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Impact of the Affordable Care Act on California Workers' Compensation

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Executive Summary

Background and Study Objective

The Patient Protection and Affordable Care Act (Affordable Care Act or ACA) was signed into law by President Obama in 2010. Covered California, the California Health Care Exchange created pursuant to the ACA, began the enrollment process in late 2013, with coverage beginning January 1, 2014. The ACA, which included an expansion of Medicaid in California (Medi-Cal), significantly impacted the number of California workers who had health coverage. According to the UC Berkeley Center of Labor Research and Education, 2.5 million workers acquired health insurance through the ACA and expanded Medi-Cal in 2015, adding to the 3.3 million workers already participating in Medi-Cal.¹ With a total estimated workforce of 18 million, this represents an approximate 14% increase in the number of California workers with health insurance coverage. The share of workers with health insurance experienced a much greater increase in some industries after the ACA became effective. For example, the number of restaurant workers with health insurance increased by 24%, an estimated 314,000 workers.

Increased access to health care benefits, for both workers and the general California population, may impact the California workers' compensation system. Areas potentially affected include injured workers' access to care, pricing for workers' compensation medical services and frequency of workers' compensation claims, particularly for types of claims where it may not be clear whether the injury was work-related. To assess these potential ACA impacts on the workers' compensation system in California, the WCIRB examined data from its Medical Data Call (MDC) and Unit Statistical Reports (USR) to compare claims for pre-ACA accident year 2013 to claims for post-ACA accident years 2014 and 2015. This study did not include data from businesses that are self-insured in the workers' compensation system in California.²

Research Questions

- With growing demands on medical providers due to increased health coverage through the ACA, did the ACA impact injured workers' access to care? Specifically, did time from accident date to first physician appointment change after ACA implementation?
- Did the increased demand on providers lead to an increase in workers' compensation medical costs through reduced workers' compensation medical fee schedule discounts?
- Did greater availability of health care benefits for workers due to the ACA affect workers' compensation claim frequency? Specifically, did claim frequency decrease for groups of employers that traditionally offered less health insurance prior to the ACA relative to other groups of employers, who tended to offer more health insurance prior to the ACA, particularly for types of injury that may not be clearly linked to a workplace event?
- Did greater availability of health care benefits for workers due to the ACA affect the diagnostic mix after ACA implementation? Specifically, did the share of claims with comorbidities decline?

Findings

- The time to see a physician in the workers' compensation system did not change significantly after ACA implementation. The median time to see a physician was one day for pre-ACA accident year 2013, as well as post-ACA accident years 2014 and 2015.
- There was no clear pattern in increased physician fees charged for workers' compensation medical services relative to fee schedules after ACA implementation.
- There was no indication of an ACA impact on overall claim frequency. After ACA implementation, the overall frequency of workers' compensation claims in industries more likely affected by the ACA did not decrease more than industries less likely affected by the ACA.

¹ U.C. Berkeley Labor Center, Lucia, L., Dietz, M. and Jacobs, K. (2017). *Which California Industries would be Most Affected by ACA Repeal and Cuts to Medi-Cal?* Retrieved from <http://laborcenter.berkeley.edu/which-california-industries-would-be-most-affected-by-aca-repeal-and-cuts-to-medi-cal/>

² About 2.3 million California workers were covered by self-insurance in 2016. See statistics published by the Department of Industrial Relations in the State of California. Retrieved from <https://www.dir.ca.gov/osip/SelfInsuredEmployers.htm>

- There was indication of an ACA impact on soft tissue injuries. After ACA implementation, the share of claims with soft tissue injuries, including sprain and strains (of shoulder, back or knee), decreased more in small businesses and industries with lower levels of health insurance prior to the ACA than in large businesses and industries with higher levels of health coverage.
- After ACA implementation, the share of claims with comorbidities of hypertension, obesity and diabetes decreased in industries with lower levels of health insurance coverage prior to the ACA, while the share did not change in industries with higher levels of health coverage. Claims with comorbidities did not decrease more in small businesses relative to large businesses, nor did they decrease more in small restaurants relative to large restaurants. However, since available WCIRB information on comorbidities is very limited, it is not possible to draw meaningful conclusions related to comorbidities.

Background and Introduction

The Patient Protection and Affordable Care Act (Affordable Care Act or ACA) was signed into law by President Obama in 2010. Covered California, the California Health Care Exchange created pursuant to the ACA, began enrollment in October 2013 with coverage beginning January 1, 2014. The ACA, which included an expansion of Medicaid in California (Medi-Cal) significantly impacted the number of California workers who had health coverage. Since the implementation of the ACA, there has been interest in understanding the potential impacts of the ACA on the workers' compensation system in areas such as access to care, fees for medical services, mix of medical diagnoses and, for employers not previously providing health insurance, workers' compensation claim volumes.

According to a UC Berkeley Center of Labor Research and Education brief, the impact of the ACA implementation varies by industrial sector in California. For example, workers in industries previously underinsured or uninsured (e.g., agriculture, restaurants and retail) have gained health coverage through the ACA at disproportionately higher rates than those in other industries.³ The brief estimates that, in 2015, 24% of the California restaurant workers aged 18-64 years were enrolled in health insurance through the ACA, including the Medi-Cal expansion.

Workers in small businesses have benefited disproportionately more from the ACA than those in large businesses. As of 2014, approximately 55% of the small businesses (with fewer than 50 full time equivalents (FTEs)) offered health insurance compared to over 90% of large companies.⁴ By 2015, about 20% more workers in small businesses obtained their health coverage via the ACA, bringing small businesses' level of employees with health insurance closer to the level of large employers.⁵

The significant increase in access to health care benefits for both workers and the general California population could have impacts on the California workers' compensation system. Areas potentially affected include injured workers' access to care, pricing for the workers' compensation medical services, frequency of claims, particularly for types of claims for which the underlying injury is not always clearly work-related, and diagnostic mix related to comorbidities. To assess these potential ACA impacts on the workers' compensation system in California, the WCIRB examined its MDC and USR data to compare claims for pre-ACA accident year 2013 to claims for post-ACA accident years 2014 and 2015.

³ U.C. Berkeley Labor Center, Lucia, L., Dietz, M. and Jacobs, K. (2017). *Which California Industries would be Most Affected by ACA Repeal and Cuts to Medi-Cal?* Retrieved from <http://laborcenter.berkeley.edu/which-california-industries-would-be-most-affected-by-aca-repeal-and-cuts-to-medi-cal/>

⁴ California Health Interview Survey 2014, Cited in Jacobs, K. (2017). *Employer-sponsored Insurance in California – Testimony to the Assembly Select Committee on Health Care Delivery Systems and Universal Coverage*. Retrieved from http://assembly.ca.gov/sites/assembly.ca.gov/files/corrected_version_select_cmte_-_esi_ken_jacobs_102317_final2_2.pdf

⁵ Siemons, R., Lucia, L. and Jacobs, K. (2017). *California's Self-Employed and Small Business Employees Experienced Large Health Coverage Gains under ACA*. Retrieved from <http://laborcenter.berkeley.edu/pdf/2017/Californias-Self-Employed-and-Small-Business-Employees-Health-Coverage-Gains-under-ACA.pdf>

Study Objectives

This study addresses the following research questions:

1. With growing demands on medical providers due to increased health coverage through the ACA, did the ACA impact injured workers' access to care? Specifically, did time from accident date to first physician appointment change after ACA implementation?
2. Did the increased demand on providers lead to an increase in workers' compensation medical costs through reduced workers' compensation medical fee schedule discounts?
3. Did greater availability of health care benefits for workers due to the ACA affect workers' compensation claim frequency? Specifically, did claim frequency decrease for groups of employers that traditionally offered less health insurance prior to the ACA relative to other groups of employers, who tended to offer more health insurance prior to the ACA, particularly for types of injury that may not be clearly linked to a workplace event?
4. Did greater availability of health care benefits for workers due to the ACA affect the diagnostic mix after ACA implementation? Specifically, did the share of claims with comorbidities decline?

Study Approach

To study these research questions, the WCIRB analyzed medical transactions in its MDC database submitted by 45 insurer groups representing over 90% of California workers' compensation premiums. This database includes approximately 160 million medical transactions from the second half of 2012 through 2017 representing approximately \$13 billion in workers' compensation medical payments. The WCIRB examined claims in the MDC database with accident dates in 2013 through 2015 at a common maturity⁶ (12 months) to answer questions related to access to care and diagnostic mix.

The WCIRB also analyzed information on employer characteristics and claim frequency based on the USRs submitted to the WCIRB in accordance with the *California Workers' Compensation Uniform Statistical Reporting Plan—1995* (USRP). The USR data is reported to the WCIRB for each insurance policy in the state, and includes information on exposure, premium and claims.

The MDC data was matched to the USR data to help assess the potential impact of the ACA on claim patterns, medical treatments and diagnostic mix at the employer and industry level. Employers were segregated into various groups based on whether they were more likely to experience a significant ACA impact (e.g., small employers, industries with lower levels of health insurance prior to the ACA) or less likely to experience a significant ACA impact (e.g., large employers, industries with higher levels of health insurance prior to the ACA).

For each pair of employer groups, the study compared the relative changes in overall claim frequency and in frequency of claims potentially more likely impacted by the ACA to assess whether the group of employers likely to have a significant ACA impact experienced a different frequency change from the group less likely to have an ACA impact.

⁶ Maturity reflects length of time from Accident Date to Service Date.

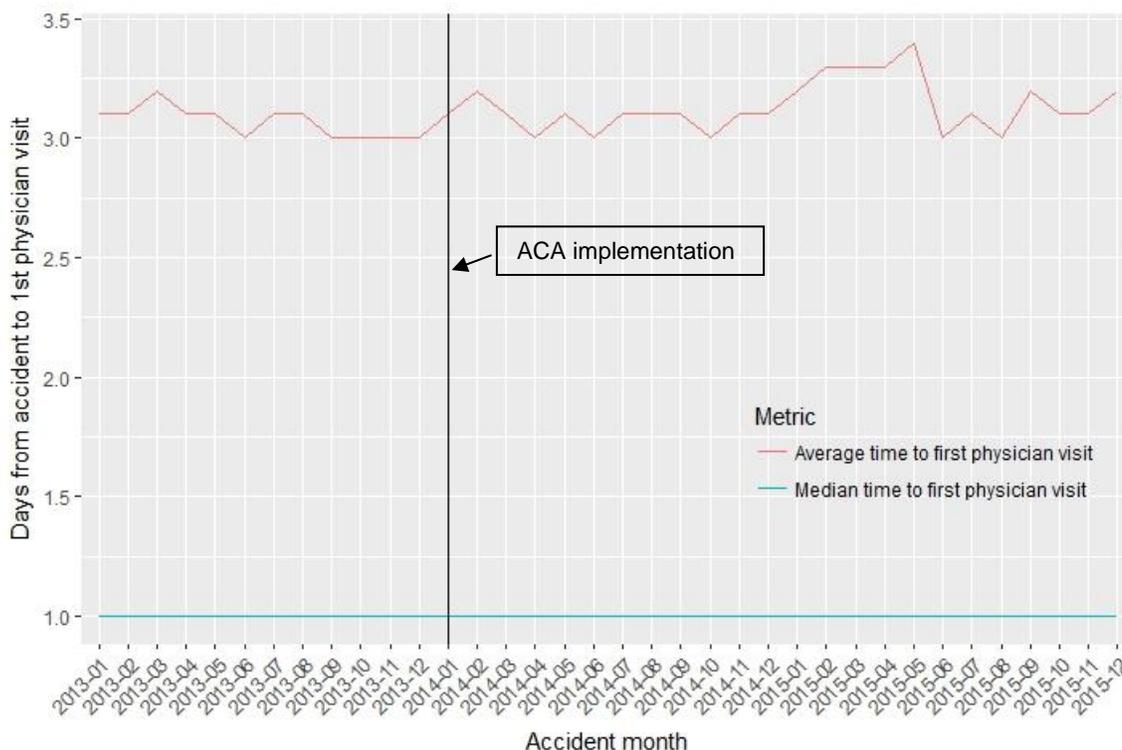
Findings

Access to Care

Access to care among injured workers as measured by the time from the date of injury to first physician visit (including visits to both primary and specialty care⁷) did not change significantly after ACA implementation. The study hypothesized that as the ACA increases health coverage, newly insured individuals may create demands for providers in the workers' compensation system, causing delays in access to care among injured workers.

The median time before and after ACA implementation was one day for first physician visit (Figure 1). On average, excluding outliers (10% of the claims) that mostly involved cumulative trauma (CT) for both periods, injured workers had their first physician visit approximately three days after the date of injury. No clear pattern of changes in time to first physician visit was observed. The WCIRB reviewed the time from accident date to first visit for primary care physicians and specialists, as well as for non-CT claims, and in none of these instances was there evidence of a significant increase in the time to first physician visit after the ACA.

Figure 1. Time from Accident Date to First Physician Visit – MDC Claims⁸



⁷ Taxonomy codes derived from Provider IDs (e.g., National Provider Identification numbers) in the MDC data were used to identify primary care physicians and specialists.

⁸ The average time between the date of injury and 1st physician visit was calculated from 90% of the MDC claims that had accidents in 2013 through 2015, excluding outliers that are mostly cumulative trauma claims.

Fees for Physician Services

In accordance with Senate Bill No. 863,⁹ the Department of Industrial Relations adopted a physician fee schedule for California workers' compensation based on the Resource-based Relative Value Scale (RBRVS) with a four-year implementation period beginning in January 2014. With this change, values for Evaluation and Management and Medicine fee schedule sections on average increased significantly, while those for Anesthesia, Radiology and Surgery on average decreased.¹⁰ Since this change is concurrent with the implementation of the ACA, it can be difficult to distinguish the ACA impact on average fee schedule discounts from those arising from the transition to the RBRVS. In any case, the WCIRB examined changes in the fee schedule due to the RBRVS and their relationships to the actual medical payments between Service Years (SYs) 2013 and 2015 to evaluate potential changes in medical costs in the workers' compensation system after ACA implementation.

The study tested the hypothesis that newly insured individuals through the ACA may create additional demands for providers in the workers' compensation system, reducing fee schedule discounts offered by the providers prior to the ACA.

Discounts in fees (i.e., difference between the actual paid amount and the fee schedule value) for physician service categories were measured by the percentage of actual medical payments to the maximum RBRVS fee schedule allowances at transactional level. A percentage less than 100 indicates, on average, discounting below fee schedule values. This study compared the median discounts in fees in service years 2013 (pre-ACA) to 2015 (post-ACA). A positive percentage point change indicates increased discounting (greater fee discounts in 2015), and a negative percentage point change indicates reduced discounting (smaller fee discounts in 2015). Paid fees for services in 2015 for primary care providers, specialists¹¹ and outpatient surgeries¹² were compared to those in 2013.

Table 2a. RBRVS Fee Schedule and Actual Medical Payments by Physician Service – Primary Care Providers

Physician Service ¹³	Actual Paid vs. Fee Schedule at Transactional Level (Median)		Median Discount in Fees for Physician Services		Change in Median Discount ¹⁴	Paid Transactions for RBRVS-based Procedure Codes	
	SY2013	SY2015	SY2013	SY2015		SY2013	SY2015
Acupuncture	95.0%	83.0%	5.0%	17.0%	+12.0%	29,855	43,086
Chiropractic	75.0%	78.4%	25.0%	21.6%	-3.4%	28,845	22,465
Evaluation & Management	95.0%	95.0%	5.0%	5.0%	0.0%	1,306,185	1,117,080
Physical Medicine	71.2%	70.7%	28.8%	29.3%	+0.5%	1,123,517	804,243
Psychotherapy	95.0%	98.0%	5.0%	2.0%	-3.0%	46,959	11,210
Radiology	90.0%	90.0%	10.0%	10.0%	0.0%	278,053	222,054
Surgery	95.0%	95.0%	5.0%	5.0%	0.0%	162,573	91,363
Other Medicine	95.0%	90.0%	5.0%	10.0%	+5.0%	169,373	70,720

Among primary care providers, increases in median fee discounts from service years 2013 to 2015 were observed for Acupuncture, Physical Medicine and Other Medicine, while declines in discounts were observed for Chiropractic and

⁹ Senate Bill No. 863, enacted into law in September 2012, increases benefits effective January 1, 2013 and January 1, 2014 and provides for a number of structural changes to the California workers' compensation benefit delivery system.

¹⁰ See Section B of the Amended WCIRB January 1, 2014 Pure Premium Rate Filing.

¹¹ Taxonomy codes derived from Provider IDs (e.g., National Provider Identification numbers) in the MDC data were used to identify primary care and specialty care providers.

¹² Outpatient surgeries were identified by primary procedure codes and place of service codes on outpatient facilities (including both outpatient hospital and ambulatory surgical center), secondary procedure codes on surgery, and taxonomy codes on hospital providers.

¹³ Anesthesia services were not included in the evaluation because of inconsistent reporting of quantity of service units provided, which is a calculation factor in applying the RBRVS rules. Special services & reports were not included because of large magnitude of code shifting between 2013 and 2015.

¹⁴ Change in median discounts was calculated as percentage point difference in the median discounts from SY2013 to SY2015.

Psychotherapy services, albeit less than 5% (Table 2a). There was no change in the median fee schedule discounts for Evaluation and Management, Radiology and Surgery services.

Among specialists, decreases in fee schedule discounts from service years 2013 to 2015 were observed for Chiropractic, Physical Medicine and Radiology services (Table 2b). Increases in fee schedule discounts were observed for Acupuncture and Evaluation and Management. There was no change in the median fee schedule discounts for Psychotherapy, Surgery and Other Medicine.

Table 2b. RBRVS Fee Schedule and Actual Medical Payments by Physician Services – Specialists

Physician Service	Actual Paid vs. Fee Schedule at Transactional Level (Median)		Median Discount in Fees for Physician Services		Change in Median Discount SY2013 to SY2015	Paid Transactions for RBRVS-based Procedure Codes	
	SY2013	SY2015	SY2013	SY2015		SY2013	SY2015
Acupuncture	88.0%	82.0%	12.0%	18.0%	+6.0%	140,230	291,636
Chiropractic	75.0%	78.4%	25.0%	21.6%	-3.4%	174,742	161,504
Evaluation & Management	95.0%	90.0%	5.0%	10.0%	+5.0%	1,534,408	1,347,579
Physical Medicine	67.5%	70.6%	32.5%	29.4%	-3.1%	4,174,555	4,198,580
Psychotherapy	95.0%	95.0%	5.0%	5.0%	0.0%	203,286	111,350
Radiology	85.0%	90.0%	15.0%	10.0%	-5.0%	484,252	476,437
Surgery	90.0%	90.0%	10.0%	10.0%	0.0%	280,731	225,669
Other Medicine	90.0%	90.0%	10.0%	10.0%	0.0%	326,485	133,307

Of the outpatient surgeries, those performed at a hospital, were paid at approximately the maximum fee schedule allowances in both service years 2013 and 2015 (Table 3). Similarly, outpatient surgeries performed at an ambulatory surgical center (ASC) were paid slightly lower than the maximum fee schedule allowances in both service years 2013 and 2015.

Table 3. RBRVS Fee Schedule and Actual Medical Payments for Outpatient Surgery

Outpatient Surgical Setting	Actual Paid vs. Fee Schedule at Transactional Level (Median)		Median Discount in Fees for Physician Services		Change in Median Discount SY2013 to SY2015	Paid Transactions for RBRVS-based Procedure Codes	
	SY2013	SY2015	SY2013	SY2015		SY2013	SY2015
Hospital	101.0%	100.0%	-1.0%	0.0%	+1.0%	11,792	13,645
Ambulatory Surgical Center (ASC)	93.3%	95.0%	6.7%	5.0%	-1.7%	29,293	28,987

In summary, there is no consistent evidence of reduced discounting in fees for the workers' compensation medical services from fee schedule maximum allowances subsequent to the implementation of the ACA.

Overall Claim Frequency

This study compared industries that tended to provide higher levels of health insurance coverage before the ACA to those that tended to provide lower levels of health coverage to examine the potential impact of the ACA.¹⁵ The study tested the hypothesis that industries or other subgroups of employers that tended to provide less health insurance may experience a more significant ACA impact on claim frequency because care of newly insured workers through the ACA may shift from the workers' compensation system to group health. To evaluate the impact of the ACA, the MDC-USR matched data was used to compare overall claim frequencies for businesses by level of health insurance prior to the ACA (Tables 4 through 6).

For this study, claim frequency is defined as the total number of claims per \$1 million exposure. For each policyholder, classification code exposures were mapped to their appropriate North American Industry Classification System (NAICS) sector.¹⁶ Each NAICS sector was categorized as industries with higher or lower levels of health coverage based on the aforementioned UC Berkeley study that showed that the effects of the ACA on workers' access to health benefits varied by industry. A policyholder was classified as providing higher or lower levels of health insurance depending on which NAICS sector the majority of its exposures were mapped. For example, industries with less health coverage include Hospitality, Retail and Construction, whereas industries with more health coverage include Information and Manufacturing.

Claim frequency in industries with less health coverage decreased by 4.6% from policy year (PY) 2013 to policy year 2015 (Table 4). By comparison, the overall claim frequency for policyholders in industries with more health coverage had a somewhat larger drop of 5.6%. The claim frequency results are contrary to the hypothesis that claim frequency might decline more in industries with less health insurance coverage. There is no statistically significant difference in claim frequency at the policyholder level between the businesses with less and those with more health coverage prior to the ACA.¹⁷

Table 4. Industries with Lower Levels of Health Coverage Compared to Industries with Higher Levels of Health Coverage: Claim Frequency per \$1 Million Exposure (Adjusted for Wage Level Change)¹⁸

Claim Frequency					
Industries with Lower Levels of Health Coverage prior to the ACA			Industries with Higher Levels of Health Coverage prior to the ACA		
PY2013	PY2015	% Change from PY2013 to PY2015	PY2013	PY2015	% Change from PY2013 to PY2015
1.22	1.16	-4.6%	0.45	0.43	-5.6%

The WCIRB also compared changes in claim frequency before and after ACA implementation for small employers (less than 50 FTEs), who were more likely to experience an ACA impact, to that of large employers (more than 250 FTEs). The decrease in claim frequency for small employers was less than that for large employers (-1.7% vs. -7.0%) (Table 5), a result contrary to the study hypothesis.

¹⁵ U.C. Berkeley Labor Center, Lucia, L., Dietz, M., and Jacobs, K. (2017). *Which California Industries would be Most Affected by ACA Repeal and Cuts to Medi-Cal?* Retrieved from <http://laborcenter.berkeley.edu/which-california-industries-would-be-most-affected-by-aca-repeal-and-cuts-to-medi-cal/>

¹⁶ NAICS sectors are the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

¹⁷ Wilcoxon sum rank test was conducted to compare the distribution of claim frequency at policyholder level for less insured industries to the distribution for more insured industries.

¹⁸ Wage level changes incorporated both wage inflation and minimum wage changes. They were applied by classification not by employer size.

Table 5. Claim Frequency per \$1 Million Exposure by Employer Size (Adjusted for Wage Level Change)¹⁸

Claim Frequency					
FTEs < 50			FTEs > 250		
PY2013	PY2015	% Change from PY2013 to PY2015	PY2013	PY2015	% Change from PY2013 to PY2015
0.63	0.62	-1.7%	0.55	0.51	-7.0%

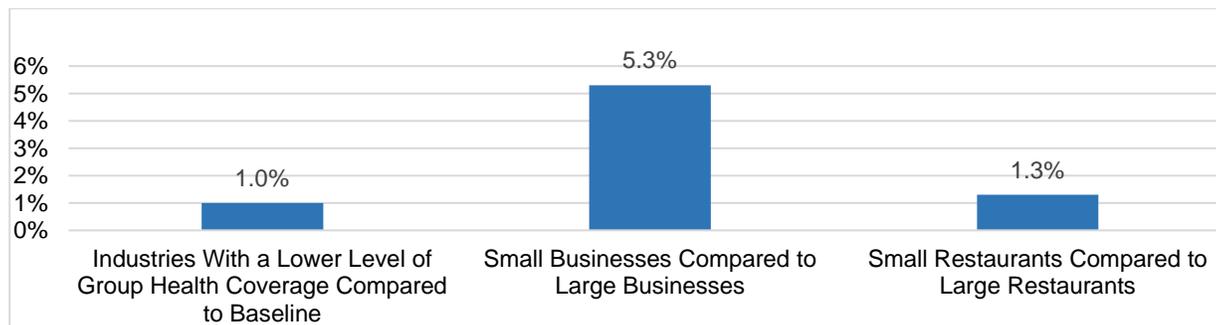
The WCIRB also compared changes in overall claim frequency between small and large restaurant employers. It was expected that prior to the ACA, smaller restaurants had a higher proportion of workers without health coverage. Restaurants (Classifications 8078 and 9079) were selected for this analysis since they are traditionally less likely to provide employer-based health coverage, and are sufficiently represented in the WCIRB's USR data. A decrease of 1.7% and 3.0% in claim frequency was observed for small restaurants and large restaurants, respectively (Table 6). The decrease in claim frequency for small restaurants at the policyholder level was not found to be significantly different from the decrease for large businesses.¹⁹

Table 6. Claim Frequency per \$1 Million Exposure for Restaurants (Classifications 8078 & 9079) by Employer Size (Adjusted for Wage Level Change)¹⁸

Claim Frequency					
Restaurants with FTEs < 50			Restaurants with FTEs > 250		
PY2013	PY2015	% Change from PY2013 to PY2015	PY2013	PY2015	% Change from PY2013 to PY2015
1.15	1.13	-1.7%	2.35	2.28	-3.0%

In summary, the study expected a relatively greater decline in overall claim frequency for employers with lower levels of health coverage, small businesses and small restaurants. The actual estimates for the changes in claim frequency were contrary to the study hypothesis in all three comparisons to the extent that if there was any ACA impact on overall claim frequency, other offsetting factors impacting claim frequency were more significant (Figure 2). These offsetting factors could potentially include the impact of the RBRVS, continued greater attention to workplace safety, and the continued migration of experience to less hazardous industries.²⁰

Figure 2. Difference in Claim Frequency Changes²¹, Pre-ACA to Post-ACA



¹⁹ Wilcoxon sum rank test was conducted to compare the distribution of claim frequency at policyholder level for small restaurants to the distribution for large businesses.

²⁰ WCIRB 2017 State of the System, Chart 12, https://www.wcirb.com/sites/default/files/documents/2017_state_of_the_california_workers_compensation_system.pdf

²¹ Difference in claim frequency changes was calculated by taking the absolute difference between the % change from PY2013 to PY2015 for the two groups of employers in comparison (e.g., industries with lower levels of health coverage were compared to industries with higher levels of health coverage).

Frequency of Soft Tissue Injuries

Soft tissue injuries such as sprains and strains (of shoulder, knee or back) are typical in workers' compensation systems. The study hypothesized that since some of these injuries may not be clearly linked to a specific and clearly identifiable workplace event, the filing of these claims in the workers' compensation system may in part depend on the injured worker's level of health coverage. In this analysis, claims with soft tissue injuries were identified as those with both Sprain/Strain in the reported Nature of Injury and Sprains and Strains of Joints and Adjacent Muscles in the reported International Classification of Disease (ICD)²² codes (ICDs 840-848). Overall, about 19% of the claims studied had soft tissue injuries to shoulder, knee or back.

The share of claims with soft tissue injuries decreased by 12.0% in industries with lower levels of health coverage prior to the ACA from accident years (AYs) 2013 to 2015, while the share increased by 17.1% in industries with higher levels of health coverage (Table 7). The difference in the change between these two groups of employers is statistically significant.²³

Table 7. Industries with Lower Levels of Health Coverage Compared to Industries with Higher Levels of Health Coverage – Soft Tissue Injuries

% of Claims with Soft Tissue Injuries					
Industries with Lower Levels of Health Coverage prior to the ACA			Industries with Higher Levels of Health Coverage prior to the ACA		
AY2013	AY2015	% Change from AY2013 to AY2015	AY2013	AY2015	% Change from AY2013 to AY2015
18.3%	16.1%	-12.0%	18.7%	21.9%	+17.1%

Similar patterns were observed when comparing small to large businesses. The share of soft tissue claims in small businesses decreased by 1.9% from accident years 2013 to 2015, while the share of these claims in large businesses increased by 4.5% (Table 8). However, the difference in the change between small and large businesses is not statistically significant at the 95% confidence level.²⁴

Table 8. Small Businesses Compared to Large Businesses – Soft Tissue Injuries

% of Claims with Soft Tissue Injuries					
FTEs < 50			FTEs > 250		
AY2013	AY2015	% Change from AY2013 to AY2015	AY2013	AY2015	% Change from AY2013 to AY2015
15.7%	15.4%	-1.9%	19.8%	20.7%	+4.5%

Finally, increases in the share of claims with soft tissue injuries were observed in both small and large restaurants, but the increase was less pronounced in small restaurants (4.5% vs. 21.8%) (Table 9). The difference in the change between small and large restaurants is statistically significant.²⁵

²² Based on the 10th version of ICD (ICD-10). The WCIRB converted the reported 9th version of ICD (ICD-9) transactions to ICD-10.

²³ The 95% confidence intervals for the ratio of the % of claims with soft tissue injuries in AY2013 to that in AY2015 (equivalently to % change from AY2013 to AY2015 + 1) were constructed for less insured and more insured groups. If the two sets of confidence intervals in comparison do not overlap, they are considered to be statistically different.

²⁴ The 95% confidence intervals for the ratio of the % of claims with soft tissue injuries in AY2013 to that in AY2015 (equivalently to % change from AY2013 to AY2015 + 1) were constructed for small and large businesses. If the two sets of confidence intervals in comparison do not overlap, they are considered to be statistically different.

²⁵ Same methodology as in Footnotes 23 and 24 was used to assess the statistical significance of the change (at the 95% confidence level).

Table 9. Small Restaurants Compared to Large Restaurants – Soft Tissue Injuries

% of Claims with Soft Tissue Injuries					
Restaurants with FTEs < 50			Restaurants with FTEs > 250		
AY2013	AY2015	% Change from AY2013 to AY2015	AY2013	AY2015	% Change from AY2013 to AY2015
8.8%	9.2%	+4.5%	13.3%	16.2%	+21.8%

In summary, the study expected a relatively greater decline in the frequency of claims with soft tissue injuries for the employers with lower levels of health coverage, small businesses and small restaurants. The actual estimates for the changes in the frequency related to soft tissue injuries were consistent with the hypothesis (Figure 3). The comparisons between less and more insured industries, and between small and large restaurants, in particular, were found to be statistically significant at the 95% confidence level (Table 10).

Figure 3. Difference in Share Changes of Claims with Soft Tissue Injuries²⁶, Pre-ACA to Post-ACA

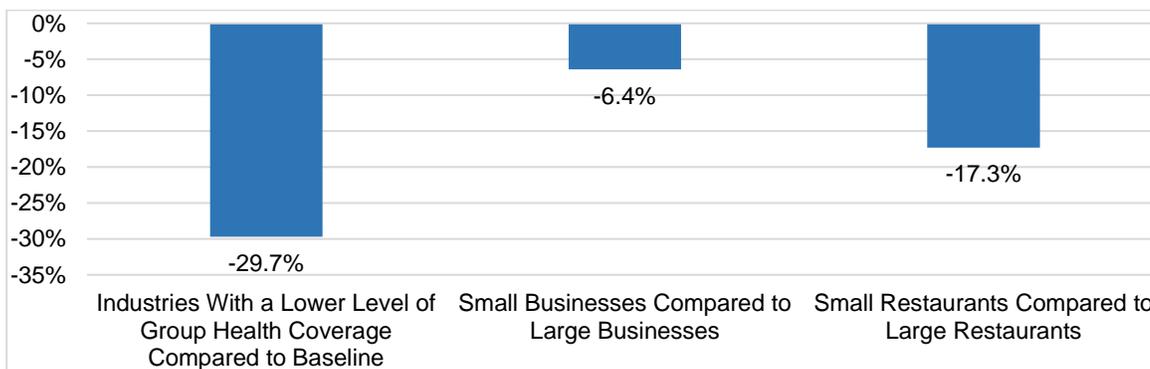


Table 10. Expected Change vs. Actual Change in Share of Claims with Soft Tissue Injuries

Share of Claims with Soft Tissue Injuries, AY2013 to AY2015	Expected Greater ACA Impact	Actual Greater Impact	Statistical Significance²⁷
Industries with Lower Levels of Health Coverage Compared to Baseline	Industries with lower levels of health coverage	Industries with lower levels of health coverage	Significant
Small vs. Large Businesses	Small businesses	Small businesses	Not Significant
Small Restaurants vs. Large Restaurants	Small restaurants	Small restaurants	Significant

²⁶ Difference in share changes was calculated by taking the absolute difference between the % change from AY2013 to AY2015 for the two groups of employers in comparison (e.g., industries with lower levels of health coverage were compared to industries with higher levels of health coverage).

²⁷ Same methodology as in Footnotes 23 to 25 was used to assess the statistical significance of the change (at the 95% confidence level).

Comorbidities of Hypertension, Obesity and Diabetes

The study hypothesized that the greater availability of health care benefits to workers under the ACA would reduce treatments of comorbidities in the workers' compensation system. This study focused on three prevalent chronic health conditions (hypertension, obesity and diabetes).²⁸ Slightly more than 1% of the claims studied by the WCIRB had one or more of the three chronic conditions reported in the ICD codes.²⁹ For these claims, the shares of hypertension, obesity and diabetes were 79%, 22% and 2%, respectively.³⁰ While the recorded incidence of comorbidities in workers' compensation claims from accident years 2013 to 2015 is much lower than that in the general population, there was a 3.6% decrease in the share of these claims from accident years 2013 to 2015 for industries with lower levels of health coverage, while no change was observed for industries with higher levels of coverage (Table 11).

Table 11. Industries with Lower Levels of Health Coverage Compared to Industries with Higher Levels of Health Coverage – Comorbidities

% of Claims with Comorbidities					
Industries with Lower Levels of Health Coverage prior to the ACA			Industries with Higher Levels of Health Coverage prior to the ACA		
AY2013	AY2015	% Change from AY2013 to AY2015	AY2013	AY2015	% Change from AY2013 to AY2015
2.8%	2.7%	-3.6%	1.3%	1.3%	0.0%

Decreases in the share of claims with these comorbidities were observed in both small and large businesses, with large businesses experienced a slightly larger drop (7.7% vs. 6.3%) (Table 12). Similar patterns were observed when comparing changes in the share of comorbidity claims in small restaurants to those in large restaurants (Table 13).

Table 12. Small Businesses Compared to Large Businesses – Comorbidities

% of Claims with Comorbidities					
FTEs <50			FTEs >250		
AY2013	AY2015	% Change from AY2013 to AY2015	AY2013	AY2015	% Change from AY2013 to AY2015
1.6%	1.5%	-6.3%	1.3%	1.2%	-7.7%

Table 13. Small Restaurants Compared to Large Restaurants (Classifications 8078 & 9079) – Comorbidities Codes

% of Claims with Comorbidities					
Restaurants with FTEs <50			Restaurants with FTEs >250		
AY2013	AY2015	% Change from AY2013 to AY2015	AY2013	AY2015	% Change from AY2013 to AY2015
1.0%	0.8%	-20.0%	0.9%	0.6%	-33.3%

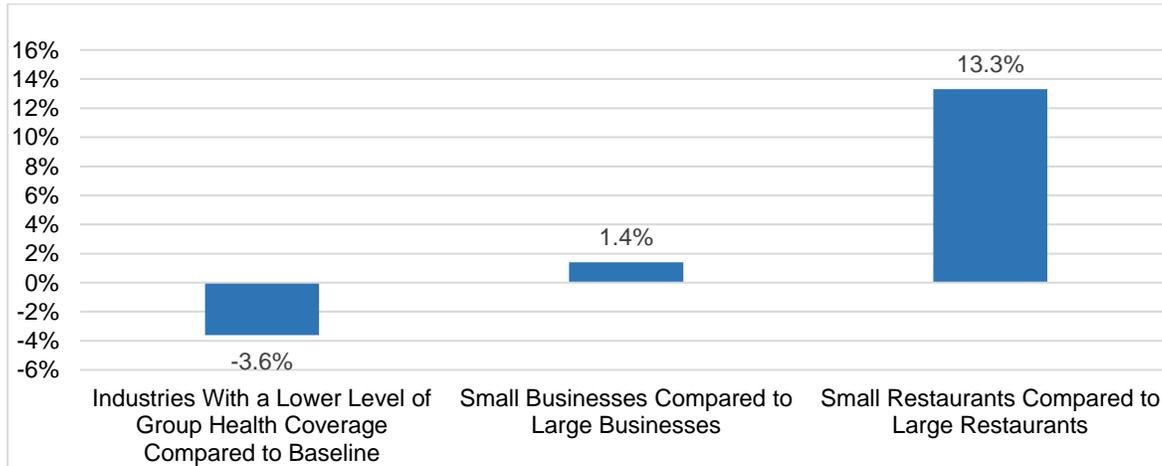
²⁸ Centers for Disease Control and Prevention, 2014. Blood Pressure: Make Control Your Goal Infographic. <https://www.cdc.gov/bloodpressure/infographic.htm>; National Diabetes Statistics Report, 2017: Estimates of Diabetes and Its Burden in the United States. Retrieved from <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>; Prevalence of Obesity Among Adults and Youth: United States, 2011-2014, <https://www.cdc.gov/nchs/data/databriefs/db219.pdf>

²⁹ Both primary ICDs and secondary ICDs reported in the WCIRB MDC data were examined.

³⁰ One claim can have more than one of the three health conditions.

In summary, changes in the share of claims with comorbidities from accident years 2013 to 2015 were consistent with the study hypothesis only in the comparison between less and more insured industrial sectors (Figure 4). However, available WCIRB information on comorbidities is limited and, as a result, it is not possible to draw meaningful conclusions related to comorbidities.

Figure 4. Difference in Share Changes of Claims with Comorbidities³¹, Pre-ACA to Post-ACA



³¹ Same methodology as in Footnote 26.

Summary and Conclusions

A significant number of California workers have gained group or individual health coverage since the rollout of the ACA either through the Covered California Exchange or the Medi-Cal expansion. With respect to the impact of the ACA on California workers' compensation system, the WCIRB found:

- Analysis of medical transactional data both prior to and after the implementation of the ACA in California showed no evidence of ACA impacts on injured workers' access to medical care.
- There was no clear pattern in increased physician fees charged for workers' compensation medical services after ACA implementation.
- There was no evidence that industries more likely impacted by the ACA and smaller employers experienced relatively greater declines in the overall workers' compensation claim frequencies than other groups of employers. This could be the result of some factors in California workers' compensation system that occurred parallel to the ACA.
- There was indication of a significant ACA impact on claims with soft tissue injuries following ACA implementation for employers more likely impacted by the ACA. It is important to note that the results of the analysis do not prove that any differences in claim shares were caused by ACA implementation.
- Comorbidities have declined for industries with lower levels of health coverage prior to the ACA relative to other industries. However, since available WCIRB information on comorbidities is very limited, it is not possible to draw meaningful conclusions related to comorbidities.

The WCIRB plans to continue to monitor future changes in the workers' compensation system that may be influenced by the ACA.

Conditions and Limitations

The WCIRB completed this study of claims using MDC data for accident years 2013 to 2015 and related reported USR data. Our data reflects approximately 90% of the insured system. In reviewing this information, the following should be noted:

1. The study reflects a reasonable approximation of reported claims within California during the study period, but not a precise segregation of those components on a policyholder-by-policyholder basis. Nor does the study suggest whether differences identified in the study have existed at similar levels in the past, or will persist in the future. As a result, the study does not provide a basis to reflect such differences in the advisory pure premium rates developed by the WCIRB for proposal to the Insurance Commissioner.
2. This report reflects a compilation of individual insurer submissions of data to the WCIRB. While the individual insurer data submissions are regularly checked for consistency and comparability with other data submitted by the insurer as well as with data submitted by other insurers, the source information underlying each insurer's data submission is not verified by the WCIRB.
3. The claim information used in the study reflects claims information limited to services rendered within 12 months of the accident date. Development patterns which may differ by California region or industrial sector are not explored in this analysis.
4. The study is based solely on the experience of insured employers. No self-insured employer experience was reflected in the study.

Notice

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