California Workers' Compensation Institute

Interactive Research

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Average Payment Trends: Updated Results from CWCI's Claims Monitoring Tool

For nearly two decades, CWCI has published reports and interactive applications that monitor California workers' compensation claim development trends using paid loss data from our Industry Research Information System (IRIS) database.[1] This report highlights findings on average payment trends for indemnity claims valued 24 months from the date of injury from the recently refreshed Claims Monitoring Interactive Application and describes the measures and filters available within the Application.

Overview of Results

Average medical payments for indemnity claims at 24 months declined in the two years prior to adoption of the 2012 (SB 863) reforms and continued to fall through 2016 – a post-reform decline that coincided with the adoption of enhanced medical dispute resolution tools such as UR and IMR, the beginning of the transition to the RBRVS Fee Schedule, and a decline in spinal surgeries and opioid use. After bottoming out in 2016, however, average medical payments on indemnity claims began to trend up, increasing by 16.2% over the next four years before leveling off in 2021. Although the trends in paid medical losses after 2012 were mostly consistent across industry sectors, there was some variation. For example, average medical payments in the Education sector increased rather than decreased from 2012 to 2016 (+4.1%), then decreased rather than increased from 2016 to 2020 (-1.3%), and the Wholesale Trade sector claims registered a 12.3% decline in average medical payments from 2016 to 2020. More recently, average paid medical losses at 24 months across all industry sectors declined by 0.9% from 2020 to 2021, while the Transportation sector registered a much more significant decline (-11.5%).

Change in Average Paid Medical at 24 Months on Indemnity Claims by Industry Sector

Industry	2012 to 2016	2016 to 2020	2020 to 2021
Accommodation	-16.7%	17.8%	-5.6%
Agriculture, Forestry, Fishing & Hunting	-15.8%	24.0%	0.5%
Clerical (8810)	2.2%	10.9%	-1.4%
Construction	-7.9%	31.6%	-0.5%
Educational Services	4.1%	-1.3%	1.8%
Food Services	-13.7%	6.1%	3.5%
Health Care & Social Assistance	-10.2%	2.9%	3.7%
Manufacturing	-14.1%	11.7%	5.2%
Retail Trade	-10.8%	14.7%	0.3%
Transportation & Warehousing	-12.0%	16.9%	-11.5%
Wholesale Trade	-13.6%	-12.3%	-5.8%
Total (Including Other Industries)	**-11.2%**	**16.2%**	**-0.9%**

1. IRIS is CWCI's proprietary database. Version 2023Q4 of the database contains detailed data on employee and employer characteristics, medical service data, benefits, and administrative cost details on more than 8 million California workers' comp claims from AY 2000 – AY 2023, valued through December 2023. The Claims Monitoring Application limits the data to certain claim characteristics as noted in the Data and Methods section, resulting in nearly 2.8 million California workers' comp claims from AY 2009 – AY 2023.

Average indemnity payments for indemnity claims measured at 24 months increased 8.9% from 2012 to 2016 and 17.3 percent from 2016 to 2020, then leveled off in 2021. The increases in indemnity were not unexpected given that weekly maximum TD rates rose more than 34 percent between 2012 and 2021 to reflect changes in the state average weekly wage, fueled in part by passage of SB 3 in 2016, which incrementally increased the state's hourly minimum wage from $10 in 2016 to $15 in 2022, and SB 863 mandated increases in PD benefits. The change from 2020 to 2021 varied significantly by industry sector.

Change in Average Paid Indemnity at 24 Months on Indemnity Claims by Industry Sector

Industry	2012 to 2016	2016 to 2020	2020 to 2021
Accommodation	1.4%	27.1%	0.9%
Agriculture, Forestry, Fishing & Hunting	11.6%	14.5%	3.9%
Clerical (8810)	20.3%	1.1%	-5.0%
Construction	6.6%	17.0%	0.5%
Educational Services	10.0%	9.7%	-3.1%
Food Services	22.0%	14.8%	0.0%
Health Care & Social Assistance	7.3%	8.0%	10.9%
Manufacturing	12.9%	17.1%	7.9%
Retail Trade	9.6%	15.0%	-1.4%
Transportation & Warehousing	2.8%	25.5%	-12.1%
Wholesale Trade	10.8%	-4.7%	-10.0%
Total (Including Other Industries)	**8.9%**	**17.3%**	**-0.2%**

Trends in total benefit payments (medical + indemnity) at 24 months varied significantly by geographic region. Los Angeles, the Inland Empire/Orange County, and the Central Coast declined from 2012 to 2016 while the other areas increased. Increases from 2016 to 2020 were also less pronounced in those areas. Although statewide there was little change in average total benefit payments from 2020 to 2021 (-0.3%), the year-to-year change in average total loss payments ranged from a 3.7% decrease for Bay Area claims to a 3.1% increase in Los Angeles County claims.

Change in Average Total Benefits Paid at 24 Months on Indemnity Claims by Region

Region	2012 to 2016	2016 to 2020	2020 to 2021
North Counties/Sierras	2.7%	30.1%	1.3%
Bay Area	4.5%	29.7%	-3.7%
Valleys	4.7%	9.4%	-1.2%
Central Coast	-0.9%	14.5%	0.0%
Los Angeles	-6.8%	16.9%	3.1%
Inland Empire / Orange County	-6.6%	9.7%	-0.7%
San Diego	1.5%	20.3%	-0.8%
Total	**-1.8%**	**16.4%**	**-0.3%**

Additional metrics on year-to-year trends are available through ***Tab 1*** in the Claims Monitoring application: "***Average Payments by Accident Year & Development Period.***"

Tab 2 in the application ***"Region and Industry Detail"*** contains side-by-side charts of average payments by region and industry detail, enabling the use of variation in payments to establish relationships between industries and regions. The results are shown across all accident years back to 2009.

For the 13-year period spanning AY 2009 through AY 2021, average medical and total benefits paid per indemnity claim at 24 months were highest in the North Counties/Sierras and the Inland Empire/Orange County, and lowest in the Valleys. The Bay Area, which has the highest average wages in the state, had the highest 24-month indemnity payments over the 13-year span, but average 24-month medical payments on Bay Area claims were the second lowest in the state. Results vary by accident year, however, so a filter can be used to break out the data for a specific year or set of years.

Drilling down further, we see that average total benefit payments at 24 months are higher for some industry sectors within the regions, but not for others. For example, looking at average 24-month payments for the 13-year period ending in AY 2021 shows that the North Counties/Sierras had the highest average benefit payments in the state for the Construction, Transportation, Wholesale, and Agricultural sectors, but the lowest payments for the Accommodation and Food Service sectors. Likewise, the Inland Empire had the highest average benefit payments in Manufacturing and Retail Trade but ranked in the bottom third for the Transportation sector.

The Institute has updated its interactive Claims Monitoring Application to show average paid indemnity and medical losses on claims from AY 2009 through the end of AY 2023 at nine levels of development: 3, 6, 9, 12, 24, 36, 48, 60, and 72 months post injury, with payments valued through December 2023. Users can view results for indemnity claims or all claims, and by payment type (indemnity, medical or combined), and break out subsets of data by industry and region (based on the claimant's home ZIP code).

How to Access the Application

Using your registered username and password, log into the Research section of our website (www.cwci.org), scroll down to "CWCI Claims Monitoring Interactive Tool – Updated 7-1-24", and click on the title. If you need to register for member access to our website, call 510-251-9470.

Metrics Available in the Application:

The Application contains two tabs and a description of the data and methods, all shown as tabs across the top of the view. The first tab contains graphics and a data table showing average payments by development period. The second tab shows a heat map by region on the left and a breakout of payment detail by industry on the right. The third tab describes the data sources and methods.

The balance of this report includes screenshots and descriptions of the tabs, details on the claims monitoring data, and methods and information on where to get help in using the Application.

Tab 1: Average Payments by Accident Year & Development Period

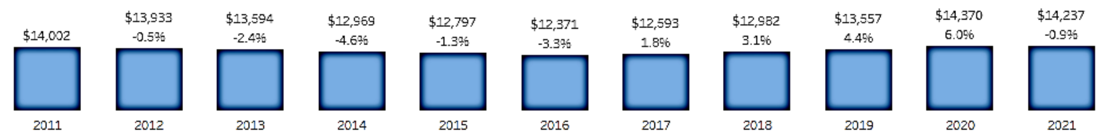
Avg Pmt by AY & Dev | Region and Industry Detail | Data & Methods

CWCI Claims Monitoring Application (IRIS valued as of December 2023)

GLOBAL SELECTIONS:

Claim Sample	Payment Type	Months of Development	Top Industry (Opt.)	Region (Opt.)
Indemnity Claims	Medical	24 Months	All	All
Include COVID				Population: Insured Only

Average Paid Medical and AY Percentage Change: Indemnity Claims at 24 Months



Average Paid Medical: Indemnity Claims by Development Period

Avg Paid — Select "Avg Paid" or "% Change" from prior Accident Year

Acc Yr	3mon	6mon	9mon	12mon	24mon	36mon	48mon	60mon	72mon
2009	$2,736	$5,207	$6,885	$8,344	$13,865	$18,252	$21,825	$24,556	$26,605
2010	$3,013	$5,482	$7,230	$8,749	$14,030	$18,714	$22,463	$25,227	$27,371
2011	$2,911	$5,280	$6,998	$8,437	$14,002	$18,700	$22,229	$24,750	$26,392
2012	$2,785	$5,078	$6,822	$8,347	$13,933	$18,565	$21,872	$24,170	$25,609
2013	$2,808	$4,983	$6,695	$8,144	$13,594	$17,860	$20,695	$22,491	$23,725
2014	$2,791	$4,868	$6,504	$7,914	$12,969	$16,895	$19,505	$21,105	$22,216
2015	$2,858	$4,889	$6,422	$7,822	$12,797	$16,433	$18,699	$20,101	$21,096
2016	$2,958	$4,948	$6,540	$7,908	$12,371	$15,513	$17,539	$18,924	$19,924
2017	$3,155	$5,178	$6,705	$8,063	$12,593	$15,759	$17,839	$19,295	$20,330
2018	$3,297	$5,351	$6,925	$8,331	$12,982	$16,469	$18,884	$20,505	
2019	$3,450	$5,605	$7,132	$8,519	$13,557	$17,604	$20,352		
2020	$3,476	$5,649	$7,360	$8,887	$14,370	$18,507			
2021	$3,170	$5,370	$7,056	$8,665	$14,237				
2022	$3,159	$5,386	$7,227	$8,850					
2023	$3,347	$5,270	$6,921						

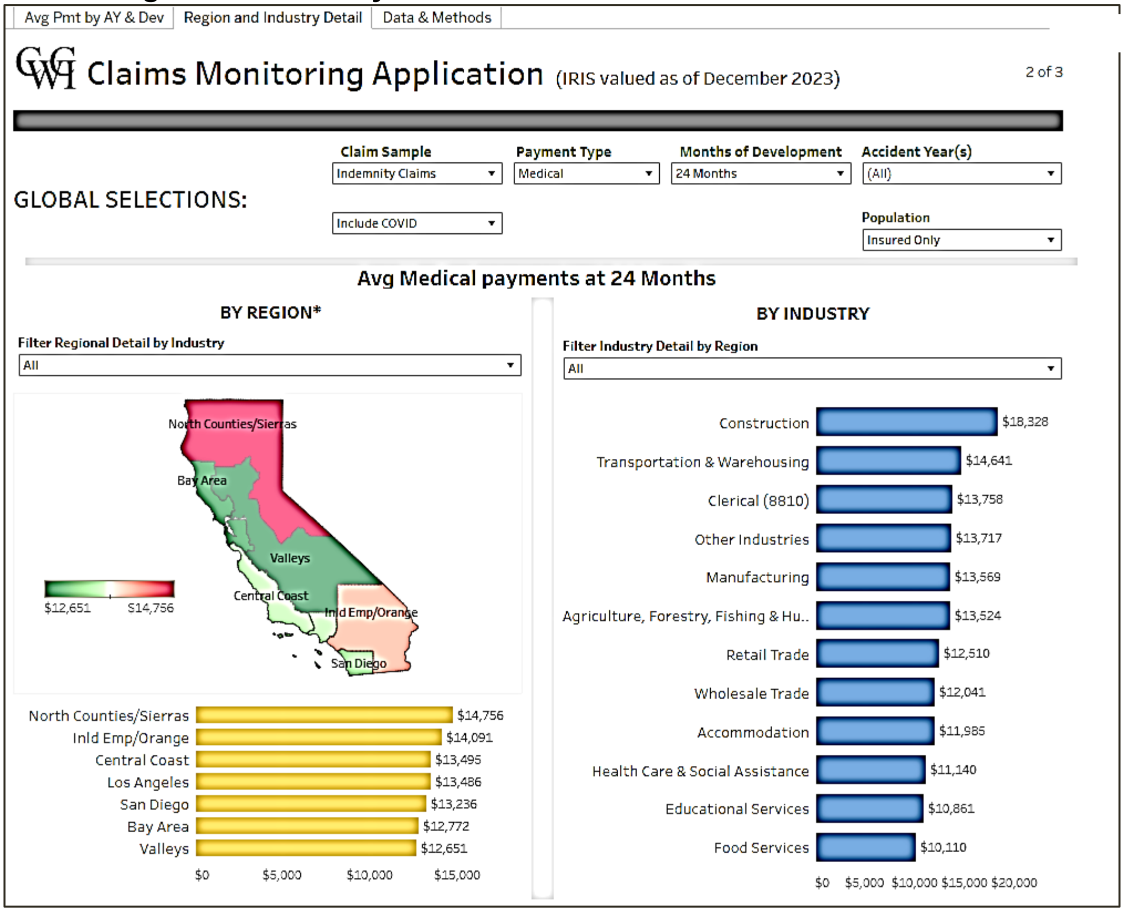
The **Global Selections** bar allows the user to select parameters and filters to be used in the exhibits. The user can define the **Claim Sample** (all claims or indemnity claims), the **Payment Type** (medical, indemnity, or medical + indemnity) and **Months of Development** (3, 6, 9, 12, 24, 36, 48, 60, or 72 months). There are also optional filters to show the results for a **Top Industry** and/or **Region**. Additional filters allow users to view a subset of the data by **Population** (insureds only or including self-insureds) and to include or exclude COVID claims.

A **Bar Graph** shows average paid loss trends and percent change from the prior year for the selected **Payment Type** by accident year for the selected **Months of Development** and **Claim Sample**. The bar graph in ***Tab 1*** shows the downward trend in average paid medical losses on indemnity claims statewide at 24 months from AY 2011 through AY 2016, and the subsequent uptrend that began in AY 2017 as summarized in the Overview of Results section. The most recent results show that between AY 2020 and AY 2021, average 24-month medical losses on indemnity claims edged down 0.9% from $14,370 to $14,237, and as noted in the grid below the bar graph, average paid medical losses also declined at the 3, 6, 9, and 12-month benchmarks.

The **Grid** below the Bar Graph includes a filter that allows the user to review either the **Avg Paid** loss or the **% Change** in the average paid losses from the prior year for all Accident Year and Development Period combinations for the selected **Payment Type** and **Claim Sample**.

By clicking the second tab at the top of the Application, the user can access the **Region and Industry Detail.** A screenshot of this tab is shown below.

Tab 2: Region and Industry Detail[2]



The **Global Selections** bar for this tab contains options for **Claim Sample, Payment Type,** and **Months of Development** with optional filters to change the **Accident Year(s)** from all years to a specific year or set of years, and to change the **Population** from insured claims to insured and self-insured claims. An additional filter is provided to include or exclude COVID claims.

A **Heat Map** and corresponding bar chart show comparative average paid losses by region based on the **Global Selections**. By default, the **Filter Regional Detail by Industry** is set to include all regions. When selecting the **By Region** filter the user can select a particular **Top Industry** to see how average payments differ by region within a single industry.

The **Bar Chart** on the right side of the tab allows users to select a particular **Region** to see how average payments differ by **Top Industry** within a single region. By default, the **Filter Industry Detail by Region** is set to include all regions so statewide results are shown when the filter is set to "All."

2. The By Region heat map and the bar chart below it exclude claims in which the region was coded as Out of State or Unknown as this section of ***Tab 2*** compares loss payments by specific region within California. The out of state and unknown category includes workers injured in California who are no longer in the state or whose employer is domiciled out of state. By contrast the By Industry bar chart includes claims coded as Out of State or Unknown region given that the chart compares average payments by industry. Nevertheless, the filter has been modified such that Out of State/Unknown claims is not an option for selection.

The relationship of these charts allows for interaction between region and industry. For example, as noted earlier, the **By Region** heat map and corresponding bar chart below show that for "All" **Accident year(s)** (the 13-year period spanning AY 2009 through AY 2021 for which 24-month data is available) medical payments on insured indemnity claims at 24 months in the North Counties/Sierras averaged $14,756 – the highest among all regions. Additionally, the **By Industry** bar chart on the right shows that across all regions, average 24-month medical payments on insured indemnity claims from the Construction sector were $18,328, by far the highest of any industry. Switching the **Filter Regional Detail by Industry** option from "All" to "Construction" shows that the North Counties/Sierras averaged $20,109 in medical payments at 24 months, the highest of all regions. Furthermore, the corresponding bar chart below the Heat Map shows that average 24-month medical payments in four of the state's seven regions exceeded the statewide average of $18,328 for Construction industry indemnity claims. Again, these results can be broken out for claims from a specific accident year or for a specific set of accident years.

Members might also want to see a breakdown of the overall average medical payments on indemnity claims in the North Counties/Sierras region by top industry and compare those figures to the region's overall average of $14,756. To analyze this the **Filter Regional Detail by Industry** is returned to "All" and the **Filter Industry Detail by Region** is set to "North Counties/Sierras." The industry bar chart shows that four top industries, led by Construction, exceeded the overall North Counties/Sierras figure.

Data and Methods

The third tab of the Application contains a description of the data selection criteria and definitions used in the study and are repeated below.

To create consistency in the types of claims examined across injury years, the Institute developed separate claim samples for each development period. The dollar values were truncated at $1 million to reduce the impact of outliers. Claims with less than $35 in total medical payments in the development period, claims with negative total indemnity payments in the development period, and claims where the months from injury date to December 31, 2023 were less than the number of months in the development period were excluded.

Likewise, the study sample for indemnity claims was defined separately for each development period. Any claim with at least $1 in indemnity payments during the development period was included as an indemnity claim. For example, if a claim had its first indemnity payment in the 15th month post injury, then it would be included in the indemnity claim analysis for development periods 24 months or greater, but not in the 6- or 12-month development periods.

Medical payments include medical treatment, drugs, durable medical equipment (DME), medical-legal services and medical cost containment payments classified as a medical payment (e.g., medical case management). Medical Cost Containment payments classified as an expense (e.g., network management) are not counted in the medical category.[3]

3. Medical losses and loss adjustment expenses are defined in the California Workers' Compensation Uniform Statistical Reporting Plan (USRP).

Help in Using the Application or Questions About the Results:

The Claims Monitoring Interactive Application is part of the Institute's ongoing effort to provide members with distributed analytics to enable a more comprehensive, interactive experience based on CWCI research. If you or your staff have questions or would like assistance in using this tool, please call the Institute at 510-251-9470.

About the Author

Adam Russell is a Research Associate at the California Workers' Compensation Institute.

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California Workers' Compensation Institute

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