ICIS SAYS…

The Industry Claims Information System (ICIS) currently encompasses transaction-level data on more than 3.5 million California workers' compensation claims contributed by large and mid-sized national and regional insurers and self-insured employers for claims with dates of injury from 1993 through early 2005. The Institute built this data warehouse to meet the changing and expanding research and analysis requirements of the California workers' compensation industry and CWCI members.

The value of data depends on its practical applications. The Institute often relies on ICIS to generate "hard numbers" that can be used to advance the public policy debate on a wide variety of workers' compensation issues and concerns. The following ICIS Says analysis examines the distribution of California workers' compensation temporary disability (TD) claims by payment level, and tracks changes in the proportion of TD claims paid at the minimum weekly rate, between the minimum and the maximum rate, and at the maximum rate following benefit increases in 2003, 2004, and 2005.

ICIS SAYS: *Early Returns on Workers' Comp Medical Reforms: Part 6* Changes in Inpatient Hospital Fee Schedule Allowances

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The Research Series: Early Returns on Workers' Comp Medical Reforms – Changes in Inpatient Hospital Fee Schedule Allowances

Background

Since the late 1990s, the inpatient hospital fee schedule has been based on reimbursements set at 120 percent of the amounts allowed under the Medicare system. Beginning in 2004, SB 228, one of the reform bills enacted in 2003, required:

- Changes in codes allowing separate (additional) payments for spinal implants
- Updating of all Medicare values used in the calculation of the fee schedule allowance rate

Emergency regulations, effective January 2, 2004 for inpatient hospital discharges after January 1, 2004 implemented the following changes:

- All reimbursement values were updated consistent with those to be used by Medicare[1] for 2004. (In 2004, adjustments were made in January and June to the underlying components of the Medicare formula.)
- Acceptance of the Medicare outlier threshold in place of the previously used California-specific outlier threshold
- Addition of the "new technology" pass-through
- Changes in the transfer payment[2] methodology
- A reduction in the number of exemptions from the fee schedule, namely the Diagnosis Related Groups (DRGs) previously specified in CCR 9792.1 (c) (1) and services provided in a Level 1 or Level 2 Trauma Center.

Research Goal

The goal of this evaluation was to measure changes in the average amounts allowed under the California workers' compensation inpatient hospital fee schedule for hospital stays for 2002, 2003 and 2004.

Data

For this analysis, the Institute obtained data on 21,194 California workers' compensation hospital admissions for 2003 as reported by health care facilities to the Office of Statewide Health Planning and Development (http://www.oshpd.ca.gov/). OSHPD maintains these data in a public database, with all admissions categorized into one of more than 500 Diagnostic Related Groups (DRGs) – a standard classification system developed by the federal Health Care Financing Administration (HCFA). The OSHPD database includes detailed information on all procedure codes, length of stay in the hospital, and charges, and HCFA also calculates a specific DRG weight for each category to reflect the relative complexity of each admission.

Using calendar year 2003 data on the number of inpatient admissions across the various DRG categories, the Institute compiled a list of the top 20 DRGs in California workers' compensation.

[1] During 2004, adjustments were made in January and June to the underlying components of the Medicare inpatient allowance formula. These components are discussed in detail in a later section of this report.

[2] A new transfer policy with a different payment methodology was added for moving a patient to a post-acute facility.

The analysts then tallied the total number of admissions, the total charges, and the average length of stay for each DRG category. Table 1 shows the results, including the distribution of inpatient hospitalizations and charges across the top 20 inpatient hospital DRG categories in California workers' compensation.

Table 1 - California Workers' Compensation 2003 Inpatient Hospitalizations, Top 20 DRG Categories

DRG CATEGORY	# of Inpatient Admissions	% of Inpatient Admissions	Average Length of Stay	Total Charges	% of Charges
500 - BACK & NECK PROCEDURES	2,185	10.3%	2.0	$61,321,839	5.8%
498 - SPINAL FUSION	1,684	7.9%	3.8	$137,053,381	13.0%
209 - MAJOR JOINT & LIMB REATTACHMENT	1,478	7.0%	4.3	$91,542,233	8.7%
520 - CERVICAL SPINAL FUSION W/O COMPLICATION	1,075	5.1%	2.1	$51,118,994	4.8%
496 – COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	865	4.1%	5.8	$105,200,817	9.9%
243 - MEDICAL BACK PROBLEMS	819	3.9%	4.0	$14,864,940	1.4%
497 - SPINAL FUSION	776	3.7%	5.5	$81,768,507	7.7%
462 – REHABILITATION	751	3.5%	15.3	$38,184,807	3.6%
219 - LOWER EXTREMITY & HUMERUS PROCEDURE	687	3.2%	2.8	$22,757,283	2.2%
224 – SHOULDER,ELBOW OR FOREARM PROCEDURE	423	2.0%	1.7	$10,247,554	1.0%
499 - BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W COMPLICATION	363	1.7%	3.6	$15,073,745	1.4%
503 – KNEE PROCEDURES	346	1.6%	2.4	$11,909,562	1.1%
223 - MAJOR SHOULDER/ELBOW PROCEDURE	285	1.3%	1.8	$8,151,638	0.8%
278 – CELLULITIS AGE >17 W/O COMPLICATION	264	1.2%	3.9	$4,391,386	0.4%
227 – SOFT TISSUE PROCEDURES W/O COMPLICATION	229	1.1%	1.9	$6,242,097	0.6%
217 - WOUND DEBRIDMENT & SKIN GRAFT EXCEPT HAND,FOR MUSCSKELET & CONN TISS DIS	229	1.1%	8.6	$16,389,951	1.6%
441 - HAND PROCEDURES FOR INJURIES	228	1.1%	3.2	$7,710,441	0.7%
229 - HAND OR WRIST PROCEDURE, EXCEPT MAJOR JOINT PROCEDURE, W/O COMPLICATION	225	1.1%	2.0	$4,976,768	0.5%
430 – PSYCHOSES	217	1.0%	10.8	$5,870,981	0.6%
519 - CERVICAL SPINAL FUSION W COMPLICATION	204	1.0%	3.0	$11,440,122	1.1%
Top 20 DRG Categories	**13,333**	**62.9%**	**4.2**	**$706,217,046**	**66.8%**
Grand Total (all admissions)	**21,194**	**100.0%**	**4.7**	**$1,057,354,784**	**100.0%**

These 20 diagnosis categories accounted for 62.9 percent of all 2003 California workers' compensation inpatient hospital admissions and 66.8 percent of the total charges for inpatient

hospitalizations. Back-related diagnosis categories that were in the top 20 (DRGs 243, 496 – 500, and 519 - 520) represented 37.7 percent of all inpatient admissions and 45.1 percent of all charges. The average length of stay for the top 20 DRGs was 4.2 days, 10.6 percent less than the average of 4.7 days for all admissions.

The Institute also determined the average fees allowed in each DRG category for each of the three years of the study.[3] To prevent changes in the mix of diagnoses over the three-year period from influencing the analysis, the 2002 and 2004 fee schedule allowance amount for each DRG were applied to the 2003 DRG distribution. All of the DRG and hospital adjustment factors required to calculate the fee schedule allowable amounts across the 2002 to 2004 timeframe were obtained from the Medicare and DWC websites.[4]

Results

Table 2 compares the average amounts allowed under the inpatient hospital fee schedule in 2002, 2003 and 2004 for all 21,194 inpatient hospitalizations included in the dataset.

[3] Changes in the fee schedule calculations were influenced by modifications to the underlying components of the OMFS formulae including:

a. Composite Factor: an adjustment factor for each California hospital that compensates for regional differences in wages and facility type (teaching hospital, trauma center, etc.)
b. DRG Weight: expresses each DRGs relative complexity and use of expensive hardware and instrumentation
c. Cost-to-Charge Ratio: an estimate of a specific hospital's mark-up on actual costs for all services
d. Outlier Factor: a dollar threshold limit used as financial protection for hospitals with high-cost admissions.

Calculating the fee schedule allowance amount is a 4-step process:

Step 1: Determine Basic Fee: 1.20 X Composite Factor X DRG weight
Step 2: Determine Admission Costs: Billed Charges X Cost-to-Charge Ratio
Step 3: Determine Outlier Threshold: Basic Fee + Hospital Specific Outlier Factor
Outlier Threshold Calculation: If "Costs" > "Outlier Threshold" (Charges X Cost-to-Charge Ratio > Basic Fee + Outlier Factor) then Reimburse Basic Fee + 0.8 X (Costs - Outlier Threshold)

[4] For more information:

Medicare's In-Patient Hospital Fee Schedule www.cms.hhs.gov/providers/hipps
In-Patient Hospital Fee Schedule Labor Code Section 5307.1
In-Patient Hospital Fee Schedule California Code of Regulations 9789.20-9789.24

Table 2. Comparison of Fee Schedule Allowed Amounts: 2002–2004 Calif. WC Hospitalizations

	AVERAGE ALLOWED AMOUNT				PCNT CHANGES	
	2002	2003	JAN-JUN 2004	JUL-DEC 2004	2002 to 2003	2003 to JUL 2004
ALL DRGs (N= 21,194 inpatient hospitalizations)	$14,324	$15,130	$15,090	$14,439	5.6%	-4.6%

After accounting for all fee schedule changes across the 3-year time frame, the data show that the average amount allowed for an inpatient admission climbed 5.6 percent from 2002 to 2003, edged down a fraction in the first half of 2004, then fell to $14,439 after the July 2004 Medicare fee schedule change – 4.6 percent below the 2003 average, but 0.8 percent above the average for 2002. Changes in DRG weights, hospital cost-to-charge ratios, and other factors contributed to this change in fee schedule allowed amounts in different ways. Table 3 breaks out the average allowed amounts for the top 20 DRGs for 2002, 2003 and the first and second halves of 2004.

Table 3. 2002 – 2004 Fee Schedule Allowed Amounts for Top 20 DRGs

	AVERAGE ALLOWED AMOUNT				PCNT CHANGES	
TOP 20 DRGS	2002	2003	JAN-JUN 2004	JUL-DEC 2004	2002-2003	2003-JUL 2004
500 - BACK & NECK PROCEDURES	$7,105	$7,416	$7,474	$7,342	4.4%	-1.0%
498 - SPINAL FUSION	$19,875	$20,797	$21,240	$20,304	4.6%	-2.4%
209 - MAJOR JOINT & LIMB REATTACHMENT	$15,745	$16,702	$16,953	$16,349	6.1%	-2.1%
520 - CERVICAL SPINAL FUSION W/O COMPLICATION	$11,681	$12,021	$12,438	$12,390	2.9%	3.1%
496 – COMBINED ANTERIOR/ POSTERIOR SPINAL FUSION	$43,497	$47,293	$46,484	$45,611	8.7%	-3.6%
243 - MEDICAL BACK PROBLEMS	$4,338	$6,126	$6,232	$6,267	41.2%	2.3%
497 - SPINAL FUSION	$29,951	$29,927	$30,054	$28,066	-0.1%	-6.2%
462 – REHABILITATION	$13,698	$12,765	$11,531	$10,016	-6.8%	-21.5%
219 - LOWER EXTREM & HUMER PROCEDURE	$7,904	$8,355	$8,406	$8,436	5.7%	1.0%
224 – SHOULDER,ELBOW OR FOREARM PROCEDURE	$5,970	$6,258	$6,566	$6,374	4.8%	1.9%
499 - BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W COMPLICATION	$11,548	$11,723	$11,745	$11,302	1.5%	-3.6%
503 - KNEE PROCEDURES	$9,299	$9,850	$10,307	$10,014	5.9%	1.7%
223 - MAJOR SHOULDER/ELBOW PROCEDURE	$6,334	$8,075	$8,968	$8,430	27.5%	4.4%
278 – CELLULITIS AGE >17 W/O COMPLICATION	$3,858	$6,976	$4,678	$4,384	80.8%	-37.2%
227 - SOFT TISSUE PROC W/O	$5,820	$6,592	$6,626	$6,680	13.3%	1.3%

COMPLICATION						
217 - WOUND DEBRID & SKIN GRAFT EXCEPT HAND,FOR MUSCSKELET & CONN TISS DIS	$22,801	$30,858	$30,689	$29,323	35.3%	-5.0%
441 - HAND PROC FOR INJURIES	$8,440	$7,934	$8,233	$8,213	-6.0%	3.5%
229 - HAND OR WRIST PROCEDURE, EXCEPT MAJOR JOINT PROC, W/O COMPLICATION	$5,941	$5,786	$5,943	$5,862	-2.6%	1.3%
430 – PSYCHOSES	$6,904	$6,831	$6,567	$5,984	-1.1%	-12.4%
519 - CERVICAL SPINAL FUSION W COMPLICATION	$18,155	$19,027	$19,610	$19,507	4.8%	2.5%
Top 20 DRG Categories	**$15,212**	**$15,516**	**$15,389**	**$14,846**	**2.0%**	**-4.3%**
Grand Total (all admissions)	**$14,324**	**$15,130**	**$15,090**	**$14,439**	**5.6%**	**-4.6%**

This analysis completes the six-part series in which the Institute tracked the early effects on cost and utilization of medical services following implementation of fee schedules, utilization review, and other workers' compensation medical cost containment strategies included in the 2002–2004 legislative reforms. The series highlighted the following key findings:

Part 1. Outpatient Surgery Fee Schedule

- 38.9 percent reduction in outpatient surgery facility fees between the fee schedule implementation year (2004) and baseline (2001)

Part 2. Physical Therapy and Chiropractic Manipulation Cost and Utilization

- Reductions of 45.1 percent in the average number of physical therapy visits and 55.8 percent in the average number of chiropractic visits at 9 months post-injury following implementation of the 2004 utilization review schedule, ACOEM and the 24-visit caps. As a result, total PT payments per claim at 9 months averaged 47.4 percent less in 2004 than in 2002; while total payments per claim for chiropractic manipulation averaged 60.9 percent less.

Part 3. Physician Services Fee Schedule

- 4.1 percent reduction in fee schedule allowances between 2003 and 2004

Part 4. Pharmacy Fee Schedule Changes

- 2004 fee schedule changes were associated with a 9.6 percent reduction in average unit payments for prescription drugs between 2002 and 2004. At the same time, reimbursements for brand name drugs climbed from 57.8 percent of total workers' compensation prescription drug dollars in 2002 to 70.2 percent in 2004 – a relative increase of 21.5 percent. In 2004, repackaged drugs dispensed through physician offices and not subject to the fee schedule accounted for 30 percent of all California workers' compensation prescriptions, 43 percent of the pharmacy dollars billed and 51.5 percent of the pharmacy dollars paid. Despite fears that the fee schedule would result in fewer pharmacies filling workers' compensation prescriptions, injured worker access to pharmacies improved significantly.

Part 5. Changes in Utilization and Reimbursement for Medical Services

- Following the implementation of the 2004 UR schedule, the proportion of indemnity claims receiving chiropractic manipulation, physical therapy and injections declined, while the proportion receiving surgery increased slightly and the proportion involving radiology rose significantly.
- At nine months post injury, the average number of visits and average total payments for chiropractic and physical medicine per indemnity claim dropped sharply in 2004. At the same time, the average number of surgery visits declined by 14.6 percent from the 2003 level, though total surgery dollars paid per claim increased 18.5 percent, suggesting a shift in the mix of surgical services used.

Part 6. Inpatient Hospital Fee Schedule Changes

- Following the adoption of the Medicare fee schedule in July 2004 the average amount allowed for inpatient hospital admissions fell to $14,439, down 4.6 percent from the 2003 average, but 0.8 percent higher than the average allowed for a 2002 inpatient admission.