

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

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Per Chapter 405 of the Texas Labor Code, the Workers' Compensation Research and Evaluation Group at the Texas Department of Insurance (TDI) 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.

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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, dental, and pharmacy services for their work-related injuries or illnesses. In a healthy workers' compensation system, health care should be easily accessible, prompt, and appropriate. This report provides medical cost and utilization data, showing trends over time (from 2012 to 2022) 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 cost decreased from 2012 to 2022. Total health care costs declined 30%, from \$1.15 billion in 2012 to \$812 million in 2022. The total number of claims decreased 20% from 319,000 to 256,000. The average cost per claim dropped 12%, from \$3,611 to \$3,169.

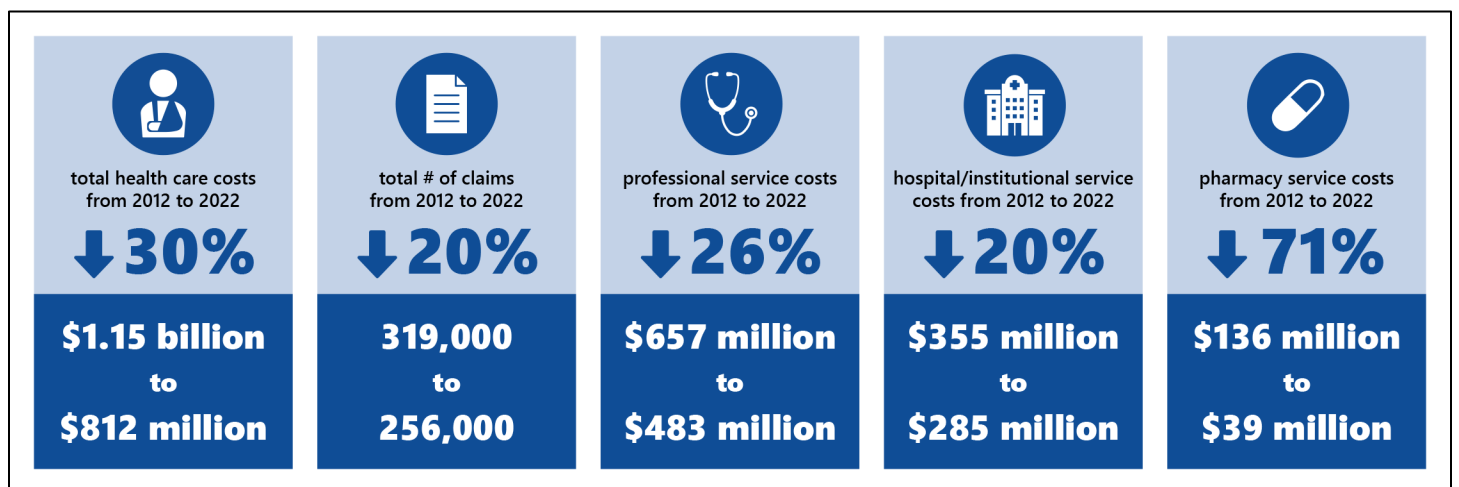
Professional and hospital/institutional cost decreased from 2012 to 2022. The total cost of professional and hospital/institutional services in 2022 was 24% lower than the cost in 2012 using current prices, but it was 41% lower if adjusted for inflation.

Professional cost and utilization decreased from 2012 to 2022. Total professional costs decreased 26%, from \$657 million in 2012 to \$483 million in 2022. The number of claims receiving professional services decreased 19%, from 301,000 to 244,000. The average cost for professional services declined 9% from \$2,181 per claim to \$1,982 in 2022.

Hospital/institutional cost and utilization decreased from 2012 to 2022. Total hospital/institutional costs decreased 20%, from \$355 million in 2012 to \$285 million in 2022. The number of claims receiving hospital/institutional services decreased 32%, from 90,000 to 62,000. The average cost for hospital/institutional services increased about 17%, from \$3,932 per claim to \$4,601 in 2022.

Pharmacy cost and utilization decreased from 2012 to 2022. Total cost of pharmacy services decreased significantly by 71% since 2012 from \$136 million to \$39 million in 2022. The number of claims receiving pharmacy services dropped 54% from 150,000 to 69,000. The average cost of pharmacy services decreased 38% from \$908 to \$563 per claim.

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. In addition to summarizing major cost and utilization statistics, 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 the Texas Department of Insurance, Division of Workers' Compensation (DWC) reported by insurance carriers as of June 2023 for claims with injury dates or service dates from January 2012 through December 2022. Medical data collected by DWC contains direct payments to health care providers. Bills with zero payment are excluded from the cost analysis but they are included in the utilization metrics.

All prices calculated in this report are displayed in current prices without adjustments for inflation. Data in this report is presented by injury year and service year and grouped by lost-time claims and medical-only claims.

- **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.
- **Service year** – service year statistics account for all services and payments in a given calendar year for all claims regardless of their injury date.
- **Lost-time claims** – claims have more than seven days of lost time away from work and receive medical benefits as well as income benefits.
- **Medical-only claims** – claims may have no lost time or a maximum of seven days of lost time and receive only medical benefits.

Overall health care costs

Total costs by bill type

Overall, the number of unique claims decreased 20%, from about 319,000 in 2012 to 256,000 in 2022 (Table 1). The total number of claims gradually decreased since 2012, but significantly reduced to around 240,000 in 2020 during the COVID-19 pandemic, before picking up slowly thereafter. The number of unique claims for professional and dental services saw a similar reduction of 19% and 16%, respectively. At the same time, unique hospital/institutional service claims decreased 32% while unique pharmacy service claims decreased 54%.

Table 1: Number of unique claims by service year, by bill type

Service year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2012	301,295	90,348	1,397	149,758	319,214
2013	291,444	86,931	1,450	140,752	308,890
2014	289,461	86,571	1,456	132,446	306,501
2015	282,973	83,724	1,433	122,169	298,287
2016	280,384	81,399	1,432	117,235	294,942
2017	280,103	82,806	1,532	111,700	294,973
2018	280,477	83,193	1,479	107,259	295,443
2019	279,714	81,249	1,512	100,072	294,652
2020	227,552	63,980	1,170	76,105	239,524
2021	237,396	63,380	1,043	71,463	250,243
2022	243,844	61,880	1,178	69,418	256,266

Source: Workers' Compensation Research and Evaluation Group, 2023.

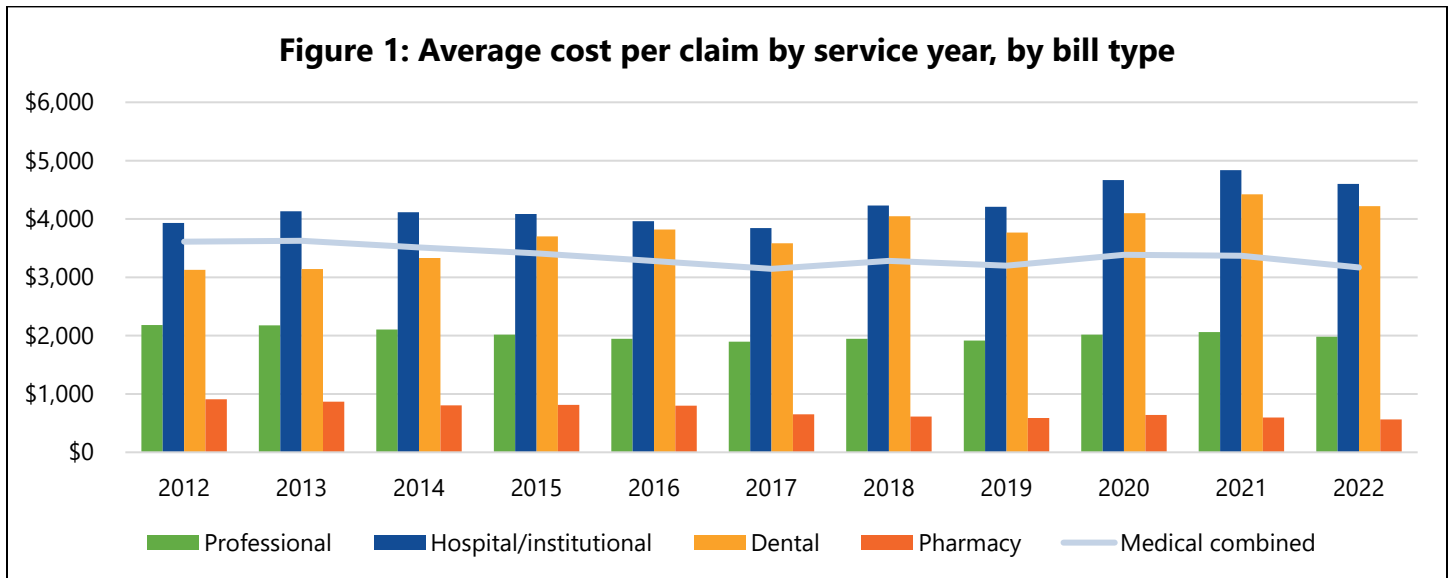
In 2012, the total cost of all services combined was about \$1.15 billion (Table 2). By 2022, the total cost decreased 30% to \$812 million. The biggest contribution to this decrease came from professional services costs, which decreased 26% from \$657 million to \$483 million. Pharmacy costs decreased almost 71% to about \$39 million compared to \$136 million in 2012. Hospital/institutional costs decreased 20%, from about \$355 million in 2012 to \$285 million in 2022.

Table 2: Total cost (in thousands) by service year, by bill type

Service year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2012	\$657,041	\$355,248	\$4,370	\$136,016	\$1,152,675
2013	\$634,218	\$359,088	\$4,557	\$122,054	\$1,119,919
2014	\$608,888	\$356,286	\$4,849	\$106,657	\$1,076,680
2015	\$570,682	\$342,123	\$5,303	\$99,208	\$1,017,316
2016	\$545,505	\$322,488	\$5,470	\$93,803	\$967,266
2017	\$531,032	\$318,225	\$5,490	\$72,816	\$927,563
2018	\$545,753	\$351,933	\$5,985	\$65,718	\$969,388
2019	\$535,917	\$342,018	\$5,697	\$58,744	\$942,376
2020	\$459,189	\$298,616	\$4,796	\$48,701	\$811,303
2021	\$489,536	\$306,593	\$4,612	\$42,693	\$843,434
2022	\$483,399	\$284,737	\$4,972	\$39,072	\$812,180

Source: Workers' Compensation Research and Evaluation Group, 2023.

The average cost for all services combined decreased 12%, from \$3,169 per claim in 2022 compared to \$3,611 in 2012 (Figure 1). The average cost per claim decreased 9% for professional services and 38% for pharmacy services from 2012 to 2022. On the other hand, the average cost per claim increased 17% for hospital/institutional services and 35% for dental services.



Source: Workers' Compensation Research and Evaluation Group, 2023.

There were about 227,000 unique claims reported in 2012 and that number remained stable around 220,000 per year until 2019 (Table 3). The number of injuries dropped sharply to 175,000 in 2020 and picked up 10% in 2021 and close to 200,000 again in 2022. This change correlates with the COVID-19 pandemic. Pharmacy service claims had the largest decrease at 50%, followed by claims with hospital/institutional services (31%), dental services (23%), and professional services (12%).

Table 3: Number of unique claims by injury year, by bill type

Injury year	Professional	Hospital/institutional	Dental	Pharmacy	Medical combined
2012	215,689	76,454	1,061	101,495	226,666
2013	210,704	74,102	1,112	96,056	221,697
2014	212,068	74,043	1,134	92,070	223,453
2015	208,257	71,339	1,053	84,740	218,553
2016	208,189	69,254	1,081	82,651	218,342
2017	210,889	71,193	1,144	80,141	221,344
2018	214,526	72,060	1,062	78,872	225,441
2019	214,694	70,319	1,128	73,490	225,939
2020	166,179	54,010	695	51,951	174,809
2021	183,468	54,912	728	51,484	193,205
2022	188,775	52,830	815	50,854	198,222

Source: Workers' Compensation Research and Evaluation Group, 2023.

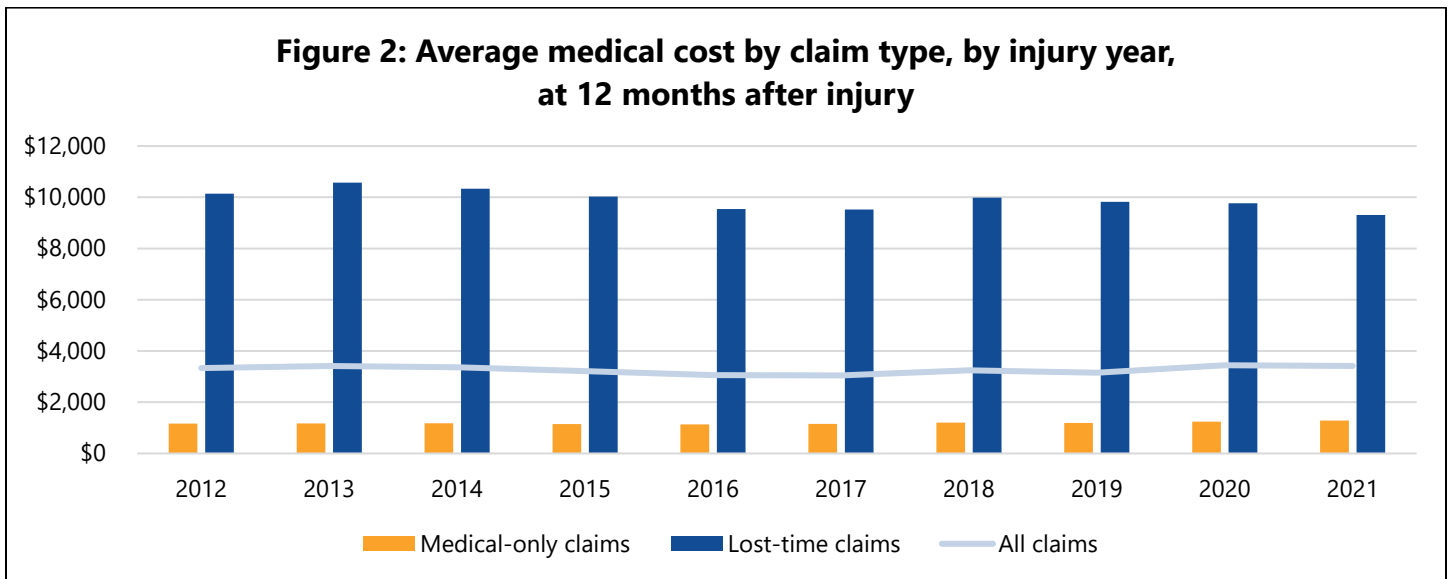
Ninety-nine percent of injured employees began receiving at least one service within six months of their injury. About 13 to 14% of claims continue receiving services six months after injury and about 2% of claims continue services after four years or more (Table 4).

Table 4: Total cost (in thousands) by injury year, by bill type

Injury year	6 months maturity		6 months – 1 year maturity		2 nd year maturity		3 rd year maturity		4+ years maturity	
	# of claims	Total cost	# of claims	Total cost	# of claims	Total cost	# of claims	Total cost	# of claims	Total cost
2012	224,696	\$624,033	32,062	\$128,586	17,283	\$103,697	7,011	\$40,653	4,592	\$49,873
2013	219,727	\$626,003	31,228	\$127,085	17,127	\$108,166	6,762	\$42,207	4,399	\$46,627
2014	221,589	\$624,425	31,109	\$125,177	16,830	\$104,532	6,685	\$37,853	4,138	\$37,501
2015	216,934	\$580,698	30,229	\$120,091	16,411	\$99,240	6,328	\$35,565	3,764	\$33,267
2016	216,843	\$556,916	29,062	\$108,805	15,323	\$90,252	5,652	\$31,222	3,135	\$25,299
2017	220,056	\$565,314	28,227	\$107,302	14,492	\$86,207	5,169	\$27,592	2,923	\$21,440
2018	224,039	\$620,281	28,939	\$109,362	14,483	\$81,541	5,509	\$27,291	2,712	\$16,071
2019	224,724	\$608,123	28,058	\$102,198	14,956	\$83,831	5,441	\$29,500		
2020	173,583	\$510,453	23,326	\$89,785	11,838	\$66,705				
2021	192,049	\$563,736	25,241	\$94,897						
2022	197,676	\$538,373								

Source: Workers' Compensation Research and Evaluation Group, 2023.

Overall, the average medical cost 12 months after injury remained stable from 2012 to 2021. The average cost per lost-time claim stayed around \$10,000 and the average cost per medical-only claim increased 10%, from about \$1,200 to \$1,300 (Figure 2).



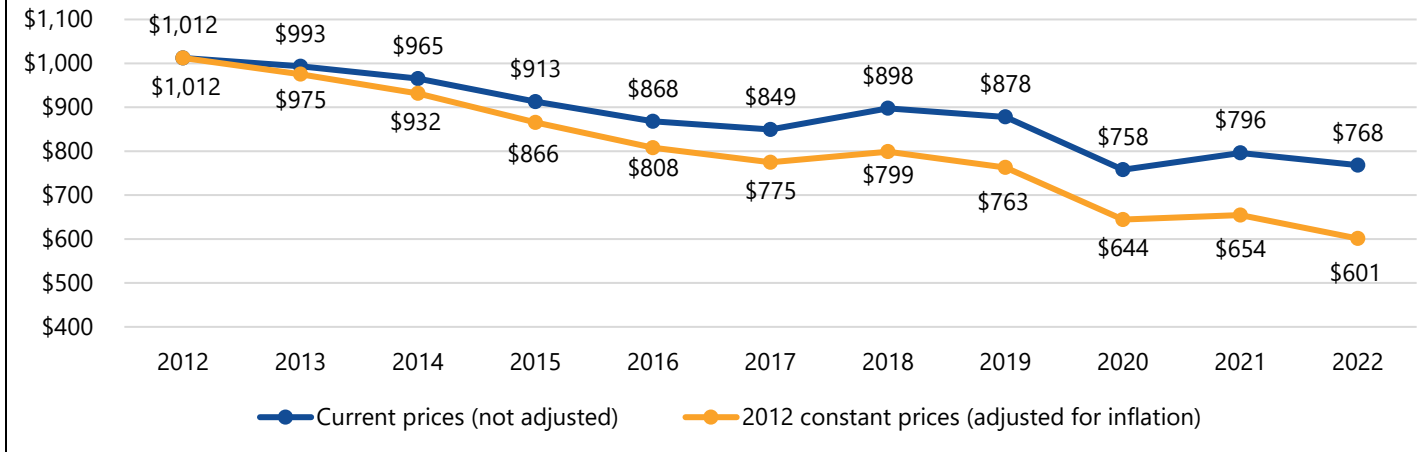
Source: Workers' Compensation Research and Evaluation Group, 2023.

Inflation-adjusted cost

All prices calculated in this report are displayed in current prices without adjustments for inflation. The Centers for Medicare and Medicaid Services publishes a nationwide measurement called the Medicare Economic Index (MEI) which measures the changes in prices paid for health care inputs and is used to adjust payment rates for Medicare and Medicaid.

The total cost of professional and hospital/institutional services in 2022 was 24% lower than the cost in 2012 using current prices, but it was 41% lower if adjusted for inflation using MEI (Figure 3).

Figure 3: Professional and hospital costs in current and inflation-adjusted prices, by service year



Source: Workers' Compensation Research and Evaluation Group, 2023.

Total cost by health care network

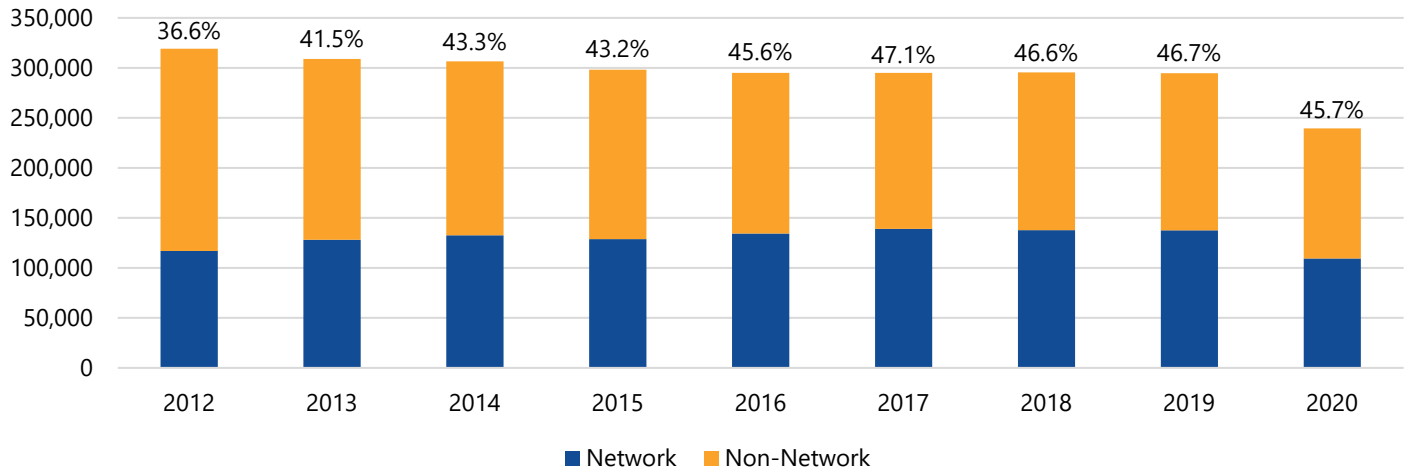
In 2005, the 79th Texas Legislature passed House Bill (HB) 7, which authorized the use of workers' compensation health care networks certified by TDI. TDI began accepting applications for the certification of workers' compensation health care networks in 2006. As of March 2023, there are 27 networks, covering 254 Texas counties, that are certified to provide workers' compensation health care services to insurance carriers.

In addition, certain public entities and political subdivisions also have the option to:

- Use a workers' compensation health care network certified by TDI under Chapter 1305, Texas Insurance Code;
- Continue to allow their injured employees to seek health care as non-network claims; or
- Contract directly with health care providers if the use of a certified network is not "available or practical," essentially forming their own health care network.

Networks' cost share is slightly lower than their claim share because networks' cost was less per claim on average, especially in more recent years (Figure 4 and Figure 5). In 2012, about 117,000 injured employees were treated in networks, accounting for 36.6% of all injured employees. The total cost for network treatment was around \$386 million, accounting for 33.5% of the total cost. While 45.7% of injured employees were treated in the network in 2020 with a total cost about \$346 million which constitutes 42.7% of the total cost. The average cost per network claim remained substantially lower than that of non-network claim (Figure 6).

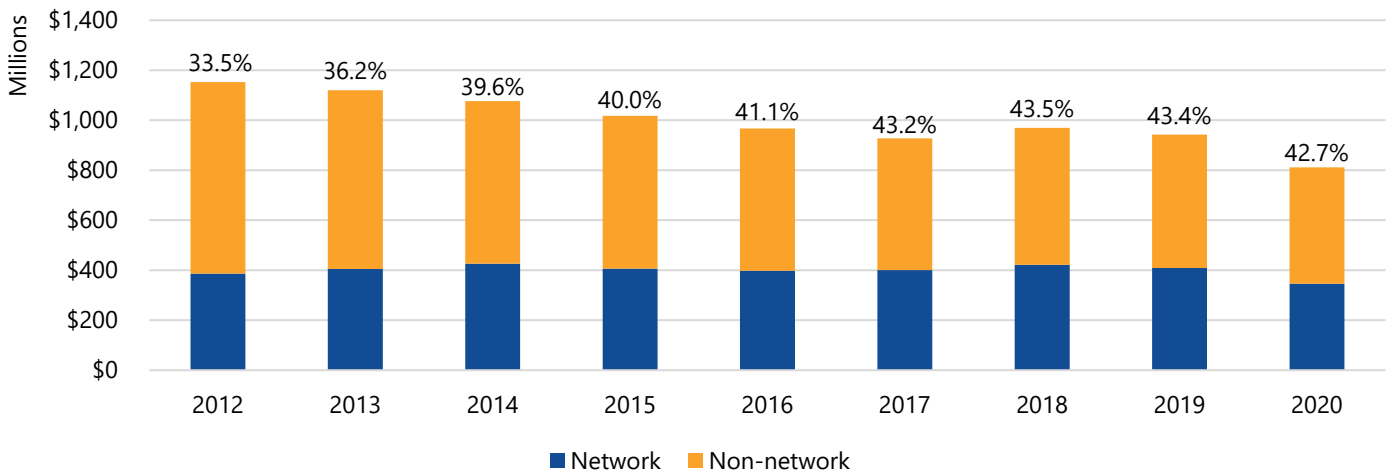
Figure 4: Number of claims by network status, by service year



Source: Workers' Compensation Research and Evaluation Group, 2023.

Note: Network data for injury year 2021 and 2022 is not available yet and therefore not included in this chart.

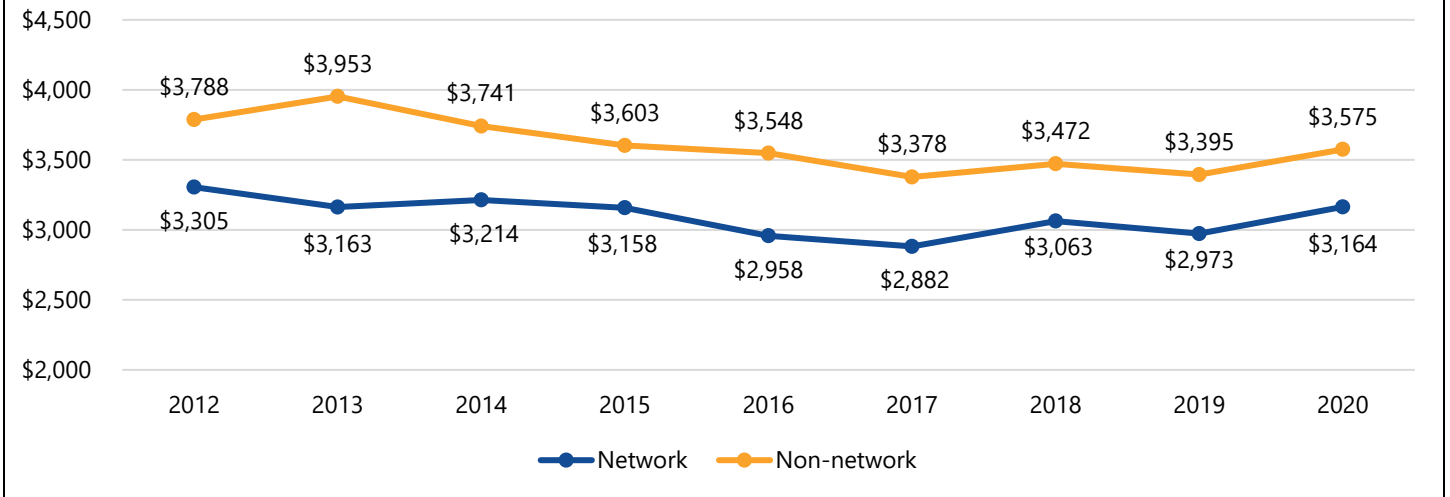
Figure 5: Total health care cost by network status, by service year



Source: Workers' Compensation Research and Evaluation Group, 2023.

Note: Network data for injury year 2021 and 2022 is not available yet and therefore not included in this chart.

Figure 6: Average health cost per claim, by service year

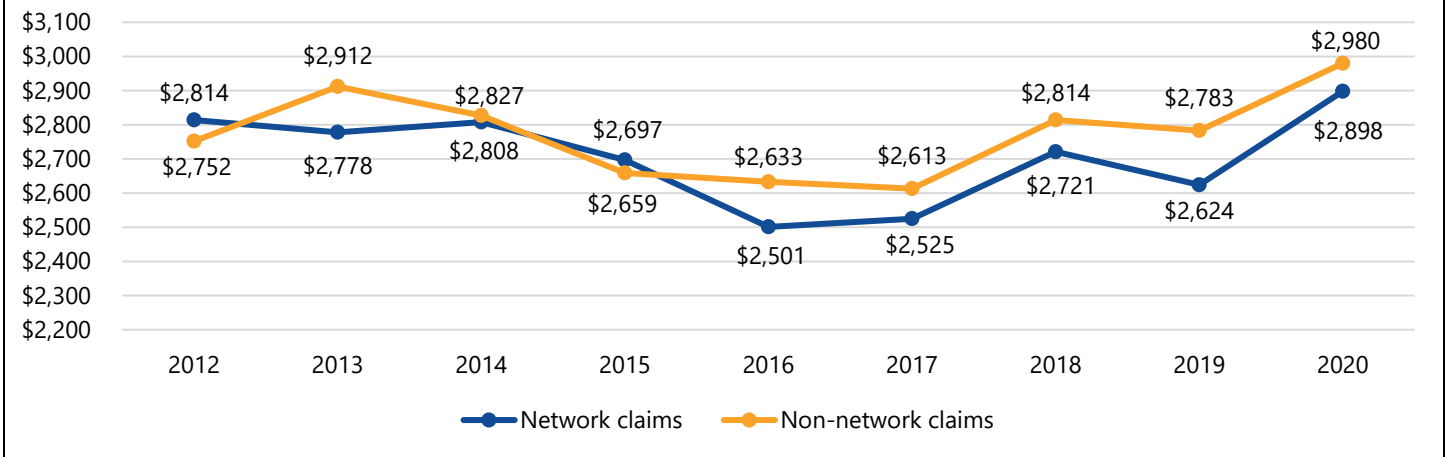


Source: Workers' Compensation Research and Evaluation Group, 2023.

Note: Network data for injury year 2021 and 2022 is not available yet and therefore not included in this chart.

Networks focus on initial care and tend to increase medical costs initially but decrease long-term costs. The average cost for network claims was slightly higher than non-network claims in 2012 (Figure 7). Since 2016, the average cost six months after injury in networks stayed lower than in non-network. Despite the higher initial medical cost, the per-claim cost in networks was lower than non-network because of a relatively lower share of claims with long-term care cost in networks.

Figure 7: Average medical cost per claim by network status, by injury year at 6 months after injury



Source: Workers' Compensation Research and Evaluation Group, 2023.

Note: Network data for injury year 2021 and 2022 is not available yet and therefore not included in this chart.

Cost and utilization of professional services

Professional cost and utilization by claim type

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

Overall, around 95% of all claims received at least one professional service in each service year. About 70% of professional care costs were for lost-time claims (Table 5). The number of unique claims decreased 25%, from around 120,000 in 2012 to 90,000 in 2022 for lost-time claims. Additionally, the total cost of lost-time claims reduced by 32%, from about \$496 million in 2012 to \$338 million in 2022. The total average cost for lost-time claims stayed slightly below \$4,000 per claim since 2015. For medical-only claims, the number of unique claims remained stable, around 170,000-181,000 from 2012 to 2019 then dropped 24% to 137,000 in 2020 and slowly increased in the last two years. The total cost for medical-only claims declined from about \$161 million in 2012 to \$145 million in 2022. Lastly, the average cost for medical-only claims increased about 6%, to \$946 in 2022 compared to \$889 in 2012.

Table 5: Total cost (in thousands) and average costs by claim type, professional services

Service year	Lost-time claims			Medical-only claims		
	# of claims	Total cost	Cost per claim	# of claims	Total cost	Cost per claim
2012	120,428	\$496,173	\$4,120	180,867	\$160,868	\$889
2013	115,036	\$474,985	\$4,129	176,408	\$159,233	\$903
2014	112,405	\$453,620	\$4,036	177,056	\$155,267	\$877
2015	108,350	\$425,871	\$3,931	174,623	\$144,811	\$829
2016	105,330	\$401,800	\$3,815	175,054	\$143,705	\$821
2017	102,718	\$386,164	\$3,759	177,385	\$144,868	\$817
2018	102,290	\$394,087	\$3,853	178,187	\$151,666	\$851
2019	99,989	\$383,044	\$3,831	179,725	\$152,873	\$851
2020	90,394	\$338,088	\$3,740	137,158	\$121,101	\$883
2021	92,412	\$352,197	\$3,811	144,984	\$137,339	\$947
2022	90,350	\$338,125	\$3,742	153,494	\$145,273	\$946

Source: Workers' Compensation Research and Evaluation Group, 2023.

Lost-time claims had about three times as many visits per claim (13.5–14.7) as medical-only claims (4.2–4.3) (Table 6). For lost-time claims, the average number of services received in each visit to a health care provider was 3.3 in 2012 and 2.8 in 2022. The average number of services per visit for lost-time claims for each service year was slightly more or equal to that of medical-only claims.

Table 6: Number of visits and services per visit per claim, by claim type, professional services

Service year	Visit per claim		Services per visit	
	Lost-time claims	Medical-only claims	Lost-time claims	Medical-only claims
2012	14.7	4.3	3.3	3.0
2013	14.7	4.3	3.4	3.1
2014	14.7	4.3	3.6	3.2
2015	14.9	4.2	3.4	3.0
2016	14.9	4.2	3.0	2.9
2017	14.4	4.2	2.9	2.9
2018	14.6	4.2	3.0	2.9
2019	14.5	4.2	2.9	2.9
2020	14.1	4.2	2.9	2.8
2021	13.7	4.2	2.8	2.9
2022	13.5	4.2	2.8	2.8

Source: Workers' Compensation Research and Evaluation Group, 2023.

Professional cost and utilization by health care provider type

This report splits health care provider types into seven categories:

- **ASC:** ambulatory surgical center.
- **DC:** Doctor of Chiropractic.
- **DME:** durable medical equipment.
- **MD/DO:** medical doctor.
- **PA/CR:** physician assistants or certified/registered nurses.
- **PT/OT:** physical/occupational therapist.
- **Other:** other health care provider types that don't fit into the other six categories.

About 95% of claims that received professional services saw medical doctors in 2012. That percentage went down to 82% in 2022 (Table 7). The percentage of claims receiving chiropractic services increased from 6.7% in 2012 to 9.2% in 2022. Services from physician assistants or certified/registered nurses more than doubled from 11.9% in 2012 to 25.2% in 2022. Similarly, other provider services also doubled over the years from 16.7% in 2012 to 31% in 2022.

Service year	ASC	DC	DME	MD/DO	PA/CR	PT/OT	Other
2012	2.2%	6.7%	7.3%	95.0%	11.9%	21.4%	16.7%
2013	1.9%	8.7%	6.6%	94.5%	12.3%	22.6%	16.6%
2014	1.6%	9.3%	6.1%	93.8%	12.5%	23.6%	17.4%
2015	1.5%	9.5%	5.9%	93.0%	13.3%	23.0%	19.0%
2016	1.4%	10.9%	5.4%	91.5%	14.8%	23.2%	22.1%
2017	1.4%	9.8%	5.0%	89.7%	17.6%	23.6%	25.8%
2018	1.5%	9.3%	4.9%	88.1%	19.5%	24.8%	28.1%
2019	1.6%	9.0%	4.3%	87.1%	20.7%	24.6%	28.6%
2020	1.7%	9.5%	4.7%	86.4%	21.2%	25.7%	29.1%
2021	1.7%	9.1%	4.3%	83.9%	23.1%	26.6%	29.9%
2022	1.4%	9.2%	3.8%	82.0%	25.2%	26.5%	31.0%

Source: Workers' Compensation Research and Evaluation Group, 2023.

Note: As some claims received services from more than one type of service providers, percentage of each service year may not add up to 100.

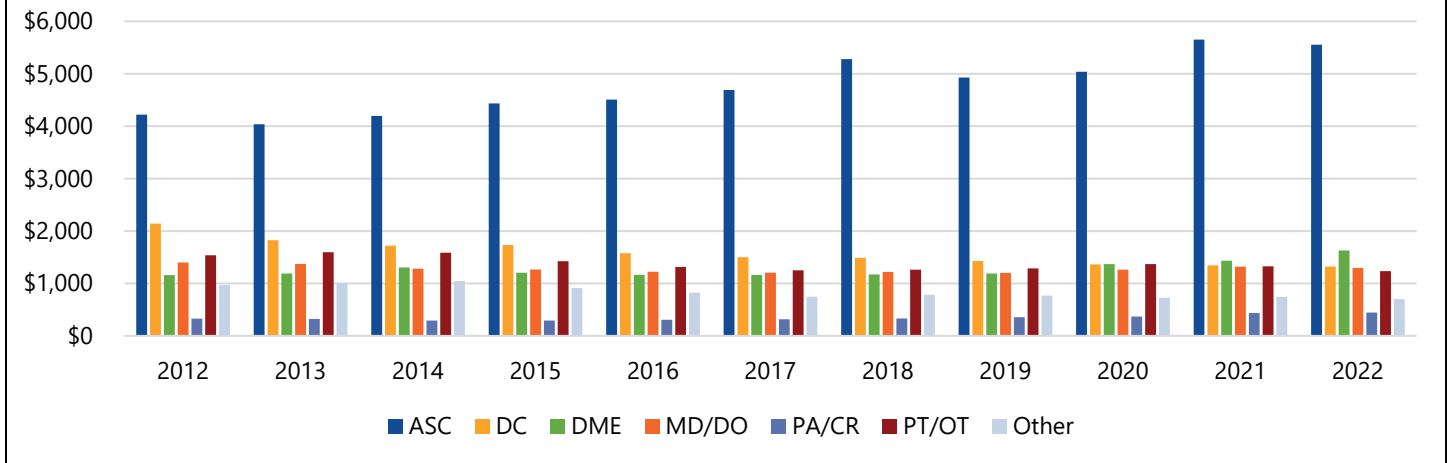
Almost all providers' costs decreased over time except services from physician assistants or certified/registered nurses, which more than doubled in recent years (Table 8). Ambulatory surgical center, doctor of chiropractic, and durable medical equipment costs decreased more than 30% since 2012. Meanwhile physical/occupational therapist costs decreased about 20% in 2022 compared to 2012.

Service year	ASC	DC	DME	MD/DO	PA/CR	PT/OT	Other
2012	\$28,471	\$43,048	\$25,593	\$400,155	\$11,828	\$99,247	\$48,698
2013	\$22,116	\$46,004	\$22,943	\$377,780	\$11,596	\$105,183	\$48,597
2014	\$19,516	\$46,386	\$23,194	\$348,152	\$10,620	\$108,364	\$52,657
2015	\$18,693	\$46,516	\$20,025	\$332,752	\$10,943	\$92,906	\$48,848
2016	\$17,175	\$48,196	\$17,669	\$313,422	\$12,794	\$85,359	\$50,889
2017	\$18,125	\$41,227	\$16,274	\$302,881	\$15,633	\$82,851	\$54,039
2018	\$22,010	\$38,935	\$16,009	\$300,994	\$18,209	\$87,859	\$61,737
2019	\$21,896	\$36,024	\$14,391	\$292,894	\$20,618	\$88,437	\$61,656
2020	\$20,006	\$29,598	\$14,588	\$248,593	\$17,797	\$80,207	\$48,400
2021	\$22,142	\$29,146	\$14,631	\$263,593	\$23,927	\$83,698	\$52,808
2022	\$19,246	\$26,649	\$15,283	\$259,079	\$27,385	\$79,843	\$52,914

Source: Workers' Compensation Research and Evaluation Group, 2023.

Average cost per claim increased for some health care providers. The average cost per claim for durable medical equipment services increased 41% from 2012 to 2022, 32% for ambulatory surgical centers, and 35% for physician assistants or certified/registered nurses compared to 2012 (Figure 8). Average costs for medical doctors remained stable around \$1,300 per claim. The average cost for chiropractic doctor services decreased 38%, followed by a 20% decrease for physician assistants or certified/registered nurse services. Other care providers showed a 28% decrease in cost from \$966 in 2012 to \$700 in 2022.

Figure 8: Average cost per claim by health care provider type, professional services



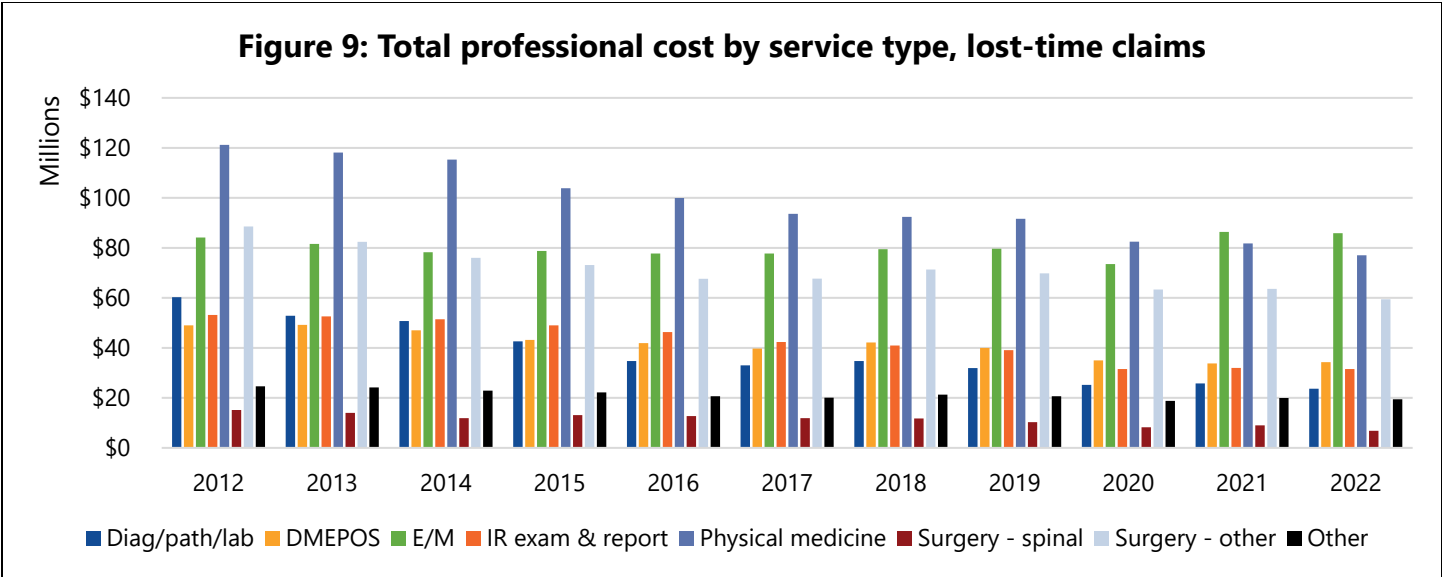
Source: Workers' Compensation Research and Evaluation Group, 2023.

Professional cost and utilization by service type

This report breaks service types into eight groups:

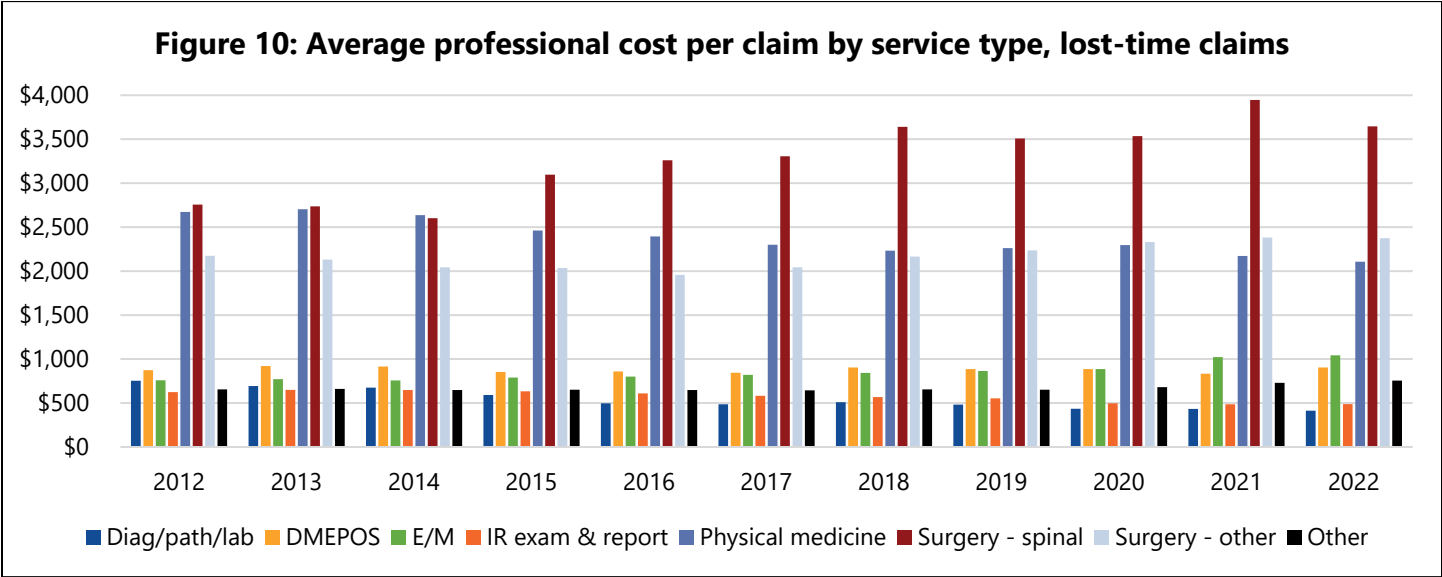
- **DMEPOS:** Durable medical equipment, prosthetics, orthotics, and supplies. This group consists of all HCPCS Level II codes, including ambulance services.
- **Diag/Path/Lab:** Diagnostic, pathology, and laboratory services.
- **E/M:** Evaluation and management services such as an office visit.
- **IR Exam & report:** Impairment rating or disability examination services, special reports, physical performance tests, and range of motion tests.
- **Physical medicine:** All manipulative and physical therapies and exercises provided by chiropractors, physical or occupational therapists, and MDs/DOs.
- **Surgery - spinal:** Spinal surgeries including spine fusion, laminectomy, and laminotomy.
- **Surgery - other:** Other surgery services besides spinal surgeries.
- **Other services:** Other service types that do not fit into the other seven groups.

For lost-time claims, service year 2012 was the peak year for most services in terms of total cost (Figure 9). Costs decreased the most for diag/path/lab at about 61%, followed by surgery-spinal at 55%. IR exam, physical medicine, and surgery-other have decreased 41%, 36%, and 33% respectively. DMEPOS decreased 30% and other services dropped 21%. E/M services were the only service type to increase from about \$84 million in 2012 to \$86 million in 2022.



Source: Workers' Compensation Research and Evaluation Group, 2023.

The average cost per claim for each service increased significantly with E/M services leading the way with 37%, followed by surgery-spinal services at 32%, surgery-other services at 9%, and DMEPOS service at 4% (Figure 10). On the contrary, physical medicine and IR exams both showed a 21% decrease in average cost per claim across the study period. Diag/path/lab's average cost per claim decreased the most, at about 45% from 2012 to 2022.



Source: Workers' Compensation Research and Evaluation Group, 2023.

Most service types saw a decrease in the percentage of lost-time claims receiving those services over the years, except for physical medicine, which increased from 37.7% in 2012 to 40.5% in 2022 (Table 9). For medical-only claims, the percentage of claims receiving each service remained stable for most services, except for an increase in physical medicine from 18.9% in 2012 to 21.2% in 2022 and a slight decrease in surgery (both spinal and other) from 2012 to 2022.

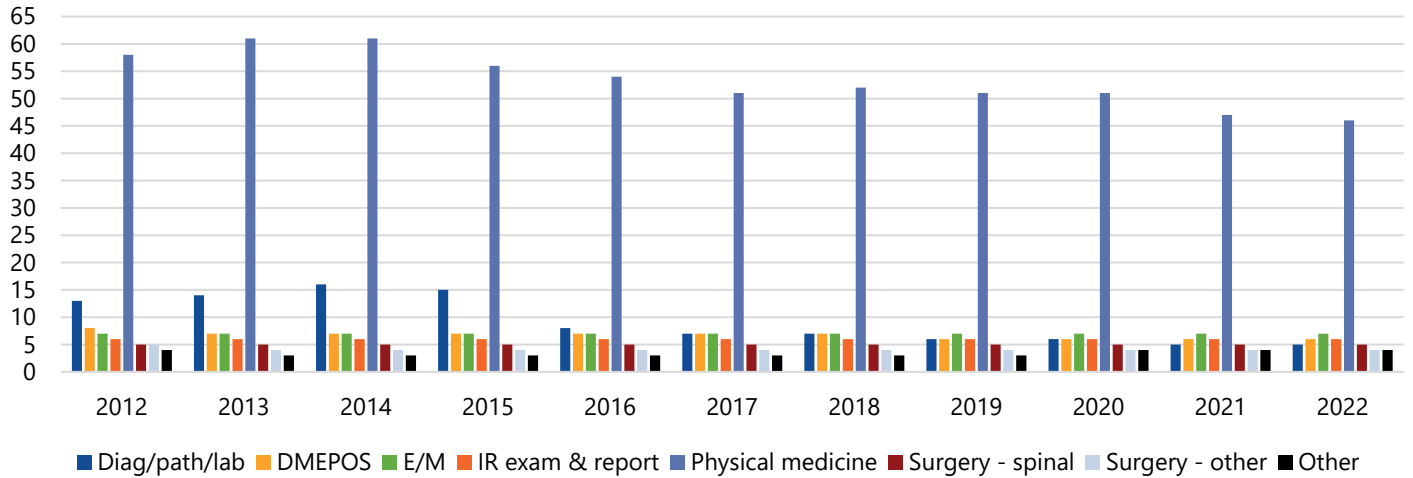
Table 9: Percent of claims receiving certain professional services, by service year

Service year	Diag/path/lab	DMEPOS	E/M	IR exam & report	Physical medicine	Surgery-spinal	Surgery-other	Other services
Lost-time claims								
2012	66.4%	46.7%	92.1%	70.8%	37.7%	4.6%	33.8%	31.2%
2013	66.4%	46.5%	91.9%	70.3%	38.0%	4.4%	33.6%	31.9%
2014	66.8%	45.7%	92.0%	70.7%	38.9%	4.1%	33.1%	31.4%
2015	66.5%	46.7%	92.1%	71.4%	38.9%	3.9%	33.2%	31.5%
2016	66.4%	46.4%	92.3%	72.1%	39.6%	3.7%	32.8%	30.3%
2017	66.2%	45.8%	92.3%	70.9%	39.6%	3.5%	32.3%	30.3%
2018	66.5%	45.5%	92.2%	70.6%	40.5%	3.2%	32.2%	31.9%
2019	66.2%	45.1%	92.2%	70.6%	40.5%	2.9%	31.2%	31.7%
2020	64.0%	43.6%	91.8%	70.2%	39.7%	2.6%	30.1%	30.5%
2021	64.3%	43.9%	91.5%	71.3%	40.7%	2.5%	28.9%	29.5%
2022	63.2%	42.0%	91.2%	71.8%	40.5%	2.1%	27.7%	28.5%
Medical-only claims								
2012	53.8%	33.6%	93.1%	68.3%	18.9%	0.3%	17.7%	16.9%
2013	54.2%	33.0%	92.6%	67.8%	19.8%	0.3%	16.8%	17.3%
2014	53.7%	31.6%	92.3%	68.2%	20.4%	0.3%	16.1%	17.6%
2015	53.4%	30.9%	92.9%	68.2%	19.4%	0.2%	16.3%	17.3%
2016	53.7%	31.8%	93.7%	68.7%	19.1%	0.2%	16.2%	17.7%
2017	53.9%	31.6%	93.9%	66.7%	19.3%	0.2%	15.8%	17.6%
2018	54.0%	30.7%	93.7%	65.3%	20.3%	0.2%	15.2%	18.3%
2019	54.2%	30.6%	93.7%	65.7%	19.5%	0.2%	14.2%	18.9%
2020	52.7%	30.9%	93.4%	65.8%	20.4%	0.2%	14.5%	18.5%
2021	53.6%	32.0%	93.3%	67.9%	21.1%	0.1%	14.1%	18.0%
2022	53.9%	30.7%	93.4%	68.2%	21.2%	0.1%	13.6%	17.5%

Source: Workers' Compensation Research and Evaluation Group, 2023.

The number of diag/path/lab services per lost-time claim decreased greatly (60%) from 13 in 2012 to 5 in 2022, followed by physical medicine (22%) from 58 per claim in 2012 to 46 in 2022 (Figure 11). Other services remained relatively stable throughout the study period.

Figure 11: Number of professional services per claim by service type, lost-time claims



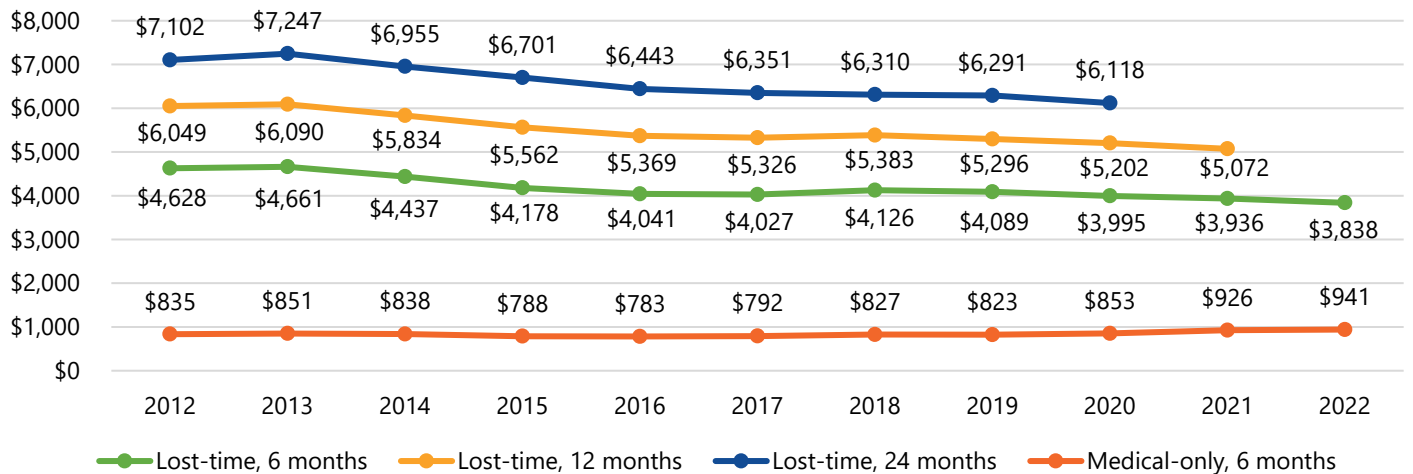
Source: Workers' Compensation Research and Evaluation Group, 2023.

Professional cost and utilization by injury year

To review professional service cost and utilization by injury year statistics, 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 6 months. Lost-time claims may require more complicated and long-term treatments and follow-up visits.

As expected, the average cost per claim differed greatly between lost-time claims and medical-only claims (Figure 12). Overall, the average cost per lost-time claim has a similar downward trend over time for each of the different claim maturity periods. The initial average cost for six months after the injury was \$3,838 for injuries in 2022 compared to \$4,628 in 2012. The average cost increased around \$1,200-\$1,400 at 12 months after the injury and another \$1,000 or so increase at 24 months after the injury. The average cost for medical-only claims stayed slightly below \$1,000.

Figure 12: Average cost per claim by claim type, professional services



Source: Workers' Compensation Research and Evaluation Group, 2023.

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 10). Both the number of claims and costs for lost-time claims decreased from 2012 to 2022. The total number of claims at six months after injury decreased from about 54,000 in 2012 to 49,000 in 2022. The total cost at six months after injury decreased 25% to about \$186 million for injuries in 2022 compared to \$249 million in 2012. The average cost per lost-time claim decreased 17% to \$3,838 in 2022 compared to \$4,628 in 2012. 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 13% since 2012 at six months after injury, 17% for 12 months after injury, and 25% for 24 months after injury. The total costs for medical-only claims stayed relatively stable for all maturities before 2020.

Table 10: Total cost (in thousands), by injury year, maturity, and claim type, professional services									
Injury year	6 months			12 months			24 months		
	Total cost	# of claims	Avg cost per claim	Total cost	# of claims	Avg cost per claim	Total cost	# of claims	Avg cost per claim
Lost-time claims									
2012	\$248,574	53,707	\$4,628	\$326,895	54,044	\$6,049	\$384,790	54,184	\$7,102
2013	\$241,184	51,746	\$4,661	\$317,306	52,104	\$6,090	\$378,651	52,250	\$7,247
2014	\$231,524	52,179	\$4,437	\$306,816	52,592	\$5,834	\$366,852	52,750	\$6,955
2015	\$208,562	49,922	\$4,178	\$279,747	50,296	\$5,562	\$338,028	50,441	\$6,701
2016	\$198,130	49,035	\$4,041	\$264,799	49,324	\$5,369	\$318,746	49,469	\$6,443
2017	\$197,984	49,162	\$4,027	\$263,580	49,489	\$5,326	\$315,121	49,614	\$6,351
2018	\$212,095	51,399	\$4,126	\$278,432	51,726	\$5,383	\$327,290	51,868	\$6,310
2019	\$206,279	50,446	\$4,089	\$268,649	50,728	\$5,296	\$319,950	50,861	\$6,291
2020	\$176,052	44,073	\$3,995	\$230,950	44,399	\$5,202	\$272,438	44,528	\$6,118
2021	\$196,828	50,012	\$3,936	\$255,350	50,350	\$5,072			
2022	\$186,481	48,593	\$3,838						
Medical-only claims									
2012	\$133,714	160,080	\$835	\$143,047	160,744	\$890	\$148,456	161,159	\$921
2013	\$133,664	157,023	\$851	\$142,519	157,758	\$903	\$147,689	158,169	\$934
2014	\$132,472	158,011	\$838	\$140,955	158,687	\$888	\$145,827	159,031	\$917
2015	\$123,508	156,699	\$788	\$131,835	157,305	\$838	\$136,766	157,583	\$868
2016	\$123,450	157,650	\$783	\$131,389	158,223	\$830	\$135,999	158,515	\$858
2017	\$126,962	160,371	\$792	\$134,957	160,898	\$839	\$139,354	161,112	\$865
2018	\$133,717	161,652	\$827	\$141,964	162,225	\$875	\$146,570	162,478	\$902
2019	\$134,112	162,963	\$823	\$141,665	163,441	\$867	\$146,208	163,685	\$893
2020	\$103,074	120,822	\$853	\$109,406	121,277	\$902	\$113,178	121,540	\$931
2021	\$122,489	132,256	\$926	\$129,837	132,760	\$978			
2022	\$131,307	139,597	\$941						

Source: Workers' Compensation Research and Evaluation Group, 2023.

The share of lost-time claims that received any service after 12 months of injury decreased over time (Table 11). For instance, the percentage of the IR exam category decreased about 5%, from 87.4% to 82.6%, and the DMEPOS category dropped from 65.5% to 58.7%.

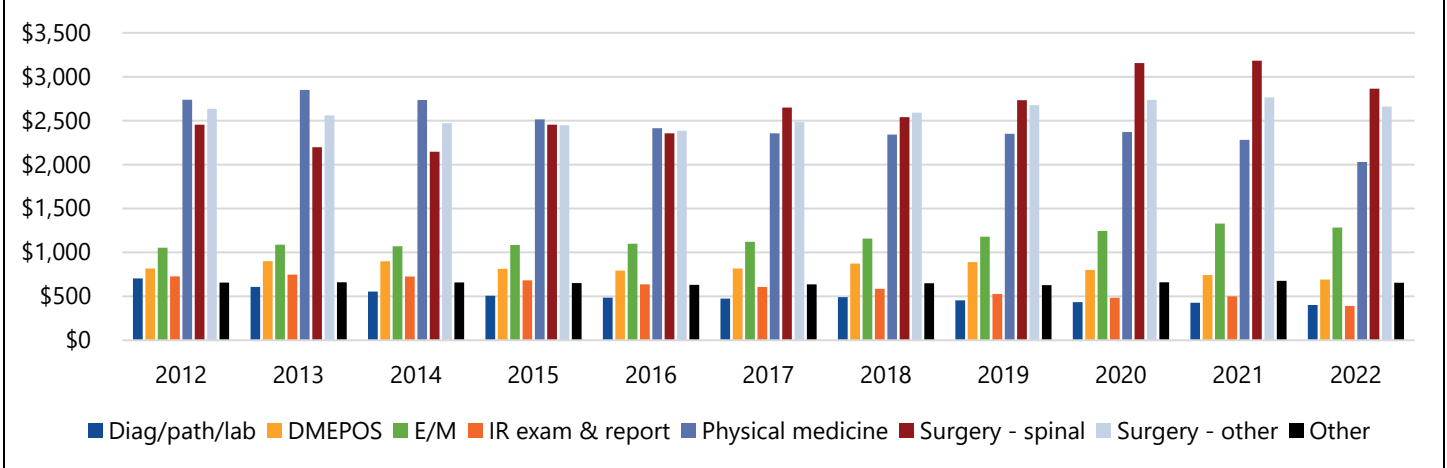
Table 11: Percent of lost time claims receiving certain professional services, by injury year, at 12 months after injury

Injury year	Diag/path/lab	DMEPOS	E/M	IR exam & report	Physical medicine	Surgery-spinal	Surgery-other	Other services
2012	85.6%	65.5%	98.2%	87.4%	57.0%	3.5%	49.4%	44.2%
2013	85.5%	64.7%	98.0%	86.7%	57.7%	3.4%	49.2%	44.8%
2014	84.5%	63.6%	97.7%	86.9%	57.7%	3.0%	47.9%	43.8%
2015	84.4%	63.7%	98.0%	87.4%	57.7%	2.7%	47.4%	43.2%
2016	84.1%	64.3%	98.3%	87.5%	57.5%	2.4%	46.3%	41.8%
2017	83.8%	63.6%	98.2%	85.8%	56.9%	2.1%	45.4%	41.2%
2018	83.4%	62.0%	97.8%	84.3%	57.0%	2.0%	44.3%	41.9%
2019	83.2%	61.7%	97.8%	82.9%	56.3%	1.7%	42.9%	41.5%
2020	81.2%	60.0%	97.6%	82.2%	55.2%	1.6%	41.2%	40.2%
2021	79.6%	58.7%	97.2%	82.6%	55.0%	1.3%	37.9%	36.8%

Source: Workers' Compensation Research and Evaluation Group, 2023.

In terms of cost by service type, the average cost per lost-time claim increased the most for E/M services, by 22% to \$1,283 per claim in 2022 compared to \$1,054 in 2012, at 12 months after injury (Figure 13). Surgery-spinal services increased 17%, from \$2,455 per claim in 2012 to \$2,865 in 2022 at 12 months after injury.

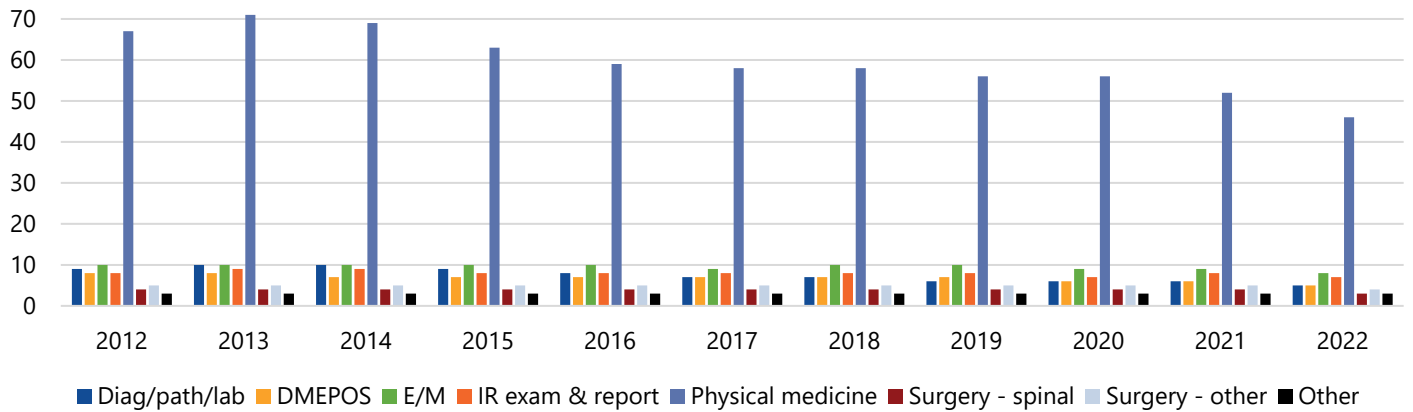
Figure 13: Average cost per claim by service type, professional services, lost-time claims, by injury year at 12 months after injury



Source: Workers' Compensation Research and Evaluation Group, 2023.

Physical medicine has historically been the most utilized service but continued to decrease over the years from 67 services per lost-time claim in 2012 to 46 services 12 months after the injury in 2022 (Figure 14). Diag/path/lab services per lost-time claim reduced by half, from 10 services per lost-time claim to 5 services, and DMEPOS services decreased by a third, from 8 services per lost-time claim to 5 services.

Figure 14: Number of professional services per claim by service type, lost-time claims, by injury year at 12 months after injury



Source: Workers' Compensation Research and Evaluation Group, 2023.

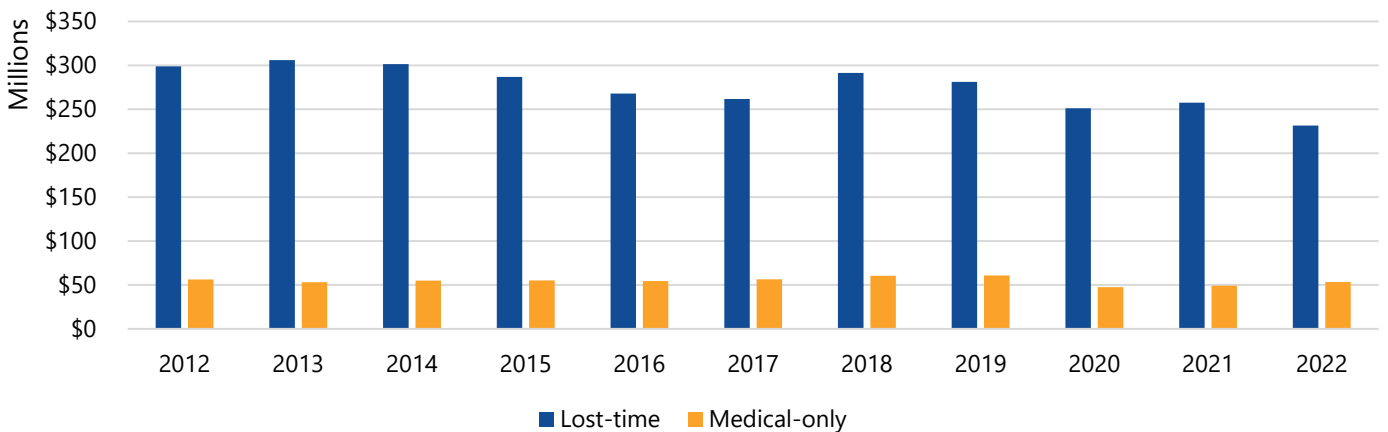
Cost and utilization of hospital/institutional services

Hospital/institutional 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.

Overall, the total hospital/institutional cost showed a downward trend over the years, except for 2018 and 2019 (Figure 15). The total hospital/institutional cost decreased from almost \$355 million in 2012 to \$285 million in 2022.

Figure 15: Total hospital/institutional services by cost, by claim type, by service year



Source: Workers' Compensation Research and Evaluation Group, 2023.

The number of unique hospital/institutional lost-time claims dropped one third from about 43,000 in 2012 to 29,000 in 2022 (Table 12). The total hospital/institutional cost reduced by 23% from \$299 million in 2012 to \$231 million in 2022.

million in 2022. Average hospital/institutional cost per lost-time claim increased from \$7,014 to close to \$8,114 in 2022. The unique number of medical-only claims decreased from about 48,000 in 2012 to 33,000 in 2022. The total cost for medical-only claims stayed between \$55-60 million from 2012 to 2019, before decreasing to \$47 million in 2020 and stabilizing back at about \$53 million in 2022. The average hospital/institutional cost per medical-only claim was \$1,180 in 2012 and gradually increased to \$1,598 in 2022.

Service year	Lost-time claims			Medical-only claims		
	# of claims	Total cost	Cost per claim	# of claims	Total cost	Cost per claim
2012	42,621	\$298,953	\$7,014	47,727	\$56,295	\$1,180
2013	40,974	\$305,906	\$7,466	45,957	\$53,183	\$1,157
2014	40,535	\$301,369	\$7,435	46,036	\$54,917	\$1,193
2015	38,896	\$286,944	\$7,377	44,828	\$55,179	\$1,231
2016	37,445	\$267,973	\$7,156	43,954	\$54,515	\$1,240
2017	37,129	\$261,735	\$7,049	45,677	\$56,490	\$1,237
2018	37,631	\$291,500	\$7,746	45,562	\$60,433	\$1,326
2019	36,062	\$281,241	\$7,799	45,187	\$60,777	\$1,345
2020	30,721	\$251,139	\$8,175	33,259	\$47,477	\$1,428
2021	30,274	\$257,451	\$8,504	33,106	\$49,142	\$1,484
2022	28,520	\$231,420	\$8,114	33,360	\$53,317	\$1,598

Source: Workers' Compensation Research and Evaluation Group, 2023.

Less than 30% of all claims received one or more hospital/institutional service (Table 13). That percentage decreased from 28% in 2012 to 24% in 2022. About 47% of total hospital/institutional claims in 2012 were lost-time claims and medical-only claims comprised about 53%. Each claim type kept the same allocation over the years.

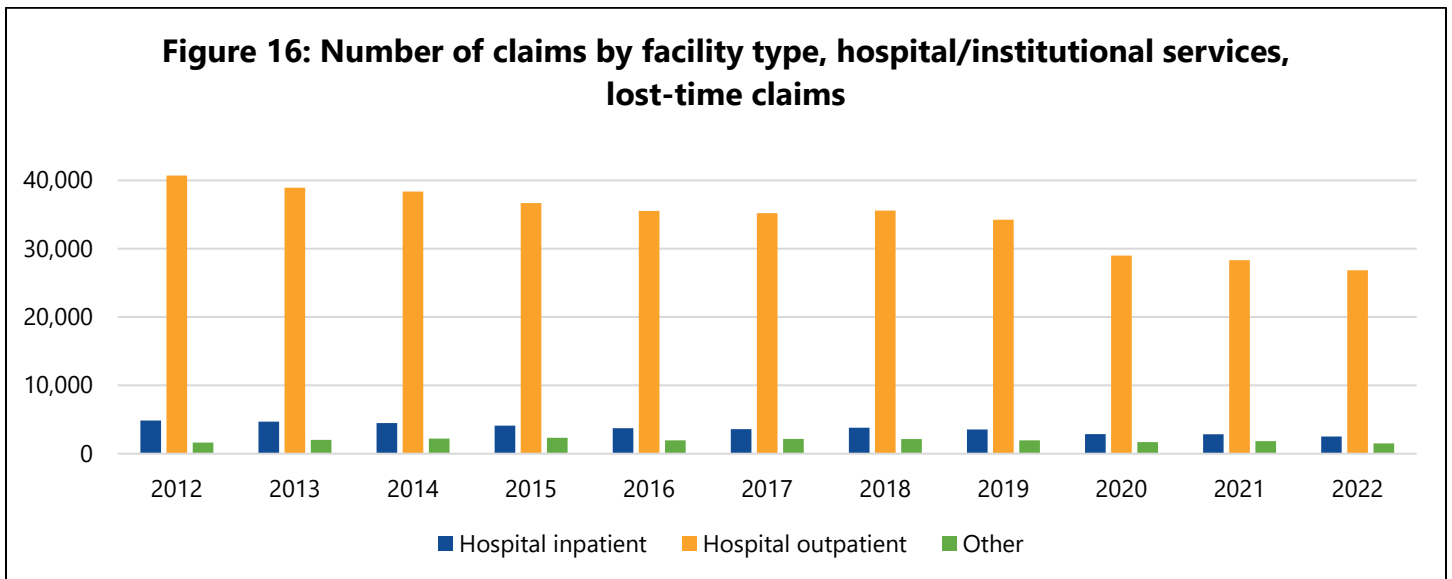
Service year	Claims – hospital / institutional	Hospital / Institutional claim share in total claims	Lost-time claims receiving hospital / institutional services		Medical-only claims receiving hospital / institutional services	
			# of claims	Share	# of claims	Share
2012	90,348	28.3%	42,621	13.4%	47,727	15.0%
2013	86,931	28.1%	40,974	13.3%	45,957	14.9%
2014	86,571	28.2%	40,535	13.2%	46,036	15.0%
2015	83,724	28.1%	38,896	13.0%	44,828	15.0%
2016	81,399	27.6%	37,445	12.7%	43,954	14.9%
2017	82,806	28.1%	37,129	12.6%	45,677	15.5%
2018	83,193	28.2%	37,631	12.7%	45,562	15.4%
2019	81,249	27.6%	36,062	12.2%	45,187	15.3%
2020	63,980	26.7%	30,721	12.8%	33,259	13.9%
2021	63,380	25.3%	30,274	12.1%	33,106	13.2%
2022	61,880	24.1%	28,520	11.1%	33,360	13.0%

Source: Workers' Compensation Research and Evaluation Group, 2023.

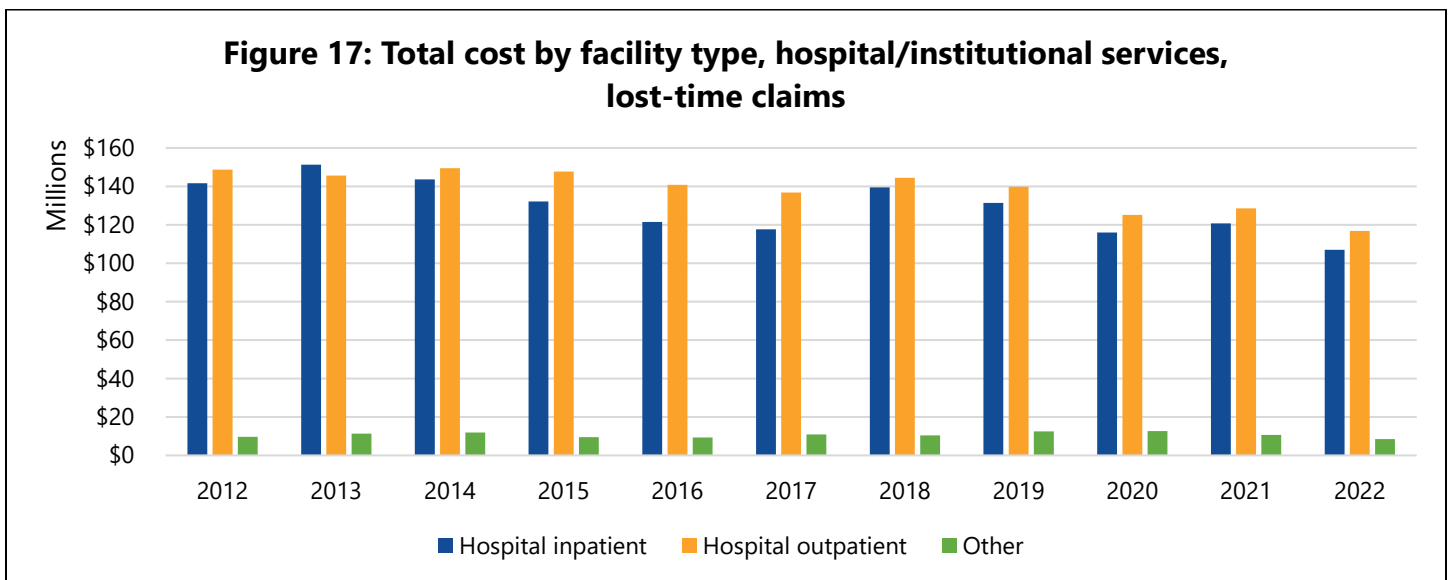
Hospital/institutional cost and utilization by facility type

Injured employees who receive hospital/institutional care do so at either inpatient or outpatient facilities. Injured employees generally receive inpatient care when they meet a certain set of clinical criteria and stay at a health care facility overnight, while outpatient care receives services and returns home the same day.

Since 2012, around 95% of all hospital/institutional claims received outpatient services for lost-time claims (Figure 16). Inpatient services represented only 11% of all hospital/institutional lost-time claims in 2012 and 9% in 2022. Even though hospital outpatient services are the most used services, the total cost of outpatient services is slightly lower than that of inpatient services (Figure 17). As expected, inpatient services cost more because they require longer care and a facility stay. The average cost per claim for inpatient care stayed flat between 2013 and 2015, then showed a strong upward trend especially after 2017 (Figure 18). The cost per claim for outpatient facilities seemed more stable over the years.

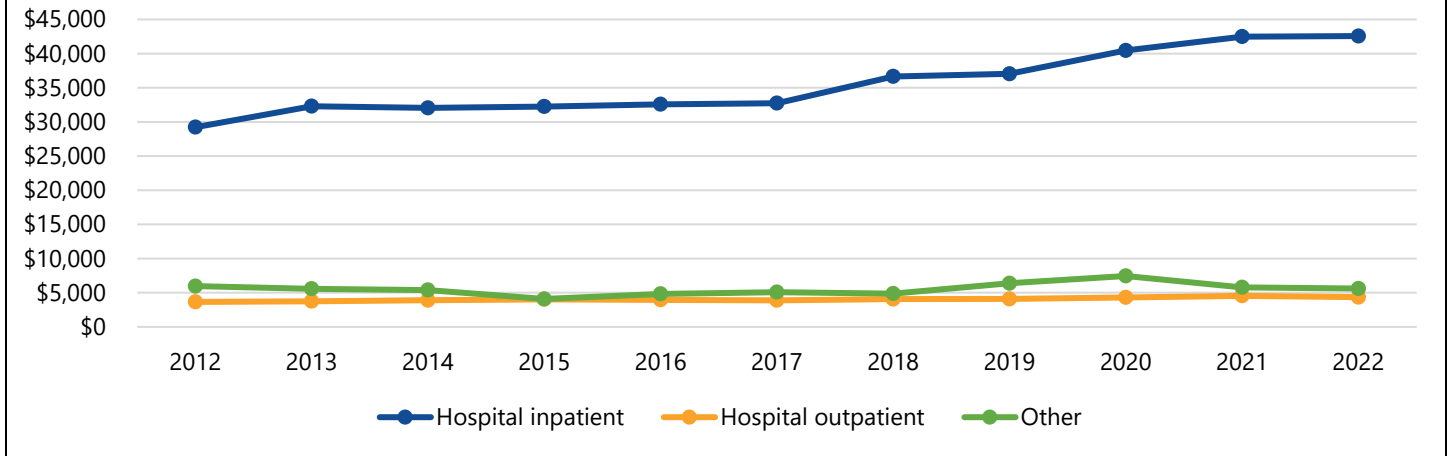


Source: Workers' Compensation Research and Evaluation Group, 2023.



Source: Workers' Compensation Research and Evaluation Group, 2023.

Figure 18: Cost per claims by facility type, hospital/institutional services, lost-time claims



Source: Workers' Compensation Research and Evaluation Group, 2023.

Hospital/institutional cost and utilization by injury year

The total hospital/institutional cost for lost-time claims six months after injury decreased 9% for injuries in 2022 compared to injuries in 2012 (Table 14). On the other hand, the total cost for medical-only claims six months after injury increased by 11% during the same time. The total hospital/institutional cost for claims decreased at 24 months for both lost-time and medical-only claims.

The number of lost-time claims at six months after injury declined to about 20,000 in 2022 compared to 28,000 in 2012. Additionally, the number of lost-time claims decreased about 24% at 12 months after injury and 27% at 24 months (Table 15). The number of medical-only claims receiving hospital/institutional services decreased by 30% for all maturities.

The average cost per claim increased for both lost-time claims and medical-only claims for all maturities (Table 16). The average cost of medical-only claims six months after injury jumped 56% to \$1,521 per claim for injuries in 2022 compared to only \$973 in 2012. The 12 months and 24 months after injury also showed 42% and 37% increases in average cost from 2012 to 2022, respectively, for medical-only claims. The average cost per lost-time claims increased 30% at six months after injury, 36% at 12 months, and 27% at 24 months over the study period.

Table 14: Total hospital/institutional services cost (in thousands), by injury year, at 6, 12, and 24 months after injury

Injury year	Lost-time claims			Medical-only claims		
	6 months	12 months	24 months	6 months	12 months	24 months
2012	\$176,218	\$206,753	\$234,381	\$44,010	\$46,242	\$48,066
2013	\$187,973	\$218,866	\$247,679	\$42,016	\$44,209	\$45,840
2014	\$191,025	\$221,479	\$247,969	\$46,337	\$48,498	\$50,085
2015	\$179,365	\$208,500	\$233,275	\$47,556	\$49,752	\$51,014
2016	\$167,430	\$192,953	\$215,368	\$47,395	\$49,443	\$51,263
2017	\$173,117	\$199,118	\$221,664	\$50,219	\$52,120	\$53,466
2018	\$203,925	\$230,893	\$250,978	\$54,178	\$56,490	\$58,030
2019	\$197,720	\$223,114	\$244,029	\$54,141	\$55,811	\$57,339
2020	\$177,760	\$200,852	\$216,529	\$42,682	\$44,539	\$45,930
2021	\$188,912	\$212,387		\$44,447	\$45,995	
2022	\$160,928			\$48,716		

Source: Workers' Compensation Research and Evaluation Group, 2023.

Table 15: Number of claims receiving hospital/institutional services, by injury year, at 6, 12, and 24 months after injury

Injury year	Lost-time claims			Medical-only claims		
	6 months	12 months	24 months	6 months	12 months	24 months
2012	28,465	29,807	30,417	45,216	45,534	45,699
2013	27,530	28,842	29,493	43,819	44,139	44,309
2014	27,506	28,863	29,493	43,794	44,136	44,282
2015	25,903	27,242	27,857	42,785	43,092	43,232
2016	24,913	26,146	26,696	41,930	42,229	42,373
2017	25,258	26,491	27,014	43,628	43,913	44,024
2018	26,158	27,290	27,752	43,754	44,027	44,152
2019	25,061	26,100	26,558	43,272	43,501	43,620
2020	20,884	21,805	22,159	31,476	31,687	31,772
2021	21,554	22,561		31,726	31,951	
2022	20,052			32,062		

Source: Workers' Compensation Research and Evaluation Group, 2023.

Table 16: Average hospital/institutional services cost per claim, by injury year, at 6, 12, and 24 months after injury

Injury year	Lost-time claims			Medical-only claims		
	6 months	12 months	24 months	6 months	12 months	24 months
2012	\$6,191	\$6,936	\$7,706	\$973	\$1,016	\$1,052
2013	\$6,828	\$7,588	\$8,398	\$959	\$1,002	\$1,035
2014	\$6,945	\$7,673	\$8,408	\$1,058	\$1,099	\$1,131
2015	\$6,924	\$7,654	\$8,374	\$1,112	\$1,155	\$1,180
2016	\$6,721	\$7,380	\$8,067	\$1,130	\$1,171	\$1,210
2017	\$6,854	\$7,516	\$8,206	\$1,151	\$1,187	\$1,214
2018	\$7,796	\$8,461	\$9,044	\$1,238	\$1,283	\$1,314
2019	\$7,890	\$8,548	\$9,189	\$1,251	\$1,283	\$1,315
2020	\$8,512	\$9,211	\$9,772	\$1,356	\$1,406	\$1,446
2021	\$8,765	\$9,414		\$1,401	\$1,440	
2022	\$8,038			\$1,521		

Source: Workers' Compensation Research and Evaluation Group, 2023.

Cost and utilization of dental services

Total cost and utilization for dental services

While the number of lost-time dental service claims decreased from 2012 to 2022, the average cost per claim showed an uptrend from \$3,699 in 2012 to \$5,926 in 2022 (Table 17). The number of medical-only dental service claims fluctuated between about 700-1,100 during the study period. The average cost per medical-only claim increased 19%, from \$2,897 in 2012 to \$3,452 in 2022.

Table 17: Total cost (in thousands) and average costs, by claim type, dental services

Service year	Lost-time claims			Medical-only claims		
	# of claims	Total cost	Cost per claim	# of claims	Total cost	Cost per claim
2012	402	\$1,487	\$3,699	995	\$2,883	\$2,897
2013	412	\$1,840	\$4,465	1,038	\$2,718	\$2,618
2014	417	\$1,880	\$4,509	1,039	\$2,969	\$2,858
2015	400	\$1,883	\$4,709	1,033	\$3,419	\$3,310
2016	415	\$2,360	\$5,687	1,017	\$3,110	\$3,058
2017	437	\$2,068	\$4,732	1,095	\$3,422	\$3,126
2018	440	\$2,721	\$6,184	1,039	\$3,264	\$3,141
2019	449	\$2,259	\$5,031	1,063	\$3,438	\$3,234
2020	360	\$1,919	\$5,330	810	\$2,877	\$3,552
2021	349	\$2,065	\$5,917	694	\$2,547	\$3,669
2022	366	\$2,169	\$5,926	812	\$2,803	\$3,452

Source: Workers' Compensation Research and Evaluation Group, 2023.

Cost and utilization of pharmacy services

Cost and utilization by claim type

DWC adopted a pharmacy closed formulary for injured employees in the Texas workers' compensation system on Sept. 1, 2011. For injuries on or after Sept. 1, 2011, pharmacy benefits are subject to the closed formulary. Legacy claims – claims that occurred prior to Sept. 1, 2011 – became subject to the closed formulary beginning on Sept. 1, 2013. The formulary intended to reduce pharmacy costs and ensure quality care for injured employees by introducing a range of initiatives such as prior authorizations, step therapy, drug selection, and drug dispensing and utilization procedures.

Overall, the number of unique lost-time pharmacy service claims decreased 53%, from about 79,000 in 2012 to 37,000 in 2022 (Table 18). The total cost of pharmacy services drastically decreased 72%, from about \$115 million in 2012 to \$33 million in 2022. The average cost per lost-time pharmacy claim decreased 40%, from \$1,458 in 2012 to \$876 in 2022. Medical-only claims followed a similar trend. The number of claims, total cost, and average cost decreased about 55%, 69%, and 32% respectively.

Table 18: Total cost (in thousands) and average costs, by claim type, pharmacy services

Service year	Lost-time claims			Medical-only claims		
	# of claims	Total cost	Cost per claim	# of claims	Total cost	Cost per claim
2012	78,983	\$115,173	\$1,458	70,775	\$20,843	\$294
2013	74,540	\$102,729	\$1,378	66,212	\$19,325	\$292
2014	70,813	\$90,928	\$1,284	61,633	\$15,729	\$255
2015	65,541	\$85,134	\$1,299	56,628	\$14,074	\$249
2016	62,077	\$80,508	\$1,297	55,158	\$13,296	\$241
2017	58,173	\$61,776	\$1,062	53,527	\$11,040	\$206
2018	55,624	\$55,542	\$999	51,635	\$10,176	\$197
2019	51,999	\$49,241	\$947	48,073	\$9,503	\$198
2020	43,234	\$41,369	\$957	32,871	\$7,332	\$223
2021	40,056	\$36,126	\$902	31,407	\$6,567	\$209
2022	37,323	\$32,685	\$876	32,095	\$6,387	\$199

Source: Workers' Compensation Research and Evaluation Group, 2023.

In 2012, almost 47% of all claims received at least one pharmacy service while only about 27% in 2022 did (Table 19). Lost-time claims made up 53% and medical-only claims about 47% of the total pharmacy claims in 2012. A similar distribution was observed over the study period.

Table 19: Number and share of claims that received pharmacy services, by claim type

Service year	Claims – pharmacy services	Pharmacy service claim share in total claims	Lost-time claims receiving pharmacy services		Medical-only claims receiving pharmacy services	
			# of claims	Share	# of claims	Share
2012	149,758	46.9%	78,983	24.7%	70,775	22.2%
2013	140,752	45.6%	74,540	24.1%	66,212	21.4%
2014	132,446	43.2%	70,813	23.1%	61,633	20.1%
2015	122,169	41.0%	65,541	22.0%	56,628	19.0%
2016	117,235	39.7%	62,077	21.0%	55,158	18.7%
2017	111,700	37.9%	58,173	19.7%	53,527	18.1%
2018	107,259	36.3%	55,624	18.8%	51,635	17.5%
2019	100,072	34.0%	51,999	17.6%	48,073	16.3%
2020	76,105	31.8%	43,234	18.0%	32,871	13.7%
2021	71,463	28.6%	40,056	16.0%	31,407	12.6%
2022	69,418	27.1%	37,323	14.6%	32,095	12.5%

Source: Workers' Compensation Research and Evaluation Group, 2023.

Pharmacy cost and utilization by maturity group

Most pharmacy claims received treatment in their first year of injury. About 13-17% of pharmacy claims received services for four years or more after injury. Fifty-four percent of the total pharmacy service cost in 2022 was for claims with a four year or more maturity, a 9% decrease compared to 2012. As expected, the average cost per claim greatly increased as the maturity increased.

Table 20: Number of claims, total cost (in thousands), by maturity group, pharmacy services

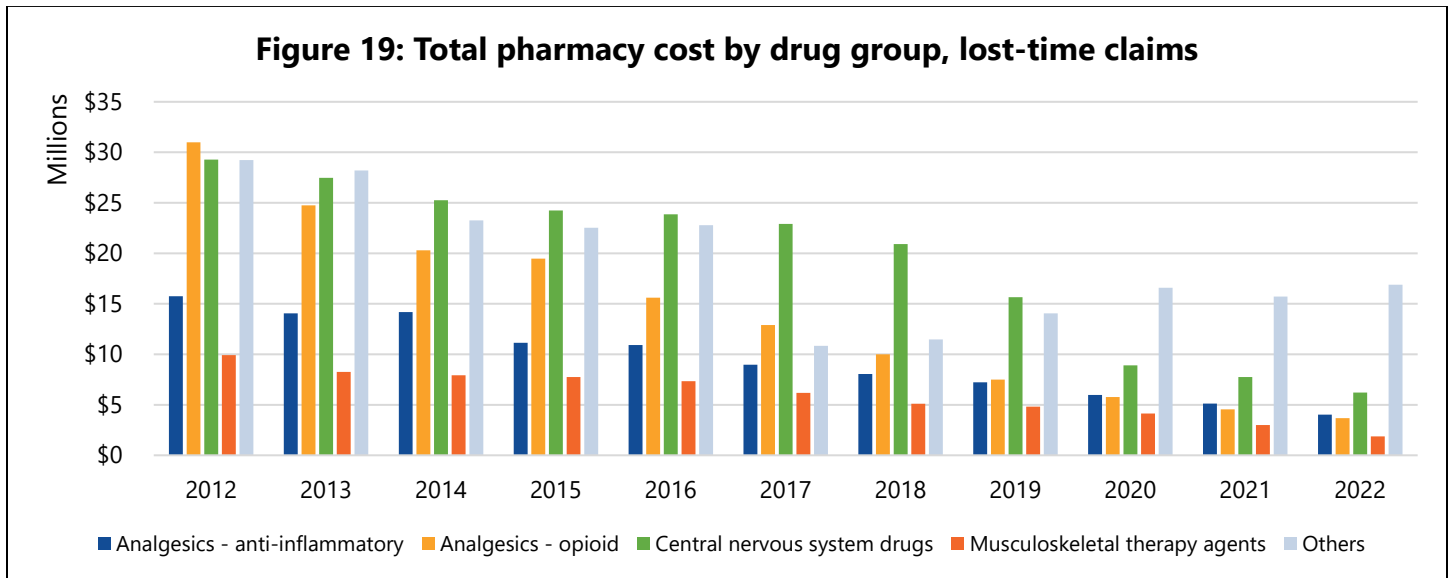
Service year	1 st year maturity			2 nd year maturity			3 rd year maturity			4+ years maturity		
	# of claims	Total cost	Avg cost	# of claims	Total cost	Avg cost	# of claims	Total cost	Avg cost	# of claims	Total cost	Avg cost
2012	114,652	\$27,105	\$236	13,828	\$13,321	\$963	6,942	\$9,296	\$1,339	25,213	\$86,294	\$3,423
2013	108,029	\$25,452	\$236	12,782	\$11,318	\$885	6,514	\$8,401	\$1,290	23,245	\$76,883	\$3,308
2014	103,190	\$28,161	\$273	11,560	\$10,617	\$918	5,869	\$6,804	\$1,159	20,715	\$61,075	\$2,948
2015	95,254	\$25,834	\$271	11,193	\$10,492	\$937	5,249	\$6,148	\$1,171	18,602	\$56,731	\$3,050
2016	92,462	\$27,050	\$293	10,452	\$11,002	\$1,053	5,028	\$6,182	\$1,229	16,907	\$49,565	\$2,932
2017	88,970	\$19,192	\$216	9,431	\$7,263	\$770	4,728	\$4,902	\$1,037	15,341	\$41,456	\$2,702
2018	86,726	\$17,504	\$202	8,421	\$6,308	\$749	4,044	\$4,219	\$1,043	13,972	\$37,683	\$2,697
2019	81,501	\$17,396	\$213	7,874	\$5,751	\$730	3,440	\$3,327	\$967	12,712	\$32,269	\$2,538
2020	59,631	\$13,000	\$218	7,308	\$5,325	\$729	3,152	\$3,180	\$1,009	11,071	\$27,193	\$2,456
2021	56,243	\$11,532	\$205	6,009	\$4,100	\$682	2,995	\$3,260	\$1,088	10,166	\$23,801	\$2,341
2022	56,420	\$11,491	\$204	5,009	\$3,966	\$792	2,383	\$2,548	\$1,069	9,043	\$21,067	\$2,330

Source: Workers' Compensation Research and Evaluation Group, 2023.

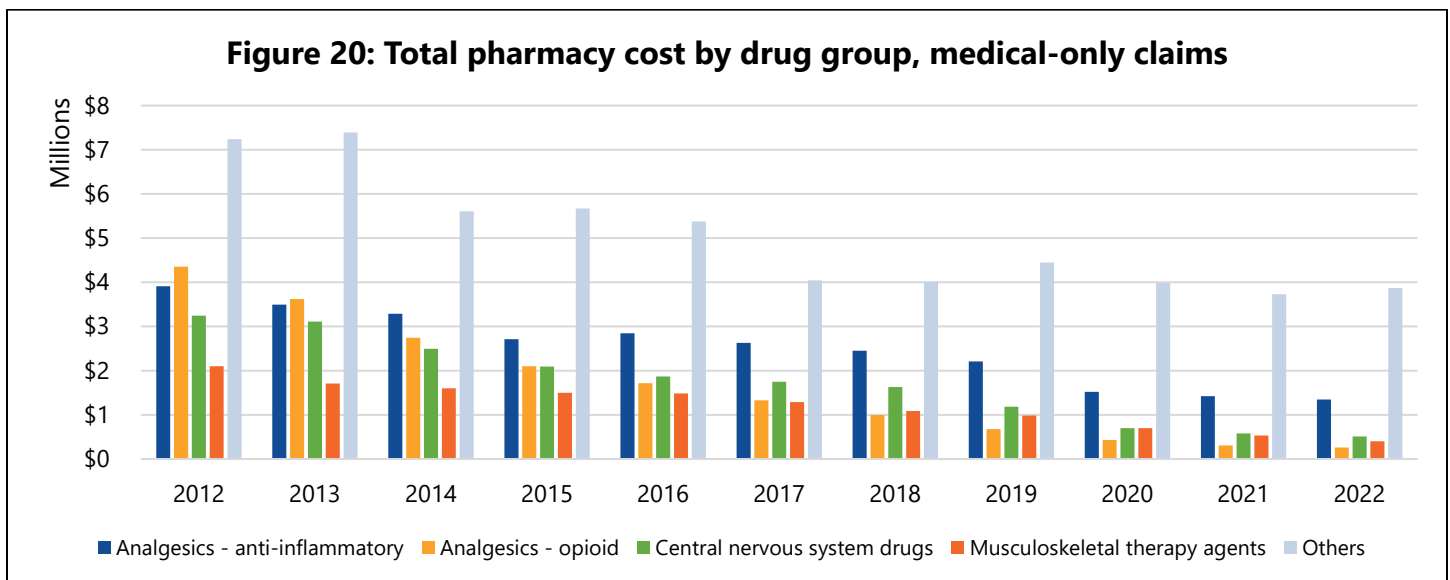
Pharmacy cost and utilization by drug group

In this report, drugs were classified into five major groups: analgesics-anti-inflammatory, analgesics-opioid, central nervous system drugs, musculoskeletal therapy agents, and other.¹

The four specified drug groups accounted for 75% of the total pharmacy costs for lost-time claims and 65% of medical-only claims in 2012 (Figure 19 and Figure 20). In 2022, the four specified drug group costs represented 48% of the total pharmacy cost for lost-time claims and 39% of medical-only claims. The total cost of analgesics-opioids decreased the most, with an 88% reduction for lost-time claims and 94% 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.

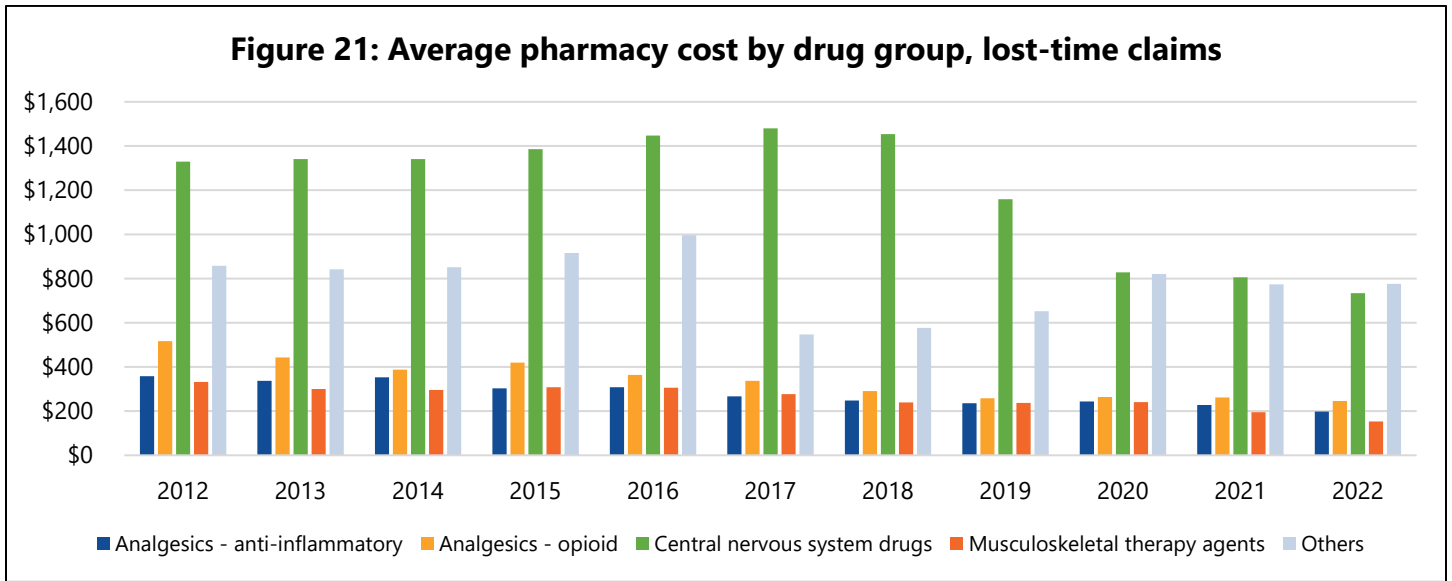


Source: Workers' Compensation Research and Evaluation Group, 2023.

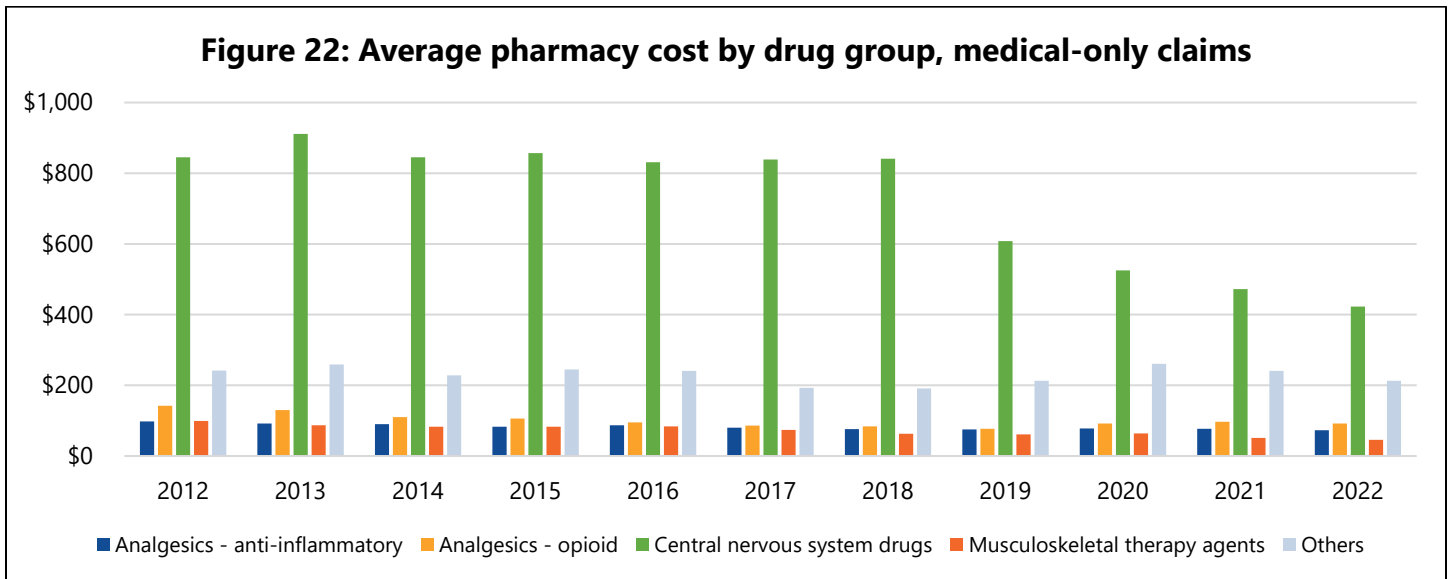


¹ Analgesics-anti-inflammatory includes drugs like ibuprofen, meloxicam, and naproxen. Analgesics-opioid includes drugs like hydrocodone/acetaminophen, tramadol HCL, and acetaminophen/codeine. Central nervous system drugs include drugs like gabapentin, lyrica, and amitriptyline. Musculoskeletal therapy agents include drugs like cyclobenzaprine hydrochloride and methocarbamol. Lastly, other includes anticonvulsants, antidepressants, anti-anxiety agents, and more.

The average pharmacy cost per claim also showed a reduction over the years (Figure 21 and Figure 22). The average cost of musculoskeletal therapy agents saw more than 54% decrease for both lost-time claims and medical-only claims.



Source: Workers' Compensation Research and Evaluation Group, 2023.



Source: Workers' Compensation Research and Evaluation Group, 2023.

The share of claims receiving opioids decreased from 76% in 2012 to 40% in 2022 for lost-time claims (Table 21). Medical-only claims saw a similar trend, with a decrease from 43% in 2012 to 9% in 2022.

Table 21: Percent of claims receiving certain drug groups, by service year

Service year	Analgesics – anti-inflammatory	Analgesics - opioid	Central nervous system drugs	Musculoskeletal therapy agents	Others
Lost-time claims					
2012	56%	76%	28%	38%	43%
2013	56%	75%	27%	37%	45%
2014	57%	74%	27%	38%	39%
2015	56%	71%	27%	38%	38%
2016	57%	69%	27%	39%	37%
2017	58%	66%	27%	38%	34%
2018	58%	62%	26%	38%	36%
2019	59%	56%	26%	39%	41%
2020	57%	50%	25%	40%	47%
2021	56%	43%	24%	38%	51%
2022	54%	40%	23%	33%	58%
Medical-only claims					
2012	57%	43%	5%	30%	42%
2013	57%	42%	5%	30%	43%
2014	59%	40%	5%	31%	40%
2015	58%	35%	4%	32%	41%
2016	59%	33%	4%	32%	40%
2017	61%	29%	4%	33%	39%
2018	62%	23%	4%	34%	41%
2019	61%	18%	4%	34%	43%
2020	60%	14%	4%	33%	46%
2021	59%	10%	4%	33%	49%
2022	58%	9%	4%	27%	57%

Source: Workers' Compensation Research and Evaluation Group, 2023.

Note: As some claims received services from more than one type of service providers, percentage of each service year may not add up to 100.

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 2012 to 2022. 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). These trends are most likely a result of a decrease in the total number of claims, as well as the implementation of evidence-based treatment guidelines, the pharmacy formulary, and the increased usage of certified health care networks.



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