

# Medical Payments in the Oregon Workers' Compensation System, First Quarter 2002

Department of Consumer & Business Services

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The estimated medical payments for treating injured workers during the first calendar quarter of 2002 totaled \$59,090,500. This figure represents a slight increase from the estimated \$58,305,000 in total medical payments reported during the first calendar quarter of 2000.<sup>1</sup>

## Medical payments by provider type

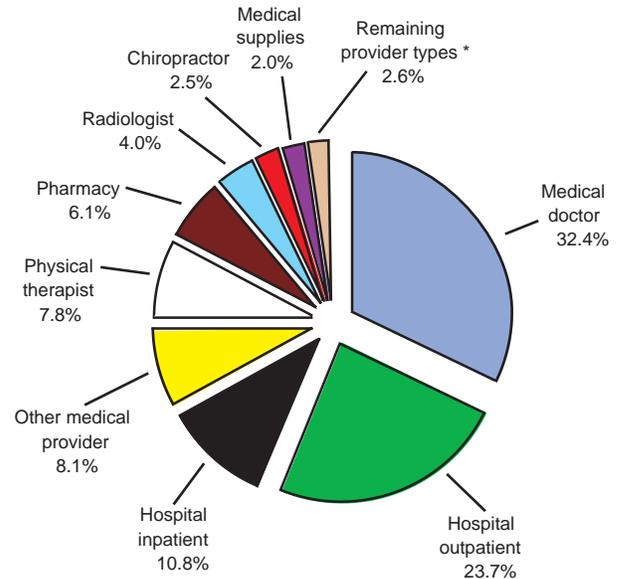
A breakdown of payments by provider type is shown in Figure 1. A more detailed description of all provider types and the expenditure amounts associated with each is shown in Table 1.

**Table 1. Workers' compensation medical payments by provider type, first quarter 2002**

Provider type	First quarter, 2002	
	Total payments	Pct. of total payments
Medical doctor	\$19,115,600	32.4%
Hospital outpatient	\$13,987,600	23.7%
Hospital inpatient	\$6,398,100	10.8%
Other medical provider	\$4,794,600	8.1%
Physical therapist	\$4,625,500	7.8%
Pharmacy	\$3,604,500	6.1%
Radiologist	\$2,359,900	4.0%
Chiropractor	\$1,464,100	2.5%
Medical supplies	\$1,183,900	2.0%
Osteopath	\$580,300	1.0%
Occupational therapist	\$490,600	0.8%
Dentist	\$142,700	0.2%
Physician assistant	\$137,200	0.2%
Registered nurse practitioner	\$55,200	0.1%
Laboratory	\$42,500	0.1%
Podiatrist	\$42,200	0.1%
Optometrist	\$31,100	0.1%
Acupuncturist	\$27,900	0.1%
Naturopath	\$6,900	0.0%
Total	\$59,090,500	100.0%

Note: Provider-type payment figures are rounded to the nearest hundred; figures and percents may not add to totals, due to rounding.

**Figure 1. Workers' compensation medical payments by provider type, first quarter 2002**



\*Remaining provider types include Osteopath, Occupational therapist, Dentist, Physician assistant, Registered nurse practitioner, Laboratory, Podiatrist, Optometrist, Acupuncturist, and Naturopath.  
Note: Percents may not total 100 percent, due to rounding.

Table 1 shows the distribution of total injured worker medical payments and the percentage of medical payments for 19 types of medical providers during the first quarter 2002. Medical doctor services represented 32.4 percent of total medical payments, followed by hospital outpatient services at 23.7 percent, and hospital inpatient services at 10.8 percent. "Other medical providers" ranked fourth (8.1%), representing nearly \$4.8 million in payments. Payments not readily classified under standard provider types are reported as "other medical providers." A substantial amount of payments made to "other medical providers" was for home health care, nursing home care, and ambulance services. Four provider types — medical doctor, inpatient, outpatient, and "other medical provider" — accounted for 75 percent of total medical payments to providers.

Considerable portions of medical payments went to physical therapists and pharmacies. Physical therapists received 7.8 percent of the total payments, while payments to pharmacies accounted for 6.1 percent. Radiologists received 4 percent

of the total payments for providing MRI, CT, and X-ray services. Chiropractors received 2.5 percent of payments for providing chiropractic manipulative treatments and other therapeutic services.

### Medical payments by service type

Table 2 shows total payments for specific medical services provided in the first quarter of 2002. Due to improved methodology and a more detailed analysis of the medical payments, some medical services that are identified in 2002 were not specified in 2000.

In 2002, therapeutic exercises comprised 5.9 percent of all payments to medical providers and, like 2000, are the medical service with the highest total payment. This service involves applying physical therapy to develop a patient's strength and endurance, range of motion, and flexibility. The presence of related services, such as manual therapy techniques, physical therapy evaluation, therapeutic activities, and ultrasound therapy in the top 20 services, illustrates the importance of physical therapy in workers' compensation medical treatment.

Office/outpatient visits also made up a large percentage of medical payments. Classification of specific office visit codes is based on the type of patient (new or established), the level of analysis required in the patient's history and examination (basic, expanded, detailed, or comprehensive), and the complexity of the medical decision regarding the patient's injury (straightforward, low, moderate, or high). In 2002, four office/outpatient visit services ranked in the top 20 at 2nd, 9th, 11th, and 15th. These rankings are similar to those found in 2000. If these four types of office visits are analyzed as a group, office visits become the medical service, within the top 20, receiving the highest percentage (7.4) of workers' compensation medical payments.

Insurer medical exam (IME) services include basic physical exams and reports, as well as more specialized IME services such as panel exams and exams by specialists. In Table 2, IME services are grouped together under the Oregon Specific Code for IMEs (D0003). IME services represent 3.6 percent (\$2,142,100) of total medical payments, up from 3.1 percent (\$1,834,000) in 2000.

**Table 2. Top 20 workers' compensation medical services in descending order by total payments, first quarter 2002**

Rank	Service code	Description of service	Total payments	Pct. of total payments
1	97110	Therapeutic exercises	\$3,487,100	5.9%
2	99213	Office/outpatient visit for est. patient w/ low to moderate complexity	\$2,375,200	4.0%
3	D0003	Insurer medical exams (IMEs)	\$2,142,100	3.6%
4	97140	Manual therapy	\$1,841,000	3.1%
5	360	Operating room services	\$1,297,000	2.2%
6	450	Emergency room services	\$972,200	1.6%
7	72148	Magnetic image; lumbar and spine w/o dye	\$902,800	1.5%
8	N/A	Ambulatory surgical center (ASC) facility fees *	\$868,400	1.5%
9	99214	Office/outpatient visit for new patient w/ moderate to high complexity	\$716,000	1.2%
10	73721	Magnetic image; joint of lower extremity w/o dye	\$714,800	1.2%
11	99203	Office/outpatient visit for new patient w/ moderate complexity	\$703,000	1.2%
12	97001	Physical therapy evaluation	\$630,900	1.1%
13	97530	Therapeutic activities	\$602,500	1.0%
14	97035	Ultrasound therapy	\$601,600	1.0%
15	99212	Office/outpatient visit for est. patient w/ minimal complexity	\$553,300	0.9%
16	72158	Magnetic image; lumbar and spine with dye	\$523,400	0.9%
17	80.51	Excision intervertebral disc	\$514,600	0.9%
18	99283	Emergency department visit	\$512,200	0.9%
19	73221	Magnetic image; joint of upper extremity w/o dye	\$510,700	0.9%
20	270	Medical/surgical supplies and devices	\$488,800	0.8%
		Remaining services	\$38,132,900	64.5%
		Total	\$59,090,500	100.0%

\* ASC facility fees estimated using payments reported by SAIF and Liberty Mutual Group.

Note: Figures and percents may not add to totals, due to rounding.

Ambulatory service center (ASC) facility fees represent 1.5 percent of total medical payments. ASC facility fees are for the use of an ASC's surgical facilities, supplies, and ancillary staff. These fees are reported and reimbursed separately from the physician's professional fee for conducting the surgery.

### Payment for services within each provider type

To more fully understand the distribution of payments for worker's compensation medical services, it is useful to look more closely at services delivered by the provider types receiving the highest proportion of payments. Tables 3, 4, and 5 describe services responsible for payments received by medical doctors, hospital inpatient facilities, and physical therapists, respectively.

Table 3 shows that within the top 10 services, office visits continue to dominate the top services for which the medical doctor provider type receives payment (17.4). IME services

represent 6.1 percent (\$1,168,500) of medical doctor payments. IME service payments received by medical doctors are likely under-estimated. Many IME services are performed by physicians employed by private entities that contract with insurers to provide IME services. As a result, about half of IME service payments are reported as being provided by an "other medical provider" since the insurer directly pays the vendor for the IME service, not the physician that performed the service. Knee arthroscopy, low back disk surgery, and carpal tunnel surgery are again among the top procedures to receive payments at 1.8, 1.4, and 1.3 percent, respectively.

Table 4 shows procedures with the highest cumulative payments within the hospital inpatient provider type. Payment amounts are for the use of a hospital's facilities, supplies, and ancillary staff. The physician's professional fee for conducting the surgery is reported separately and reimbursed under medical doctor provider type. As in

**Table 3. Top 10 medical doctor services, first quarter 2002**

Rank	Service code	Description of service	Total payments	Pct. of total payments
1	99213	Office/outpatient visit for est. patient w/ low to moderate complexity	\$1,808,100	9.5%
2	D0003	Insurer medical exams (IMEs)	\$1,168,500	6.1%
3	99214	Office/outpatient visit for new patient w/ moderate to high complexity	\$567,100	3.0%
4	99203	Office/outpatient visit for new patient w/ moderate complexity	\$508,800	2.7%
5	99212	Office/outpatient visit for est. patient w/ minimal complexity	\$436,900	2.3%
6	29881	Knee arthroscopy/surgery	\$338,300	1.8%
7	97110	Therapeutic exercises	\$288,600	1.5%
8	63030	Low back disk surgery	\$262,300	1.4%
9	64721	Carpal tunnel surgery	\$243,000	1.3%
10	99283	Emergency department visit	\$237,300	1.2%
		Remaining services	\$13,256,700	69.3%
		Total	\$19,115,600	100.0%

Note: Figures and percents may not add to totals, due to rounding.

**Table 4. Top 10 hospital inpatient services, first quarter 2002**

Rank	Service code	Description of service	Total payments	Pct. of total payments
1	80.51	Excision intervertebral disc	\$514,600	8.0%
2	81.08	Lumbar/lumbosac fusion, posterior technique	\$447,400	7.0%
3	86.22	Debridement of wound, infection, or burn	\$238,800	3.7%
4	81.02	Other cervical fusion, anterior technique	\$208,700	3.3%
5	81.54	Total knee replacement	\$183,500	2.9%
6	79.36	Open reduction of fracture - tibia and fibula	\$169,700	2.7%
7	03.53	Repair of vertebral fracture	\$166,000	2.6%
8	81.06	Lumbar/lumbosac fusion, anterior technique	\$125,200	2.0%
9	86.69	Skin graft to other sites	\$108,100	1.7%
10	81.07	Lumbar/lumbosac fusion, lateral transverse process technique	\$94,800	1.5%
		Remaining services	\$4,141,300	64.7%
		Total	\$6,398,100	100.0%

Note: Figures and percents may not add to totals, due to rounding.

**Table 5. Top 10 physical therapist services, first quarter 2002**

Rank	Service code	Description of service	Total payments	Pct. of total payments
1	97110	Therapeutic exercises	\$1,776,400	38.4%
2	97140	Manual therapy	\$1,028,200	22.2%
3	97530	Therapeutic activities	\$311,900	6.7%
4	97001	Physical therapy evaluation	\$310,100	6.7%
5	97035	Ultrasound therapy	\$292,800	6.3%
6	97014	Electric stimulation therapy	\$178,600	3.9%
7	97010	Hot or cold pack therapy	\$74,400	1.6%
8	97033	Electric current therapy	\$64,300	1.4%
9	97113	Aquatic therapy/exercises	\$53,500	1.2%
10	97032	Electrical stimulation therapy	\$49,200	1.1%
		Remaining services	\$486,100	10.5%
		Total	\$4,625,500	100.0%

Note: Figures and percents may not add to totals, due to rounding.

2000, excision intervertebral disc, was the procedure with the highest total hospital inpatient payments performed on injured workers. Orthopedic surgeries account for eight of the top 10 hospital inpatient services; dermatologic surgeries account for the other top 10 services.

Table 5 shows the top services in the physical therapist provider type. Therapeutic exercises ranked first in 2002 and continued to account for the largest share of physical therapy payments (38.4 percent). Manual therapy, such as mobilization/manipulation, manual lymphatic drainage, and manual traction, was next with 22.2 percent of payments. Payments for therapeutic activities and physical therapy evaluations each represent 6.7 percent of payments.

Analyses of hospital outpatient and other medical provider services are not covered in this report. Insurers often combine all outpatient services into a single outpatient charge (according

to the hospital cost-to-charge fee schedule); consequently, details about specific hospital outpatient services are lost in the insurer billing process. Because insurers do not use a common coding scheme for services provided by “other medical providers,” further analysis is not possible at this time.

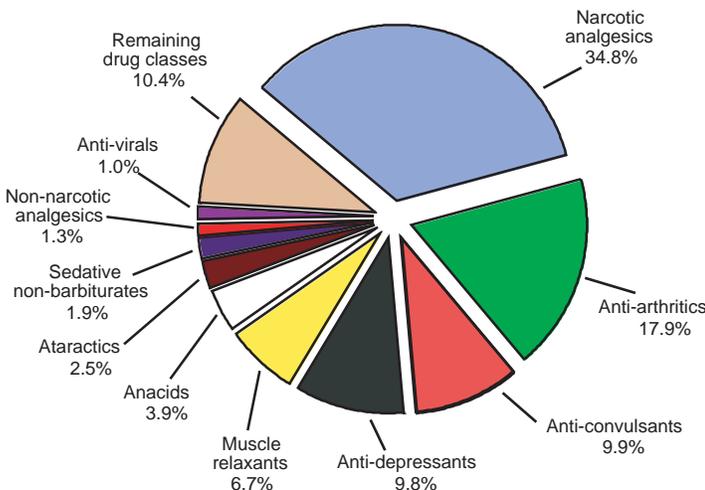
**Pharmacy payments by drug name and class**

Figure 2 breaks down pharmacy payments by drug class (also known as drug category). A drug class contains drugs with similar actions and uses. Narcotic analgesics continues to rank first among the drug classes dispensed to injured workers, receiving more than one-third of pharmacy payments. Narcotic analgesic payments are followed by anti-arthritis (also known as anti-inflammatories) and anti-convulsants (anti-seizure medications), at 17.9 and 9.9 percent of total pharmacy payments, respectively.<sup>2</sup>

Table 6 shows the top pharmacy payments by drug name and total payment. In 2002, the drug to receive the highest aggregate payment was oxycodone HCL, a narcotic analgesic (pain reliever) representing 16.3 percent of pharmacy payments. The top 25 drugs, as a whole, represented over 70 percent of pharmacy payments.

Further analysis of workers’ compensation pharmacy data shows a higher use of generic drugs than in general healthcare. In 2002, generic drugs represented 51 percent of dispensed prescriptions in general healthcare, representing 16 percent of the total dollars spent on dispensed prescriptions.<sup>3</sup> In Oregon’s workers’ compensation system, generic drugs represented 62 percent of dispensed prescriptions and 26 percent of the total dollars spent on prescriptions in the first quarter of 2002. Additionally, when generic and brand name versions of a drug within the top five drug classes are both available, the generic is dispensed more than 90 percent of the time. Because the top five drug classes contribute to four-fifths of the total dollars, the workers’ compensation system has experienced significant cost savings as a result of generic drug utilization.<sup>4</sup>

**Figure 2. Top drug classes by pharmacy payments, first quarter 2002**



Note: Percents may not total 100 percent, due to rounding.

**Table 6. Top 25 pharmacy payments by drug name, first quarter 2002**

Rank	Drug name	Drug class	Brand name(s)	Generic or Brand	Total payments	Percent payments
1	Oxycodone HCL	Narcotic analgesics	Oxycodone HCL	Generic	\$17,900	0.5%
			Oxycontin, OxyIR, OxyFast	Brand	\$571,200	15.8%
					<b>\$589,100</b>	<b>16.3%</b>
2	Gabapentin	Anti-convulsants	Neurontin	Brand	<b>\$274,700</b>	<b>7.6%</b>
3	Celecoxib	Anti-arthritics	Celebrex	Brand	<b>\$222,300</b>	<b>6.2%</b>
4	Hydrocodone bitartrate w/ acetaminophen	Narcotic analgesics	Hydrocodone bitartrate w/ APAP	Generic	\$161,000	4.5%
			Norco, Vicodin, Lortab, Lorcet, Zydone	Brand	\$21,800	0.6%
					<b>\$182,800</b>	<b>5.1%</b>
5	Rofecoxib	Anti-arthritics	Vioxx	Brand	<b>\$181,400</b>	<b>5.0%</b>
6	Morphine sulfate	Narcotic analgesics	Morphine sulfate, Oramorph SR	Generic	\$64,500	1.8%
			MS Contin, Kadian	Brand	\$47,800	1.3%
					<b>\$112,300</b>	<b>3.1%</b>
7	Tramadol HCL	Narcotic analgesics	Ultram	Brand	<b>\$105,500</b>	<b>2.9%</b>
8	Fentanyl	Narcotic analgesics	Duragesic	Brand	<b>\$91,500</b>	<b>2.5%</b>
9	Carisoprodol	Muscle relaxants	Carisoprodol	Generic	\$50,400	1.4%
			Soma	Brand	\$18,400	0.5%
					<b>\$68,800</b>	<b>1.9%</b>
10	Omeprazole	Anacids	Prilosec	Brand	<b>\$66,500</b>	<b>1.8%</b>
11	Fluoxetine HCL	Anti-depressants	Fluoxetine HCL	Generic	\$47,500	1.3%
			Prozac	Brand	\$11,600	0.3%
					<b>\$59,100</b>	<b>1.6%</b>
12	Nabumetone	Anti-arthritics	Nabumetone	Generic	\$43,600	1.2%
			Relafen	Brand	\$15,300	0.4%
					<b>\$58,900</b>	<b>1.6%</b>
13	Paroxetine HCL	Anti-depressants	Paxil	Brand	<b>\$55,100</b>	<b>1.5%</b>
14	Venlafaxine HCL	Anti-depressants	Effexor	Brand	<b>\$53,200</b>	<b>1.5%</b>
15	Zolpidem tartrate	Sedative non-barbiturate	Ambien	Brand	<b>\$52,200</b>	<b>1.4%</b>
16	Propoxyphene napsylate w/ acetaminophen	Narcotic analgesics	Propoxyphene napsylate w/ APAP	Generic	\$43,200	1.2%
			Darvocet-N	Brand	\$6,300	0.2%
					<b>\$49,500</b>	<b>1.4%</b>
17	Sertraline HCL	Anti-depressants	Zoloft	Brand	<b>\$48,500</b>	<b>1.3%</b>
18	Tizanidine HCL	Muscle relaxants	Zanaflex	Brand	<b>\$44,900</b>	<b>1.2%</b>
19	Cyclobenzaprine HCL	Muscle relaxants	Cyclobenzaprine HCL	Generic	\$40,200	1.1%
			Flexeril	Brand	\$2,000	0.1%
					<b>\$42,200</b>	<b>1.2%</b>
20	Oxycodone HCL w/ acetaminophen	Narcotic analgesics	Oxycodone HCL w/ APAP, Endocet	Generic	\$28,700	0.8%
			Percocet, Tylox, Roxicet	Brand	\$12,500	0.3%
					<b>\$41,200</b>	<b>1.1%</b>
21	Metaxalone	Muscle relaxants	Skelaxin	Brand	<b>\$38,500</b>	<b>1.1%</b>
22	Citalopram hydrobromide	Anti-depressants	Celexa	Brand	<b>\$34,200</b>	<b>0.9%</b>
23	Naproxen	Anti-arthritics	Naproxen	Generic	\$29,300	0.8%
			Naprosyn	Brand	\$600	0.0%
					<b>\$29,900</b>	<b>0.8%</b>
24	Ibuprofen	Anti-arthritics	Ibuprofen	Generic	\$22,400	0.6%
			Motrin	Brand	\$4,900	0.1%
					<b>\$27,300</b>	<b>0.8%</b>
25	Codeine phosphate w/ acetaminophen	Narcotic analgesics	Codeine phosphate w/ APAP	Generic	\$21,400	0.6%
			Tylenol w/ codeine	Brand	\$2,900	0.1%
					<b>\$24,300</b>	<b>0.7%</b>
<b>Subtotal</b>					<b>\$2,553,900</b>	<b>70.9%</b>
<b>Remaining pharmacy payments</b>					<b>\$1,050,600</b>	<b>29.1%</b>
<b>Total</b>					<b>\$3,604,500</b>	<b>100.0%</b>

Note: Drug payment figures are rounded to the nearest hundred; figures and percents may not add to totals, due to rounding.

## Methodology

Under Bulletin 220 (Oregon Administrative Rule 436-009-0030(9)), many insurers are required to report medical billing data to the Workers' Compensation Division. Prior to 2001, analysis of this data was difficult due to data inconsistencies. In 2001, the Department of Consumer and Business Services' Information Management Division developed a model for estimating total medical payments based upon reported insurer medical billing data. Extensive review of this data and application of this model have allowed for a more detailed study of Oregon's workers' compensation medical payments.

To develop an accurate estimate of total payments for medical services provided to injured workers, insurer medical billing data was reviewed. Insurers with a distribution of payments that significantly deviated from the norm were removed from the analysis.

Insurers report medical billing data utilizing standard coding systems such as Current Procedural Terminology (CPT) codes, International Classification of Diseases (ICD-9-CM) codes, and National Uniform Billing Committee (NUBC) hospital revenue codes. Insurers that submitted unknown billing codes were asked to describe their unique codes. Data was reviewed and edited until at least 95 percent of the payments for each provider type had matching descriptions.

Data describing paid losses for prior years was obtained from the National Council on Compensation Insurance, and the historical relationship between insurer medical billing data and total medical paid losses was analyzed. The analysis showed that reported payments represent about 81 percent of the total medical paid losses. Total medical payments for January-March of 2002 were estimated by dividing total reported medical payments during this period by .81.

IMD analysts selected a subset of insurer medical billing data that showed evidence of a consistent distribution of payments as well as a substantial correlation between payments and services. This subset was used to estimate the distribution of services within each provider type shown in Table 1.

The "medical cost model" developed as a result of this research has led to a more thorough understanding of medical services provided to Oregon's injured workers. This model allows for detailed analysis of the distribution of payments among medical provider types and the types of drugs prescribed to injured workers. This analysis, the second in a series of reports that describe medical payments in Oregon's workers' compensation system, has the potential for being used for longitudinal analyses.

## Endnotes:

<sup>1</sup>See Medical Payments in the Oregon Workers' Compensation System, First Quarter 2000, Department of Consumer & Business Services (July 2001).

<sup>2</sup>It is common for anti-convulsants, most often Neurontin, to be prescribed for purposes other than seizure suppression; typically for "off-label" use in relieving neuropathic and neurogenic pain and in migraine prophylaxis. The FDA approves a drug for a specific, labeled purpose, but some drug references, such as the *Physicians' Desktop Reference*, provide alternative, "off-label" purposes.

<sup>3</sup>See IMS Health, National Prescription Audit Plus™ and National Sales Perspectives™, (July 2003).

<sup>4</sup>See Brand and Generic Drug Utilization in Oregon's Workers' Compensation System, First Quarter 2002, Department of Consumer & Business Services (August 2004).

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