Ambulatory Surgical Center Cost Outcomes: The Impact of California SB 863 Workers’ Compensation Reforms

February 26, 2014

Rena David, M.B.A., M.P.H.
California Workers’ Compensation Institute

Gregory Johnson, Ph.D.
Workers’ Compensation Insurance Rating Bureau

A joint study prepared by:

WCIRB California
Workers’ Compensation Insurance Rating Bureau of California

California Workers’ Compensation Institute
Notice

This Ambulatory Surgical Center Cost Outcomes: The Impact of California SB 863 Workers’ Compensation Reforms (Study) was developed by the Workers’ Compensation Insurance Rating Bureau of California (WCIRB) and the California Workers’ Compensation Institute (CWCI) for the convenience of its users. The WCIRB and the CWCI have made reasonable efforts to ensure the accuracy of this Study. You must make an independent assessment regarding the use of this Study based upon your particular facts and circumstances.
About the Organizations

Workers’ Compensation Insurance Rating Bureau of California

The WCIRB is California's trusted, objective provider of actuarially-based information and research, advisory pure premium rates, and educational services integral to a healthy workers' compensation system.

As a licensed rating organization and the California Insurance Commissioner’s designated statistical agent, the WCIRB performs a number of functions, including collection of premium and loss data on every workers’ compensation insurance policy, examination of policy documents, inspections of insured businesses, and test audits of insurer payroll audits and claims classification. This data is used to advise the Insurance Commissioner and other stakeholders of the costs of providing workers’ compensation benefits.

The Workers' Compensation Insurance Rating Bureau of California (WCIRB) is a California unincorporated, private, nonprofit association comprised of all companies licensed to transact workers’ compensation insurance in California, and has over 400 member companies. No state money is used to fund its operations.

For more information, please visit www.wcirb.com.

525 Market Street, Suite 800
San Francisco, CA 94105-2476
888.229.2472

California Workers’ Compensation Institute

The California Workers’ Compensation Institute, incorporated in 1964, is a private, non-profit organization of insurers and self-insured employers conducting and communicating research and analyses to improve the California workers’ compensation system. The Institute’s member insurers write 71 percent of the California insured market, and its public and private self-insured members account for $46 billion of annual payroll (27 percent of the statewide total for self-insured employers).

For more information, please visit www.cwci.org.

1111 Broadway, Suite 2350
Oakland, CA 94607
510.251.9470
Acknowledgements

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

- Alex Swedlow, President, CWCI
- Brenda Ramirez, Claims and Medical Director, CWCI
- Bob Young, Communications Director, CWCI
- Dave Bellusci, EVP, COO and Chief Actuary, WCIRB
- Ward Brooks, Director, Actuarial Research, WCIRB
- Susan Hensley, Medical Data Call Manager, WCIRB
- Tim Basuino, Medical Data Call Specialist, WCIRB
Executive Summary

The costs of treatment at ambulatory surgery centers (ASCs) have been one factor in the escalation of California workers’ compensation medical costs. In 2012, however, state lawmakers, seeking to reduce workers’ compensation treatment costs made several changes, including reducing 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 Workers’ Compensation Insurance Rating Bureau, initially projected that this change in the fee schedule would reduce ASC payments by 25 percent.¹

The authors undertook this study to measure the extent to which the change in ASC reimbursements achieved its intended goal of reducing these costs. The authors examined several factors before and after the implementation of the new ASC Fee Schedule in January 2013, including:

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

The results indicate a 26 to 28 percent decline in average ASC reimbursements following the adoption of the ASC fee schedule. This decline occurred despite increases in ASC billed amounts, reduced contract savings, and an increase in the percentage of episodes with billings for services unaffected by the fee schedule change. The study also found no material change in the mix of services or the location of services from 2012 to 2013.

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).
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 Goals

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 provide a preliminary assessment of the changes that have occurred in California workers’ compensation outpatient care and reimbursement following the January 1, 2013 implementation of the revised fee schedule based on actual payments made to ASCs. Specifically, the authors’ goal was to generate and analyze data in seven key areas that may impact ASC payments:

1. **Per Procedure Billed Amounts.** How much did the average amount billed per ASC procedure change in 2013?

2. **Per Procedure Paid Amounts.** How much did the average payment per ASC procedure reimbursed under the fee schedule change in 2013?

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 2013?

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) database\(^6\) and CWCI’s Industry Claims Information System (ICIS) database\(^7\) 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 2013. 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; and
- Network discounts

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); and
- 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.

---

\(^6\) 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 875,000 unique claims generating $3.3 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 million California workers’ compensation claims.
Results

Changes in Average Billed and Paid Amounts Per ASC Procedure

The ICIS data on ASC billings and payments reflect ASC procedures with January 2012 through June 2013 service dates for which reimbursements were made prior to July 1, 2013. Using the data on the 2012 ASC procedures, the authors calculated the average amounts billed and paid per ASC procedure prior to the adoption of the ASC fee schedule changes, then after adjusting the 2013 figures to account for the year-to-year shift in the mix of services, ran the same calculations using the 2013 data to determine how much the average billed and paid amounts changed after the fee schedule took effect.

Chart 1

Average Billed Amounts Per ASC Procedure
2012 & 2013

Chart 1 compares average amounts billed for 2012 and 2013, and shows that following the implementation of the fee schedule changes in January 2013, the average amount billed per ASC procedure increased 6.4 percent from $3,183 to $3,386.
Chart 2 shows that while the average amounts billed for ASC procedures increased 6.4 percent between 2012 and 2013, the reduction in the conversion factor multiplier from 1.20 to 0.80\(^8\) caused the average ASC fee schedule allowance to decline by nearly 31 percent, from $977 to $674. With the increase in the average billed amount and the reduction in the fee schedule allowances, the spread between the billed and scheduled amounts for ASC services widened from $2,206 in 2012 to $2,711 in 2013.

---

\(^8\) The multiplier for most facilities also includes an adjustment of +0.02 for outliers.
As the SB 863 revisions to the fee schedule reduced the maximum facility fee allowances for ASC services, the discounts for ASC services negotiated between networks and workers’ compensation payers also declined.

Chart 3 shows that discounts for ASC services, which averaged $97 per procedure (or 10 percent of the fee schedule allowance) in 2012, declined by 56 percent to $42 (or 6 percent of the fee schedule amount) in 2013. Despite this decrease in the negotiated discounts, the net reduction in average payments for ASC services following the implementation of the ASC fee schedule was 28 percent.
**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 2012-2013 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.

---

**Chart 4**

<table>
<thead>
<tr>
<th>Average Payment Per Episode, Top 30 ASC Procedures 2012 &amp; 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="" alt="Bar chart showing average payment per episode, Top 30 ASC Procedures 2012 &amp; 2013" /></td>
</tr>
</tbody>
</table>

Chart 4 shows the average amount paid for ASC services per episode declined 26 percent from $3,291 to $2,443 following the adoption of the fee schedule changes in January 2013 – which tracks closely with the 28 percent reduction in per procedure payments noted earlier in Chart 3.
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 neurostimulator 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 and 2013 distributions for procedures rendered at ASCs (Chart 5A) and on an outpatient basis at hospitals (Chart 5B).

Chart 5A

**Distribution of Top 30 ASC Procedures by Service Type 2012 & 2013**

<table>
<thead>
<tr>
<th>Procedure Type</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgeries</td>
<td>64%</td>
<td>67%</td>
</tr>
<tr>
<td>Nerve Impingement Procedures</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>Spinal Cord Stimulation Procedures</td>
<td>12%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: WCIRB MDC Database

Chart 5B

**Distribution of Top 30 Outpatient Hospital Procedures by Service Type 2012 & 2013**

<table>
<thead>
<tr>
<th>Procedure Type</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgeries</td>
<td>71%</td>
<td>75%</td>
</tr>
<tr>
<td>Nerve Impingement Procedures</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Spinal Cord Stimulation Procedures</td>
<td>14%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: WCIRB MDC Database
The results show that between 2012 and 2013 there were only minor shifts in the distributions of outpatient procedures rendered at ASCs or on an outpatient basis at 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.

**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 in 2012 and in 2013, and then compared the results from each year for ASC and outpatient hospital settings.

![Chart 6A](chart.png)

The results, noted in Table 6A, indicate that rather than an increase in non-primary procedures following the implementation of the new schedule, both ASCs and outpatient hospitals experienced a slight (3 percentage point) reduction of the proportion of outpatient facility fees that went toward additional services associated with the primary paid procedure. These reductions translate to a relative decline of 9 percent in the use of these procedures by ASCs and a relative decline of 8 percent in the use of these services by outpatient hospitals. In both settings, these types of services accounted for about one third of all 2013 outpatient facility fee payments.

---

Defined as paid procedures on the same claim, the same bill and for the same date of service as the primary medical procedure. For example: Additional spinal injections beyond the primary injection procedure.
The authors further refined the analysis by isolating any additional paid services that were not subject to the new ASC fee schedule reductions (such as x-rays and lab tests) to determine if the financial incentive would drive a differential increase. 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 2013 that included payments for these types of services, as well as the percentage of all ASC payments represented by these services (Chart 6B).

![Chart 6B](chart.png)

In 2012, 5.9 percent of the ASC episodes included payments for services not subject to the fee schedule reductions, but after the revised schedule took effect in January 2013, that percentage increased to 8.5 percent of the episodes. Over the same period, payments for these services increased from 1.1 percent to 2.2 percent of the total amount paid for ASC services, but continued to account for only a small fraction of the total ASC reimbursements.

---

10 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.
Sites of Service

The revised outpatient fee schedule reduced the facility fee allowances for ASCs, but not for outpatient hospitals, so the authors assessed whether this change caused a shift in the setting for outpatient surgeries. Using the MDC data, they calculated and compared the proportion of workers' compensation outpatient surgical episodes that occurred in each of these settings in 2012 and in 2013 (Chart 7).

The resulting distributions show that the proportion of workers' compensation surgical episodes conducted at outpatient hospitals and at ASCs were nearly identical in 2012 and 2013, with outpatient hospitals accounting for just under a quarter of all surgical episodes and ASCs accounting for the balance in both years. Thus, the study found no evidence of a shift of services from ASCs to outpatient hospital settings following the implementation of the revised fee schedule.
Summary

The changes to the California workers’ compensation outpatient physician fee schedule mandated by state lawmakers in SB 863 and in subsequent regulations were intended to reduce ambulatory surgery center facility fees. In projecting the financial impact of this change, the WCIRB estimated this reform would reduce ASC fees by 25 percent.

This study offers an initial 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 28 percent on a per-procedure basis, and 26 percent on a per-episode basis. Such results suggest that thus far, the change in the ASC fee schedule has achieved its intended objective of reducing one aspect of workers’ compensation medical costs.

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, both ASCs and hospital outpatient departments registered declines in the proportion of outpatient facility fees paying for additional services associated with the primary paid procedure. The proportion of ASC payments attributable to services not subject to the fee schedule change increased, but remained relatively small. Likewise, the data indicate no change in the mix of services or the percentage of episodes occurring in outpatient hospital settings and ASCs.

Finally, it should be noted that all of the data used in the study reflect transactions that took place either in the year immediately preceding the effective date of the revised fee schedule (2012) or in the first six months following its implementation (January through June 2013). Thus, the findings from this analysis should be considered preliminary. They do, however, provide important benchmarks for measuring future experience, and the authors will continue to monitor California workers’ compensation ASC and outpatient surgical fees, and will update this report later in 2014 to include all 2013 transaction data.