



Ambulatory Surgical Center Cost Outcomes: Follow Up Study on the Impact of California SB 863 Workers' Compensation Reforms

March 11, 2015

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A joint study prepared by:



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Acknowledgements

The authors would like to thank the following people for their assistance in preparing this study.

- Stacy Jones, Senior Research Associate, CWCI
- Bob Young, Communications Director, CWCI
- Dave Bellusci, EVP, COO and Chief Actuary, WCIRB
- Ward Brooks, Vice President, Actuarial Research, WCIRB
- Susan Hensley, Data Reporting Manager, WCIRB
- Tim Basuino, Medical Analytics Specialist, WCIRB
- Alex Swedlow, President, CWCI

Executive Summary

In recent years, the increasing cost of treatment at ambulatory surgery centers (ASCs) has been one factor in the escalation of California workers' compensation medical costs. In 2012, state lawmakers sought to address these escalating costs by including provisions in SB 863 that, among other things, reduced the maximum facility fees for services performed in ASCs to 80 percent of the fee paid by Medicare for the use of hospital outpatient surgery departments. The WCIRB initially projected that this change in the fee schedule would reduce ASC payments by 25 percent.¹

This study is a follow-up to the authors' initial February 2014 study that measured the extent to which the change in ASC reimbursements achieved its intended goal of reducing these costs. It includes an entire year of additional data, encompassing episodes from January 2012 through June 2014, and as in the initial analysis, examines several factors before and after the implementation of the new ASC Fee Schedule in January 2013, including:

- Fees billed
- Fee schedule allowance
- Network discounts
- Payment per procedure and episode
- Mix of services
- Service intensity
- Sites of service

As found in the prior study, this update finds that the reduction in payments has been slightly better than the initial predictions, with a 27 percent decrease in payments per episode and a 29 percent decrease in the payments per procedure from the pre-reform to the post-reform period. There was no evidence of significant changes in service mix or intensity or shifts away from the ASC to the hospital setting.

¹ Workers' Compensation Insurance Rating Bureau, Amended January 1, 2013 Pure Premium Rate Filing – Additional Information Related to WCIRB Evaluation of Senate Bill No. 863, Oct. 12, 2012.

Background

Prior to 2004, California workers' compensation outpatient surgery facility fees were not subject to a fee schedule, and payments varied widely as payers negotiated or paid usual and customary (U&C) fees. In the absence of a fee schedule, California workers' compensation paid significantly more than federal health care programs such as Medicare for comparable services, as was noted in a 2002 study by Kominsky and Gardner.²

In 2003, California lawmakers amended Labor Code §5307.1(c)(1) in SB 228 to require the Division of Workers' Compensation (DWC) to promulgate a fee schedule that utilizes the Medicare payment rules for the use of outpatient surgery rooms and emergency rooms. Under Medicare, each Current Procedural Terminology (CPT) code for a specific outpatient surgical procedure is classified into an Ambulatory Procedure Classification (APC). The final fee is calculated using a formula rather than a prescribed dollar amount.³ Under the fee schedule, which took effect for services on or after June 15, 2004, maximum facility fees could not exceed 120 percent of the Medicare fee.

The adoption of the outpatient facility fee schedule had an immediate effect on costs. CWCI research from 2005 compared pre and post SB 228 payments for 239 distinct outpatient procedures performed in ASCs and found that after adjusting for medical inflation and changes in the mix of medical procedures, average outpatient surgery facility fee payments fell 38.9 percent following the adoption of the Outpatient Surgery Facility Fee Schedule in 2004.⁴

By 2012, however, several years of escalating workers' compensation medical costs and a growing desire to increase injured workers' permanent disability benefits led state lawmakers to revisit the issue of ASC fees as one cost-saving component of a legislative reform deal (SB 863) hammered out by representatives of labor, employers and the Brown Administration. The final version of that bill called for the DWC to modify the Outpatient Facility Fee Schedule so that maximum facility fees for services performed in ASCs were reduced from 120 percent to 80 percent of the Medicare fee for those services, though hospital-based outpatient facility maximum fees were kept at 120 percent of the Medicare rate.⁵

² Kominsky and Gardner, Inpatient Hospital Fee Schedule and Outpatient Surgery Study, California Commission on Health and Safety and Workers' Compensation, February 2002.

³ The Centers for Medicare and Medicaid Services (CMS) maintains APC relative weights (APC Wt), Status Codes for each APC, and conversion factors. The DWC also used Medicare conversion and geographic wage index factors to produce adjusted conversion factors by county. The APC weights and conversion factor are revised periodically, sometimes several times per year. There are also some allowances for outliers and other adjustments. If more than one procedure is performed during the same event, fees for most secondary procedures are reduced by 50 percent. The maximum fee for any given procedure is: APC relative wt x Adjusted Conversion Factor x Multiplier to Medicare Rate x Secondary procedure adjustment (where applicable).

⁴ Swedlow, A. Early Returns on Workers' Comp Medical Reforms: Part 1. Changes in Outpatient Surgery Payments Following Adoption of the Outpatient Surgery Facility Fee Schedule. CWCI ICIS Says Report, September 2005.

⁵ On February 7, 2014, the California Division of Workers' Compensation announced public hearings on a proposed revision to the regulations governing non-facility fees rendered in a hospital which, if approved, may have an indirect impact on hospital outpatient reimbursements.

Research Goal

In evaluating the potential savings of the SB 863 reforms in 2012 as part of its January 1, 2013 pure premium rate proposal, the WCIRB used data from the Commission on Health and Safety and Workers' Compensation and estimated that the change in the ASC Fee Schedule could reduce medical costs by 25 percent. This study was undertaken to update the authors' February 2014 assessment examining ASC services with payments from January 2012 through June 2014. The authors analyzed the impact of the reform using the following measures:

1. **Per Procedure Billed Amounts.** How much did the average amount billed per ASC procedure change from January 2013 through June 2014?
2. **Per Procedure Paid Amounts.** How much did the average payment per ASC procedure reimbursed under the fee schedule change over that same 18-month span?
3. **Negotiated Discounts.** Did networks adjust their discount rates for ASC services after the fee schedule revisions took effect?
4. **Average Payment per Episode.** What was the combined effect of the changes in the fee schedule and network discounts on the average amount paid per episode?
5. **Types of Services Delivered.** Did the mix of services change between 2012 and mid-2014?
6. **Service Intensity.** Did providers increase the number of non-primary procedures within the specific episode (e.g., more injections on the date of service)? Was there an increase in billings for services not subject to the ASC fee reductions (e.g. office visit charges)?
7. **Place of Service.** Did the reduction in ASC fee allowances result in a shift of services to outpatient hospital settings which were not affected by the change in reimbursements? If so, what was the financial impact?

Data and Methods

For this study, the authors used WCIRB's Medical Data Call (MDC) database⁶ and CWCI's Industry Claims Information System (ICIS) database⁷ to compile separate data sets on California workers' compensation insured claims experience. These data sets included billing and payment information on outpatient surgical facility services rendered at hospitals and ambulatory surgical facilities from January 2012 through June 2014. The data detail included:

- Injured worker information
- Provider and ambulatory surgery facility site of service identifiers
- Official Medical Fee Schedule (OMFS) CPT procedure codes
- Billed amounts
- Taxonomy (provider type)
- OMFS maximum allowable amounts
- Network discounts

⁶ The MDC database contains data on California workers' compensation medical transactions, compiled from 90% of the California insurance market starting with third quarter 2012 transactions. This database includes medical payment data on 49.8 million paid transactions generating \$6.3 billion in payments.

⁷ ICIS is a proprietary database maintained by the CWCI that contains detailed information, including employer and employee characteristics, medical service information, and benefit and other administrative cost information on more than 4.3 million California workers' compensation claims.

The authors compiled separate data sets from the MDC and ICIS databases to address both ASC and hospital settings, with the goal of producing the most robust possible methods to answer the research questions.

In conducting the analyses, the authors used taxonomy/provider type, place of service and location of service to tag and isolate facility settings, while ambulatory surgery services were analyzed using several grouping systems:

- Unique CPT procedure
- Medicare’s Ambulatory Payment Classification (APC)
- Major service types (surgeries, injections and spinal stimulators)

ICIS data was used to analyze services by specific unique procedure, while the MDC data was used to examine “episodes” of care in which the primary OMFS/CPT codes were grouped with any additional paid procedure codes on the same date of service. In addition, the authors collected data on any other services provided on the same date of service, and adjusted the data to control for changes in the mix of procedures and locations of service after the revised schedule took effect.

Results

Changes in Average Billings, Discounts and Payments per ASC Procedure

The ICIS data on ASC billings and payments reflect ASC procedures with January 2012 through June 2014 service dates for which reimbursements were made prior to July 1, 2014. Using the data on the 2012 ASC procedures, the authors calculated the average amount billed, the average amount discounted via MPN arrangement, and the average amount paid per ASC procedure. These results served as a pre-reform baseline for measuring the impact of the ASC Fee Schedule changes that took effect on January 1, 2013 (Table 1). The findings show a net 29 percent reduction in ASC payments per procedure. This outcome occurred despite an erosion of MPN discounts from 11 percent to 7 percent on a per procedure basis.

Table 1: ASC Per-Procedure Payments, Pre- Vs. Post-ASC Schedule Changes

Dates of Service	Billed Per Procedure	Fee Schedule Reimbursement Per Procedure	MPN Discounts Per Procedure	% Negotiated Discount	Average Paid Per Procedure	% Difference Pre- vs Post-ASC Changes
Pre-ASC Schedule Changes (2012)	\$6,567	\$1,813	\$191	11%	\$1,571	
Post-ASC Schedule Changes (2013 Through June 2014)	\$6,402	\$1,285	\$90	7%	\$1,123	-29%

Source: CWCI ICIS Database

Changes in Paid Amounts per ASC Episode

In addition to using the ICIS data to assess the changes in the average ASC billed and paid amounts per procedure, the authors used the MDC data to measure the combined effect of the fee schedule changes and network discounts on a per episode basis.

For this portion of the analysis, the authors identified the top 30 ASC procedures used in California workers' compensation (based on volume of services in the 2012-2014 claim sample), then grouped the data into "episodes" of care, which included all procedures and ancillary services delivered by an ASC or hospital outpatient department on a specific claim, a specific bill and a specific date of service.

Each episode may include more than one procedure, so the per episode analysis provides an event- based view into these services. For example, an arthroscopy episode may include billing and payment data for both the arthroscopic procedure as well as a "debridement" procedure (removal of tissue from the surgical area) that was performed on the same date and included on the same bill.

Table 2 shows the average amount paid for ASC services per episode declined 27 percent from \$2,074 to \$1,524 following the adoption of the fee schedule changes in January 2013 – which tracks closely with the 29 percent reduction in per procedure payments noted earlier in Table 1.

Table 2: ASC Per-Episode Payments, Pre- Vs. Post-ASC Schedule Changes

	Pre-ASC Schedule Changes (2012 Services)	Post-ASC Schedule Changes (2013 Thru June 2014 Services)
ASC Episodes	20,803	39,693
\$ Paid	\$43.2M	\$60.5M
\$ Paid/Episode	\$2,074	\$1,524
Compared to 2012		-27%

Source: WCIRB MDC Database

Comparing ASC and Outpatient Hospital Services

The authors investigated whether the controls on ASC reimbursement caused a shift to outpatient hospital settings, which were not addressed in the SB 863 reforms. To examine that question, the authors selected payments from the top 30 procedures for both settings from 2012 and from 2013 through June 2014. As shown in Table 3, there was not a shift to outpatient hospitals, as the proportion of outpatient surgical episodes that occurred in ASCs was nearly identical before and after January 1, 2013. While the average amount paid per outpatient surgical episode conducted in an ASC has declined 27 percent since the adoption of the ASC Fee Schedule changes, without similar legislated reimbursement limits on hospitals, the average cost per episode for outpatient surgeries conducted in hospitals has increased by 8 percent.

Table 3: ASC & Hospital Outpatient Services, Pre- vs. Post-ASC Schedule Changes

Top 30 Episodes Only	2012	2013 and 1 st Half 2014	% Change
ASC Episodes	20,803	39,683	
Outpatient Hospital Episodes	5,661	9,887	
Total Episodes ASC + Outpatient Hospital	26,364	49,580	
% ASC Episodes	79%	80%	
ASC Paid	\$43.2M	\$60.5M	
Outpatient Hospital Paid	\$13.7M	\$26.2M	
Total Paid ASC + Outpatient Hospital	\$56.9M	\$86.7M	
% ASC Paid	76%	70%	
ASC Avg. Paid/Episode	\$2,074	\$1,524	(-27%)
Outpatient Hospital Paid/ Episode	\$2,458	\$2,646	(+8%)

Source: WCIRB MDC Database

Mix of Services

The most frequently used outpatient surgical procedures in California workers' compensation, comprising 85 percent of all ASC services in the system, fall into three groupings: surgeries, nerve impingement procedures and spinal cord stimulation procedures. Surgeries include knee and shoulder arthroscopies, as well as hand and hernia procedures; nerve impingement procedures are primarily injections in the back; and spinal cord stimulation procedures are primarily neuro-stimulator implants. To determine if there was a shift in the mix of these procedures under the revised fee schedule, or in the setting in which they were delivered, the authors reviewed the MDC data and identified the top 30 ASC procedures by service type, then compared the 2012 distributions to the distributions from 2013 through June 2014. The results, noted in Table 4, show that since the adoption of the ASC Fee Schedule changes in January 2013 there have been only minor shifts in the percentage of outpatient procedures rendered at ASCs and in hospitals. These relatively stable distributions indicate that at least thus far, the fee schedule changes had little effect on the types of ASC procedures performed in these settings. Furthermore, on a per-episode basis, reimbursements for each of the three major service types changed at similar rates for both settings after the changes to the fee schedule took effect.

Table 4: Mix of Outpatient Surgical Procedures, Pre- Vs. Post-ASC Schedule Changes

Service Type	ASCs % of \$ Paid Pre-ASC Schedule Changes	ASCs After 1/1/2013 % of \$ Paid	ASC Paid/ Episode Diff. Before and after ASC Schedule Changes	Outpatient Hospital 2012 % of \$ Paid	Outpatient Hospital % of \$ Paid After ASC Schedule Changes	Outpatient Hospital Paid/Episode Difference After ASC Schedule Changes
Surgeries - Arthroscopies & Open (20 services)	64%	67%	-28%	71%	73%	+1.0%
Nerve Impingement Procedures (8 services)	24%	22%	-29%	15%	12%	+0.5%
Spinal Cord Stimulator Procedures (4 services)	12%	9%	-25%	14%	15%	+0.1%
Total (32 services)	100%	100%	-27%	100%	100%	+0.8%

Service Intensity

The revised fee schedule reduced facility fees for procedures performed at ASCs, creating a potential incentive for ASCs to deliver more services to compensate for the lost revenue. For example, an ASC that was treating an injured worker with epidural injections might provide additional non-primary procedures during the same surgical event, generating additional fees.

To determine if the provision of services outside the primary procedure code changed after the revised schedule took effect, the authors used the MDC database episode data to calculate the proportion of total outpatient facility fees that paid for such services before and after January 1, 2013, and then compared the results from each year for ASC and outpatient hospital settings.

The results, noted in Table 5, indicate that rather than an increase in non-primary procedures following the implementation of the new schedule, ASCs and outpatient experienced a slight (2 percentage point) reduction of the proportion of outpatient facility fees that paid for additional services associated with the primary paid procedure. For outpatient hospital care, there was no change in this measure of service intensity before and after January 1, 2013.

**Table 5: Non-Primary Procedures Paid as Part of the Primary Procedure
Pre- Vs. Post-ASC Schedule Changes**

	ASCs 2012 (Pre-ASC Schedule Changes)	ASCs 2013 Through June 2014 (Post-ASC Schedule Changes)	Difference	Outpatient Hospital 2012	Outpatient Hospital 2013 -June 2014	Difference
% paid per episode for additional services	39%	37%	-2%	39%	39%	0%

Source: WCIRB MDC Database

The authors further refined the analysis by isolating any additional paid services that were not subject to the new ASC Fee Schedule reductions⁸ (such as x-rays and lab tests). For this part of the study, the authors reviewed the ICIS data from ASCs to identify episodes where these other services were performed, then calculated the percentage of episodes from 2012 and from 2013 through June 2014 that included payments for these types of services, as well as the percentage of all ASC payments represented by these services. As shown in Table 6, the percentage of total ASC payments for services not subject to the OMFS change declined only slightly after the ASC Fee Schedule changes took effect on January 1, 2013. This finding is consistent with the finding that ASC reimbursement change did not drive a change in service intensity, noted in Table 5.

Table 6: Service Intensity: Additional Paid Services, Pre- Vs. Post- ASC Schedule Changes

	ASCs 2012	ASCs After 1/1/2013	Difference
% Paid for Ancillary Services	1.5%	1.2%	-0.3%

Source: CWCI ICIS Database

Summary

The changes to the California workers' compensation Hospital Outpatient Department and Ambulatory Surgical Centers Fee Schedule mandated by state lawmakers in SB 863 and set forth in subsequent regulations were intended to reduce ambulatory surgery center facility fees. In its 2012 projection of the financial impact of this change, the WCIRB estimated this reform would reduce ASC fees by 25 percent.

This study follows up on a 2014 study with an additional twelve months of paid transaction data. It provides an updated look at the outcomes of that reform by using two independent sets of data to measure and compare the average amounts billed and paid for outpatient surgical facility fees. The findings indicate that by reducing the conversion factor used in the ASC reimbursement calculation, the revised schedule produced a net reduction of 29 percent on a per-procedure basis, and 27 percent on a per-episode basis. These results are similar to the 2014 findings using the identical measures and show that thus far, the change in the ASC Fee Schedule has achieved its intended objective of reducing one aspect of workers' compensation medical costs.

⁸ Paid services not subject to the new ASC Fee Schedule included only those rendered on the same claim, at the same facility and on the same date of service as the procedures that were impacted by the fee schedule reduction.

Moreover, the study found no evidence of changes which would potentially undermine the fee schedule savings. Although billings increased and negotiated discounts eroded, the net paid amounts were not materially affected. On the question of service intensity, two separate measures indicated no changes after 2013. Likewise, the data indicate no change in the mix of services or the proportion of episodes occurring in outpatient hospital settings and ASCs.

These findings provide important benchmarks for measuring the impact of SB 863 and point to the type of legislative reform that may be successful in curbing California workers' compensation medical costs.

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