Oregon's Workers' Compensation System: Average Costs and Utilization of Medical Services, 1999-2003

Information Management Division
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In 2005, the Oregon Department of Consumer and Business Services, Workers' Compensation Division (WCD) created the Medical Quality Initiative (MQI) to look at ways of controlling increasing medical and overall costs in Oregon's workers' compensation system while ensuring that injured workers have adequate access to quality health care that results in a high return-to-work rate. At the same time, the division wanted to minimize disputes and litigation as well as reduce the administrative process of medical reporting for medical providers and insurance companies. The Information Management Division (IMD) worked with the WCD to provide data showing rates of change in the cost and utilization of medical services in Oregon's workers' compensation system. This research alert is one of several alerts providing the results of IMD's research. It summarizes medical costs and care utilization for services provided within the first year, for injuries occurring between 1999 and 2003.

Total claim counts decreased by an annual average rate (AAR) of more than 5 percent per year (see Figure 1) between 1999 and 2003.[1] Based on a review of Accepted Disabling Claims (ADCs) and Accepted Nondisabling Claims (ANCs) by injury year for 1999 to 2003, total claim counts fell at an AAR of 5.4 percent. Nondisabling claim counts, which represent more than three-quarters of total claims, fell at a faster rate than disabling claims. From 1999 to 2003, nondisabling claim counts fell at an AAR of 5.6 percent while disabling claim counts fell at an AAR of 4.9 percent.

Total medical payments increased by an AAR of nearly 4 percent per year (see Figure 2) between 1999 and 2003. While claim counts decreased, total medical payments during the first year after date of injury increased at an AAR of 3.9 percent per year.

Figure 1. Total claim counts

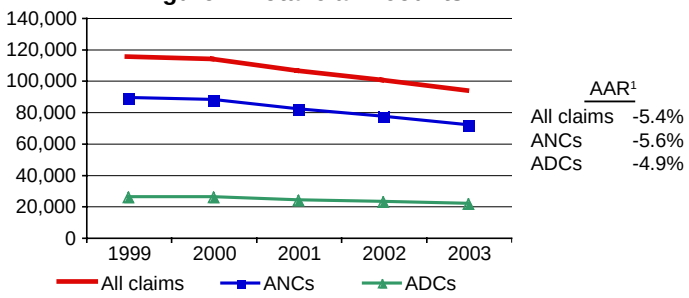
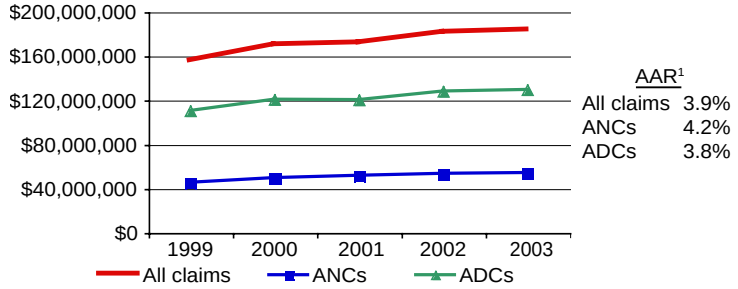


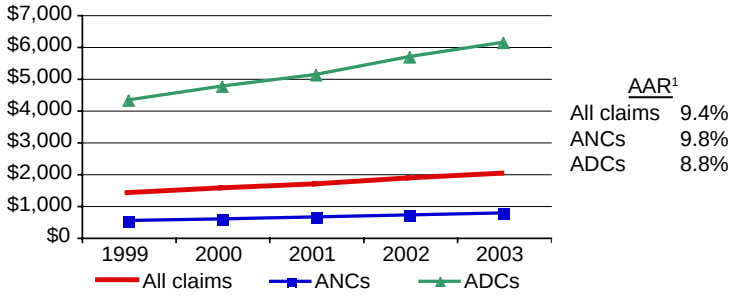
Figure 2. Total medical payments



[1]Annual average rates (AAR) were calculated over the time period specified and reflect the slope of the least squares line through the natural log of the annual data points.

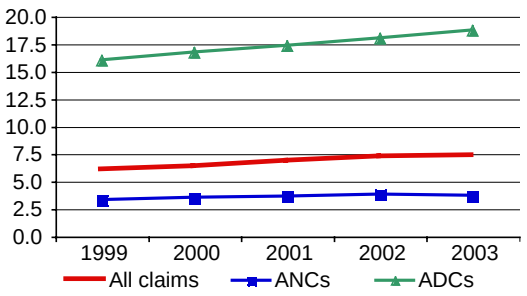
Average medical payments per claim increased by an AAR of more than 9 percent per year (see Figure 3) between 1999 and 2003. A decreasing trend in claim counts and an increasing trend in total medical payments equate to a substantial increase in average medical payments per claim. Average medical payments per claim within the first year after injury increased at an AAR of 9.4 percent. Average medical payments per claim within the first year after injury for nondisabling claims increased at an AAR of 9.9 percent, while average medical payments within the first year after injury for disabling claims increased at an AAR of 8.8 percent. (These figures are not adjusted for inflation. From 1999 to 2003, the medical services component of the Consumer Price Index (CPI) increased at an annual rate of 4.6 percent. Inflation-adjusted AARs can be calculated by subtracting the CPI inflation rate from the nominal rate.)

Figure 3. Average medical payments per claim



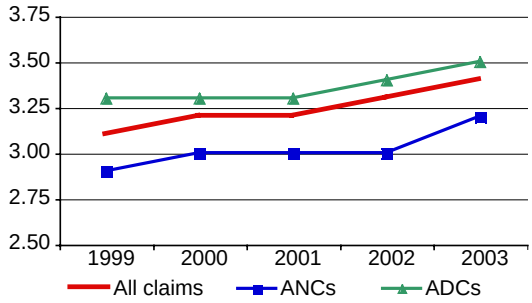
	AAR[1]
All claims	9.4%
ANCs	9.8%
ADCs	8.8%

Figure 4. Average number of visits per claim



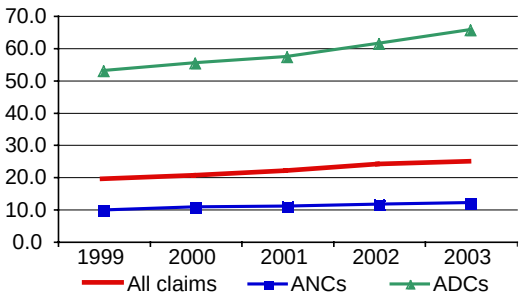
	AAR[1]
All claims	5.3%
ANCs	3.1%
ADCs	3.9%

Figure 5. Average number of services per visit



	AAR[1]
All claims	2.2%
ANCs	2.0%
ADCs	1.5%

Figure 6. Average number of services per claim



	AAR[1]
All claims	7.4%
ANCs	5.1%
ADCs	5.3%

Average number of visits per claim and average number of services per visit increased (see Figure 4 and Figure 5). Increases in average visits per claim drove the growth in average services per claim (see Figure 6). The average number of visits per claim increased from six in 1999 to 7.3 in 2003, an AAR of 5.3 percent. Similarly, the average number of services provided per visit increased from 3.1 in 1999 to 3.4 in 2003, an AAR of 2.2 percent. The combination of these data equates to a 7.4 percent AAR in the average number of services per claim. During this time, the average payment per service increased at an AAR of 4.8 percent, consistent with the CPI for medical services, which had an AAR of 4.6 percent.

One of the MQI goals was to compare Oregon's workers' compensation costs and utilization of medical services with those of other states. WCD was unable to find comparable data from other states to compare against; however, the Workers' Compensation Research Institute (WCRI) had available figures that were a composite of 12 states and could be used for comparison.

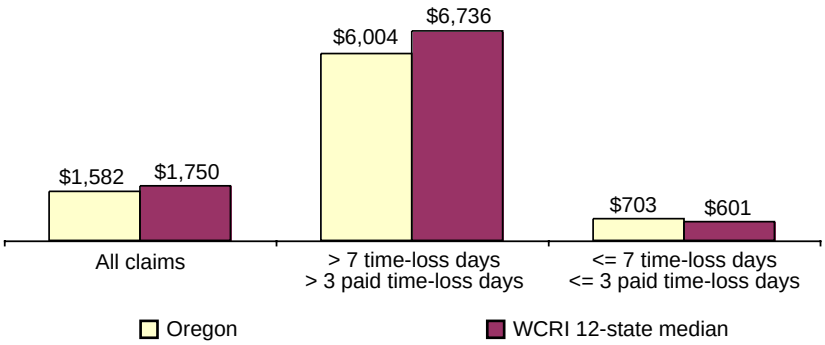
Compared with the WCRI-published 12-state median, Oregon has a slightly lower average medical payment per claim (see Table 1 and Figure 7).[2] In an analysis of medical payments for claims with injury dates between Oct. 1, 2000 and Sept. 31, 2001 and with services evaluated through March 31, 2002, Oregon had an average medical payment per claim of $1,582 compared with the WCRI-published 12-state median average medical payment per claim of $1,750. Utilization levels were comparable.

Table 1. Average medical payment per claim, Oregon vs. WCRI 12-state median

WCRI 12-state median	All claims	> 7 time-loss days[2]	<=7 time-loss days[2]
Claim distribution	100%	20%	80%
Avg. medical payment per claim	$1,750	$6,736	$601
Avg. number of services per claim	20	68	10
Avg. number of visits per claim	7	20	4
Avg. number of services per visit	3.2	3.4	2.9
Avg. payment per service	$89	$109	$57
Avg. payment per visit	$259	$339	$162
Oregon	**All claims**	**> 3 *paid* time-loss days[2]**	**<=3 *paid* time-loss days[2]**
Claim distribution	70,896	11,752	59,144
	100.0%	16.6%	83.4%
Total medical payments	$112,157,472	$70,559,008	$41,578,232
Percent medical payments	100.0%	62.9%	37.1%
Avg. medical payment per claim	$1,582	$6,004	$703
Avg. number of services per claim	21	66	12
Avg. number of visits per claim	7	20	4
Avg. number of services per visit	3.2	3.3	3.0
Avg. payment per service	$77	$91	$60
Avg. payment per visit	$242	$304	$180

Note: Oregon figures do not included the medical portions of disputed claim settlements (DCSs). Therefore, the figures may be slightly underestimated.

Figure 7. Average medical payment per claim, Oregon vs. WCRI 12-state median



[2]WCRI figures are based on a 12-state median. Seven of the 12 states have a seven-day waiting period, compared with Oregon's three-day waiting period (*The Anatomy of Workers' Compensation Medical Costs and Utilization: Trends and Interstate Comparisons, 4th Edition*, June 2004, WCRI). Due to Oregon's three-day waiting period, four paid days of time loss would be equivalent to seven days of missed work.

Methodology

For the first portion of this analysis, a quality sample of medical billing data was selected. The sample is composed of insurers (notably SAIF and the Liberty Mutual group, along with other private insurers and self-insurers) that have reported medical billing data with a high degree of correlation to the department's Claim Information System (CIS). These insurers have reported medical billing data that matches 90 percent or more of the accepted disabling claims (ADCs) listed on the CIS as accepted by the insurers and have consistently reported valid medical service and payment data. The sample consists of claims with injuries occurring between Jan. 1 of the injury year (1999-2003) through Dec. 31. All services provided within one year (365 days) of the injury are used in the analysis. This time frame was chosen because a significant portion of services on a claim are provided within the first year after injury. Furthermore, a one-year time frame allows for the use of the most recent data available.

The number of ADCs and estimated accepted nondisabling claims (ANCs) are calculated using data from all insurers (SAIF, private, and self-insured) in Oregon's workers' compensation system.[3] ANCs are not reported to the Department of Consumer and Business Services. Instead, the department uses ratios of ANCs to ADCs from three data sources. Medical billing data reported to the department is combined with the department's CIS data to provide estimates for SAIF and some private insurers and self-insurers. National Council on Compensation Insurance (NCCI) data provides ratios of indemnity cases to medical cases for SAIF and private insurers. Also, on occasion SAIF has provided counts of claims with and without payments. The ratios from these sources are used to estimate the number of nondisabling claims that are accepted by Oregon insurers each year. The figures for ANCs are subject to revision.

[3] *Various characteristics of the workers' compensation systems, calendar year 1968-2004*, available on the department's Web site at www.dcbs.oregon.gov, provides an overview of Oregon workers' compensation statistics.

If you have questions about the information contained in this document, please contact by e-mail or phone: Nathan Johnson, research analyst, (503) 947-7194, Research & Analysis Section, Information Management Division.

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