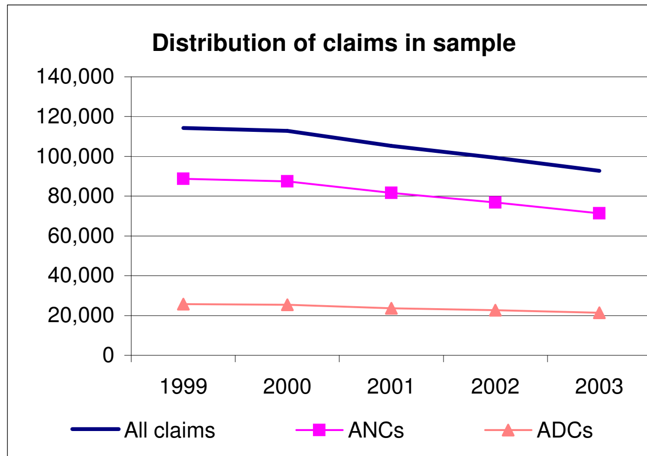
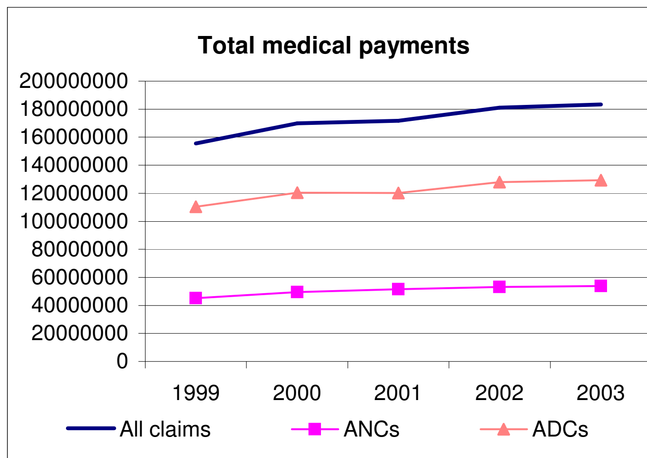
Attachment 1: Medical cost and utilization trends

Claims consist of injuries from January 1st of the injury year (DOI year) through December 31st. All services provided within one year (365 days) of the injury are used in the analysis. Figures include both currently open and closed claims.

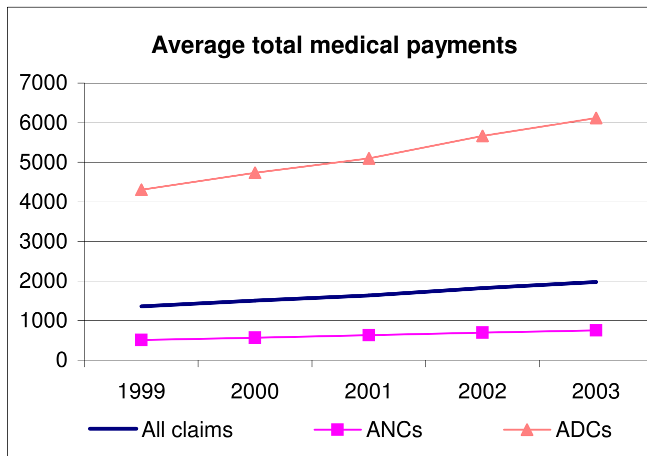
Figures are derived from insurers (notably SAIF and the Liberty Mutual group) that have reported billing data which has a high degree of correlation to the claims system. These insurers have reported billing data that matches 90 percent or more of the ADCs listed on the claims system as accepted by the insurers.



Growth Rate*	
All claims	-5.4%
ANCs	-5.6%
ADCs	-4.9%



Growth Rate*	
All claims	3.9%
ANCs	4.2%
ADCs	3.8%



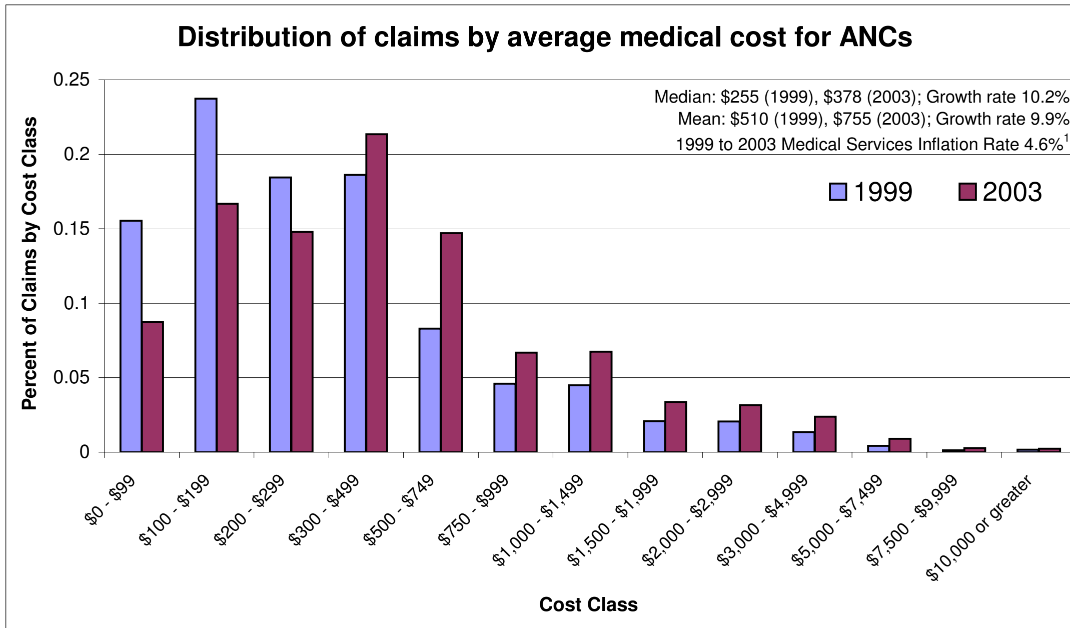
Growth Rate*	
All claims	9.4%
ANCs	9.8%
ADCs	8.8%

* The growth rate calculation uses the log-linear least squares method.

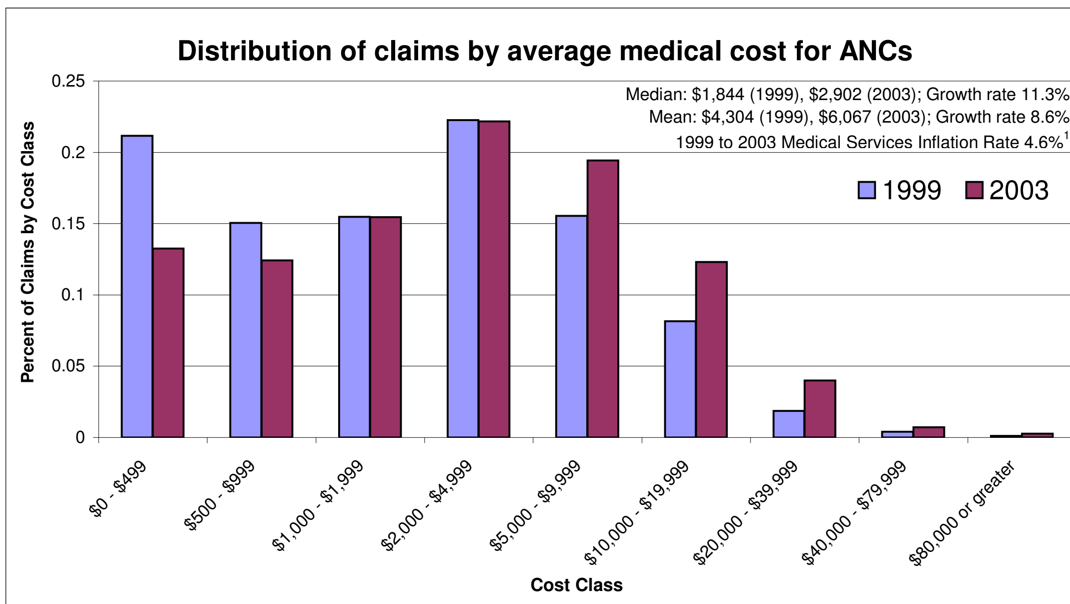
Methodology: For each claim in the sample, the total medical payments, total number of visits (number of individual days a service was provided), and the total number of services are calculated. Also, the number of services per visit (number of services/number of visits), payments per visit (total payments/number of visits), and the payments per service (total payments/number of services) are calculated. Then an average for all the claims in each injury year is calculated.

Source: Department of Consumer and Business Services\Information Management Division\Research and Analysis — September 28, 2005

Attachment 2: Distribution of Claims by Average Medical Cost for ANCs and ADCs, 1999 and 2003



In 1999, median medical costs of ANCs were $255. By 2003, the median cost for ANCs had increased to $378, an annual growth rate of 10.2%. During this period, the average, or mean, medical cost per ANC increased from $510 to $755, an annual growth rate of 9.9%. The above graph shows a general shift from less costly to more costly claims. This signifies a possible increase in overall ANC severity. It is also possible that claims that were less severe ANCs in 1999 were no longer being filed in 2003 and claims that would have previously been ADCs are migrating to ANCs.



In 1999, median medical costs of ADCs were $1,844. By 2003, the median cost for ADCs had increased to $2,902, an annual growth rate of 11.3%. During this period, the average, or mean, medical cost per ADC increased from $4,304 to $6,067 an annual growth rate of 8.6%. The above graph shows a general shift from less costly to more costly claims. This signifies a possible increase in overall ADC severity. It is also possible that claims that had previously been disabling are now be classified as ANCs due to a variety of system changes and medical advancements.

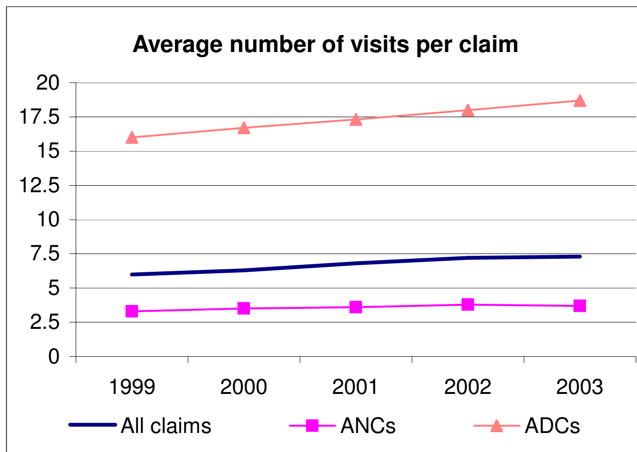
1. The inflation rate is the 1999 to 2003 annual growth rate in the Medical Services component of the Consumer Price Index, Urban Wage Earners and Clerical Workers as published by the Bureau of Labor Statistics.

Source: Department of Consumer and Business Services\Information Management Division\Research and Analysis September 28, 2005

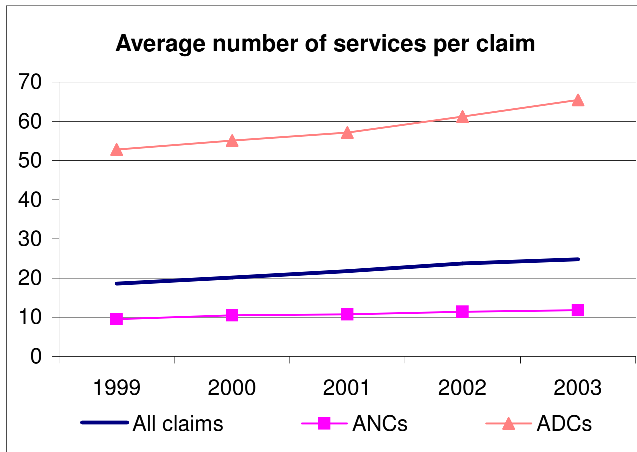
Attachment 3: Medical cost and utilization trends

Claims consist of injuries from January 1st of the injury year (DOI year) through December 31st. All services provided within one year (365 days) of the injury are used in the analysis. Figures include both currently open and closed claims.

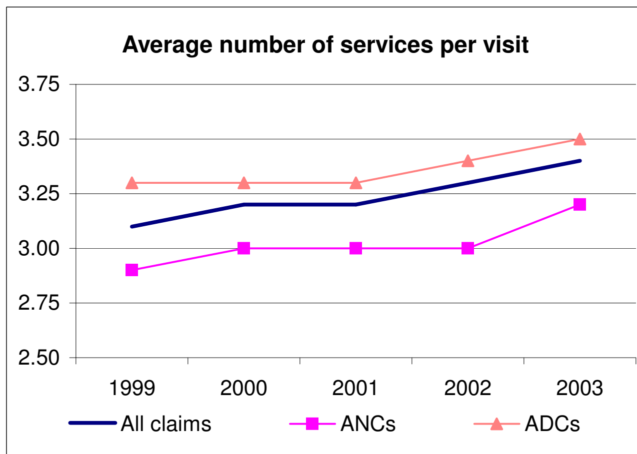
Figures are derived from insurers (notably SAIF and the Liberty Mutual group) that have reported billing data which has a high degree of correlation to the claims system. These insurers have reported billing data that matches 90 percent or more of the ADCs listed on the claims system as accepted by the insurers.



Growth Rate*	
All claims	5.3%
ANCs	3.1%
ADCs	3.9%



Growth Rate*	
All claims	7.4%
ANCs	5.1%
ADCs	5.3%



Growth Rate*	
All claims	2.2%
ANCs	2.0%
ADCs	1.5%

* The growth rate calculation uses the log-linear least squares method.

Methodology: For each claim in the sample, the total medical payments, total number of visits (number of individual days a service was provided), and the total number of services are calculated. Also, the number of services per visit (number of services/number of visits), payments per visit (total payments/number of visits), and the payments per service (total payments/number of services) are calculated. Then an average for all the claims in each injury year is calculated.

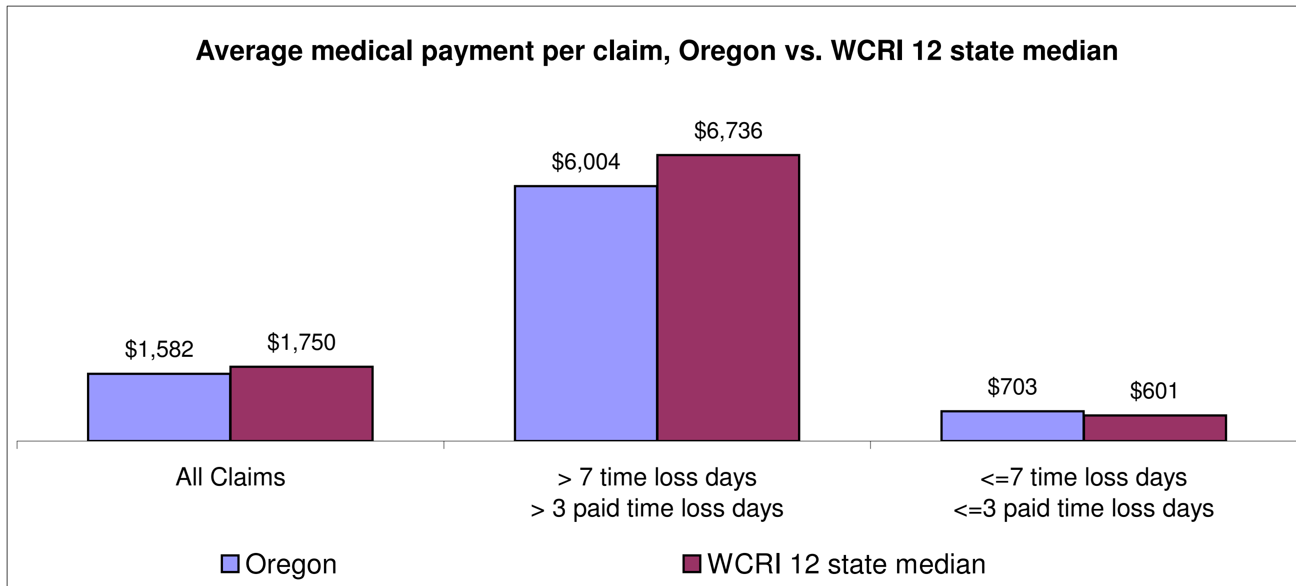
Source: Department of Consumer and Business Services\Information Management Division\Research and Analysis September 28, 2005

Attachment 4: Medical Cost and Utilization Trends - National Comparison

All claims from Oct. 1, 2000 through Sept. 31, 2001 and with services evaluated through March 31, 2002. Oregon figures include both currently open and closed claims.

WCRI 12 state median	All Claims	> 7 time loss days *	<=7 time loss days *
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 *	<=3 *paid* time loss days *
Claim distribution	70,896	11,752	59,144
	100.0%	16.6%	83.4%
Total medical costs *	$112,157,472	$70,559,008	$41,578,232
Percent medical costs	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 include the medical portions of disputed claim settlements (DCSs). Therefore the figures may be slightly underestimated.

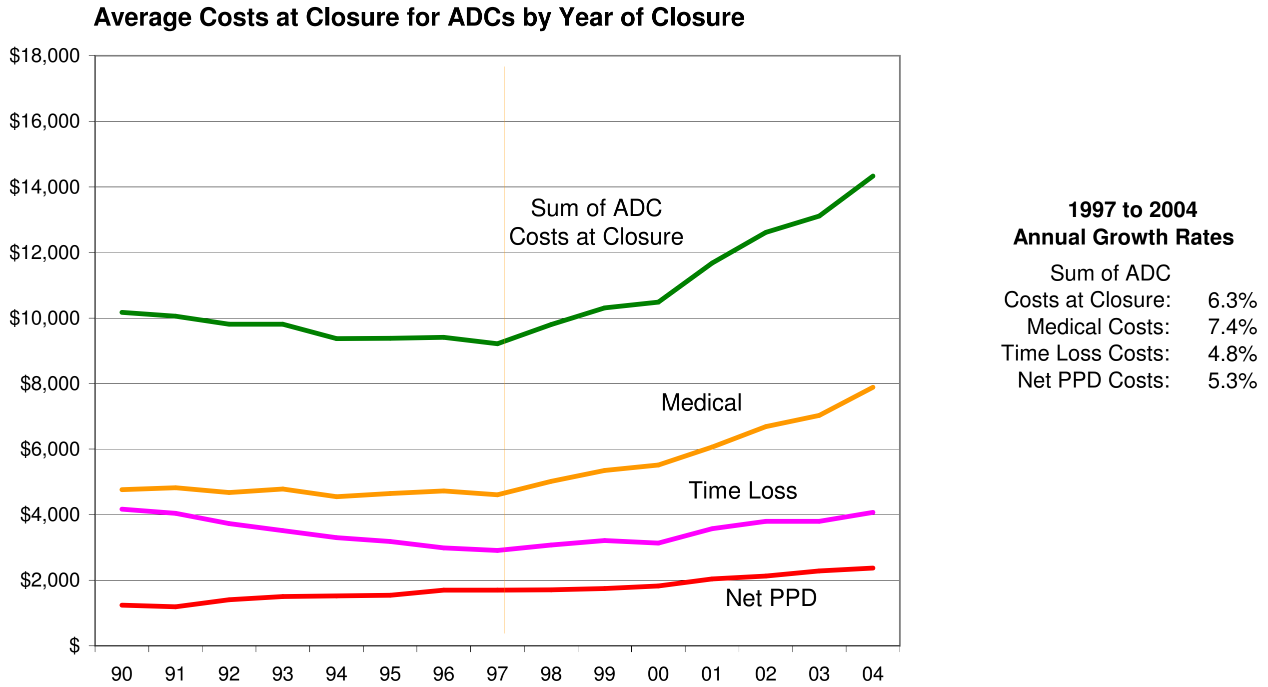
* WCRI figures are based upon a 12-state median. Seven of the 12 states have a 7 day waiting period, compared to Oregon's 3 day waiting period (The Anatomy of Workers' Compensation Medical Costs and Utilization: Trends and Interstate Comparisons, 4th Edition, June 2004, WCRI). Due to Oregon's 3 day waiting period, a worker with 4 paid days of time loss would be equivalent to 7 days of missed work.

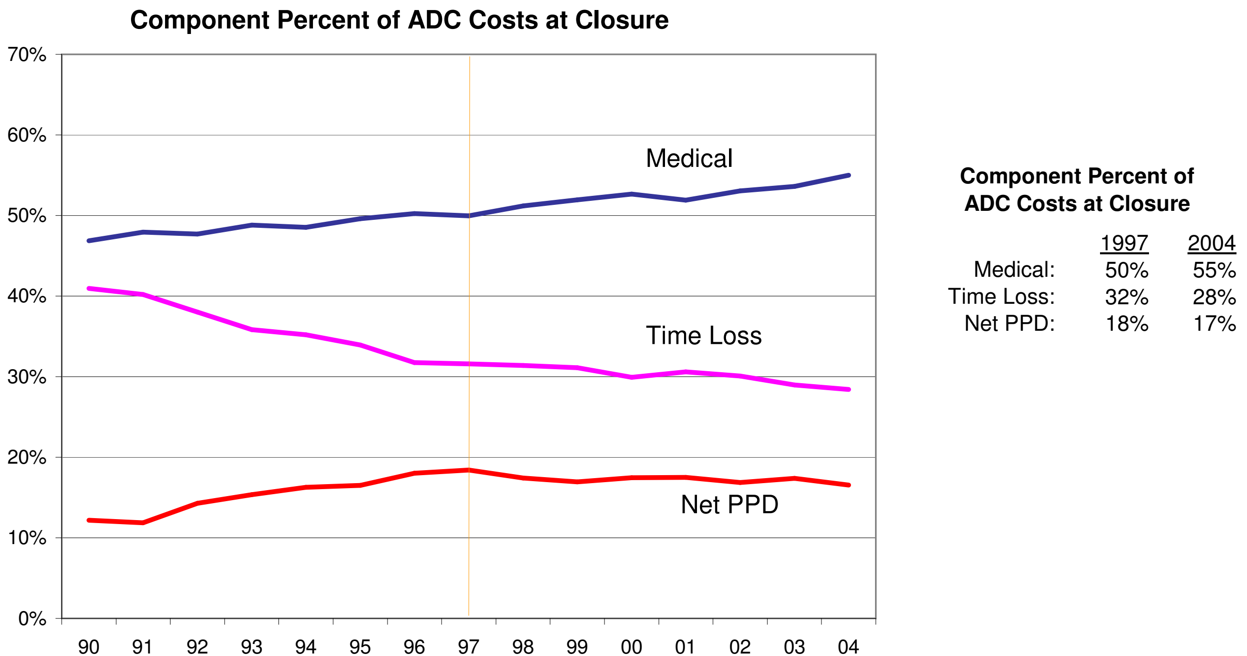
** Oregon figures are derived from insurers (notably SAIF and the Liberty Mutual group) that have reported medical billing data which have a high degree to correlation to the CIS. These insurers have reported billing data that matches 90 percent or more of the ADCs listed on the CIS as accepted by the insurers.

Source: Department of Consumer and Business Services\Information Management Divsion\Research and Analysis September 28, 2005

Attachment 5: Average costs at closure for ADCs, by year of closure (1990-2004)

Total medical and time loss costs, and net PPD awards are reported to the department at notice of closure. These total costs are the sum of payments in each category. Total ADC costs are the sum of total medical, total time loss, and total net PPD costs.





Note: Disabling claims with Claim Disposition Agreements (CDA) are not included in this analysis. Review of CDA claims shows that they have much higher (2-3 times) medical costs. However, since no medical costs or time-loss costs are reported to the department, we are unable to include them in this analysis. Costs exclude Permanent Total Disability (PTD) and fatal indemnity payments; vocational assistance; medical-only claim costs; settlements; time loss paid prior to claim denial and prior to settlement where claim was never closed; and compensation modified on appeal. Average Permanent Partial Disability (PPD) costs are calculated across all claims determined, rather than claims with PPD.

The data underlying these graphs are available in a supplementary packet.

Source: Department of Consumer and Business Services\Information Management Division\Research and Analysis September 28, 2005

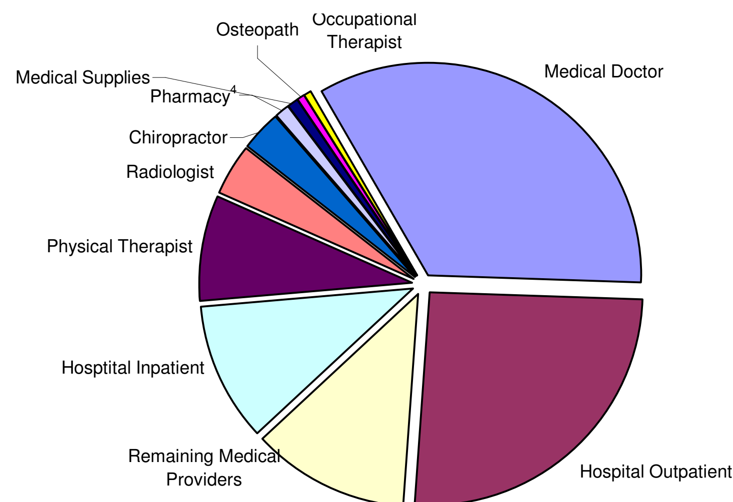
Attachment 6: Analysis of Contribution to Medical Payments Growth 1999-2003 - All Claims

By Medical Provider Type

Provider types as reported in insurer medical billing data submitted to the department (OAR Appendix A 436-009-0030)

Provider Type	2003 share of Total Medical Payments[1]	Share of Total Medical Payments Growth 1999-2003[2]	Contribution Trend[3]
Medical Doctor	33.8%	35.4%	↑
Hospital Outpatient	25.6%	24.7%	↓
Hospital Inpatient	10.7%	10.4%	↓
Physical Therapist	8.0%	9.5%	↑
Remaining Providers	12.0%	8.5%	↓
Radiologist	4.0%	4.5%	↑
Pharmacy[4]	1.2%	2.9%	↑
Chiropractor	3.0%	2.2%	↓
Osteopath	0.7%	0.8%	↑
Medical Supplies	0.7%	0.8%	↑
Occupational Therapist	0.5%	0.1%	↓

Share of 2003 Total Medical Payments by Medical Provider Type

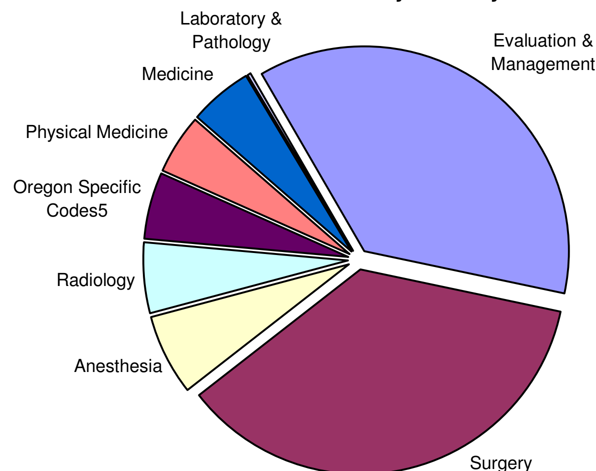


Medical Doctor Payments by Service Category

Service categories as defined in medical fee schedule (OAR 436-099-0040(4))

Service Category	2003 share of Total MD Payments[1]	Share of Total MD Payments Growth 1999-2003[2]	Contribution Trend[3]
Evaluation & Management	36.7%	49.3%	↑
Surgery	36.1%	35.6%	↓
Physical Medicine	4.9%	6.4%	↑
Anesthesia	6.4%	4.6%	↓
Radiology	5.7%	3.0%	↓
Medicine	4.9%	2.2%	↓
Laboratory & Pathology	0.3%	0.3%	-
Oregon Specific Codes[5]	5.1%	-1.4%	↓

Share of 2003 Medical Doctor Payments by Service Category



Notes:

1 - This column represents each component's percentage share of total payments for 2003.

2 - This column represents each category's share of total growth in medical payments. First the total amount of growth in medical payments from 1999 to 2003 is calculated. Then, the total growth in medical payments for each category over the same time period is calculated. The percentage in this column is the share of total medical payments growth contributed by each category. Categories with a decrease in total medical payments from 1999 to 2003 would have a negative percentage.

3 - If a category's share of medical payment growth from 1999 to 2003 is greater than its share of total payments in 2003, then the category is increasing its relative share of total payments. In other words, its contribution trend to medical payment growth is increasing. Likewise, if its share of growth is less than its share of total payments, then its contribution to growth has a decreasing trend.

4 - It should be noted that a significant portion of pharmacy payments may be borne by the injured worker prior to claim acceptance. Insurer reimbursements to workers are not reported to the department in medical billing data; therefore, the 1.2% share is a known underestimate. Other department models suggest that the actual share is approximately 6% of ADC medical costs.

5 - Oregon Specific Codes are found in the Division 009 Rules (OAR 436-009-0060). Some of the more commonly used codes are for independent medical exams, arbiter exams, and physical capacity exams.

Source: Department of Consumer and Business Services\Information Management Division\Research and Analysis

September 28, 2005

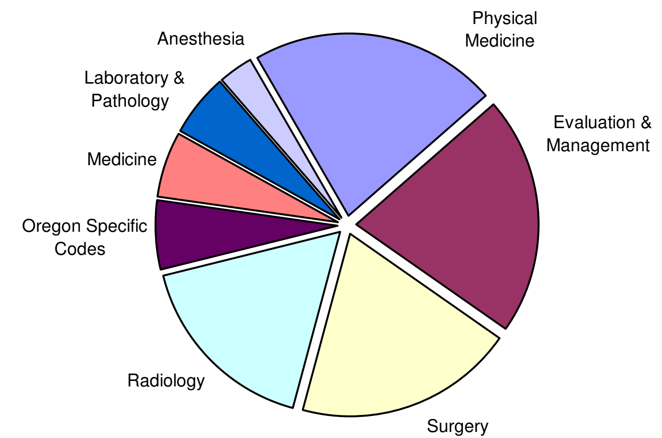
Attachment 7: Analysis of Contribution to Medical Payments Growth 1999-2003 - All Claims

By Medical Service Category

Service categories as defined in medical fee schedule (OAR 436-099-0040(4))

Provider Type	2003 share of Total Payments[1]	Share of Total Payments Growth 1999-2003[2]	Contribution Trend[3]
Physical Medicine	21.9%	39.6%	↑
Evaluation & Management	21.1%	29.1%	↑
Radiology	16.8%	20.7%	↑
Surgery	19.7%	20.1%	↑
Oregon Specific Codes[4]	6.2%	3.8%	↓
Anesthesia	3.1%	3.0%	↓
Medicine	5.9%	-4.6%	↓
Laboratory & Pathology	5.4%	-11.7%	↓

Share of 2003 Total Payments by Medical Service Category

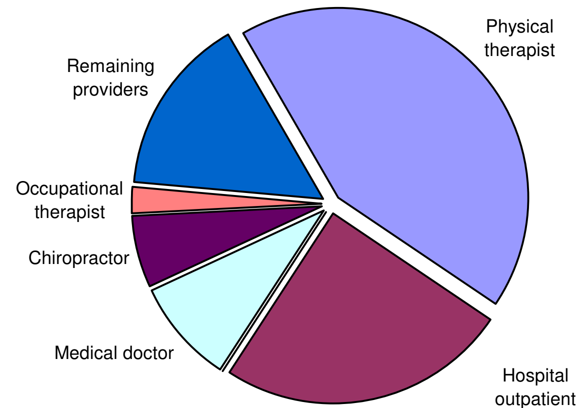


Physical Medicine Payments By Medical Provider Type

Provider types as reported in insurer medical billing data submitted to the department (OAR Appendix A 436-009-0030)

Service Category	2003 share of Total Physical Medicine Payments[1]	Share of Total Physical Medicine Payment Growth 1999-2003[2]	Contribution Trend[3]
Hospital outpatient	24.6%	36.0%	↑
Physical therapist	42.9%	33.4%	↓
Remaining providers	15.3%	17.0%	↑
Medical doctor	8.8%	7.7%	↓
Chiropractor	6.1%	5.5%	↓
Occupational therapist	2.2%	0.4%	↓

Share of 2003 Physical Medicine Payments by Medical Provider Type



Notes:

1 - This column represents each component's percentage share of total payments for 2003.

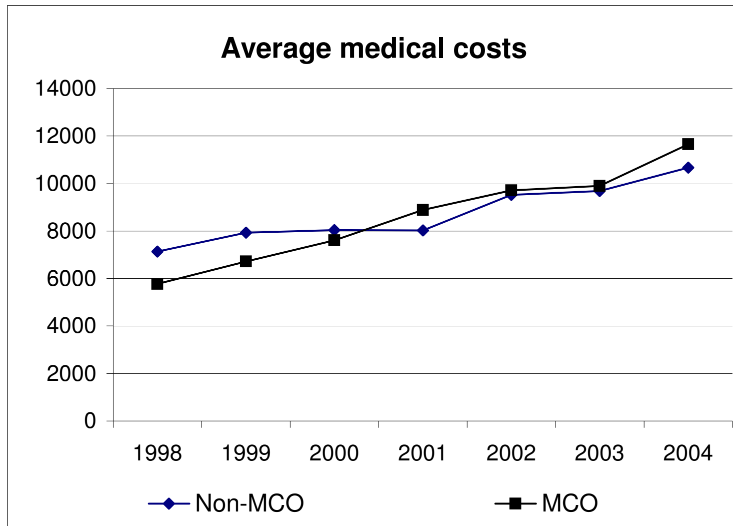
2 - This column represents each category's share of total growth in medical payments. First the total amount of growth in medical payments from 1999 to 2003 is calculated. Then, the total growth in medical payments for each category over the same time period is calculated. The percentage in this column is the share of total medical payments growth contributed by each category. Categories with a decrease in total medical payments from 1999 to 2003 would have a negative percentage.

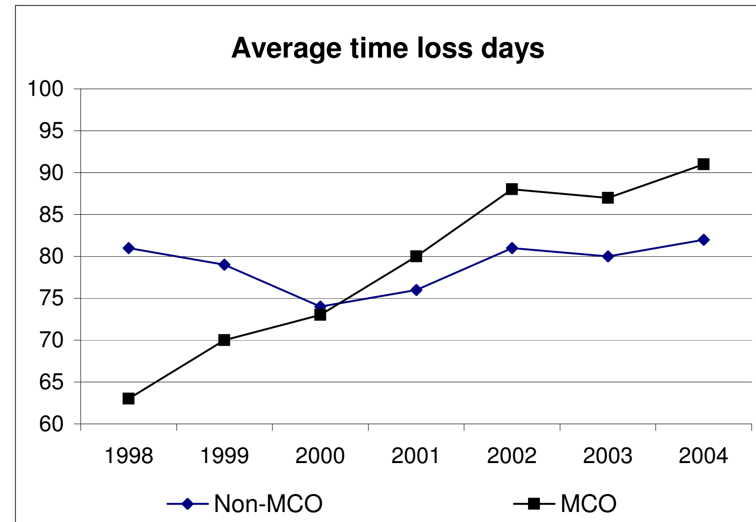
3 - If a category's share of medical payment growth from 1999 to 2003 is greater than its share of total payments in 2003, then the category is increasing its relative share of total payments. In other words, its contribution trend to medical payment growth is increasing. Likewise, if its share of growth is less than its share of total payments, then its contribution to growth has a decreasing trend. Differences of less than one percentage point were considered insignificant and noncontributing to growth.

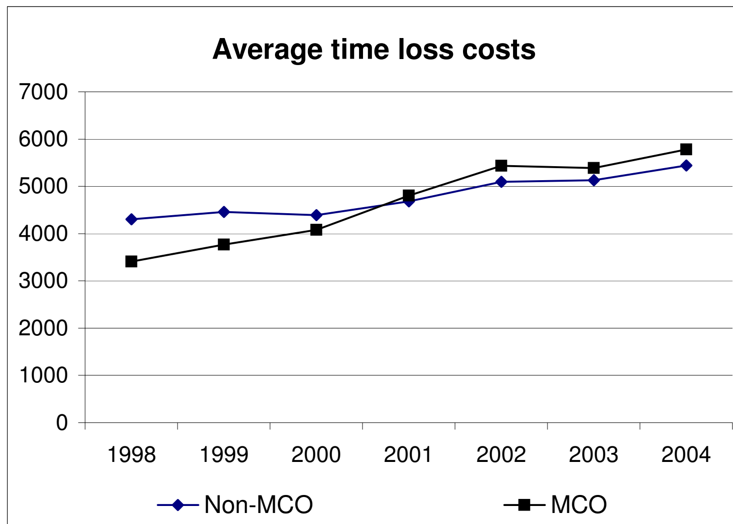
4 - Oregon Specific Codes are found in the Division 009 Rules (OAR 436-009-0060). Some of the more commonly used codes are for independent medical exams, arbiter exams, and physical capacity exams.

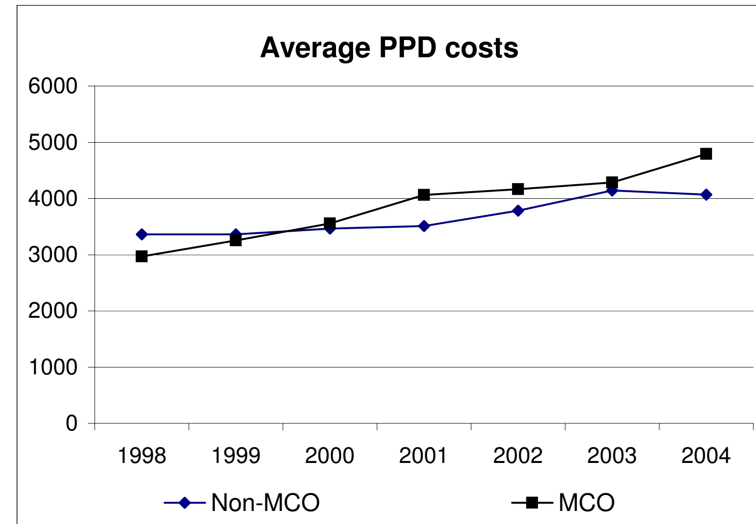
Attachment 8: Average cost figures for ADCs with 158 days or more before first closure, MCO enrolled vs non-enrolled (1997-2004)

The effect of managed care on a claim will be greater the longer the claim has been enrolled and under managed care. Although most claims are enrolled at time of acceptance, during the time from injury to acceptance care has been provided that was not subject to managed care and may reduce the benefit of managed care on the claim had it been enrolled at time of injury. By reviewing claims open over the median time from injury to first closure, the effect of managed care is accounted for to a greater extent. Analysis has determined that the median time from date of injury to first closure for closed ADCs reported to the department is 158 days. The upper half of the ADCs, those open 158 days or more, are presumably those with more severe injuries. However, we remain unable to account for the tendency of insurers to enroll the more complicated or severe claims over other more numerous less severe claims. Our inability to effectively account for differences in enrolled claim severity causes our analysis of the impact of managed care on medical costs to be inconclusive.









Source: Department of Consumer and Business Services\Information Management Division\Research and Analysis

September 28,2005

Attachment 9: Oregon Workers' Compensation Medical Fee Schedule Changes Over Time

CF = Conversion factor
% Chng = Percent change from previous conversion factor effective date

Service Category (as referenced in OAR 436-009-0040(4))	Effective Date: 7/1/1999 [1]		04/01/00		04/01/01		04/01/02		7/1/2003 [2,3]		4/1/2004 [4]		04/01/05	
	CF	% Chng	CF	% Chng	CF	% Chng	CF	% Chng	CF	% Chng	CF	% Chng	CF	% Chng
Evaluation and Management	$55.70	-	$55.70	-	$55.70	-	$55.70	-	$66.84	20.0%	$68.40	2.3%	$68.40	-
Anesthesiology	$45.42	-	$45.42	-	$45.42	-	$45.42	-	$52.23	15.0%	$53.45	2.3%	$53.45	-
Surgery	$91.53	-	$91.53	-	$91.53	-	$91.53	-	$91.53	-	$93.66	2.3%	$93.66	-
Radiology	$78.17	-	$78.17	-	$78.17	-	$78.17	-	$66.45	-15.0%	$68.00	2.3%	$68.00	-
Lab and Pathology	$89.43	-	$89.43	-	$89.43	-	$89.43	-	$58.63	-34.4%	$60.00	2.3%	$60.00	-
Medicine	$89.43	-	$89.43	-	$89.43	-	$89.43	-	$73.33	-18.0%	$75.04	2.3%	$75.04	-
Physical Medicine and Rehabilitation	$66.42	-	$66.42	-	$66.42	-	$66.42	-	$64.29	-3.2%	$65.79	2.3%	$65.79	-
Multidisciplinary and other Oregon-Specific Codes *	$9.53	-	$9.53	-	$9.53	-	$9.53	-	$58.63	-	$60.00	2.3%	$60.00	-

[1] WCD first adopted the resource-based relative value units (RVUs) contained in the Federal Register on July 1, 1999. Prior to this, WCD developed and maintained its own fee schedule with relative value units and conversion factors. The conversion factors effective July 1, 1999, were calculated to allow for a revenue-neutral shift from the previous WCD-maintained fee schedule to the new Federal Register-based fee schedule.

[2] The conversion factor changes adopted by WCD effective July 1, 2003 were calculated to be revenue neutral.

[3] WCD completely revised the Multidisciplinary and other Oregon Specific Code CFs and RVUs in the fee schedule effective July 1, 1999. The revision resulted in a zero sum change for each service, i.e. each service's total charge (RVU x CF = total charge) using the new fee schedule was equal to the total charge for the same service using the previous fee schedule.

[4] A 2.3 percent cost-of-living increase, as determined from the consumer price index (CPI), was provided for all conversion factors.

Source: Department of Consumer and Business Services\Information Management Division\Research and Analysis

September 28, 2005