



Medical Payments in the Oregon Workers' Compensation System, First Quarter 2000

Research & Analysis Section

Department of Consumer & Business Services

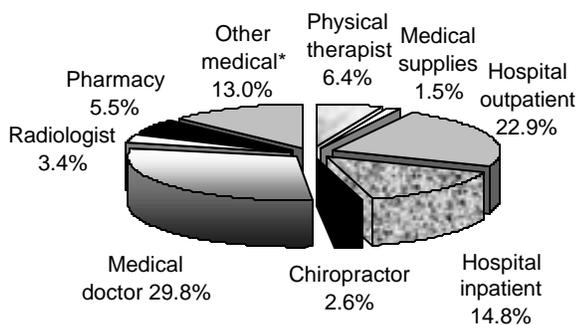
July 2001

By Clifton Hindmarsh and Julie Sutton

Total medical payments by provider type

The estimated total medical payments in treating injured workers for the first calendar quarter of 2000 is \$58,305,000. 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.

Figure 1. Medical payments by provider type



*Other medical includes all other provider types not shown.

Table 1 divides the care of injured workers into nineteen types of medical providers and then shows the total estimated amount paid to each provider type. The third column shows the percentage of medical payments as a portion of total workers' compensation payments. For the first quarter of 2000, the distribution of medical payments is dominated by payments to medical doctors, hospital inpatient and outpatient care, and care that falls under a variety of "other medical" providers. These categories accounted for over 75 percent of total payments.

Services categorized under the provider type, medical doctor, represent 29.8 percent of the total medical payments, followed by 22.9 percent for hospital outpatient services and 14.8 percent for hospital inpatient services. Other medical providers ranked fourth with 10.8 percent representing over 6.3 million dollars in payments. One reason why the other medical provider type comprises such a large percentage of the medical payments is because payments that are not readily classified under standard provider types are instead coded as other medical. Analysis of other medical provider payments shows that a substantial amount goes to home health care, nursing home care, and ambulance services.

As shown in Table 1, substantial payments also go to pharmacies and physical therapists. Pharmacies make up 5.5 percent of the total payments while physical therapists account for 6.4 percent. Chiropractic, and to a lesser extent, acupuncture and naturopathic services, usually considered alternative medical treatment, also play an important role in caring for those injured on the job.

Table 2 shows the top twenty medical services across all provider types. The Current Procedural Terminology (CPT) and International Classification of Diseases (ICD-9-CM) coding systems are used to classify medical services in tables 2 through 5.

Table 1. Workers' compensation medical payments by provider type, first quarter 2000

Provider type	Total payments	Percent of total*
Medical doctor	\$17,398,000	29.8%
Hospital outpatient	\$13,374,000	22.9%
Hospital inpatient	\$8,633,000	14.8%
Othermedical	\$6,314,000	10.8%
Physicaltherapist	\$3,708,000	6.4%
Pharmacy	\$3,207,000	5.5%
Radiologist	\$1,980,000	3.4%
Chiropractor	\$1,521,000	2.6%
Medicalsupplies	\$896,000	1.5%
Osteopath	\$476,000	0.8%
Occupational therapist	\$270,000	0.5%
Dentist	\$241,000	0.4%
Physicians assistant	\$69,000	0.1%
Nurse practitioner	\$63,000	0.1%
Laboratory	\$57,000	0.1%
Podiatrist	\$46,000	0.1%
Acupuncturist	\$23,000	0.0%
Optometrist	\$23,000	0.0%
Naturopath	\$6,000	0.0%
Total	\$58,305,000	100.0%

*Percents may not add to total because of rounding.

In Table 2, therapeutic exercise, comprises over five percent of all payments to medical providers and ranks as the number one medical service to injured workers. This service involves applying physical therapy to develop an injured worker's strength and stamina and improve flexibility. The presence of similar services, such as manual therapy techniques, therapeutic activities, physical therapy evaluation, and ultrasound therapy in the top twenty services, shows the importance of physical therapy in workers' compensation medical treatment.

Office/outpatient visits also make up a large percentage of medical services. Classification of specific office visit codes are based on the type of patient and severity of the worker's condition. Four office/outpatient visit services rank in the top twenty at number 2, 9, 11, and 14. If taken as a group, the office visits for new and established patients would be the top

service in the workers' compensation medical payments. Next in importance are insurer medical exams (IME). In table 2, all IME services are grouped together; basic exams, reports, and more specialized IME services, such as nerve conduction studies, combined make up 3.1 percent of total medical payments.

Top services within each provider type

To more fully understand the top services performed in workers' compensation, it is useful to look at services for provider types with the highest level of payments in relation to total payments. Tables 3, 4, and 5 describe the top ten services in the medical doctor, hospital inpatient, and physical therapist provider types, respectively.

Table 3 shows that office visits dominate the top services for the medical doctor provider type. Second in importance are insurer medical exams, representing \$813,000 dollars or 4.7 percent of medical doctor payments. Surgery facility charges are expenses for the use of surgical suites, and represent adjunct costs to other services in this provider type.

In Table 4, for the hospital inpatient provider type, all services associated with a medical procedure are classified under the ICD-9-CM procedure itself. Here we can see Laminectomy, excision intervertebral disc was the primary procedure with the highest cost that was performed on injured workers.

Table 5 shows the top services for the physical therapist provider type. Therapeutic exercises accounts for the lion's share with over 35 percent of payments. Manual therapy and therapeutic activities are next in importance with 17.4 and 11.8 percent, respectively.

A breakdown of hospital outpatient services is not included in this report. This is because many outpatient services are combined into one line item by insurers for application of the hospital cost-to-charge fee schedule and are reported to the department in an aggregated manner. Since detail about the specific services is lost in the process we chose not to include the data for hospital outpatient services in this report.

Pharmacy payments by drug name and type

Table 6 shows the top pharmacy payments by drug name, type and total payments. Figure 2 breaks down pharmacy payments by type of drug. The individual drug with the highest payments was Oxycontin, a Narcotic Analgesic (pain reliever), with payments of \$339,000, representing 10.6% of the total payments.

Table 2. Top twenty workers' compensation medical services in descending order of total payments, first quarter 2000

Service code	Description of Services	Total payments	Percent of total*
97110	Therapeutic exercises	\$3,000,000	5.1%
99213	Office/outpatient visit for established patient with problem(s) of low to moderate severity	\$2,272,000	3.9%
NA	Insurer medical exam	\$1,834,000	3.1%
NA	Anesthesia services	\$1,584,000	2.7%
80.51	Laminectomy, excision intervertebral disc	\$1,159,000	2.0%
97140	Manual therapy	\$1,146,000	2.0%
99199	Special service, procedure, report; adjunct to basic services performed	\$1,044,000	1.8%
72148	Magnetic image, spinal canal, lumbar	\$907,000	1.6%
99214	Office/outpatient visit for established patient w/ problem(s) of moderate to high severity	\$824,000	1.4%
99283	Emergency dept visit	\$809,000	1.4%
99203	Office/outpatient visit for new patient with problem(s) of moderate severity	\$790,000	1.3%
73721	Magnetic image, any joint of lower extremity	\$689,000	1.2%
97530	Therapeutic activities	\$675,000	1.2%
99212	Office/outpatient visit for established patient w/ problem(s) of minimal severity	\$662,000	1.1%
97001	Physical therapy evaluation	\$638,000	1.1%
97035	Ultrasound therapy	\$612,000	1.0%
29881	Knee arthroscopy/surgery	\$515,000	0.9%
98940	Chiropractic manipulation	\$511,000	0.9%
NA	Surgical facility charges	\$500,000	0.9%
73221	Magnetic image, any joint of upper extremity	\$442,000	0.8%
	Remaining services	<u>\$37,692,000</u>	<u>64.1%</u>
	Totals	\$58,305,000	100.0%

*Percents may not add to total because of rounding.

Table 3. Top 10 medical doctor services, first quarter 2000

Service code	Description of service	Total payments	Percent of total*
99213	Office/outpatient visit for established patient w/ problems(s) of low to moderate severity	\$1,551,000	8.9%
NA	Insurer medical exam	\$813,000	4.7%
99214	Office/outpatient visit for established patient w/ problems(s) of moderate to high severity	\$563,000	3.2%
NA	Surgery facility charges	\$496,000	2.9%
99212	Office/outpatient visit for established patient w/ problem(s) of minimal severity	\$462,000	2.6%
99203	Office/outpatient visit for new patient w/ problem(s) of moderate severity.	\$449,000	2.6%
29881	Knee arthroscopy/surgery	\$401,000	2.3%
63030	Low back disk surgery	\$336,000	1.9%
99202	Office/outpatient visit for new patient w/ problem(s) of low severity.	\$256,000	1.5%
64721	Carpal tunnel surgery	\$254,000	1.5%
	Remaining services	<u>\$11,817,000</u>	<u>67.9%</u>
	Totals	\$17,398,000	100.0%

*Percents may not add to total because of rounding.

Table 4. Top 10 hospital inpatient services, first quarter 2000

Service code	Description of service	Total payments	Percent of total*
80.51	Laminectomy, excision intervertebral disc	\$1,159,000	13.4%
86.22	Debridement of wound, infection or burn	\$429,000	5.0%
81.08	Lumbar/lumbosac fusion posterior	\$366,000	4.2%
81.55	Revise knee replacement	\$360,000	4.2%
79.35	Open reduction of fracture - femur	\$312,000	3.6%
79.36	Open reduction of fracture - tibia and fibula	\$312,000	3.6%
81.02	Other cervical fusion, anterior technique	\$258,000	3.0%
03.09	Other exploration of spinal cord	\$206,000	2.4%
79.37	Open reduction of fracture - tarsals/metatarsals	\$168,000	1.9%
81.06	Lumbar/lumbosac fusion anterior	\$150,000	1.7%
	Remaining services	<u>\$4,913,000</u>	<u>56.9%</u>
	Totals	\$8,633,000	100.0%

*Percents may not add to total because of rounding.

Table 5. Top 10 physical therapist services, first quarter 2000

Service code	Description of service	Total payments	Percent of total*
97110	Therapeutic exercises	\$1,309,000	35.3%
97140	Manual therapy	\$645,000	17.4%
97530	Therapeutic activities	\$437,000	11.8%
97035	Ultrasound therapy	\$260,000	7.0%
97001	Physical therapy evaluation	\$258,000	7.0%
97014	Electric stimulation therapy	\$152,000	4.1%
97010	Hot or cold packs therapy	\$80,000	2.2%
97124	Massage therapy	\$68,000	1.8%
97033	Electric current therapy	\$49,000	1.3%
97113	Aquatic therapy/exercises	\$48,000	1.3%
	Remaining services	<u>\$402,000</u>	<u>10.8%</u>
	Totals	\$3,708,000	100.0%

*Percents may not add to total because of rounding.

Figure 2 shows that narcotic analgesics rank as the number one category of drugs given to injured workers with 17 percent of payments, followed by anti-inflammatory agents and anti-convulsants, both at 10 percent of total pharmaceutical payments.

An analysis of the use of generic drugs in the workers' compensation medical data shows a higher use of generic drugs than in the overall pharmacy market. In the first quarter 2000

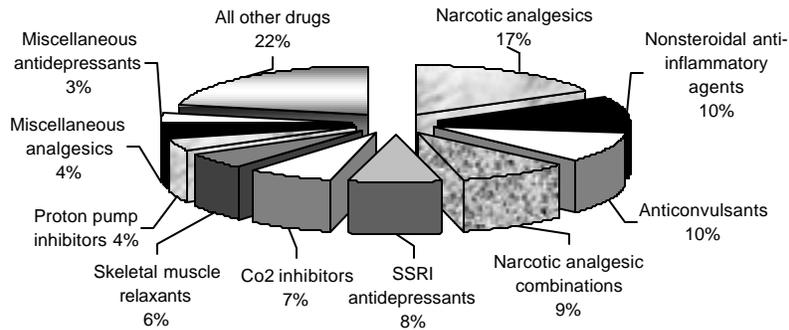
period, generics made up 60.8 percent of the prescriptions written for injured workers. In contrast, generics in 1999 made up 47.1 percent of the prescriptions written in the US market, according to the Pharmaceutical Research and Manufacturers of America (*PhRMA*). This is important because of the lower cost of generic drugs compared to brand name drugs. Generic drugs represented 23.4 percent of the dollar payments compared to 12 percent in the US market.

Table 6. Top 20 pharmacy payments by drug name, first quarter 2000

Description	Type of drug	Total payments	Percent of total*
OxyContin	Narcotic analgesic	\$339,000	10.6%
Neurontin	Anticonvulsant	\$233,000	7.3%
Celebrex	Cox-2 inhibitor	\$155,000	4.8%
Ultram	Miscellaneous analgesic	\$117,000	3.6%
Acetaminophen-Hydrocodone Bitartrate	narcotic analgesic combination	\$110,000	3.4%
Prozac	SSRI antidepressant	\$106,000	3.3%
Prilosec	Proton pump inhibitor	\$96,000	3.0%
Relafen	Nonsteroidal anti-inflammatory agent	\$81,000	2.5%
Duragesic	Narcotic analgesic	\$70,000	2.2%
Carisoprodol	Skeletal muscle relaxant	\$67,000	2.1%
Paxil	SSRI antidepressant	\$63,000	2.0%
Vioxx	Cox-2 inhibitor	\$59,000	1.8%
Zoloft	SSRI antidepressant	\$54,000	1.7%
MS Contin	Narcotic analgesic	\$51,000	1.6%
Acetaminophen-Propoxyphene Napsylate	Narcotic analgesic combination	\$42,000	1.3%
Cyclobenzaprine Hydrochloride	Skeletal muscle relaxant	\$38,000	1.2%
Ambien	Anxiolytics, sedatives and hypnotic	\$35,000	1.1%
Daypro	Nonsteroidal anti-inflammatory agent	\$32,000	1.0%
Lovenox	Heparin	\$30,000	0.9%
BuSpar	Anxiolytic, sedative and hypnotic	\$29,000	0.9%
Remaining pharmacy		<u>\$1,400,000</u>	<u>43.7%</u>
Totals		\$3,207,000	100.0%

*Percents may not add to total because of rounding.

Figure 2. Top drug types in workers compensation pharmacy payments, first quarter 2000



Methodology

The Department of Consumer and Business Services (DCBS) has recently developed an approach to accurately describe the overall volume and components of medical payments within the Oregon workers' compensation system. In the past, reporting market characteristics such as the medical payment per provider type was difficult because of inconsistent data. However, an extensive review and refinement of the data has made more detailed study of workers' compensation medical payments possible. Using the quarterly data submitted to the department as part of the Workers' Compensation Division (WCD) Bulletin 220 medical data reporting, the Information Management Division has devised a model to not only describe the level of total payments for medical services, but also the services within each medical provider type. This approach made it feasible to perform analyses previously beyond the scope of the data.

The first task in developing an accurate representation of the medical services provided to injured workers was a thorough review of all the data submitted by those insurers required to report medical billing data under WCD Bulletin 220. Staff reviewed detailed records to identify insurers whose distribution of payments, within each provider type, was dissimilar to the majority of insurers, or who used codes that could not be matched to standard descriptions. These insurers were then contacted to correct errors in the data or to determine the meanings of unknown codes. Insurers who had significant data inconsistencies in a particular provider type were removed at this step. Then, for each provider type, all insurer records were combined and the data was reviewed and edited until at least 95% percent of the payments had matching descriptions.

To determine the overall volume of medical payments, analysts determined the historical relationship between Bulletin 220 and total medical paid losses. The analysis showed that payments reported under Bulletin 220 are about 82 percent of the total medical paid losses. Data on paid losses for prior years was obtained from the National Council on Compensation Insurance. Staff then estimated the total medical payments during January-March of 2000 by inflating total Bulletin 220 medical payments during this period.

To determine the distribution of medical payments according to provider type, analysts selected a group of reliable insurers who were reporting in every provider type and who had a reasonable distribution of payments. All clean data in each provider type were used to estimate the distributions of services within provider type. A weighted average based on market share by insurer type was used to calculate the overall distribution by provider type shown in Table 1.

Conclusion

The "medical cost model" developed as a result of this research has resulted in a much more thorough understanding of medical services provided to injured workers. For the first time, the distribution of payments among a detailed list of medical provider types is known. This review has also made possible new analyses, such as the kinds of drugs given to injured workers. This medical review will be the first of an annual series, one in which panel or longitudinal analyses can also be undertaken.