



## California Workers' Compensation Institute

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### **California Workers' Compensation Medical Payment Study: Medicare Reimbursement Models for Evaluation and Management Services**

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#### **Executive Summary**

In 2007, The California Division of Workers Compensation seeks to modify the Official Medical Fee Schedule which establishes health care reimbursement levels for most medical services within the workers' compensation system including Evaluation and Management office visits. At the request of the Administrative Director, CWCI estimated system-wide changes on 10 E&M office visit codes priced under 9 distinct California regional 2006 Medicare fee schedules. The authors used a database of approximately 1 million E&M codes with 2005 dates of service and compared the current OMFS reimbursement level with the 9 California Medicare fee schedules. Each medical encounter in the sample included the location of the injured worker which was used to create a 10<sup>th</sup> option, a weighted, regional-adjusted average reimbursement level for all 10 procedures in all 9 regions. The results show the 10 Medicare options would increase system-wide reimbursement levels for the 10 E&M codes between 16.4 and 46.1% or \$56 to \$157 million over 2005 OMFS amounts. A regional adjusted Medicare fee schedule would increase fees by 23% or \$79 million.

#### **Background**

The California Official Medical Fee Schedule (OMFS) for workers' compensation governs medical provider fees for the treatment of work injuries in the state. The Physician portion of the OMFS uses the Current Procedural Terminology (CPT) and CPT-like codes to define and classify medical procedures into categories of services for purposes of identification, billing and reimbursement. To simplify the application of these codes, they are normally grouped into broad categories:

- Evaluation and Management (including office, emergency room, and hospital visits, and consultations),
- Anesthesia,
- Surgery,
- Radiology,
- Pathology and Laboratory,
- Medicine,
- Physical Medicine,
- Manipulative Treatment, and
- Special Services.

Other services, such as pharmaceuticals, durable medical equipment, supplies, orthotics, prosthetics, ambulance services, as well as inpatient and outpatient facility fees are also part of the OMFS but do not fall under the Physician's portion of the OMFS. Workers' Compensation Insurance Rating Bureau figures show that in calendar year 2005, insured employers paid \$2.9 billion for treatments billed under the physicians' portion of the schedule and another \$.9 billion for other medical. The addition of medical fees paid by self-insured employers push the total medical dollars for 2005 towards the \$5 billion mark. Of the estimated \$5 billion, WCIRB estimated that \$1.9 billion in payments were for outpatient physician services.

Revisions to the fee schedule can result from biennial reviews mandated by California workers' compensation law. The state revised the physician fee schedule in 1994, 1996, and 1999. In 2004 under SB 228 maximum reasonable physician fees that exceeded Medicare's were reduced up to 5% and subsequently updated to conform to Medicare changes. Medicare payments are adjusted for geographical differences in resource costs. There are currently 89 geographically adjusted variations to the National Medicare fee schedule across the country; nine of them for California.

The Administrative Director of the Division of Workers' Compensation has proposed changes to maximum reasonable fees associated with 10 evaluation and management (E&M) office visit codes to make them comparable with Medicare rates. Medicare reimbursement rates in California vary across nine geographic regions within the state, however, so unless the Administrative Director were to adopt nine different fee schedules to apply to these E&M office visits, a single California Medicare equivalent must be determined.

This report models system-wide reimbursement effects from modifying the Official Medical Fee Schedule for the 10 E&M office visit fees to a variety of alternative Medicare pricing scenarios.

### **Study Goal, Data & Methods**

The goal of this study was to estimate the impact on California workers' compensation medical payments in 2005 had the OMFS reimbursements for evaluation and

management (E&M) office visits been set at 2006 Medicare rates. The OMFS has over 73 CPT codes within the Evaluation and Management section. The Division of Workers Compensation was interested in modifications to 10 specific office visit codes. Table 1 displays the ten primary CPT codes associated with E&M office visits for new and established patients.

**Table 1. 10 Primary Evaluation and Management Visit Codes**

<b>CPT Code</b>	<b>E&amp;M Office Code Description</b>
99201	Office Visit/outpt E/M new pt, PF Hx & exam, SF MDM
99202	Office Visit /outpt E/M new pt, exp PF Hx & exam, SF MDM
99203	Office Visit/outpt E/M new pt, detailed Hx & exam, low MDM
99204	Office Visit/outpt E/M new pt, compr Hx & exam, mod MDM
99205	Office Visit/outpt E/M new pt, compr Hx & exam, high MDM
99211	Office Visit/outpt E/M estab pt that may not require phys
99212	Office/outpt E/M estab pt, PF Hx & exam, SF MDM
99213	Office Visit/outpt E/M estab pt, exp PF Hx & exam, low MDM
99214	Office Visit/outpt E/M estab pt, detailed Hx/exam, mod MDM
99215	Office Visit/outpt E/M estab pt, compreh Hx/exam, high MDM

The authors compiled a sample database of medical procedure codes with 2005 dates of service. The data was sampled from the Industry Claim Information System<sup>1</sup>, a proprietary database of claim and benefit payment information. Each procedure code was mapped to a fee schedule section. This encounter data also included the injured worker's zip code information which allowed the authors to model different Medicare regional fee schedules.

The volume associated with the 10 E&M codes represent the majority of all procedure codes in the E&M section of the OMFS. Table 2 displays the 10 visit codes as a percentage of all E&M activity in the 2005 data sample.

**Table 2. Total Volume, Billed and Payment Amounts for 10 Primary E&M Codes**

<b>CPT Code</b>	<b>Volume</b>	<b>Billed Dollars</b>	<b>Paid Dollars</b>
99201	3,016	\$331,815	\$118,538
99202	13,184	\$1,793,047	\$758,613
99203	59,086	\$7,422,498	\$4,458,254
99204	42,384	\$6,366,234	\$4,593,906
99205	13,713	\$2,630,996	\$1,978,149
99211	12,007	\$653,491	\$280,508
99212	55,726	\$4,491,634	\$1,981,603
99213	372,249	\$29,986,054	\$17,607,659

<sup>1</sup> The California Workers' Compensation Institute's Industry Claims Information System (ICIS) currently encompasses transaction-level data on more than 3.5 million California workers' compensation claims contributed by large and midsize national and regional insurers and self-insured employers for claims with dates of injury from 1993 to 2005.

<b>CPT Code</b>	<b>Volume</b>	<b>Billed Dollars</b>	<b>Paid Dollars</b>
99214	299,252	\$31,500,879	\$21,606,954
99215	90,111	\$13,758,628	\$9,979,362
Sub-total	960,728	98,935,275	63,363,545
All E&M Codes	1,201,442	\$154,315,288	\$94,203,218
<b>Pcnt of Total</b>	<b>80.0%</b>	<b>64.1%</b>	<b>67.3%</b>

The 10 codes represented 80% of all E&M services rendered in California workers' compensation and 2 out of 3 dollars paid for all codes in the E&M section.

In order to model the potential effect of the Medicare Fee Schedule on the entire California Workers Compensation System, the authors compiled additional system-wide medical payment data, summarized in Table 3.

**Table 3. Estimate of Total Payments for Evaluation and Management Services**

Total Physician Medical Payout (\$000s) – Insured 2005	\$1,900,000
Total Medical Payout (\$000s) - Industry 2005	\$2,375,000
Percent of Evaluation & Management Payments	21.4%
Estimated E&M Payout (2005)	\$ 508,250
Office Visit Code Revenue % of E&M Revenue	67.3%
<b>Estimated Office Visit Payment (\$000s) Industry 2005</b>	<b>\$342,052</b>

Total physician payments for the insured population of injured workers in calendar year 2005 were estimated using the WCIRB report of Losses and Expenses. The physician payment amount of \$1.9 billion was then adjusted by a factor of 1.25 to account for self-insured employer data not reported to the WCIRB resulting in a total estimated medical payout for physician services in 2005 of \$2.4 billion.<sup>2</sup>

Next, the proportion of the \$2.4 billion in physician payments related to evaluation and management services was estimated using the 2005 data sample from the ICIS database. Table 4 displays summary information about the study sample which encompasses 6 million outpatient services across 12 sections of the OMFS.

**Table 4. Sample Distribution of 2005 Date of Service Procedures, Billed and Paid Amounts by Fee Schedule Section**

<b>Fee Schedule Section</b>	<b>Volume</b>	<b>Billed Dollars</b>	<b>Paid Dollars</b>
Acupuncture	38,356	\$ 3,088,856	\$ 2,378,238
Anesthesiology	70,132	\$ 25,295,207	\$ 10,906,365
Chiropractic Manipulation	224,622	\$ 10,142,434	\$ 7,956,621

<sup>2</sup> Benefits, Coverage and Costs, 2004, National Academy of Social Insurance, Ishita Sengupta, Virginia Reno and John F Burton, Jr., July, 2006

<b>Fee Schedule Section</b>	<b>Volume</b>	<b>Billed Dollars</b>	<b>Paid Dollars</b>
Evaluation. & Mgmt.	1,201,442	\$ 154,315,288	\$ 94,203,218
Medical Treatment	223,538	\$ 38,402,351	\$ 25,755,776
Medical/Legal	89,742	\$ 67,743,044	\$ 64,521,419
Osteopathic Manipulation	1,859	\$ 135,863	\$ 81,221
Path/Laboratory	164,566	\$ 9,893,618	\$ 2,703,637
Physical Medicine	2,547,809	\$ 107,837,668	\$ 65,350,158
Radiology	382,243	\$ 107,487,482	\$ 43,879,429
Special Services	785,822	\$ 47,258,174	\$ 29,625,936
Surgery	238,765	\$ 253,325,525	\$ 92,483,520
<b>Grand Total</b>	<b>5,968,896</b>	<b>\$ 824,925,510</b>	<b>\$ 439,845,538</b>
<b>Percent of E&amp;M</b>	<b>20.1%</b>	<b>18.7%</b>	<b>21.4%</b>

This sample contains \$825 million in billed charges and \$440 million in payments rendered to injured workers in California in calendar year 2005. Each medical procedure was mapped to a specific section of the fee schedule through a crosswalk of CPT codes. The 1.2 million E&M codes represent 20.1% of all codes in the distribution. E&M billings totaled \$154 million, or 18.7% of all dollars billed for physician services with a total of \$94 million or 21.4% of all dollars paid.

The total amount that was paid for all the E&M services in the study sample was \$94.2 million. As displayed in Table 3, the total paid for the ten office visit E&M services were similarly calculated to be \$63.4 million, or 67.3% of all the E&M payments.

In the final step, the total payments to physicians for E&M services were assessed by multiplying the 21.4% of all charges accounted for by E&M services by the estimated \$2.4 billion paid to physicians to treat injured workers. That calculation shows that in 2005, California workers' compensation payments to physicians for E&M services totaled an estimated \$508 million. The Institute estimated that total payments for the 10 office visit E&M services in 2005 (the baseline) amounted to \$342 million, again using the 67.3 percent adjustment factor (Table 3) of the estimated total for all E&M services that year.

After deriving the system-wide baseline E&M office visit OMFS payments for 2005, a series of models were developed to estimate the change to the baseline payments if the workers' compensation office visits were reimbursed at Medicare levels<sup>3</sup>. The Institute derived the alternative scenarios from the nine different Medicare fee schedules specific to the nine Medicare regions in California, and then compared the estimated payments under each schedule. In addition, a tenth scenario was added using a weighted average of fees based on the geographic mix of services extracted from the ICIS database.

The Medicare geographic regions, based on specific counties in California, are:

<sup>3</sup> Information on Medicare regions and fee schedule amounts were accessed from [http://www.medicarenhic.com/cal\\_prov/fee\\_sched.shtml#2006](http://www.medicarenhic.com/cal_prov/fee_sched.shtml#2006)

1. Marin/Napa/Solano
2. San Francisco
3. San Mateo
4. Alameda/Contra Costa
5. Santa Clara
6. Ventura
7. Los Angeles
8. Orange
9. Rest of CA
10. Weighted Regional Adjusted Average

Using ICIS data, the authors compiled the number of office visits for services with dates of service during 2005 and assigned each office visit to a geographic region based on the zip code of the injured workers' home address and calculated the distribution of office visits, broken out by specific CPT code, across the nine geographic regions of the state (Table 5).

**Table 5: Percent of Office Visits by Type by Medicare Region**

CPT Code	Marin/ Napa/ Solano	San Francisco	San Mateo	Alameda/ Contra Costa	Santa Clara	Ventura	LA	Orange	Rest of CA	TOTAL
99201	2.8%	2.3%	2.4%	6.1%	5.2%	2.6%	18.4%	4.9%	55.2%	100.0%
99202	4.6%	2.1%	1.8%	8.0%	4.6%	1.3%	14.0%	4.1%	59.6%	100.0%
99203	2.2%	1.1%	1.8%	5.7%	4.6%	3.0%	21.2%	5.0%	55.6%	100.0%
99204	1.5%	2.1%	1.4%	5.9%	2.5%	3.2%	21.8%	6.0%	55.6%	100.0%
99205	0.8%	1.6%	1.0%	4.4%	3.1%	3.8%	37.9%	7.9%	39.5%	100.0%
99211	1.4%	1.5%	1.4%	4.3%	4.4%	1.5%	22.7%	6.8%	56.0%	100.0%
99212	2.5%	1.6%	2.6%	5.9%	3.6%	1.3%	26.8%	4.2%	51.4%	100.0%
99213	2.8%	1.3%	1.8%	7.3%	4.2%	2.4%	18.0%	4.2%	57.9%	100.0%
99214	1.6%	1.8%	1.4%	8.2%	3.8%	3.4%	23.7%	7.1%	48.9%	100.0%
99215	0.8%	0.9%	0.7%	5.5%	3.8%	2.0%	36.7%	9.5%	40.1%	100.0%

The authors were surprised that more than half (52.3%) of all office visits were provided in the "Rest of California" region. To gain a better understanding of the geographic composition of this region, they analyzed the counties within the "Rest of California" region and compiled the following distribution of the office visits within the "Rest of California" category (Table 6).

**Table 6. Counties included in the "Rest of California" Region**

County	Office Visit Volume	Percent Of Total Office Visits
San Diego	95,900	7.17%
San Bernardino	66,222	4.95%
Riverside	61,738	4.62%

<b>County</b>	<b>Office Visit Volume</b>	<b>Percent Of Total Office Visits</b>
Sacramento	51,308	3.84%
Fresno	47,387	3.54%
Kern	33,253	2.49%
San Joaquin	31,419	2.35%
Stanislaus	30,390	2.27%
Sonoma	26,772	2.00%
Tulare	25,752	1.93%
Blanks	22,812	1.71%
Monterey	21,764	1.63%
Santa Barbara	19,641	1.47%
Merced	15,025	1.12%
Santa Cruz	14,135	1.06%
Shasta	11,479	0.86%
Butte	9,737	0.73%
San Luis Obispo	9,736	0.73%
Placer	9,014	0.67%
Imperial	8,757	0.66%
Humboldt	8,653	0.65%
Madera	8,194	0.61%
Yolo	7,681	0.57%
Mendocino	7,392	0.55%
Kings	7,267	0.54%
All Other Counties	47,362	3.54%
Total "Rest of CA"	698,790	52.27%

Several counties with significant population bases are included in the "Rest of California" Medicare region including San Diego (third largest), San Bernardino (fourth largest), Riverside (fifth largest) and Sacramento (eighth largest). (Source: California State Association of Counties). (There were also 22,812 office visits with no county locator in the ICIS database that were included in the tally for this region.)

The analysts applied the CPT code distribution from the 9 geographic regions (Exhibit One) to the corresponding Medicare fee schedules to develop a prorated Medicare fee schedule that would adjust for the mix of E&M services within each region. The prorated fee schedule became the basis for the tenth comparison scenario, the weighted average cost.

## Results

The Institute compared the maximum OMFS<sup>4</sup> fees for the 10 office visit E&M codes to the corresponding Medicare fees for each of the 9 California regions as well as the regional adjusted weighted average (Table 7). Table 8 displays the percentage difference between the OMFS and each of the Medicare schedules, including the weighted average of all regions ("Weighted Average").

**Table 7. Comparison of OMFS and Medicare Reimbursement Levels for 10 E&M Codes**

CPT Code	OMFS	Marin	San Fran	San Mateo	Alameda	Santa Clara	Ventura	LA	Orange	Rest of CA	Weighted Average
99201	\$39.10	\$43.27	\$47.47	\$47.55	\$44.17	\$47.75	\$40.27	\$40.30	\$41.67	\$37.56	\$39.90
99202	\$57.80	\$75.87	\$82.78	\$82.98	\$77.43	\$83.37	\$70.99	\$71.13	\$73.30	\$66.50	\$70.19
99203	\$76.50	\$112.16	\$122.13	\$122.45	\$114.46	\$123.01	\$105.23	\$105.62	\$108.69	\$98.73	\$103.86
99204	\$109.65	\$157.58	\$171.02	\$171.55	\$160.78	\$172.38	\$148.32	\$148.96	\$152.97	\$139.52	\$146.12
99205	\$145.35	\$198.82	\$215.05	\$215.82	\$202.84	\$216.90	\$187.78	\$188.74	\$193.43	\$177.09	\$186.73
99211	\$23.80	\$26.72	\$29.88	\$29.86	\$27.30	\$29.97	\$24.33	\$24.15	\$25.29	\$22.33	\$23.81
99212	\$35.70	\$45.81	\$50.39	\$50.46	\$46.77	\$50.67	\$42.51	\$42.49	\$44.01	\$39.56	\$42.02
99213	\$47.60	\$62.06	\$68.00	\$68.14	\$63.35	\$68.46	\$57.78	\$57.75	\$59.66	\$53.94	\$56.93
99214	\$72.25	\$96.69	\$105.65	\$105.90	\$98.69	\$106.40	\$90.29	\$90.33	\$93.16	\$84.47	\$89.57
99215	\$110.50	\$138.43	\$150.27	\$150.75	\$141.26	\$151.52	\$130.19	\$130.55	\$134.08	\$122.45	\$129.41
<b>Weighted Average</b>	<b>\$66.07</b>	<b>\$87.81</b>	<b>\$95.85</b>	<b>\$96.08</b>	<b>\$89.62</b>	<b>\$96.54</b>	<b>\$82.11</b>	<b>\$82.21</b>	<b>\$84.72</b>	<b>\$76.88</b>	<b>\$81.24</b>

**Table 8. Comparison of California's Official Medical Fee Schedule for Office Visits to Regional Medicare Rates**

CPT Code	Marin	San Francisco	San Mateo	Alameda	Santa Clara	Ventura	Los Angeles	Orange	Rest of CA	Weighted Average
99201	10.7%	21.4%	21.6%	13.0%	22.1%	3.0%	3.1%	6.6%	-3.9%	2.1%
99202	31.3%	43.2%	43.6%	34.0%	44.2%	22.8%	23.1%	26.8%	15.1%	21.4%
99203	46.6%	59.6%	60.1%	49.6%	60.8%	37.6%	38.1%	42.1%	29.1%	35.8%
99204	43.7%	56.0%	56.5%	46.6%	57.2%	35.3%	35.9%	39.5%	27.2%	33.3%
99205	36.8%	48.0%	48.5%	39.6%	49.2%	29.2%	29.9%	33.1%	21.8%	28.5%
99211	12.3%	25.5%	25.5%	14.7%	25.9%	2.2%	1.5%	6.3%	-6.2%	0.0%
99212	28.3%	41.1%	41.3%	31.0%	41.9%	19.1%	19.0%	23.3%	10.8%	17.7%
99213	30.4%	42.9%	43.2%	33.1%	43.8%	21.4%	21.3%	25.3%	13.3%	19.6%
99214	33.8%	46.2%	46.6%	36.6%	47.3%	25.0%	25.0%	28.9%	16.9%	24.0%
99215	25.3%	36.0%	36.4%	27.8%	37.1%	17.8%	18.1%	21.3%	10.8%	17.1%
<b>Weighted Average</b>	<b>32.9%</b>	<b>45.1%</b>	<b>45.4%</b>	<b>35.7%</b>	<b>46.1%</b>	<b>24.3%</b>	<b>24.4%</b>	<b>28.2%</b>	<b>16.4%</b>	<b>23.0%</b>

<sup>4</sup> DWC OMFS reimbursement amounts were accessed at  
([http://www.dir.ca.gov/dwc/dwcproregs/OMFS\\_Regulations/OMFS\\_tableAMay.xls](http://www.dir.ca.gov/dwc/dwcproregs/OMFS_Regulations/OMFS_tableAMay.xls))



With the exception of two office visit codes with the “Rest of California” region, all of the Medicare fees for all regions are substantially greater than the corresponding OMFS fees. In general, the Medicare rates in Northern California are priced at a higher rate than those of Southern California or the “Rest of California.” Also, the differences among Medicare fee schedules are substantial. The average differences from OMFS to Medicare rates range from a high of 46.1% in Santa Clara to a low of 16.4% in the “Rest of California”.

To complete the estimate of system-wide changes on medical payments for the various Medicare fee schedules, the authors compared the OMFS baseline payments to the estimated office visit payments under each of the ten alternative payment schedules. The resulting adjustment factors (represented by the “Percentage Difference” column) and estimated medical payment impacts for the ten scenarios are represented in Table 9.

**Table 9. Potential Impact of Medicare Fees on Annual Medical Payments**

<b>Fee Schedule</b>	<b>Percentage Difference</b>	<b>Estimated Annual Office Visit Payment</b>	<b>Increase in Est. Annual Office Visit Payments</b>
2005 OMFS		\$342,052,250	
Marin/Napa/Solano	32.90%	\$454,587,440	\$112,535,190
San Francisco	45.10%	\$496,317,815	\$154,265,565
San Mateo	45.40%	\$497,343,972	\$155,291,722
Alameda/ Contra Costa	35.70%	\$464,164,903	\$122,112,653
Santa Clara	46.10%	\$499,738,337	\$157,686,087
Ventura	24.30%	\$425,170,947	\$83,118,697
Los Angeles	24.40%	\$425,512,999	\$83,460,749
Anaheim	28.20%	\$438,510,985	\$96,458,735
Rest of CA	16.40%	\$398,148,819	\$56,096,569
Medicare Weighted Avg	23.00%	\$420,724,268	\$78,672,018

The results show that all ten fee schedule options result in higher E&M reimbursements levels. The estimated system-wide increases range from \$56 million more per year if the “Rest of California” fee schedule were applied uniformly across the state to \$157 million more when the Santa Clara region fee schedule were applied statewide. The regional adjusted Medicare weighted average would add an estimated \$79 million in E&M payments. Ventura County has a similar overall increase of 24.3% or \$83 million over OMFS payments.