569	75,877	\$103,634	\$1,366

Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs for non-network claims by bill type

The number of non-network claims 12 months after injury decreased for professional services by 16%, from close to 109,000 claims in 2018 to 92,000 in 2022. Hospital/institutional service non-network claims decreased by 28% from almost 41,000 to 29,000, and pharmacy service non-network claims by 35%, from about 37,000 to 24,000 during the same report period (Table 27).

Table 27: Non-network claims 12 months after injury, by bill type

Injury year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	108,838	40,515	565	36,877	116,227
2019	108,678	39,712	591	34,057	116,368
2020	85,914	29,650	376	24,612	91,769
2021	91,286	29,705	375	23,885	97,601
2022	91,935	29,330	453	23,857	98,016

Source: Workers' Compensation Research and Evaluation Group, 2024.

The cost of non-network claims 12 months after injury decreased for professional services by 9% from about \$217 million in 2018 to \$198 million in 2022; for hospital/institutional service by 15%, from close to \$155 million to \$131 million; and for pharmacy service by 32%, from near \$10 million to \$7 million during the same report period (Table 28).

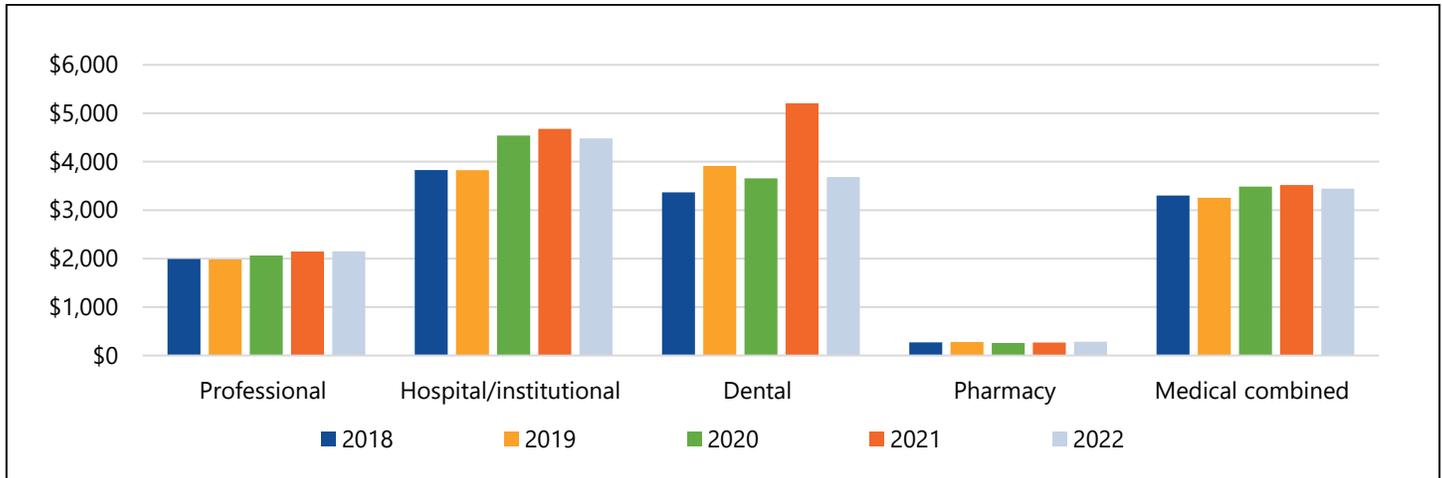
Table 28: Non-network costs (in thousands) 12 months after injury, by bill type

Injury year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	\$216,942	\$155,056	\$1,903	\$10,074	\$383,976
2019	\$215,282	\$151,934	\$2,313	\$9,467	\$378,996
2020	\$177,443	\$134,574	\$1,376	\$6,383	\$319,776
2021	\$196,032	\$138,971	\$1,953	\$6,405	\$343,362
2022	\$197,641	\$131,475	\$1,669	\$6,832	\$337,617

Source: Workers' Compensation Research and Evaluation Group, 2024.

The average cost per non-network claim 12 months after injury increased 4% for all services combined (Figure 20). Hospital/Institutional services increased 17%, from \$3,827 per claim in 2018 to \$4,483 per claim in 2022, followed by dental services, professional services, and pharmacy services at 9%, 8%, 5% respectively.

Figure 20: Average cost per non-network claim 12 months after injury, by bill type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs for network claims by claim type

The number of network claims 12 months after the injury decreased 16%, from almost 109,000 in injury year 2018 to 102,000 in 2022 (Table 29). The total cost of network claims also decreased 6%, from a little over \$345 million to almost \$324 million. Overall, the average cost of network claims stayed flat.

The number of lost-time claims increased 14% in 2022 compared to 2018. However, the total cost of lost-time claims decreased 6%, from about \$245 million to \$231 million. As a result, the average cost of lost-time claims decreased 18%, from \$9,642 to \$7,897.

The number of medical-only claims decreased 12%, from 2018 to 2022, and the total cost decreased by 6% during the same period.

Table 29: Number of network claims and costs 12 months after injury, by claim type

Injury year	All claims			Lost-time claims			Medical-only claims		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	108,775	\$345,144	\$3,173	25,502	\$245,888	\$9,642	83,273	\$99,256	\$1,192
2019	109,230	\$329,684	\$3,018	25,108	\$232,280	\$9,251	84,122	\$97,404	\$1,158
2020	82,753	\$278,162	\$3,361	23,400	\$207,754	\$8,878	59,353	\$70,408	\$1,186
2021	95,574	\$315,232	\$3,298	28,305	\$231,264	\$8,170	67,269	\$83,968	\$1,248
2022	102,333	\$323,669	\$3,163	29,196	\$230,566	\$7,897	73,137	\$93,103	\$1,273

Source: Workers' Compensation Research and Evaluation Group, 2024.

Costs for network claims by bill type

The number of network claims 12 months after injury for professional services decreased 6%, from about 105,000 claims in 2018 to 99,000 in 2022. The number of network hospital/institutional service claims also decreased 17%, from nearly 31,000 to 25,000, and pharmacy service network claims dropped 32%, from around 41,000 to 28,000 during the same report period (Table 30).

Table 30: Network claims 12 months after injury, by bill type

Injury year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	105,221	30,871	484	41,341	108,775
2019	105,631	29,964	520	38,901	109,230
2020	79,947	23,932	307	26,867	82,753
2021	92,116	25,031	338	27,310	95,574
2022	98,886	25,491	405	28,076	102,333

Source: Workers' Compensation Research and Evaluation Group, 2024.

The cost of network claims 12 months after injury decreased for professional services by 2% from almost \$204 million in 2018 to \$200 million in 2022; for hospital/institutional services by 12%, from about \$132 million to \$116 million; and for pharmacy services by 24% from nearly \$8 million to \$6 million during the same report period (Table 31).

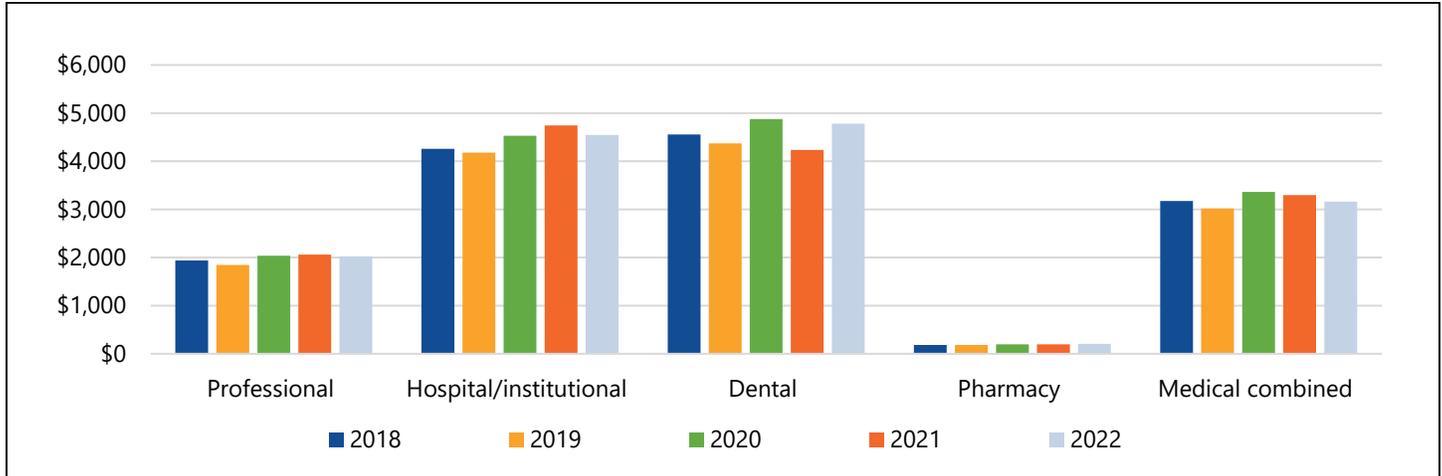
Table 31: Network costs (in thousands) 12 months after injury, by bill type

Injury year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2018	\$203,790	\$131,522	\$2,205	\$7,626	\$345,144
2019	\$195,063	\$125,204	\$2,273	\$7,143	\$329,684
2020	\$162,947	\$108,437	\$1,497	\$5,281	\$278,162
2021	\$189,724	\$118,741	\$1,432	\$5,335	\$315,232
2022	\$200,080	\$115,850	\$1,936	\$5,804	\$323,669

Source: Workers' Compensation Research and Evaluation Group, 2024.

The average cost per network claim for all services fluctuated throughout the study period (Figure 21). The average cost for each individual service increased for all service types. Pharmacy services led the way with a 12% increase, followed by hospital/institutional services at 7%, dental services at 5%, and professional services at 4%.

Figure 21: Average cost per network claim 12 months after injury, by bill type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Professional services

Cost and utilization by maturity and claim type

To review professional services cost and utilization by injury year, services within a set length of time from the injury date are grouped by maturity date (six months, 12 months, and 24 months after the injury). Most medical-only claims mature within six months. Lost-time claims may require more complicated and long-term treatments and follow-up visits.

The total costs for lost-time claims increased greatly as maturity increased each injury year, while the costs for medical-only claims only increased slightly as maturity increased (Table 32). The total number of lost-time claims at six months after injury increased from around 48,000 in 2018 to 51,000 in 2023. However, the total cost for those claims decreased 2% to about \$202 million for injuries in 2023 compared to \$207 million in 2018. The average cost per lost-time claim also decreased 8% to \$3,961 in the same period. Lost-time claims with 12 months and 24 months maturity after injury followed a similar trend.

The total number of medical-only claims decreased by about 12% since 2018 at six months after injury, 15% for 12 months after injury, and 19% for 24 months after injury. The total costs for medical-only claims at six-month injury decreased 23% to about \$107 million in 2020 compared to \$139 million in 2018. Those costs began to increase from 2021 and reached nearly \$146 million in 2023.

Table 32: Number of professional service claims and cost, by injury year, maturity, and claim type

Lost-time claims									
Injury year	6 months			12 months			24 months		
	Total cost (in thousands)	Number of claims	Average cost	Total cost (in thousands)	Number of claims	Average cost	Total cost (in thousands)	Number of claims	Average cost
2018	\$206,600	48,101	\$4,295	\$272,513	48,422	\$5,628	\$321,123	48,561	\$6,613
2019	\$200,927	47,302	\$4,248	\$262,822	47,578	\$5,524	\$313,949	47,712	\$6,580
2020	\$172,181	42,123	\$4,088	\$226,791	42,442	\$5,344	\$268,216	42,578	\$6,299
2021	\$194,842	49,469	\$3,939	\$253,381	49,812	\$5,087	\$296,308	49,967	\$5,930
2022	\$197,272	50,285	\$3,923	\$259,754	50,629	\$5,131			
2023	\$201,902	50,972	\$3,961						
Medical-only claims									
Injury year	6 months			12 months			24 months		
	Total cost (in thousands)	Number of claims	Average cost	Total cost (in thousands)	Number of claims	Average cost	Total cost (in thousands)	Number of claims	Average cost
2018	\$139,363	165,059	\$844	\$148,220	165,637	\$895	\$153,056	165,893	\$923
2019	\$139,419	166,246	\$839	\$147,523	166,731	\$885	\$152,273	166,976	\$912
2020	\$106,924	122,957	\$870	\$113,599	123,419	\$920	\$117,417	123,678	\$949
2021	\$124,985	133,090	\$939	\$132,376	133,590	\$991	\$136,201	133,834	\$1,018
2022	\$129,676	139,687	\$928	\$137,967	140,192	\$984			
2023	\$145,654	144,636	\$1,007						

Source: Workers' Compensation Research and Evaluation Group, 2024.

As expected, the average cost per claim differed greatly between lost-time claims and medical-only claims (Figure 22). Overall, the average cost per lost-time claim has a similar downward trend from 2018 to 2021 for each of the different claim maturity periods and picked up slightly from 2022 to 2023 for 12-months and six-months maturities, respectively. The initial average cost for six months after the injury was \$3,961 for injuries in 2023 compared to \$4,295 in 2018. The average cost increased around \$1,300 at 12 months after the injury and an additional \$2,000 or so 24 months after injury. The average cost for medical-only claims stayed slightly below \$1,000 before 2023 for six months after the injury.

Figure 22: Average cost per professional services claim, by claim type and maturity



Source: Workers' Compensation Research and Evaluation Group, 2024.

The shares of lost-time claims that received different professional services at 12 months of injury decreased over time (Table 33). For instance, the percentage of claims that received physical medicine decreased about 4%, from 58.7% in injury year 2018 to 54.4% in 2022, and other surgery dropped about 8%, from 45.9% to 37.6%.

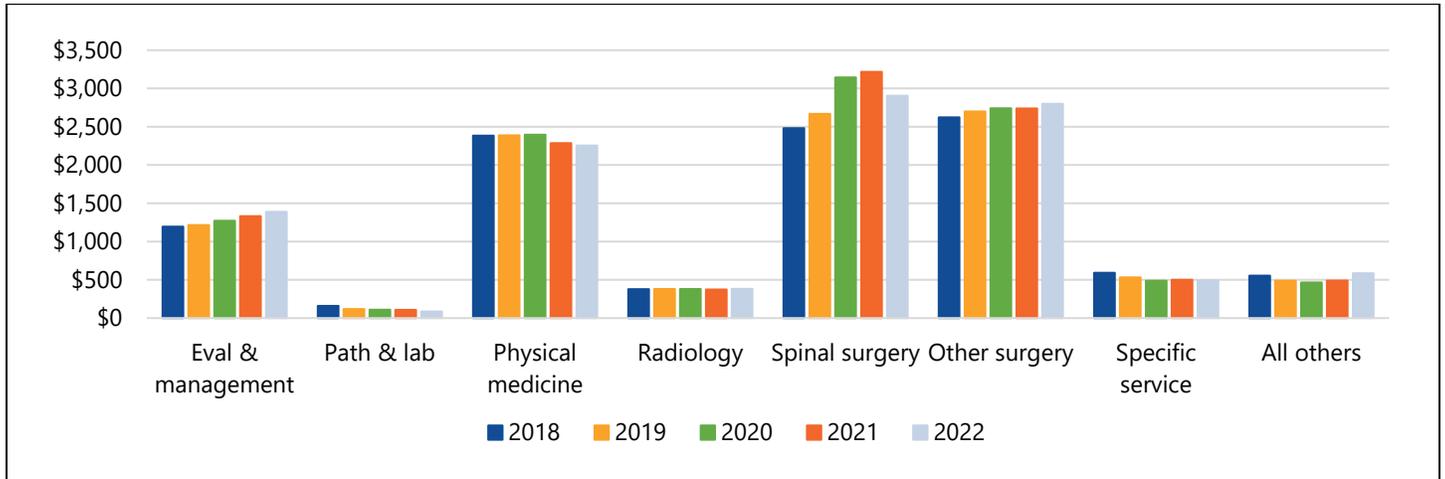
Table 33: Percent of lost-time claims receiving certain professional services, 12 months after injury

Injury year	Evaluation & management	Pathology & lab	Physical medicine	Radiology	Spinal surgery	Other surgery	Specific service	All others
2018	98.0%	18.2%	58.7%	82.4%	2.1%	45.9%	85.6%	31.8%
2019	98.1%	18.0%	58.1%	82.1%	1.8%	44.4%	84.0%	31.7%
2020	97.8%	17.1%	56.3%	79.6%	1.7%	42.4%	82.9%	30.7%
2021	97.3%	13.6%	54.9%	77.7%	1.3%	38.2%	82.1%	27.2%
2022	97.4%	13.0%	54.4%	77.7%	1.2%	37.6%	82.3%	27.2%

Source: Workers' Compensation Research and Evaluation Group, 2024.

The average cost per lost-time claim for spinal surgery increased 17% to \$2,905 per claim in 2022, compared to \$2,482 in 2018 at 12 months after injury (Figure 23). Similarly, the average cost per claim for evaluation and management service increased 16%, from \$1,194 to \$1,389 per claim at 12 months after injury. Pathology and lab services decreased the most from \$160 to \$87 during the same period.

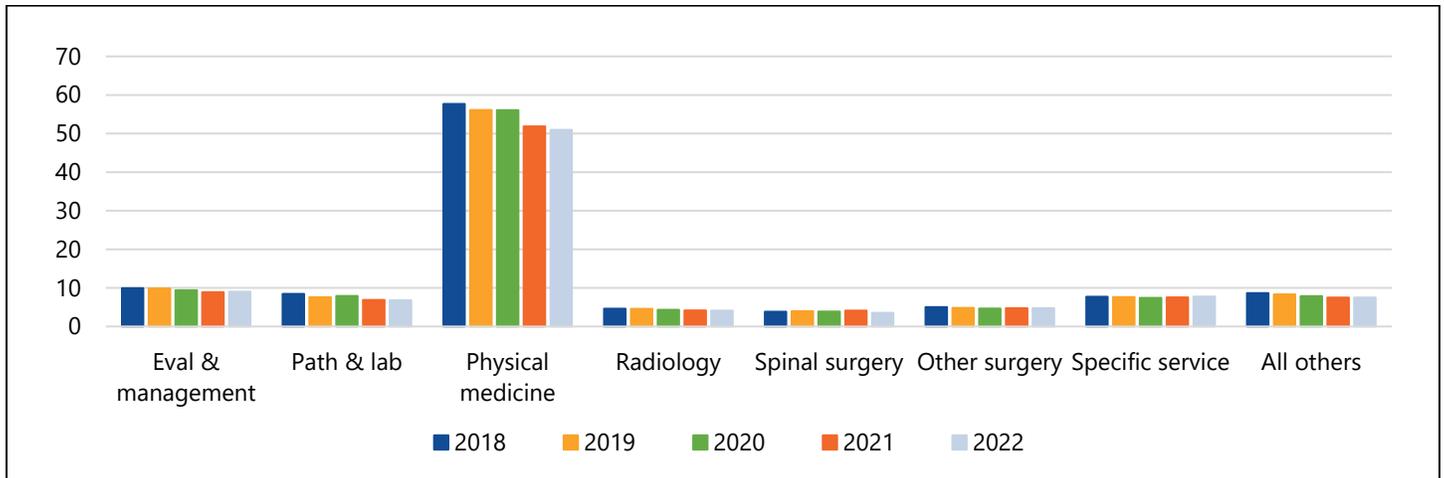
Figure 23: Average cost per lost-time claim for certain professional services 12 months after injury



Source: Workers' Compensation Research and Evaluation Group, 2024.

Physical medicine has historically been the most utilized type of professional service 12 months after injury, but it has decreased over the years from 58 services per lost-time claim in 2018 to 51 services in 2022 (Figure 24).

Figure 24: Number of professional services per lost-time claim 12 months after injury, by service type



Source: Workers' Compensation Research and Evaluation Group, 2024.

Hospital/institutional services

Cost and utilization by maturity and claim type

The total hospital/institutional cost for lost-time claims decreased 19% from 2018 to 2023 and 15% for medical-only claims (Table 34). The total hospital/institutional cost for claims followed a similar trend at 12 and 24 months after injury for both lost-time and medical-only claims.

Table 34: Total hospital/institutional services cost (in thousands), by injury year, maturity, and claim type

Injury year	Lost-time claims			Medical-only claims		
	6 months	12 months	24 months	6 months	12 months	24 months
2018	\$198,495	\$225,004	\$244,865	\$59,065	\$61,574	\$63,114
2019	\$190,680	\$215,569	\$236,237	\$59,583	\$61,569	\$63,221
2020	\$171,982	\$194,801	\$210,489	\$46,222	\$48,210	\$49,610
2021	\$185,092	\$208,299	\$224,028	\$47,693	\$49,414	\$50,208
2022	\$172,785	\$195,004		\$50,118	\$52,320	
2023	\$161,585			\$50,107		

Source: Workers' Compensation Research and Evaluation Group, 2024.

The number of lost-time claims for hospital/institutional services six months after injury declined 17% to about 20,000 in 2023 from 24,000 in 2018. Similarly, the number of lost-time claims decreased 13% at 12 months after injury from 2018 to 2022 and 13% at 24 months from 2018 to 2021 (Table 35). The number of medical-only claims receiving hospital/institutional services decreased by 29% since 2018 for all maturities.

Table 35: Number of hospital/institutional claims by injury year, maturity, and claim type

Injury year	Lost-time claims			Medical-only claims		
	6 months	12 months	24 months	6 months	12 months	24 months
2018	24,363	25,484	25,947	45,616	45,902	46,028
2019	23,425	24,456	24,913	44,979	45,220	45,341
2020	19,835	20,751	21,109	32,615	32,831	32,916
2021	21,290	22,309	22,686	32,195	32,427	32,529
2022	21,237	22,196		32,371	32,625	
2023	20,175			32,548		

Source: Workers' Compensation Research and Evaluation Group, 2024.

The average cost per hospital/institutional services claim increased for both lost-time claims and medical-only claims for almost all maturities (Table 36). The average cost for medical-only claims six months after injury jumped 19% to \$1,539 per claim for injuries in 2023 compared to \$1,295 in 2018. Costs for 12 months and 24 months after injury also showed 20% and 13% increases from 2018 to 2022. The average cost per lost-time claims stays mostly flat at six months and 12 months after injury but increased 5% at 24 months after injury.

Table 36: Average hospital/institutional services costs per claim, by maturity, and claim type

Injury year	Lost-time claims			Medical-only claims		
	6 months	12 months	24 months	6 months	12 months	24 months
2018	\$8,147	\$8,829	\$9,437	\$1,295	\$1,341	\$1,371
2019	\$8,140	\$8,815	\$9,482	\$1,325	\$1,362	\$1,394
2020	\$8,671	\$9,388	\$9,972	\$1,417	\$1,468	\$1,507
2021	\$8,694	\$9,337	\$9,875	\$1,481	\$1,524	\$1,543
2022	\$8,136	\$8,786		\$1,548	\$1,604	
2023	\$8,009			\$1,539		

Source: Workers' Compensation Research and Evaluation Group, 2024.

Pharmacy services

Cost and utilization by maturity group

The pharmacy services cost in the first year after injury represented about 60% of the total pharmacy costs. The average cost of first year after injury was around \$230 from 2018 to 2021 (Table 37). It increased to \$243 in 2022. About 6-7% of claims used pharmacy services after the first year of injury. Around 1% of claims continued using pharmacy services after three years.

Table 37: Number of claims and total cost, by maturity group

Injury year	1st year maturity			2nd year maturity			3rd year maturity			4+ years maturity		
	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost	Number of claims	Total cost (in thousands)	Average cost
2018	78,218	\$17,701	\$226	5,578	\$5,686	\$1,019	2,209	\$3,181	\$1,440	1,155	\$4,188	\$3,626
2019	72,958	\$16,610	\$228	5,247	\$4,746	\$905	2,039	\$3,019	\$1,480	1,053	\$2,988	\$2,838
2020	51,479	\$11,664	\$227	3,900	\$3,777	\$968	1,457	\$2,225	\$1,527			
2021	51,195	\$11,740	\$229	3,676	\$4,244	\$1,154						
2022	51,933	\$12,636	\$243									

Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization of N status drugs

Claims with at least one N status drug prescription 12 months after injury increased 22% from 1,625 in injury year 2018 to 1,990 in injury year 2022 (Table 38). The number of N status drug prescriptions increased 22%, from 2,783 to 3,405 and the total cost of N status drugs increased 9%, from about \$148,000 to \$163,000, during the same period (Table 39).

Table 38: Number of N status drug claims and prescriptions, 12 months after injury

Injury year	N status drug			Other drugs		
	Number of claims	Number of prescriptions	Average prescriptions per claim	Number of claims	Number of prescriptions	Average prescriptions per claim
2018	1,625	2,783	1.7	80,322	296,908	3.7
2019	2,149	3,608	1.7	74,665	275,107	3.7
2020	1,780	2,889	1.6	52,080	190,778	3.7
2021	1,979	3,440	1.7	52,203	188,391	3.6
2022	1,990	3,405	1.7	53,004	192,089	3.6

Source: Workers' Compensation Research and Evaluation Group, 2024.

Table 39: N status drug costs, 12 months after injury

Injury year	Total cost	Percent of total claims	Average cost
2018	\$148,461	2%	\$99
2019	\$191,041	3%	\$97
2020	\$131,458	3%	\$78
2021	\$165,330	4%	\$91
2022	\$162,521	4%	\$89

Source: Workers' Compensation Research and Evaluation Group, 2024.

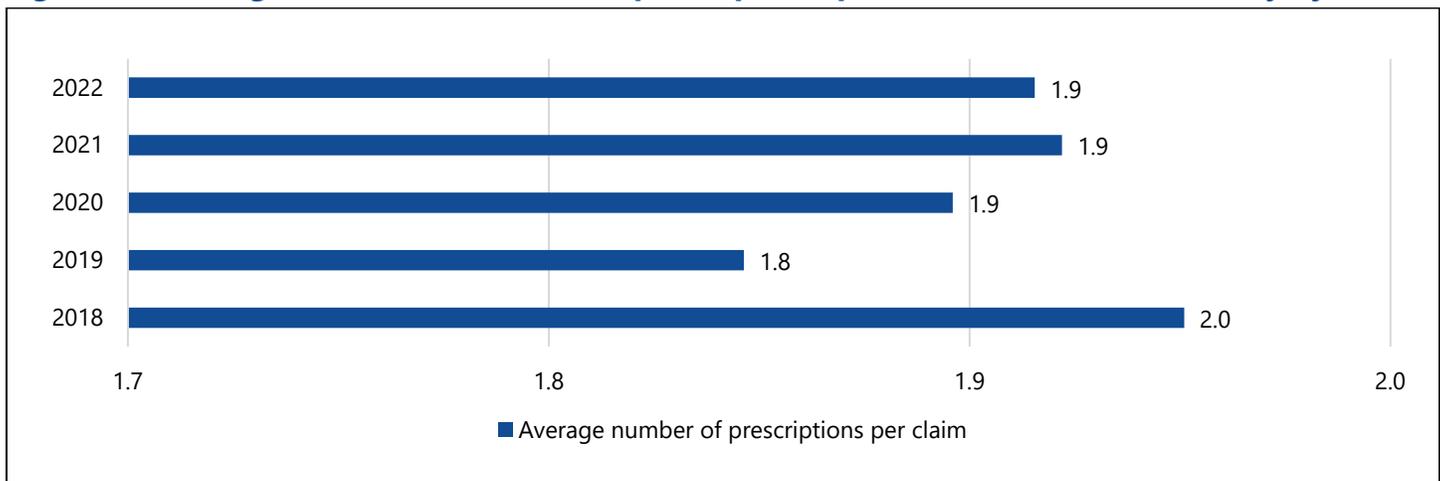
Cost and utilization of Schedule II drugs

The number of claims with at least one Schedule II prescription 12 months after injury decreased 45%, from 8,484 in injury year 2018 to 4,665 in injury year 2022 (Table 40). About 11% of claims had at least one Schedule II prescription in 2018, decreasing to 9% in 2022. The total cost of Schedule II drugs 12 months after injury was a little more than \$578,000 in 2018, dropping to about \$214,000 in 2022. The average number of Schedule II prescriptions per claim was decreased from 2 to 1.9 during the same period (Figure 25).

Table 40: Number of Schedule II drug claims and costs, 12 months after injury

Injury year	Number of claims	Total cost	Percent of total claims	Average cost
2018	8,484	\$578,244	11%	\$68
2019	7,093	\$399,949	10%	\$56
2020	4,833	\$240,603	9%	\$50
2021	4,434	\$222,691	9%	\$50
2022	4,665	\$213,636	9%	\$46

Source: Workers' Compensation Research and Evaluation Group, 2024.

Figure 25: Average number of Schedule II prescriptions per claim, 12 months after injury

Source: Workers' Compensation Research and Evaluation Group, 2024.

Cost and utilization of compound drugs

The number of compounded drug prescriptions at 12 months after injury was 48 in injury year 2018 and dropped to 22 in year 2019 and then increased slowly to 36 in 2021 before increasing to 155 in 2022 (Table 41). The total cost of compounded drugs almost doubled from around \$11,000 in 2018 to nearly \$21,000 in 2021 and reached to \$116,000 in 2022. Accordingly, the average cost increased from \$231 to \$748 in the same time frame.

Table 41: Compound drug costs 12 months after injury

Injury year	Number of compound drugs	Total cost	Average cost per compound drug
2018	48	\$11,083	\$231
2019	22	\$3,610	\$164
2020	29	\$9,136	\$315
2021	36	\$20,858	\$579
2022	155	\$115,959	\$748

Source: Workers' Compensation Research and Evaluation Group, 2024.

Concluding remarks

This report presents information about the cost and utilization of medical services, including professional, hospital/institutional, dental, and pharmacy services in the Texas workers' compensation system from 2018 to 2023. The data in this report shows a general trend of reductions in the cost and utilization of medical services, in both injury years and service years.



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