Minnesota Workers' Compensation System Report, 2002

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Executive summary

In parallel with nationwide trends, Minnesota's workers' compensation system experienced major cost reductions in the early 1990s and a period of stability later in the decade. Most recently, costs have turned upward.

This report, part of an annual series, presents data from 1984 through 2002 on several aspects of Minnesota's workers' compensation system—claims, benefits, and costs; vocational rehabilitation; and disputes and dispute resolution. A new chapter analyzes medical cost trends with data from a large insurer. The report's purpose is to describe statistically the current status and direction of workers' compensation in Minnesota and to offer explanations where possible for recent developments.

These are the report's major findings:

After a period of stability in the late 1990s, trends in the Minnesota workers' compensation system have begun to change:

- The claim rate, which had been falling gradually, showed a more pronounced decline from 2000 to 2002.
- Indemnity and medical benefits per claim are up sharply (adjusting for wage growth). Benefits have increased more gently as a percentage of payroll, because of the falling claim rate.
- The increase in indemnity benefits is partly due to increasing benefit duration.
- According to data from a large insurer, the largest contributors to the recent increases in medical costs were outpatient hospital facility services, radiology, drugs, and surgery and anesthesia. The cost increases for radiology and surgery and anesthesia were primarily due to a shift toward more expensive services.
- Participation in vocational rehabilitation, increasing since 1997, rose more rapidly from 2000 to 2002.
- The dispute rate increased sharply from 1999 to 2002.
- Total workers' compensation system cost rose substantially relative to payroll from 2000 to 2002, after six years of decline.

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(Continued)

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1

Introduction

During the early and middle 1990s, through cost-control measures by employers and insurers and law changes in most states, workers' compensation benefits and costs fell nationwide. In Minnesota, a combination of employer and insurer efforts and law changes in 1992 and 1995 produced major cost reductions in the first half of the 1990s, followed by a period of stability in the second half of the decade. The most recent data, however, shows total system cost increasing relative to payroll.

This report, part of an annual series, presents data from 1984 through 2002 on several aspects of Minnesota's workers' compensation system — claims, benefits, and costs; vocational rehabilitation; and disputes and dispute resolution. A new chapter analyzes medical cost trends with data from a large insurer. The report's purpose is to describe statistically the current status and direction of workers' compensation in Minnesota.

Chapter 2 presents overall claim, benefit, and cost data. Chapter 3 presents more detailed data to explain some of the trends in Chapter 2. Chapter 4, new in this year's report, presents detailed medical cost data from a large insurer. Chapters 5 and 6 provide statistics on vocational rehabilitation and on disputes and dispute resolution.

Appendix A contains a glossary with descriptions of, among other things, the major types of benefits. Appendix B summarizes portions of the 1992, 1995, and 2000 law changes relevant to trends in this report.

Appendix C describes data sources and estimation procedures. Appendix D and E presents medical trend data supplementary to Chapter 4.

Some important points to keep in mind throughout the report:

Developed statistics. Most statistics in this report are presented by injury year or insurance policy year.[1] An issue with such data is that the originally reported numbers for more recent years are not mature because of longer claims and reporting lags. In this report, all injury year and policy year data is "developed" as needed to a uniform maturity so that the statistics are comparable over time. The technique uses "development factors" (projection factors) based on observed data for older claims.[2]

Adjustment of cost data for wage growth. Several figures in the report present costs over time. As wages and prices grow, a given cost in dollar terms represents a progressively smaller economic burden from one year to the next. If the total cost of indemnity and medical benefits grows at the same rate as wages, there is no net effect on cost as a percentage of payroll. Therefore, all costs (except those costs expressed relative to payroll) are adjusted for average wage growth. The adjusted trends reflect the extent to which cost growth exceeds average wage growth.[3]

[1] Definitions in Appendix A. Some insurance data are by accident year, which is equivalent to injury year.

[2] See Appendix C for more detail.

[3] See Appendix C for computational details.

2

Claims, benefits, and costs: overview

This chapter presents overall indicators of the status and direction of Minnesota's workers' compensation system.

Major findings

- The rate of paid claims, which had been falling gradually since 1984, dropped 15 percent from 2000 to 2002. (Figure 2.1)
- The total cost of Minnesota's workers' compensation system rose 18 percent relative to payroll from 2000 to 2002, after falling nearly in half from 1994 to 2000. (Figure 2.2)
- Adjusted for average wage growth, average indemnity benefits per insured claim rose 27 percent from 1998 to 2001; average medical benefits per claim rose 32 percent. (Figure 2.4)
- Relative to payroll, indemnity benefits rose 11 percent from 1998 to 2002, while medical benefits rose 18 percent. (Figure 2.6) Benefits increased less rapidly relative to payroll than per claim because of the falling claim rate.
- Pure premium rates showed little change from 2003 to 2004. (Figure 2.8)

Background

The following basic information is necessary for understanding the figures in this chapter.[4]

Workers' compensation benefits and claim types

Workers' compensation provides three basic types of benefits:

Indemnity benefits compensate the injured or ill worker (or dependents) for wage loss, permanent functional impairment, or death.

Medical benefits consist of reasonable and necessary medical services and supplies related to the injury or illness.

Vocational rehabilitation benefits consist of a variety of services to help eligible injured workers return to work. These benefits are considered separately in Chapter 5.

Claims with indemnity benefits are called ***indemnity claims;*** these claims typically have medical benefits also. The remainder of claims are called ***medical-only claims*** because they only have medical benefits.

Insurance arrangements

Employers cover themselves for workers' compensation in one of three ways. The most common is to purchase insurance in the "voluntary market," so named because an insurer may choose whether to insure any particular employer. Employers unable to insure in the voluntary market may insure through the Assigned Risk Plan, the insurance program of last resort administered by the Department of Commerce. Employers meeting certain financial requirements may self-insure.

[4] See Appendix A for more detail.

Rate-setting

Minnesota is an open-rating state for workers' compensation, meaning that rates are set by insurance companies rather than by a central authority. In determining their rates, insurance companies start with "pure premium rates." The Minnesota Workers' Compensation Insurers Association (MWCIA)—Minnesota's workers' compensation data service organization and rating bureau—calculates these rates every year.

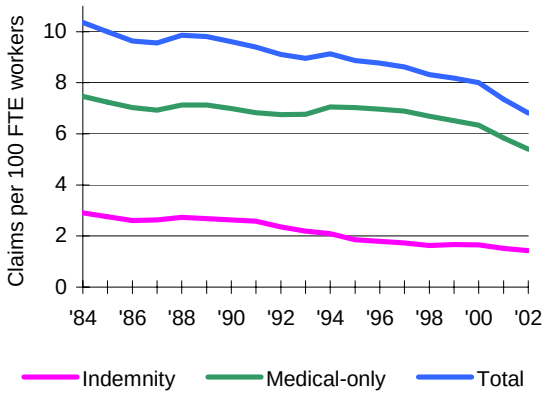
The pure premium rates represent expected losses (indemnity and medical) per $100 of payroll for some 600 payroll classifications. Insurance companies add their own expenses to the pure premium rates and make other modifications in determining their own rates. Of necessity, the pure premium rates are calculated with historical data (the most recent available); therefore, a lag of two to three years exists between benefit trends and pure premium rate changes.

Claim rates

Claim rates took a pronounced downward turn in 2001 and 2002, after falling gradually from 1984 through 2000.

- In 2002, there were—
  - 6.8 paid claims per 100 FTE workers, down 15 percent from 2000;
  - 1.4 paid indemnity claims per 100 FTE workers, down 14 percent from 2000;
  - 5.4 paid medical-only claims per 100 FTE workers, down 15 percent from 2000.
- The overall paid claim rate for 2002 was down 29 percent from 1990 and 34 percent from 1984.
- Of the total decrease in the indemnity claim rate from 1984 to 2002, about half occurred from 1990 to 1995, during which time indemnity claims fell from a 27-percent share of total paid claims to 21 percent. This percentage has shown little change since 1995.

Figure 2.1 Paid claims per 100 full-time-equivalent workers, injury years 1984-2002 [1]



Injury Year	Indemnity Claims	Medical-Only Claims	Total Claims
1984	2.9	7.5	10.4
1990	2.6	7.0	9.6
1995	1.8	7.0	8.9
2000	1.7	6.3	8.0
2001	1.5	5.8	7.4
2002	1.4	5.4	6.8

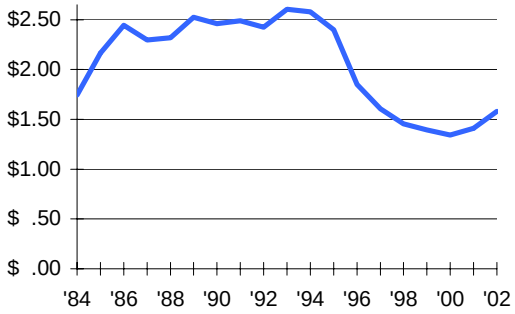
1. Developed statistcs from DLI data and other sources (see Appendix C).

System cost

The total cost of Minnesota's workers' compensation system turned upward relative to payroll in 2001 and 2002, after falling nearly in half from 1994 to 2000.

- From 2000 to 2002, cost rose from $1.34 per $100 of payroll (revised) to $1.58, an 18-percent increase.
- The total cost of workers' compensation in 2002 was an estimated $1.32 billion, up from $1.17 billion in 2001 (not adjusted for inflation).
- These figures reflect benefits (indemnity, medical, and vocational rehabilitation) plus other costs such as claim adjustment, litigation, and taxes and assessments. The figures are computed primarily from actual premium for insured employers (adjusted for costs under deductible limits) and pure premium for self-insured employers (see Appendix C).

Figure 2.2 System cost per $100 of payroll, 1984-2002 [1]



	Cost per $100 of Payroll
1984	$1.74
1990	2.46
1994	2.58
2000	1.34
2001 [2]	1.41
2002 [2]	1.58

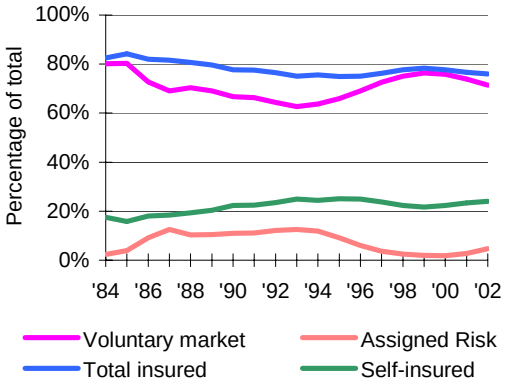
1. Data from several sources (see Appendix C). Includes insured and self-insured employers.
2. Preliminary.

Insurance arrangements

The voluntary market lost market share from 1999 through 2002 after a period of increase during the late 1990s.[5]

- The voluntary market share of paid indemnity claims was 71 percent in 2002, down from 76 percent in 1999 but still above its low point of 63 percent in 1993.
- The self-insured share increased from 22 percent in 1999 to 24 percent in 2002, almost as high as its peak in 1993.
- The Assigned Risk Plan share increased to 5 percent in 2002, still far below its 1993 high of 13 percent.
- These shifts are at least partly due to changes in insurance costs shown in Figure 2.2. Rate increases tend to cause shifts from the voluntary market to both the Assigned Risk Plan and self-insurance, while rate decreases cause shifts in the opposite direction.

Figure 2.3 Market shares of different insurance arrangements as measured by paid indemnity claims, injury years 1984-2002 [1]



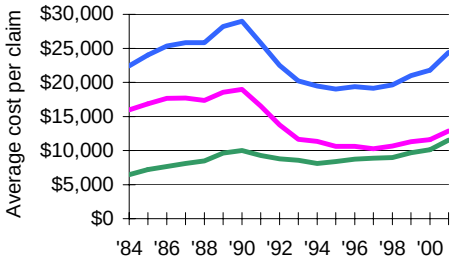
Injury Year	Voluntary Market	Assigned Risk Plan	Total Insured	Self-Insured
1984	80.2%	2.3%	82.5%	17.5%
1993	62.6	12.5	75.1	24.9
1999	76.4	2.0	78.4	21.6
2000	75.8	1.9	77.7	22.3
2001	73.9	2.7	76.7	23.3
2002	71.4	4.6	76.0	24.0

1. Data from DLI.

[5] When market share is measured by pure premium (not shown here), the trends are nearly identical.

Figure 2.4 Average indemnity and medical benefits per insured claim, adjusted for wage growth, policy years 1984-2001 [1]

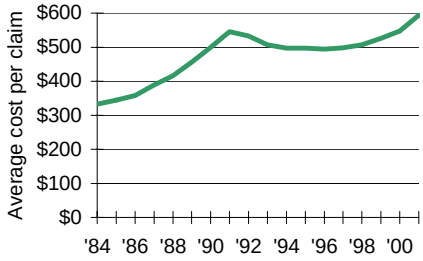
A: Indemnity Claims



Policy Year	Indemnity Benefits	Medical Benefits	Total Benefits
1984	$16,000	$6,500	$22,400
1990	19,000	10,000	29,000
1998	10,700	9,000	19,700
2000	11,600	10,200	21,800
2001 (p)	12,900	11,500	24,400

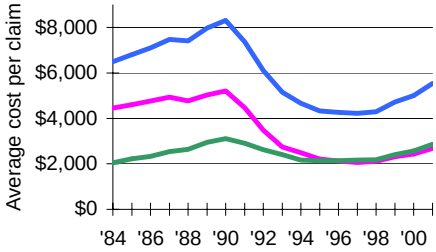
Indemnity Medical Total

B: Medical-Only Claims



Policy Year		Medical Benefits	Total Benefits
1984		$333	$333
1991		545	545
1998		506	506
2000		547	547
2001 (p)		594	594

C: All Claims



Policy Year	Indemnity Benefits	Medical Benefits	Total Benefits
1984	$4,450	$2,050	$6,500
1990	5,210	3,110	8,320
1998	2,110	2,180	4,290
2000	2,440	2,560	5,010
2001 (p)	2,670	2,870	5,540

Indemnity Medical Total

1. Developed statistics from MWCIA data (see Appendix C). Includes the voluntary market and Assigned Risk Plan; excludes self-insured employers. Benefits are adjusted for average wage growth between the respective year and 2002. 2001 is the most recent year available.

p = preliminary

Benefits per claim

Adjusting for wage growth, average benefits per insured claim turned sharply upward in 1999 and continued a rapid increase through 2001. This followed a period of stability at historically low levels from 1995 through 1998.

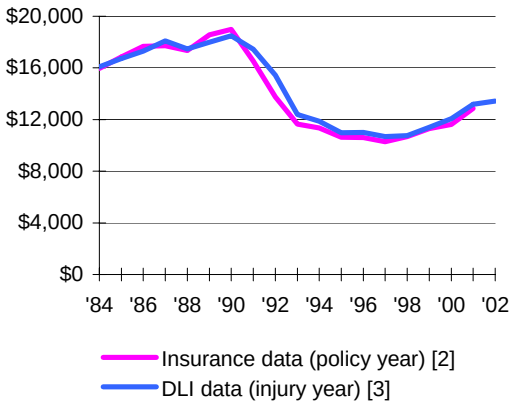
- For all claims combined, in 2001 relative to 1998:
  - average total benefits were up 29 percent;
  - average indemnity benefits were up 27 percent;
  - average medical benefits were up 32 percent.

Indemnity benefits per indemnity claim: insurance and DLI data

According to DLI data, the growth of average indemnity benefits per indemnity claim slowed between 2001 and 2002. The DLI data closely corroborate the insurance data for earlier years (the insurance data are not yet available for 2002).

- The 2002 DLI figure is up 2 percent from 2001, compared with an average growth of 7 percent per year for 1998-2001.

Figure 2.5 Average indemnity benefits per indemnity claim, adjusted for wage growth, 1984-2002: insurance and DLI data [1]



Policy or Injury Year	Insurance Data [2]	DLI Data [3]
1984	$16,000	$16,100
1990	19,000	18,500
1998	10,700	10,700
1999	11,300	11,400
2000	11,600	12,100
2001	12,900	13,200
2002	[4]	13,400

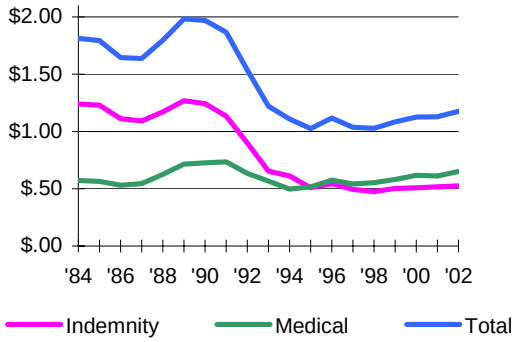
1. Benefits are adjusted for average wage growth between the respective year and 2002.
2. From Figure 2.4. Excludes self-insured employers, supplementary benefits, and second-injury claims. Includes the Assigned Risk Plan and vocational rehabilitation benefits.
3. Developed statistics (see Appendix C). Includes self-insured employers, the Assigned Risk Plan, supplementary benefits, and second-injury claims. Excludes vocational rehabilitation benefits.
4. Not yet available.

Benefits relative to payroll

Indemnity and medical benefits rose relative to payroll from 1998 to 2002.[6]

- From 1998 to 2002, relative to payroll:
  - ➢ Indemnity benefits rose 11 percent.[7]
  - ➢ Medical benefits rose 18 percent.
  - ➢ Total benefits rose 15 percent.
- These changes are the net result of a rapidly decreasing claim rate (Figure 2.1) and a rapidly increasing cost per claim (Figures 2.4, 2.5).
- The sharp decreases in the early 1990s reflect the 1992 and 1995 law changes and other factors, including safety programs, more active medical treatment, better management of claims and costs, and more effective return-to-work programs.[8]

Figure 2.6 Benefits per $100 of payroll in the voluntary market, accident years 1984-2002 [1]



Accident Year	Indemnity Benefits	Medical Benefits	Total Benefits
1984	$1.24	$.57	$1.81
1990	1.24	.72	1.97
1995	.51	.52	1.03
1998	.47	.55	1.03
2000	.51	.62	1.12
2001	.52	.61	1.13
2002	.53	.65	1.18

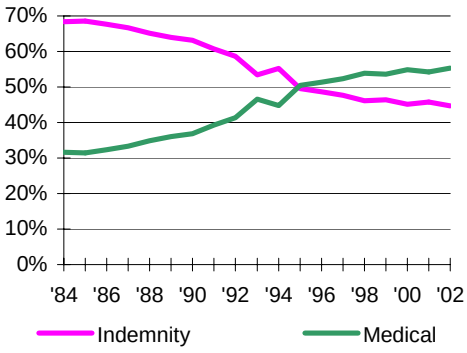
1. Developed statistics from MWCIA data (see Appendix C). Excludes self-insured employers, the Assigned Risk Plan, and supplementary and second-injury benefits.

Indemnity and medical shares

The medical share of total benefits has risen steadily since 1984, and has exceeded the share of indemnity benefits since 1995.[9]

- Reflecting the data in Figure 2.6, medical benefits were 55 percent of total benefits in 2002, up from 51 percent in 1995 and 32 percent in 1984.
- Indemnity benefits now account for 45 percent of total benefits.

Figure 2.7 Indemnity and medical benefit percentages in the voluntary market, accident years 1984-2002 [1]



Accident Year	Indemnity Benefits	Medical Benefits
1984	68.4%	31.6%
1995	49.5	50.5
1998	46.2	53.8
2001	45.8	54.2
2002	44.7	55.3

1. Developed statistics from MWCIA data (see Appendix C). Excludes self-insured employers, the Assigned Risk Plan, and supplementary and second-injury benefits.

[6] The statistics in Figures 2.6 and 2.7 are somewhat changed from last year's report because they incorporate a change in methodology adopted by the MWCIA. See Appendix C for details.

[7] The indemnity benefit trend in Figure 2.6, from insurance data, is closely corroborated by DLI data.

[8] These are well-documented in the workers' compensation literature.

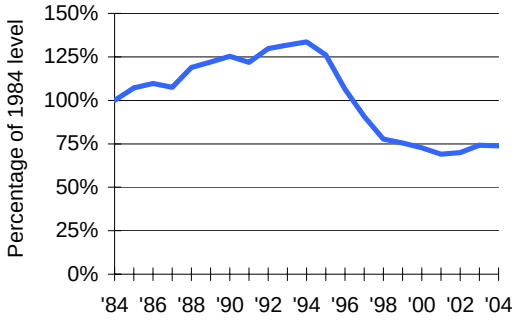
[9] See note 6.

Pure premium rates

Pure premium rates showed little change from 2003 to 2004.

- Pure premium rates fell 0.3 percent, on average, in 2004, but are up 7 percent from 2001.
- Pure premium rates are ultimately driven by the trend in benefits relative to payroll (Figure 2.6). However, this occurs with a lag because the pure premium rates for any period are derived from prior premium and loss experience.[10]
- Insurers in the voluntary market consider the pure premium rates, along with other factors, in determining their own rates, which in turn affect total system cost (Figure 2.2).

Figure 2.8 Average pure premium rate as percentage of 1984 level, 1984-2004 [1]



Effective Year	Percentage of 1984
1984	100.0%
1994	133.6
1998	77.7
2001	69.0
2003	74.1
2004	73.9

1. Data from the MWCIA. Pure premium rates represent expected indemnity and medical losses per $100 of covered payroll in the voluntary market.

[10] Changes in pure premium rates directly following law changes also include estimated effects of those law changes.

3

Claims, benefits, and costs: detail

This chapter presents additional data on claims, benefits, and costs. Most of the data provide further detail on the indemnity claim and benefit information in Chapter 2. Some of the data relate to costs of special benefit programs and state agency administrative functions.

Major findings

- The average duration of total disability benefits rose 28 percent from 1998 to 2002. For temporary partial disability (TPD) benefits, average duration rose 6 percent between 1997-1999 and 2000-2002.[11] (Figure 3.3)
- Average indemnity benefits per indemnity claim (adjusted for wage growth) rose 25 percent between 1998 and 2002. This is primarily attributable to—
  - the increase in total disability duration, and
  - increases in the frequency and average amount of stipulated benefits. (Figures 3.5, 3.6)
- State agency administrative costs in 2002 amounted to about .037 cents per $100 of covered payroll, about the same as in 1990. (Figure 3.8)

Background

The following basic information is necessary for understanding the figures in this chapter. See Appendix A for more detail.

Benefit types

Temporary total disability (TTD). A wage-replacement benefit paid to an employee who is temporarily unable to work because of a work-related injury or illness, equal to two-thirds of pre-injury earnings subject to a minimum and maximum. TTD ends when the employee returns to work (among other reasons).

Temporary partial disability (TPD). A wage-replacement benefit paid to an employee who has returned to work at less than his or her pre-injury earnings, generally equal to two-thirds of the difference between current earnings and pre-injury earnings.

Permanent partial disability (PPD). PPD compensates for permanent functional impairment resulting from a work-related injury or illness. The benefit is based on the employee's impairment rating and is unrelated to wages.

Permanent total disability (PTD). A wage-replacement benefit paid to an employee who sustains a severe work-related injury specified in law, or who, because of a work-related injury or illness in combination with other factors, is permanently unable to secure gainful employment (subject to a permanent impairment rating threshold).

Stipulated benefits. Indemnity and/or medical benefits specified in a claim settlement—"stipulation for agreement"—among the affected parties. A stipulation usually occurs in a dispute, and stipulated benefits are usually paid in a lump-sum.

[11] The increase of TPD duration is figured using three-year averages because of annual fluctuations.

Total disability. In most figures in this chapter—those presenting DLI data—the term "total disability" refers to the combination of TTD and PTD benefits, because the DLI data do not distinguish between these two benefit types.

Counting claims and benefits: insurance data and department data

The first figure in this chapter uses insurance data (from the MWCIA); all other figures use DLI data.

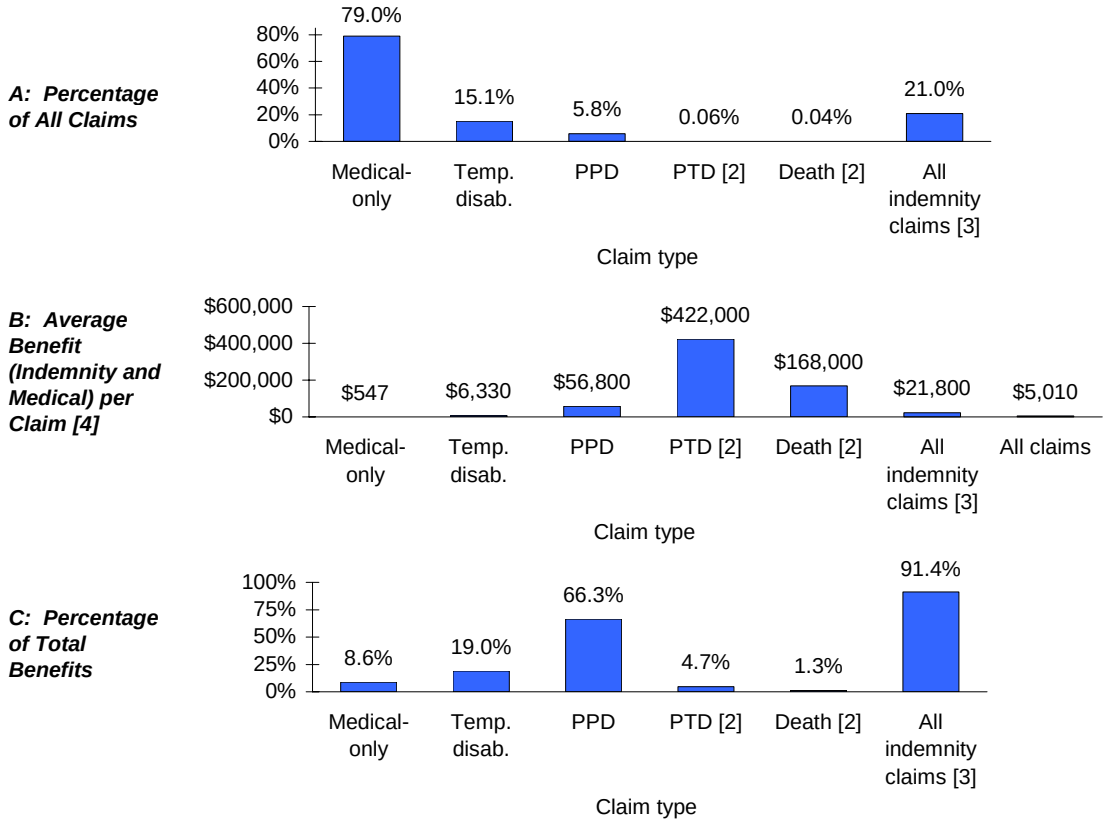
In the insurance data, claims and benefits are categorized by "claim type," defined according to the most severe type of benefit on the claim. In increasing severity, the benefit types are medical, temporary disability (TTD or TPD), PPD, PTD, and death. For example, a claim with medical, TTD, and PPD payments is a PPD claim. PPD claims also include (1) claims with temporary disability benefits lasting more than one year and (2) claims with stipulated settlements. All benefits on a claim are counted in the one claim-type category that the claim falls into.

In the DLI data, by contrast, each claim may be counted in more than one category depending on the types of benefits paid. The same claim, for example, may be counted among claims with total disability benefits and among claims with PPD benefits.

Costs supported by special compensation fund assessment

DLI, through its Special Compensation Fund (SCF), levies an annual assessment on insurers (including self-insurers) to finance (1) costs in DLI and other state agencies to administer the workers' compensation system and (2) certain benefits for which DLI is responsible. Primary among these benefits are supplementary benefits and second-injury benefits. Although these programs have been eliminated, benefits must still be paid on old claims (see Appendices B and C). Insurers add the assessment amount to premium charged to employers, and this is included in total workers' compensation system cost (Figure 2.2).

Figure 3.1 Benefits by claim type for insured claims, policy year 2000 [1]



1. Developed statistics from MWCIA data (see Appendix C). 2000 is the most recent year available.
2. Because of annual fluctuations, data for PTD and death claims are averaged over several years (see Appendix C).
3. Indemnity claims consist of all claim types other than medical-only.
4. Benefit amounts in Panel B are adjusted for overall wage growth between 2000 and 2002.

Benefits by claim type

Each claim type contributes to total benefits paid depending on its relative frequency and average benefit. PPD claims account for the majority of total benefits.

(As indicated above, in the insurance data, the benefits for each claim type include all types of benefits paid on that type of claim. PPD claims, for example, may include medical, TTD, and TPD benefits in addition to PPD benefits.)

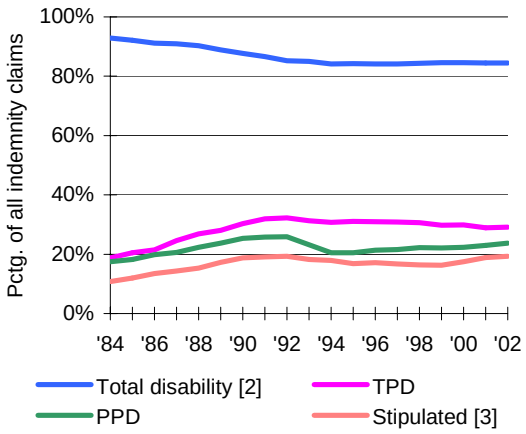
- PPD claims accounted for 66 percent of total benefits in 2000 (Panel C of Figure 3.1) through a combination of low frequency (Panel A) and higher-than-average benefits per claim (Panel B).
- Other claim types contributed smaller amounts to total benefits because of very low frequency (PTD and death claims) or very low average benefits (medical-only claims).
- Indemnity claims were 21 percent of all paid claims, but accounted for 91 percent of total benefits because they have far higher benefits on average than medical-only claims ($21,800 vs. $547).

Claims by benefit type

Since the mid-to-late 1990s, as a proportion of all paid indemnity claims, claims with PPD benefits and claims with stipulated benefits have increased, claims with TPD benefits have decreased, and claims with total disability benefits have been stable.

- The percentage of claims with PPD benefits rose three percentage points from 1994 to 2002. The decrease from 1992 to 1994 resulted from the introduction of a new PPD rating schedule in July 1993.[12]
- The percentage of claims with stipulated benefits rose three percentage points from 1999 to 2002. This is probably related to a similar trend in the dispute rate (Figure 5.1).
- The share of claims with TPD benefits fell three points from 1992 to 2002.

Figure 3.2 Percentages of paid indemnity claims with selected types of benefits, injury years 1984-2002 [1]



Injury Year	Total Disab.[2]	TPD	PPD	Stipu-lated [3]
1984	92.8%	18.7%	17.4%	10.8%
1992	85.2	32.2	25.8	19.3
1995	84.3	31.1	20.5	16.8
1999	84.6	29.8	22.1	16.2
2001	84.4	28.9	23.0	18.9
2002	84.5	29.1	23.7	19.4

1. Developed statistcs from DLI data (see Appendix C). An indemnity claim may have more than one type of benefit paid. Therefore, the sum of the figures for the different benefit types is greater than 100 percent.
2. Total disability includes TTD and PTD benefits. TTD and PTD are not distinguished in the DLI database.
3. Includes indemnity and medical components.

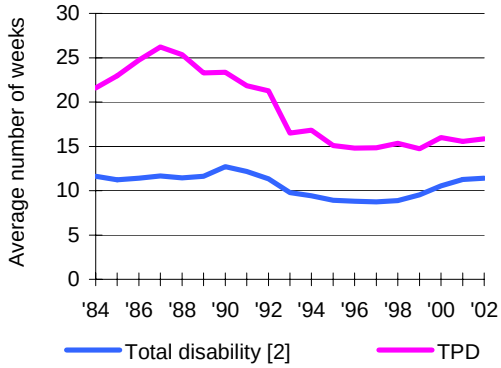
[12] "Analysis of the Effects of the 1993 Permanent Partial Disability Rating Schedule," DLI Research and Statistics, August 1999.

Benefit duration

The average duration of total disability benefits has increased substantially since 1998. A slight increase seems to have occurred for TPD benefits.

- After a period of stability at relatively low levels starting in 1995, total disability duration rose 28 percent from 1998 to 2002.
- The picture is less clear with TPD duration because of annual fluctuations. However, the annual average for 2000-2002 (15.8 weeks) is up 6 percent from 1997-1999 (15.0 weeks).
- The current recession probably explains at least some of the recent duration increases, because injured workers are likely to need benefits for longer periods when job opportunities are less plentiful. However, the importance of this factor cannot be established with the current data.
- These trends in duration affect indemnity cost per claim (Figures 2.4, 2.5, 3.5). As a result, they also affect pure premium rates and system cost (Figures 2.2, 2.8).

Figure 3.3 Average duration of wage-replacement benefits in weeks, injury years 1984-2002 [1]



Injury Year	Total Disab.[2]	TPD
1984	11.6	21.6
1987	11.7	26.2
1990	12.7	23.4
1995	8.9	15.1
1998	8.9	15.3
1999	9.5	14.7
2001	11.3	15.5
2002	11.4	15.9

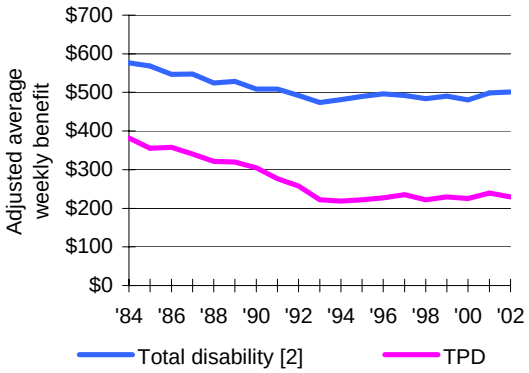
1. Developed statistics from DLI data (see Appendix C).
2. Total disability includes TTD and PTD benefits. TTD and PTD are not distinguished in the DLI database.

Weekly benefits

Average weekly total disability and TPD benefits have been fairly stable since the mid-1990s, adjusting for average wage growth.

- Average weekly total disability and TPD benefits were about the same in 2000 as in 1993 after adjusting for wage growth. This means these weekly benefits increased by the same proportion as overall wage levels.
- The 2000 law change increased the maximum and minimum weekly benefits (see Appendix B). However, because of annual fluctuations in average weekly benefits, it is difficult to see the effect of the law change in these numbers.[13]
- Average weekly total disability and TPD benefits fell from 1984 through 1993, primarily because the pre-injury wages of injured workers (the basis for weekly benefits) grew more slowly than overall wage levels.[14]

Figure 3.4 Average weekly wage-replacement benefits, adjusted for wage growth, injury years 1984-2002 [1]



Injury Year	Total Disab. [2]	TPD
1984	$577	$382
1993	474	222
1996	496	227
1999	491	230
2000	480	226
2001	499	240
2002	501	229

1. Developed statistics from DLI data (see Appendix C). Benefit amounts are adjusted for average wage growth between the respective year and 2002.
2. Total disability includes TTD and PTD benefits. TTD and PTD are not distinguished in the DLI database.

[13] As part of its overall cost estimate for the law change, DLI Research and Statistics estimated that the increase in the minimum and maximum would raise average weekly total disability benefits by 3.6 percent.

[14] Data from DLI and the Minnesota Department of Employment and Economic Development.

Average indemnity benefits by type

Adjusting for average wage growth, average total disability, TPD, and stipulated benefit amounts (per claim with that benefit type) increased during the last four years after a stable period that had begun in the mid-1990s. Average adjusted PPD benefits fell slightly during the same period.

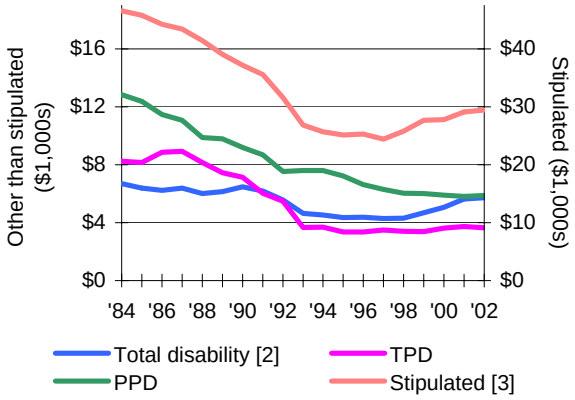
- In 2002 relative to 1998, after adjusting for average wage growth:
  - average total disability benefits were up 33 percent;
  - average TPD benefits were up 7 percent;
  - average stipulated benefits were up 14 percent;
  - average PPD benefits were down 3 percent.

- The trends in average total disability and TPD benefits are driven by the trends in average benefit duration and average weekly benefits (Figures 3.3 and 3.4). The recent increases in average total disability and TPD benefits were caused primarily by increases in benefit duration.

- Adjusted average PPD benefits fell steadily from 1984 through 2000 primarily because most PPD benefits were paid under a benefit schedule that remained fixed. Under this fixed schedule, PPD benefits fell relative to rising wages, which is reflected in the adjusted average benefit amounts.

- The 2000 law change raised the PPD benefit schedule (see Appendix B). It is not clear why this increase is not apparent in these numbers. Future versions of these statistics are likely to reflect the PPD benefit increase as the numbers mature.[15]

Figure 3.5 Average indemnity benefit by type *per claim with that benefit type,* adjusted for wage growth, injury years 1984-2002 [1]



Injury Year	Total Disab.[2]	TPD	PPD	Stipulated [3]
1984	$6,690	$8,240	$12,830	$46,570
1995	4,360	3,350	7,220	25,110
1998	4,300	3,410	6,040	25,800
2000	5,070	3,610	5,910	27,800
2001	5,620	3,730	5,800	29,130
2002	5,720	3,640	5,890	29,420

1. Developed statistics from DLI data (see Appendix C). Benefit amounts are adjusted for average wage growth between the respective year and 2002.
2. Total disability includes TTD and PTD benefits. TTD and PTD are not distinguished in the DLI database.
3. Includes indemnity and medical components.

- The recent increase in average stipulated benefit amounts is likely attributable to increasing values of claims involved in settlements, related to the recent increases in total disability and TPD benefits and the 2000 increase in the PPD benefit schedule.

[15] At the time of the law change, DLI Research and Statistics estimated that the increase in the PPD benefit schedule would raise overall PPD benefits by 14 percent. Because the law change took effect for injuries on or after October 1, 2000, only three quarters of its effect is reflected in the change from 2000 to 2001. After adjusting for both this and average wage growth between these two years (3.2 percent), the expected change in adjusted average PPD benefits between 2000 and 2001 would be 7.1 percent, assuming no change in impairment ratings.

Indemnity benefits per indemnity claim

Average indemnity benefits per indemnity claim rose during the last four years after reaching a historical low in 1998, adjusting for wage growth. The primary cause was an increase in total disability and stipulated benefits per claim. The increase in total disability benefits per claim is mostly attributable to duration increases. The 2000 law change contributed a relatively small amount to the 1998-2002 increase.

Note: Figure 3.6 differs from Figure 3.5 in that it shows the average benefit of each type *per indemnity claim*, rather than *per claim with that type of benefit.* Figure 3.6 reflects both the percentage of indemnity claims with each benefit type (Figure 3.2) and benefit amounts per claim with the respective benefit type (Figure 3.5).

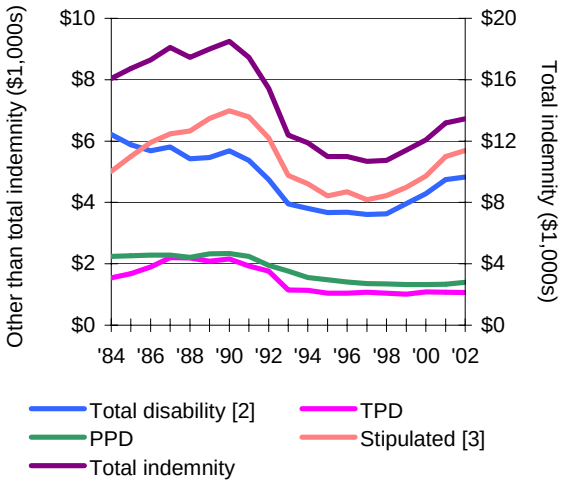
- Indemnity benefits per indemnity claim in 2002 were up 11 percent from 2000 and 25 percent from 1998, but still 27 percent below their peak in 1990. These numbers (last column of Figure 3.6) are the DLI numbers in Figure 2.8.

- Almost all of the total increase in indemnity benefits per claim between 1998 and 2002 ($2,690) came from increases in total disability benefits ($1,200) and stipulated benefits ($1,480).

  - The increase in total disability benefits per indemnity claim resulted primarily from an increase in duration (Figure 3.3) and to a lesser degree from an increase in average weekly benefits (Figure 3.4).
  - The increase in stipulated benefits per indemnity claim resulted partly from an increase in the proportion of claims with these benefits (Figure 3.2) and partly from an increase in average stipulated benefit amounts (Figure 3.5).

- In 2002, total disability and stipulated benefits per indemnity claim were several times as large as TPD and PPD benefits per indemnity claim.

Figure 3.6 Average indemnity benefit by type *per paid indemnity claim*, adjusted for wage growth, injury years 1984-2002 [1]



Injury Year	Total Disab. [2]	TPD	PPD	Stipu-lated [3]	Total Indem. [4]
1984	$6,210	$1,540	$2,240	$5,010	$16,080
1990	5,680	2,160	2,340	6,990	18,500
1995	3,670	1,040	1,480	4,210	10,990
1998	3,630	1,040	1,340	4,220	10,750
2000	4,290	1,080	1,320	4,860	12,070
2001	4,750	1,080	1,330	5,490	13,170
2002	4,830	1,060	1,400	5,700	13,440

1. Developed statistics from DLI data (see Appendix C). Benefit amounts are adjusted for average wage growth between the respective year and 2001.
2. Total disability includes TTD and PTD benefits. TTD and PTD are not distinguished in the DLI database.
3. Includes indemnity and medical components.
4. Because some benefit types are not shown, total indemnity benefits are greater than the sum of the benefit types shown.

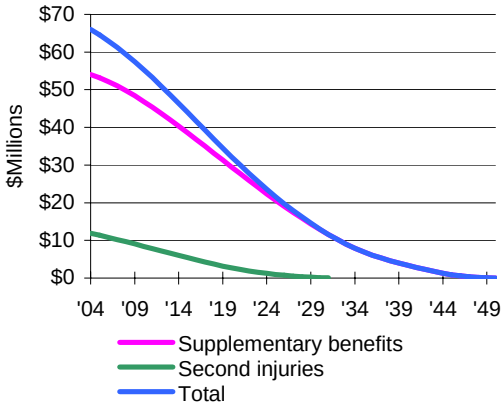
- DLI estimated that the indemnity benefit increases enacted by the 2000 legislature would raise total indemnity benefits by 4.6 percent. This accounts for less than a fifth of the 25-percent increase in indemnity benefits per claim from 1998 to 2002. Most of the legislated benefit increase was in the form of an increase in PPD benefits and an increase in minimum and maximum weekly benefits (see Appendix B).

Supplementary benefit and second-injury costs

DLI produces an annual projection of supplementary benefit and second injury reimbursement costs as they would exist without future settlement activity. The total annual cost is projected to fall in half by 2020.

- The total projected cost for 2004, $66 million, is about 5 percent of total workers' compensation system cost.
- The 2004 cost consists of $54 million for supplementary benefits and $12 million for second injuries.
- Without settlements, supplementary benefit claims are projected to continue until 2049, and second injury claims until 2030.
- Claim settlements, currently about $15 million per year, will reduce future projections of these liabilities.

Figure 3.7 Projected cost of supplementary benefit and second-injury reimbursement claims, fiscal claim-receipt years 2004-2050 [1]



Fiscal Year of Claim Receipt	Projected Amount Claimed ($Millions) Supplementary Benefits	Second Injuries	Total
2004	$54.0	$11.9	$66.0
2010	46.9	8.5	55.4
2020	29.5	2.7	32.2
2030	12.9	.1	13.0
2050	.0	.0	.0

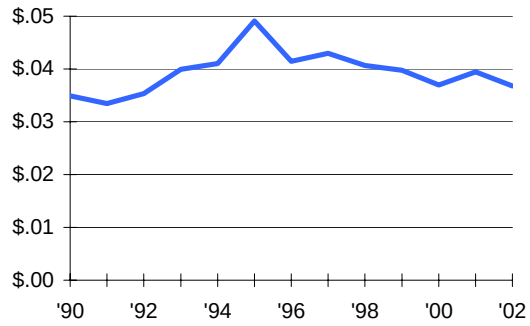
1. Projected from DLI data, assuming no future settlement activity. See Appendix C.

State agency administrative cost

With the exception of a spike in 1995, state agency administrative cost has changed little as a proportion of workers' compensation covered payroll over the last decade.[16]

- In fiscal year 2002, state agency administrative cost (see note in figure) came to .037 cents per $100 of payroll, about the same as in 1990.
- Administrative cost for 2002 was about $31 million, or about 2.4 percent of total workers' compensation system cost.

Figure 3.8 Net state agency administrative costs per $100 of payroll, fiscal years 1990-2002 [1]



Fiscal Year	Admin. Cost per $100 of Payroll
1990	$.035
1995	.049
1997	.043
1999	.040
2000	.037
2001	.039
2002	.037

1. Includes costs of workers' compensation functions in DLI, the Office of Administrative Hearings, the Workers' Compensation Court of Appeals, and the Department of Commerce, as well as the cost of Minnesota's OSHA program. Costs are net of fees for service. Data from DLI, MWCIA, and WCRA.

[16] These figures reflect a somewhat expanded definition of "net administrative cost" compared to last year's report. The change affects the entire series. See Appendix C for details.

4

Medical cost detail

An important finding from Chapter 2 is that between policy years 1998 and 2001, average medical benefits per claim grew 32 percent after adjusting for wage growth. This chapter presents additional statistics on medical costs. DLI Research and Statistics computed these statistics from detailed workers' compensation medical cost data for Minnesota from a large insurer.[17] Although the claims in this data (referred to as the "research data") are similar to the state's overall claim population on some important dimensions (see below), it is uncertain how closely the results represent Minnesota's overall workers' compensation experience. However, on a qualitative level, the results do point out some important developments — highlighting, for example, certain types of services with relatively large cost increases.

Major findings

The following findings emerge from the research data for injury years 1997 to 2002:

- Per-claim expenditures increased 76 percent for drugs, 54 percent for outpatient hospital facility services, and 35 percent for radiology. The increase for drugs was 44 percent for hospital providers and 137 percent for nonhospital providers.

- Of the $225 increase in total medical cost per claim, outpatient hospital facility services accounted for $89 (32 percent), radiology $50 (18 percent), drugs $43 (16 percent), and surgery and anesthesia $43 (15 percent).

- For most service groups with significant contributions to the overall cost increase (including radiology, drugs, and surgery and anesthesia), the cost increase came primarily from an increasing cost per claim with the service, as opposed to an increasing proportion of claims receiving the service. For outpatient and inpatient hospital facility services, however, the two factors were equally important.

- Shifts in service mix were a predominant factor in the cost increase for some services.

  - For radiology, 24 points of the 28-percent increase in the cost per claim with this service resulted from a more expensive service mix.
  - For surgery and anesthesia, the service mix became 22 percent more expensive (which was partly offset by decreases in quantity of service per claim and cost per unit of service).

Background

Current cost-control mechanisms

The current mechanisms for controlling medical costs in Minnesota's workers' compensation system came about largely in the 1992 law changes and in rules following those changes. The three most important cost-control mechanisms are (1) the medical fee schedule, (2) treatment parameters and (3) the allowance for using certified managed care organizations.[18]

Fee schedule. The fee schedule sets reimbursement limits for a range of medical services in nonhospital and outpatient-large-hospital settings.[19] The schedule covers evaluation and management, surgery, radiology, pathology and laboratory services, physical medicine and rehabilitation, chiropractic

[17] Several large insurers, third-party administrators, and managed care organizations were approached for data for this analysis. Several of them supplied data, but in only one case was the data sufficient for this analysis.

[18] See Appendix B for additional detail.

[19] Large hospitals are those with more than 100 licensed beds.

manipulations, and other medicine.[20] It is a "relative value" schedule. It uses "relative value units" (RVUs) from Medicare adapted for Minnesota under provisions of the 1992 law. The reimbursement limit for each service is the product of the RVU for that service and a "conversion factor" (CF) indicating the amount of allowable reimbursement per RVU. By law, the CF is adjusted each year by no more than the percent increase in the statewide average weekly wage (SAWW). From 1993 through 2001, the CF was adjusted by the percent increase in the SAWW; in 2002 and 2003, it was adjusted by the percent change in the producer price index for physicians.

Generally, services not covered by the fee schedule are reimbursed at 85 percent of the provider's "usual and customary charge" (U&C) for the service. All large-hospital inpatient services and those large-hospital outpatient services not in the schedule are also reimbursed at 85 percent of U&C. All small-hospital services are reimbursed at 100 percent of U&C. A separate formula applies to the reimbursement of drug charges.[21]

Treatment parameters. The treatment parameters set forth guidelines for the treatment of low-back pain, neck-pain, thoracic back pain, and upper extremity disorders. They cover diagnosis (including diagnostic imaging procedures), conservative (nonsurgical) treatment, surgical treatment, inpatient hospitalization, and chronic management.[22] The rules allow for treatments outside of the parameters if circumstances warrant. Insurers may deny payment for medical services outside of the parameters.[23]

Certified managed care organizations (CMCOs). The 1992 law also allows employers and insurers to require workers (with certain exceptions) to obtain medical care for work injuries from providers in a CMCO network. CMCOs are certified by DLI on the basis of statutory criteria. Currently there are four CMCOs in Minnesota.

Research data

The research data, from a large insurer, includes details on claimant characteristics, injury diagnosis, medical treatment, and cost.

A comparison of the research data with DLI claims data (representing the overall population of claims) shows a general similarity between the two with regard to broad industry group, claimant gender and age, and type of injury. However, compared to the overall population of claims, the research data has somewhat lower proportions of women and of claims in the services and public administration sectors. Some of these differences disappear when self-insured claims (in the overall claim population) are removed from the comparison.[24]

This chapter analyzes the 1997-2002 period (see below). A comparison of the research data with data for all insurers (available for 1997-2001) shows that average medical cost per claim rose significantly less in the research data than for all insurers. Thus, the estimated magnitudes of different components of the overall medical cost increase in the research data are likely to understate, on the whole, the corresponding magnitudes for all insurers combined. [25]

Analytical approach

To analyze the major contributing factors to medical cost, this analysis delineates the following service groups:

- evaluation and management (e.g., office visits, consultations, visits with hospital patient);
- surgery and anesthesia;
- radiology;
- pathology and laboratory services;
- chiropractic manipulations;
- physical medicine;[26]

[20] Services not in the above categories but with Current Procedural Terminology (CPT) codes (trademark of the American Medical Association). Includes, among others, immunization, psychiatry, ophthalmology, cardiovascular and pulmonary tests and procedures, and neurology and neuromuscular tests and procedures.

[21] The maximum reimbursement for drugs (except for large-hospital inpatient settings and small hospitals) is the average wholesale price plus a $5.14 dispensing fee (not to exceed retail price for nonprescription drugs).

[22] The parameters concerning chronic management and some imaging procedures apply to all injuries.

[23] Medical providers may appeal a denial of payment.

[24] Details available upon request from DLI Research and Statistics.

[25] See Appendix C (Figure A-1 and surrounding text) for details.

[26] "Physical medicine" is used as shorthand for physical medicine and rehabilitation.

- drugs (prescription and nonsubscription drugs supplied to the worker for home use plus drugs used in patient-care settings);
- equipment and supplies;
- other medicine (see note 20);
- inpatient hospital facility services (not included in the above categories);
- outpatient hospital facility services (not included in the above categories); and
- other services.[27]

For some service groups — surgery and anesthesia, radiology, drugs, and equipment and supplies — the analysis distinguishes between hospital and nonhospital providers. For physical medicine, the analysis delineates between physical therapist, hospital, and chiropractic providers.

The analysis presents data by year of injury for injury years 1997 to 2002 (the last year in the research data).[28] It uses 1997 as the base year because 1997 is the earliest year in a period of relatively low medical costs in both the overall insurance data and the research data.[29] Appendices D and E present trend data for the same period.

As elsewhere in the report, the statistics are presented at a uniform maturity so as to be comparable over time. In this chapter, the statistics are presented at an average maturity of 2.75 years after the date of injury.

Because the composition of claims changes over time with respect to gender, age, and injury type, all statistics are adjusted for changes in these factors. In addition, as throughout the report, trends in cost per claim are adjusted for average wage growth.[30] Because of these adjustments, the statistics in this chapter show how medical cost and service utilization would have changed over the period examined if gender, age, and injury type had remained constant, and they show the degree to which costs have increased faster than general wage growth. Thus, the statistics do not represent trends in actual cost and utilization. Instead, they represent trends due to factors other than changing gender, age, and injury type and, where costs are concerned, trends in excess of general inflation.

Terminology

The cost numbers in this chapter do not represent full medical cost for the claims in question, because (1) the numbers are based on payments only, as opposed to payments plus reserves, and (2) the numbers are developed to a relatively low maturity (2.75 years). However, this chapter uses the term "medical cost" for consistency with the remainder of the report.

At several points in the analysis, a distinction is made between the average cost of a type of service for claims with that service and the average cost of the service for all claims. The latter is important for understanding the contribution of the service group to total medical cost. It is the product of the percentage of claims with the service and the average cost of the service for claims with the service. For convenience, the discussion refers to the average cost of a service for all claims as the cost of the service "per total claim."

[27] Includes several miscellaneous services such as transportation and dentistry.

[28] See definition of injury year data in Appendix A.

[29] See Figure A-1 in Appendix C.

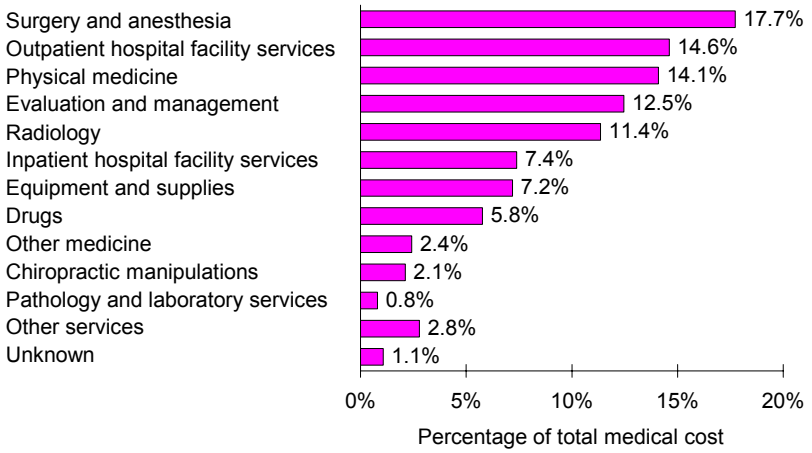
[30] See "Adjustment of cost data for wage growth" in Chapter 1 for rationale. See Appendix C for computational details.

Cost distribution by service group

The largest component of total medical cost for injury year 2002 was surgery and anesthesia.

- Surgery and anesthesia accounted for 18 percent of total medical cost for 2002, followed by outpatient hospital facility services (15 percent) and physical medicine (14 percent).
- The total cost of each service group (and thus its contribution to total medical cost) is the product of the percentage of claims with that type of service and the average cost of that service when it occurs (columns 1 and 2 in the figure).
- The most prevalent types of service (according to the percentage of claims with the service) were evaluation and management (81 percent of claims) and radiology (41 percent).
- The types of service with the greatest cost per claim (for claims with the service) were inpatient hospital facility services ($5,800 per claim), surgery and anesthesia ($990), and physical medicine ($950).
- For some service groups, there are large differences by provider type in cost per claim with service. These differences may occur because of differences in quantity of service, service mix, or cost per unit of service.

Figure 4.1 Medical cost per claim by service group, injury year 2002 [1]



Service Group [2]	Pctg. of Claims with Service	Cost per Claim with Service	Cost per Total Claim	Pctg. of Total Cost
Surgery and anesthesia	31.1%	$987	$307	17.7%
Nonhospital providers	*29.3*	*834*	*245*	*14.1*
Hospital providers	*7.2*	*862*	*62*	*3.6*
Outpatient hospital facility services	32.4	779	252	14.6
Physical medicine	25.5	954	244	14.1
Physical therapist providers	*13.2*	*1,013*	*134*	*7.7*
Hospital providers	*7.2*	*1,194*	*86*	*5.0*
Chiropractic providers	*8.8*	*287*	*25*	*1.5*
Evaluation and management	81.3	265	215	12.5
Radiology	41.4	474	196	11.4
Nonhospital providers	*38.7*	*297*	*115*	*6.7*
Hospital providers	*16.7*	*491*	*82*	*4.7*
Inpatient hospital facility services	2.2	5,797	128	7.4
Equipment and supplies	35.3	352	124	7.2
Nonhospital providers	*21.3*	*140*	*30*	*1.7*
Hospital providers	*19.4*	*487*	*95*	*5.5*
Drugs	35.7	279	100	5.8
Nonhospital providers	*22.8*	*223*	*51*	*2.9*
Hospital providers	*18.7*	*272*	*51*	*2.9*
Other medicine	17.8	235	42	2.4
Chiropractic manipulations	10.6	346	37	2.1
Pathology and laboratory services	7.5	186	14	0.8
Other services	22.9	211	48	2.8
Unknown	3.4	541	19	1.1
Total	100.0%	$1,729	$1,729	100.0%

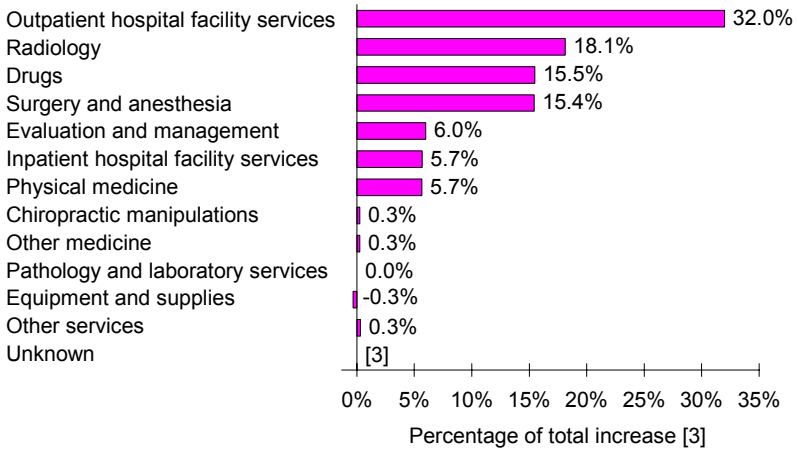
1. Computed from data from a large insurer (see Appendix C).
2. See text for additional detail.

Major contributors to overall cost increase

Drugs and outpatient hospital facility services showed the largest percent increases in cost per total claim from 1997 to 2002. However, outpatient hospital facility services and radiology contributed the largest amounts to the overall increase in cost per total claim.

- Expenditures per total claim increased 76 percent for drugs, followed by 54 percent for outpatient hospital facility services and 35 percent for radiology.
- Of the $225 increase in total medical cost per claim, outpatient hospital facility services accounted for $89 (32 percent), radiology $50 (18 percent), drugs $43 (16 percent), and surgery and anesthesia $43 (15 percent).
- For radiology, drugs, and surgery and anesthesia, hospital providers accounted for about one-third of the increase in cost per total claim.
- For physical medicine, hospital providers accounted for most of the cost increase.
- For drugs, cost per total claim increased 44 percent for hospital providers as opposed to 137 percent for nonhospital providers.

Figure 4.2 Contributions of service groups to overall change in total medical cost per total claim between injury years 1997 and 2002 [1]



Service Group [2]	Percent Change in Cost per Total Claim	Amount of Change in Cost per Total Claim	Percentage of Total Cost Increase [3]
Outpatient hospital facility services	54.3%	$89	32.0%
Radiology	34.5	50	18.1
Nonhospital providers	*41.2*	*33*	*12.0*
Hospital providers	*26.7*	*17*	*6.2*
Drugs	75.8	43	15.5
Nonhospital providers	*136.6*	*28*	*10.1*
Hospital providers	*43.8*	*15*	*5.4*
Surgery and anesthesia	16.2	43	15.4
Nonhospital providers	*11.9*	*26*	*9.5*
Hospital providers	*36.1*	*16*	*5.9*
Evaluation and management	8.4	17	6.0
Inpatient hospital facility services	14.1	16	5.7
Physical medicine	6.9	16	5.7
Physical therapist providers	*3.9*	*5*	*1.7*
Hospital providers	*17.0*	*12*	*4.2*
Chiropractic providers	*- 2.2*	*-1*	*- 0.2*
Chiropractic manipulations	2.1	1	0.3
Other medicine	1.7	1	0.3
Pathology and laboratory services	- .4	0	0.0
Equipment and supplies	- .7	-1	- 0.3
Nonhospital providers	*- 9.1*	*-3*	*- 1.2*
Hospital providers	*2.3*	*2*	*0.8*
Other	1.8	1	0.3
Unknown	-74.0	-53	[3]
Total	14.9%	$225	100.0%

1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between 1997 and 2002. (See Appendix C.)
2. See text for additional detail.
3. The percent contribution to the total cost change is computed over services with reported (known) type.

Figure 4.3 Components of change in cost per total claim between injury years 1997 and 2002 [1]

Service group [2]	Change in Percentage of Claims with Service	Change in Cost of Service per Claim with Service	Change in Cost of Service per Total Claim [3]
Outpatient hospital facility servs. (32.0%)	24.8%	23.7%	54.3%
Radiology (18.1%)	5.4%	27.6%	34.5%
Nonhospital providers (12.0%)	*3.1%*	*37.0%*	*41.2%*
Hospital providers (6.2%)	*16.4%*	*8.9%*	*26.7%*
Drugs (15.5%)	14.4%	53.7%	75.8%
Nonhospital providers (10.1%)	*19.4%*	*98.3%*	*136.6%*
Hospital providers (5.4%)	*13.3%*	*26.9%*	*43.8%*
Surgery and anesthesia (15.4%)	0.5%	15.6%	16.2%
Nonhospital providers (9.5%)	*8.0%*	*3.6%*	*11.9%*
Hospital providers (5.9%)	*-15.6%*	*61.3%*	*36.1%*
Evaluation and management (6.0%)	-1.2%	9.7%	8.4%
Inpatient hospital facility servs. (5.7%)	7.3%	6.4%	14.1%
Physical medicine (5.7%)	-2.2%	9.3%	6.9%
Physical therapist providers (1.7%)	*2.1%*	*1.8%*	*3.9%*
Hospital providers (4.2%)	*-10.9%*	*31.3%*	*17.0%*
Chiropractic providers (-0.2%)	*0.3%*	*-2.5%*	*-2.2%*
Other (0.3%)	18.4%	-13.9%	1.8%
Chiropractic manipulations (0.3%)	6.4%	-4.0%	2.1%
Other medicine (0.3%)	-1.8%	3.6%	1.7%
Pathology and laboratory servs. (0.0%)	-3.7%	3.3%	-0.4%
Equipment and supplies (-0.3%)	-12.1%	12.9%	-0.7%
Nonhospital providers (-1.2%)	*-19.4%*	*12.7%*	*-9.1%*
Hospital providers (0.8%)	*-3.1%*	*5.6%*	*2.3%*
Total (100.0%)	0.0%	14.9%	14.9%

1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between 1997 and 2002. (See Appendix C.)
2. See text for additional detail. Percent contribution to overall cost increase per total claim (from Figure 4.2) is in parentheses.
3. Equal to the "product" of the first two columns. Technically, col. 3 = (1 + col. 1) x (1 + col. 2) - 1. An approximation is that column 3 is roughly equal to the sum of the first two columns.

Analysis of cost change per total claim

The change in the cost of a type of service per total claim[31] is the product of (1) the change in the percentage of claims with that service and (2) the change in the average cost of that service for claims with that service.

- For five of the seven service groups with the largest increases in cost per total claim (combining provider types), the predominant factor was the change in the average cost of the service for claims with that service.
  - ➢ For drugs, for example, the 76-percent increase in cost per total claim resulted from a 54-percent increase in the average cost of drugs per claim with drugs and a 14-percent increase in the percentage of claims with drugs.
- For outpatient and inpatient facility services, the two factors were of roughly equal importance.
  - ➢ For example, the 54-percent increase in the cost of outpatient hospital facility services per total claim resulted from a 25-percent increase in the percentage of claims with outpatient hospital facility services and a 24-percent increase in the average cost of outpatient hospital facility services per claim with these services.
- Significant variation occurs by provider type.
  - ➢ For physical medicine provided by hospitals, the 17-percent increase in the cost of this service per total claim resulted from an 11-percent decrease in the percentage of claims with this service combined with a 31-percent increase in the cost of this service per claim with the service. For physical therapist and chiropractic providers of physical

[31] Column 1 of Figure 4.2.

medicine, relatively small changes occurred.
- The average cost of drugs per claim with drugs increased 98 percent for nonhospital providers as opposed to 27 percent for hospital providers.

Analysis of cost change for selected service groups

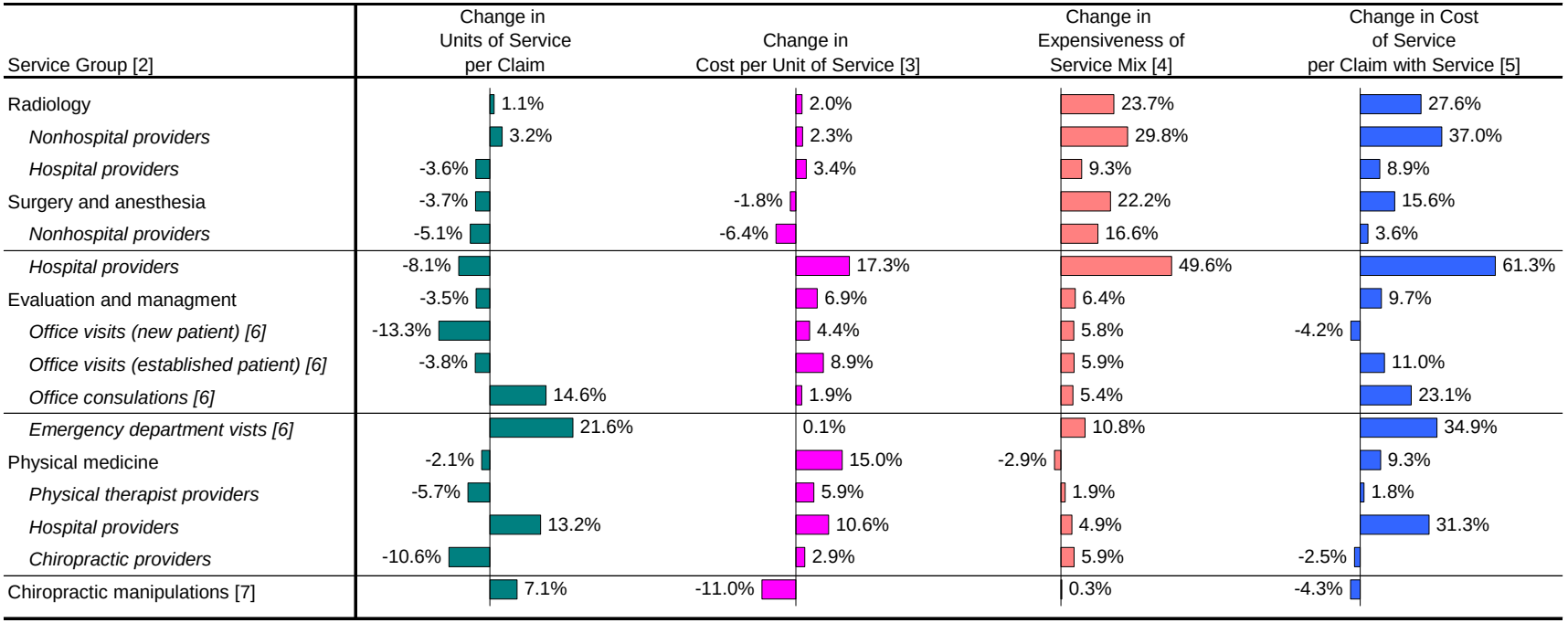
The change in the average cost of a service per claim with that service[32] is the product of the changes in (1) average units of service per claim, (2) average cost per unit (for a fixed service mix) and (3) the expensiveness of the service mix. Changes in average service costs were divided into these components for those service groups for which it was feasible (see Appendix C). Figure 4.4 shows the results.

A note on service mix: Each service group encompasses a range of particular services that vary widely in cost because of complexity, skill demands, and use of time and other resources. The expensiveness of the service mix measures the degree to which the services within the group tend to be the more costly ones.[33]

- For radiology and for surgery and anesthesia, an increasingly expensive service mix was responsible for most or all of the increase in average cost per claim with the service .
  - For radiology, a more expensive service mix was responsible for 24 percentage points of the 28-percent increase in average cost per claim with the service.
  - For surgery and anesthesia, a 22-percent increase in the expensiveness of the service mix was offset by mild decreases in units of service and cost per unit to produce a 16-percent increase in average cost per claim with the service. The shift toward more expensive services occurred primarily within the surgery component of this service group (not shown here).
- For evaluation and management overall, there were roughly equal increases from cost per unit and from service mix, partly offset by a decrease in units of service. But considerable variation occurred within this service group:
  - While all subgroups of evaluation and managment shifted toward a more expensive service mix, there were decreases in the average quantity of office visits (new patient and established patient), but increases in office consultations and emergency department visits. Office consultations are the most expensive of the four subgroups shown; office visits with established patients are the least expensive. Mid-range are office visits with new patients and emergency department visits.[34]
- For physical medicine, a 15-percent increase in average cost per unit was counteracted by decreases in the quantity of service per claim and in the expensiveness of service mix.
- For chiropractic manipulations, cost per unit decreased 12 percent, producing a decrease in cost per claim with the service even with increases in quantity of service and expensiveness of service mix.
- The decrease in cost per unit for chiropractic manipulations was caused largely by the introduction of new RVUs in 2001.[35]
- Significant variation occurred by provider type. For example, for radiology, the shift to a more expensive service mix was stronger among nonhospital providers, but for surgery and anesthesia, this shift was stronger for hospital providers. For the latter group, 50 percentage points of the 61-percent increase in cost per claim with the service was attributable to a more expensive service mix.[36]

[32] Second column of bars in Figure 4.3.
[33] See note 4 in Figure 4.4.
[34] Based on RVUs.
[35] The 2001 RVUs for chiropractic manipulations were lower than the prior ones. The RVUs also fell for surgery and anesthesia, which had a 6.4-percent decrease in cost per unit for nonhospital providers. However, the year-by-year trend in cost per unit shows a clear decrease between 2000 and 2001 for chiropractic manipulations but not for surgery and anesthesia.
[36] As with all provider types combined, the shift toward more expensive services within surgery and anesthesia occurred primarily in the surgery component for both hospital and nonhospital providers.

Figure 4.4 Components of change in cost of selected service groups between injury years 1997 and 2002 [1]



Service Group [2]	Change in Units of Service per Claim	Change in Cost per Unit of Service [3]	Change in Expensiveness of Service Mix [4]	Change in Cost of Service per Claim with Service [5]
Radiology	1.1%	2.0%	23.7%	27.6%
Nonhospital providers	3.2%	2.3%	29.8%	37.0%
Hospital providers	-3.6%	3.4%	9.3%	8.9%
Surgery and anesthesia	-3.7%	-1.8%	22.2%	15.6%
Nonhospital providers	-5.1%	-6.4%	16.6%	3.6%
Hospital providers	-8.1%	17.3%	49.6%	61.3%
Evaluation and managment	-3.5%	6.9%	6.4%	9.7%
Office visits (new patient) [6]	-13.3%	4.4%	5.8%	-4.2%
Office visits (established patient) [6]	-3.8%	8.9%	5.9%	11.0%
Office consulations [6]	14.6%	1.9%	5.4%	23.1%
Emergency department vists [6]	21.6%	0.1%	10.8%	34.9%
Physical medicine	-2.1%	15.0%	-2.9%	9.3%
Physical therapist providers	-5.7%	5.9%	1.9%	1.8%
Hospital providers	13.2%	10.6%	4.9%	31.3%
Chiropractic providers	-10.6%	2.9%	5.9%	-2.5%
Chiropractic manipulations [7]	7.1%	-11.0%	0.3%	-4.3%

1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between 1997 and 2002. (See Appendix C.)
2. See text for additional detail.
3. Computed for a fixed service mix within the service group (see Appendix C).
4. The "expensiveness of the service mix" is the average cost per unit of service for the overall service group as affected by changes in the service mix within the group, holding constant the cost per unit of particular services (see Appendix C).
5. Equal to the "product" of the first three columns. Technically, col. 4 = (1 + col. 1) x (1 + col. 2) x (1 + col. 3) - 1. An approximation is that column 4 is roughly equal to the sum of the first three columns.
6. For the four subgroups under evaluation and management, units of service and cost per claim with service (and the associated changes) are expressed relative to the number of claims with any evaluation and management services.
7. The changes for chiropractic manipulations refer to 1998 to 2002 because service coding changes prevent comparisons before 1998.

5

Vocational rehabilitation

This chapter gives data on vocational rehabilitation (VR) services in Minnesota's workers' compensation system.

Major findings

- Participation in vocational rehabilitation rose from 15 percent of paid indemnity claimants in 1997 to 22 percent for 2002. The participation rate increased almost twice as much from 2000 to 2002 as from 1997 to 1999. A projected 6,400 claimants injured in 2002 will receive VR services. (Figure 5.1)
- The total cost of VR services for 2002, $42 million, was about 3.2 percent of workers' compensation system cost. (Figure 5.2)
- Adjusted for average wage growth, the average, median, and total costs of VR services were about the same in 2002 as in 2000. (Figure 5.2)
- The time from injury to start of VR services has increased over the last four years; the duration of services has decreased.
- In 2002, about 70 percent of VR participants had a job at the time of plan closure, a majority of these with their pre-injury employer. This is down from 75 percent in 1998. (Figure 5.6)
- The average VR participant returning to work receives a wage about the same as their pre-injury wage, but this varies widely among individuals. (Figure 5.7)

Background

VR is the third type of workers' compensation benefit, supplementing medical and indemnity benefits. VR services are provided to injured workers who need help in returning to work because of their injuries and whose employers are unable to offer them suitable employment.

VR services include—

- vocational evaluation,
- counseling,
- job analysis,
- job modification,
- job development,
- job placement,
- vocational testing,
- transferable skills analysis,
- job-seeking skills training,
- on-the-job training, and
- retraining.

VR services are provided by "qualified rehabilitation consultants" (QRCs) registered by DLI. QRCs determine whether injured workers are eligible for VR services, develop VR plans for those determined eligible, and coordinate service delivery under these plans. Eligibility is determined in a VR consultation, which is typically done within certain timelines or if requested by the employee or employer. VR plan costs are generated by hourly charges for services by QRCs and vendors and the costs for certain services, such as retraining, on-the-job training programs, and vocational testing.

Time period covered

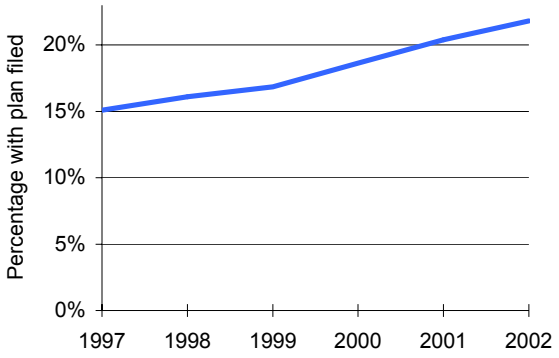
The data in this chapter come from VR documents filed with DLI for each claim with VR activity. Since the VR system experienced major changes in the early and middle 1990s, only data from 1997 or 1998 through 2002 are used.

Participation rate

The VR participation rate increased steadily from 1997 to 2002.[37]

- Over this five-year period, the participation rate increased from 15.1 percent to 21.8 percent.
- About 6,420 individuals injured in 2002 are expected to receive VR services (some of these have not yet begun services).
- The VR participation rate increased almost twice as much from 2000 to 2002 as it did from 1997 to 1999. This may be partly related to the 2000-2003 recession, to the extent that VR is more likely to be used when return to work is more difficult.
- Despite the increasing VR participation rate, the actual number of claimants with VR plans was stable from 2000 to 2002 because the number of claims decreased.

Figure 5.1 Percentage of paid indemnity claims with a VR plan filed, injury years 1997-2002 [1]



Injury Year	Percentage with Plan
1997	15.1%
1999	16.9
2000	18.6
2001	20.4
2002	21.8

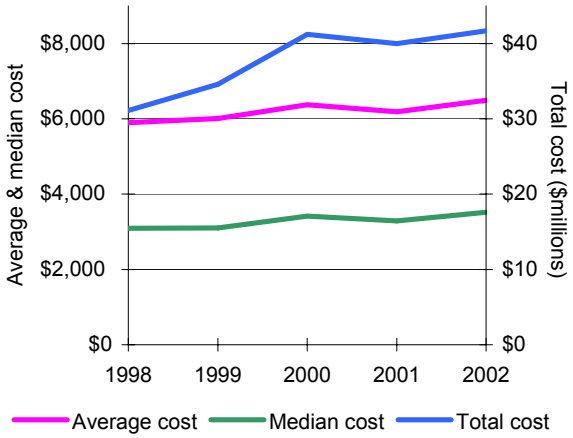
1. Data from DLI. Statistics for 1997-2001 are developed (see Appendix C).

Cost

Adjusted for average wage growth, the average, median, and total costs of VR services were about the same in 2002 as in 2000.

- The stable total cost of VR services for 2000-2002 occurred because of a stable number of participants and average plan cost.
- The total cost of VR services increased rapidly from 1998 to 2000 primarily because of an increasing number of participants, but also because of increasing average cost.
- The average VR plan cost was $6,490 in 2002; the median plan cost was $3,520.
- The total cost of VR for 2002, $42 million, was about 3.2 percent of total workers' compensation system cost.

Figure 5.2 VR plan costs, adjusted for wage growth, 1998-2002 [1]



Injury Year	Average Cost	Median Cost	Total Cost ($Millions)
1998	$5,900	$3,090	$31.1
1999	$6,010	$3,100	$34.6
2000	$6,370	$3,420	$41.2
2001	$6,190	$3,290	$40.0
2002	$6,490	$3,520	$41.7

1. Developed statistics from DLI data (see Appendix C). Costs are adjusted for average wage growth between the respective year and 2002.

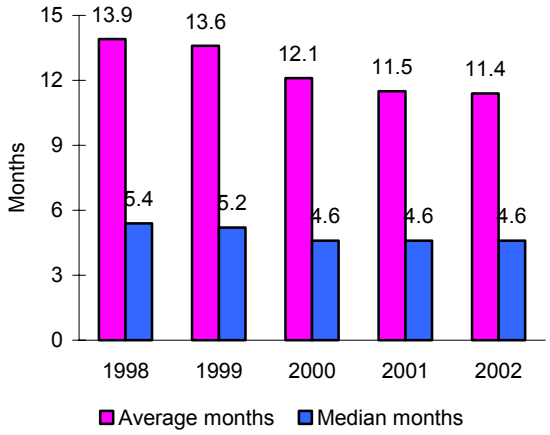
[37] Before 1997, the percentage of indemnity claimants receiving VR services varied widely, reflecting a law change, court decisions, and DLI initiatives.

Timing of services

The success of VR is closely linked to prompt service provision. The average time between injury and the start of VR services has declined since 1998.

- From 1998 to 2002, the average time from injury to start of VR services declined 18 percent. The median time declined through 2000 but remained steady from 2000 to 2002 at about 4½ months.
- Compared to workers who started VR more than one year after injury, workers who started within six months (among plan closures in 2002) had—
  - lower VR costs by 15 percent ($5,080 vs. $5,960);
  - shorter VR service durations by 21 percent (11.6 months vs. 14.7 months); and
  - greater chances of returning to work with their pre-injury employer (50 percent vs. 36 percent).

Figure 5.3 Time from injury to start of VR services, plan-closure years 1998-2002 [1]



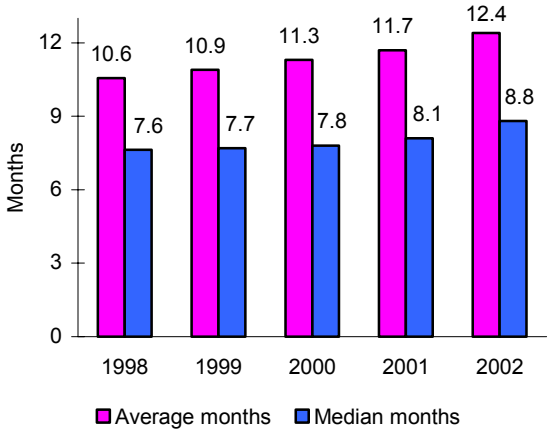
1. Data from DLI.

Service duration

VR service duration, the time from the start to the end of the plan, has increased gradually since 1998.

- Average service duration increased 17 percent from 1998 to 2002. Median duration increased 15 percent. The more recent portion of this increase may be related to the 2000-2003 recession, to the degree that more extensive services are needed in a poor job market.
- Among plan closures in 2002, average service duration was shortest for participants returning to work with their pre-injury employer (9 months) and longest for those going to a different employer or not returning to work (15 months).

Figure 5.4 VR service duration, plan-closure years 1998-2002 [1]



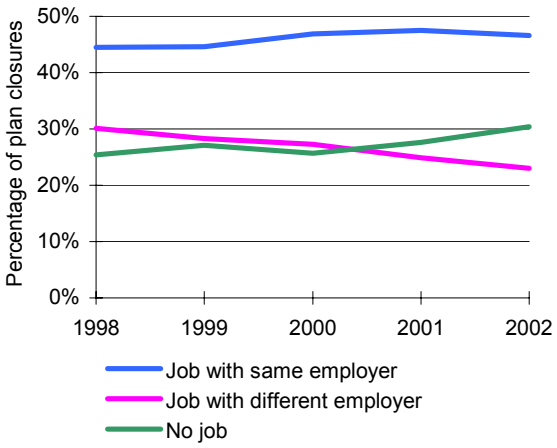
1. Data from DLI.

Return-to-work status

The percentage of VR participants finding a job with a different employer than their pre-injury employer decreased steadily during the last four years.

- From 1998 to 2002, the percentage obtaining a job with a different employer fell steadily from 30 percent to 23 percent. Related to this were the following:
  - From 2000 to 2002, the percentage with no job increased from 25 percent to 30 percent, probably in part because of the recession.
  - From 1998 to 2000, the percentage returning to their pre-injury employer increased.
- Among 2002 plan closures, the average cost of services for participants returning to work with their pre-injury employer ($3,290) was less than half the costs for participants going to a different employer ($7,890) and for those not returning to work at plan closure ($6,730).[38]

Figure 5.5 Return-to-work status, plan-closure years 1998-2002 [1]



Plan-Closure Year	Job With Same Employer	Job With Different Employer	No Job
1998	44.5%	30.1%	25.4%
1999	44.6	28.3	27.1
2000	46.9	27.3	25.7
2001	47.5	24.9	27.6
2002	46.6	23.0	30.4

1. Data from DLI.

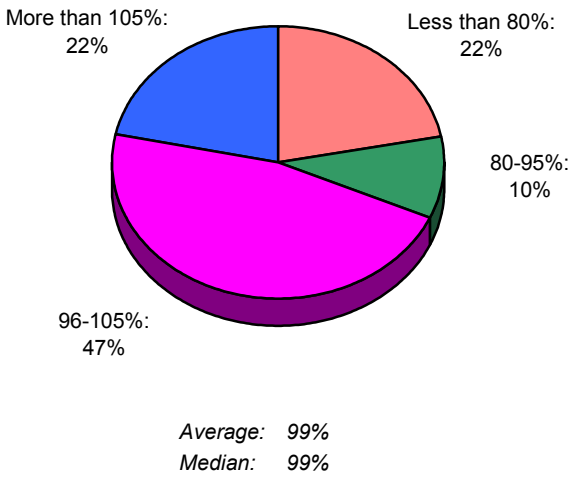
[38] These figures are limited to private service-providers.

Return-to-work wages

The average return-to-work wage of VR participants is about the same as their pre-injury wage. However, the return-to-work wage ratio varies widely.

- In 2002, more than two-thirds of participants returning to work received a wage of at least 95 percent of their pre-injury wage. About one third made less than 95 percent of their pre-injury wage, with most of those earning less than 80 percent of their pre-injury wage.
- For plan closures in 2002, the average return-to-work wage ratio was—
  - ➢ higher for participants who returned to their pre-injury employer (104 percent) than for those who went to a different employer (88 percent), and
  - ➢ higher for service durations under six months (105 percent) than for longer service durations (e.g., 88 percent for durations longer than 18 months).

Figure 5.6 Ratio of return-to-work wage to pre-injury wage for participants returning to work, plan-closure year 2002 [1]



1. Data from DLI.

Reasons for plan closure

A majority of plans close because they are completed, but more than 35 percent close for other reasons, such as settlements and agreements of the parties.

- The 1998-2002 period saw a steady increase in the proportion of plans closed by agreement of the parties.
- By definition, plan completion always involves a return to work. For plans closed for reasons other than completion in 2002, participants had returned to work only 27 percent of the time.

Figure 5.7 Reason for plan closure, plan-closure years 1998-2002 [1]

Plan-Closure Year	Plan Completed	Claim Settlement	Decision and Order	Agreement of Parties
1998	62.9%	21.9%	5.3%	9.9%
1999	62.8	24.4	2.2	10.6
2000	64.3	21.7	1.1	12.8
2001	62.8	21.4	1.3	14.5
2002	59.0	23.1	1.7	16.2

1. Data from DLI.

6

Disputes and dispute resolution

This chapter presents data on workers' compensation disputes and dispute resolution.

Major findings

- The overall dispute rate increased from 14.8 percent of filed indemnity claims in 1999 to 17.5 percent in 2002, a 17-percent increase.[39] (Figure 6.1)
- The rate of denial of filed indemnity claims, after increasing in the 1980s, has remained between 14 and 16 percent since 1991. (Figure 6.3)
- For wage-loss claims filed in 2002, the proportion with "prompt first action" (payment initiation or denial within the legal time limit) was 85 percent, close to the rates for the prior four years. (Figure 6.4)
- The percentage of paid indemnity claims with claimant attorney fees rose from 13.8 percent in 1999 to 16.4 percent in 2002, a 19-percent increase. (Figure 6.6)
- For 2002, total claimant and defense legal costs were about $98 million, roughly 11 percent of total benefits and 7 percent of total workers' compensation system cost. (Figure 6.7)

Background

The following basic information is necessary for understanding the figures in this chapter. See Appendix A for more detail.

Types of disputes

Disputes in Minnesota's workers' compensation system generally occur over five types of issues:[40]

- denial of primary liability,
- eligibility for and amount of monetary benefits,
- discontinuance of wage-loss benefits,
- medical issues, and
- rehabilitation issues.

Dispute resolution process

Depending on the nature of the dispute and the wishes of the parties, dispute resolution may be facilitated by a dispute resolution specialist in the Customer Assistance (CA) unit of the Department of Labor and Industry (DLI) or by a judge in the Office of Administrative Hearings (OAH). Decisions from OAH can be appealed to the Workers' Compensation Court of Appeals and then to the Minnesota Supreme Court.

CA and OAH carry out a variety of dispute resolution activities:

Customer assistance activities

Informal assistance. This process, which can be initiated by any party to a dispute, may involve phone calls or correspondence with the parties, to avoid a longer, more formal and costly process.

[39] A "percent increase" means the proportionate increase in the initial percentage, not the number of percentage points of increase. For example, an increase from 10% to 15% is a 50-percent increase.

[40] Disputes also occur over miscellaneous other types of issues, such as attorney fees, which are not considered in this report.

Dispute certification. In a medical or rehabilitation dispute, CA must certify that a dispute exists and that informal intervention did not resolve the dispute before an attorney may charge for services.

Mediation. A mediation occurs when all parties agree to participate and may be used to deal with any type of dispute. The mediator, a CA specialist, works to facilitate agreement among the parties and formally records its terms.

Administrative conference and "non-conference decision-and-orders." An administrative conference is an expedited, informal proceeding where parties present and discuss viewpoints in a dispute. CA conducts administrative conferences on rehabilitation issues and on medical issues involving $1,500 or less. If agreement is not achieved, the CA specialist issues a "decision and order." If CA believes a dispute under its jurisdiction does not require a conference, it may issue a "non-conference decision and order."

Office of administrative hearings activities

Settlement conference. OAH conducts settlement conferences in litigated cases to achieve a negotiated settlement where possible without a formal hearing.

Administrative conference. OAH conducts administrative conferences on most discontinuance disputes and on medical disputes involving more than $1,500. The OAH judge conducting the conference issues a "decision and order."

Formal hearing. OAH conducts formal hearings on disputes presented on claim petitions (see "claim petition disputes" below) and other petitions where resolution through a settlement conference is not possible. OAH also conducts hearings on some discontinuance disputes, disputes referred by CA because they do not seem amenable to less formal resolution, and disputes over miscellaneous issues such as attorney fees and pre-hearing disputes. OAH also conducts hearings *de novo* when a party disagrees with an administrative-conference or nonconference decision and order.

Data issues

DLI is currently implementing a new data system in a multi-year process. Since the process is not yet complete, this chapter's data come from both old and new systems. While the new data provide greater detail than the old, this chapter uses categories compatible with data from the old system to achieve comparability over time. When data in the new system is sufficiently mature, they will be used alone, and the categories in the report will then be revised to capture the richer detail available.

Counting disputes

Given the data currently available, four "dispute" categories are used in this report:

Claim petition disputes. Disputes over primary liability and benefit issues are typically filed on a claim petition, which triggers a formal hearing or settlement conference at OAH. Some medical and vocational rehabilitation disputes are also filed on claim petitions.

Discontinuance disputes. These disputes are most often initiated when the claimant (usually by phone) requests an administrative conference in response to the insurer's declared intention to discontinue temporary total or temporary partial benefits. These disputes may also be presented on the claimant's *Objection to Discontinuance* or the insurer's petition to discontinue benefits, which leads to a hearing at OAH.

Medical requests. Medical disputes are often filed on a *Medical Request* form, which triggers an administrative conference at CA or OAH.

Rehabilitation requests. Vocational rehabilitation disputes are often filed on a *Rehabilitation Request* form, which leads to an administrative conference at CA.

Many disputes, especially those handled informally by CA through mediation or other means, are not counted in these categories.

Dispute rates

After a period of stability in the mid-to-late-1990s, the dispute rate rose sharply from 1999 to 2002.

- The overall dispute rate increased from 14.8 percent in 1999 to 17.5 percent in 2002, a 17-percent increase.[41] During the same period:
  - The rate of claim petitions rose 19 percent.
  - The rate of discontinuance disputes rose 22 percent.
  - The rate of *Medical Requests* rose 43 percent (61 percent since 1998).
  - The rate of *Rehabilitation Requests* rose 17 percent (54 percent since 1995).
- The increased rate of *Medical Requests* may be related to increasing medical costs (see Figure 2.4).

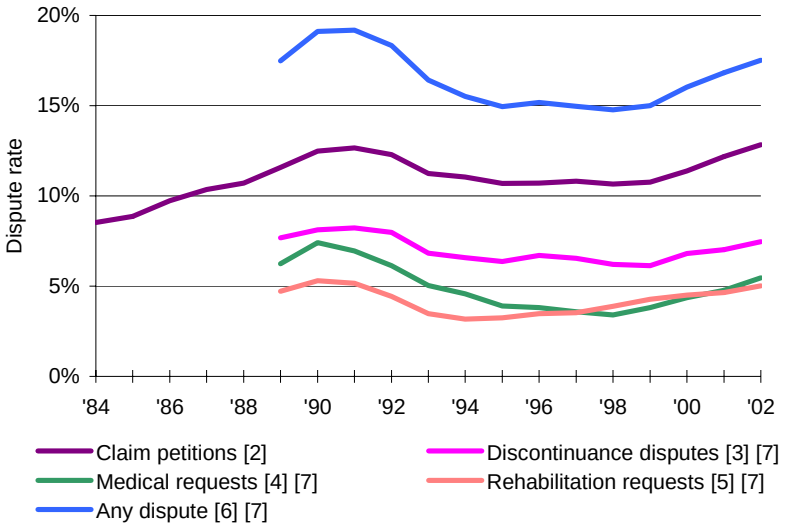
Dispute types

Claim petitions constitute almost half (44 percent) of all disputes.

- Discontinuance disputes are the next most common, making up almost a quarter of disputes.
- Medical Requests and Rehabilitation Requests are somewhat less frequent.

[41] See note 39 on p. 33.

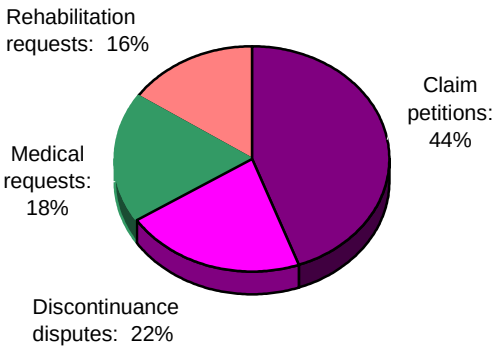
Figure 6.1 Incidence of disputes, injury years 1984-2002 [1]



Injury Year	Dispute Rate				
	Claim Petitions [2]	Discontinuance Disputes [3]	Medical Requests [4]	Rehabilitation Requests [5]	Any Dispute [6]
1984	8.5%	[7]	[7]	[7]	[7]
1990	12.5	8.1%	7.4%	5.3%	19.1%
1995	10.7	6.4	3.9	3.3	14.9
1998	10.7	6.2	3.4	3.9	14.8
1999	10.8	6.1	3.8	4.3	15.0
2001	12.2	7.0	4.8	4.6	16.8
2002	12.8	7.5	5.5	5.0	17.5

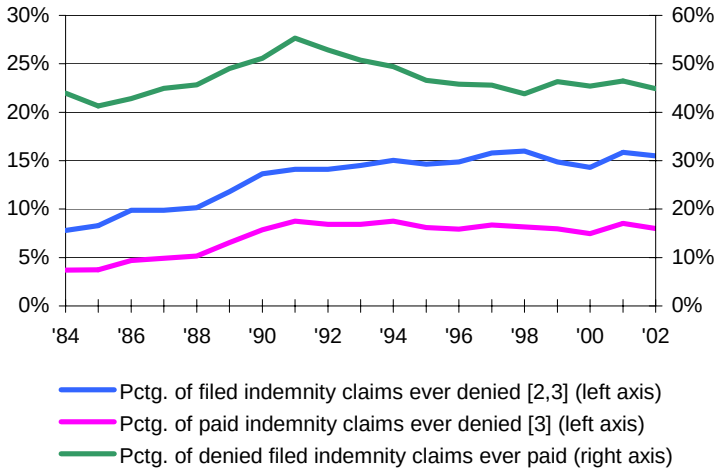
1. Developed statistics from DLI data (see Appendix C).
2. Percentage of filed indemnity claims with claim petitions. (Filed indemnity claims are claims for indemnity benefits, whether ultimately paid or not.)
3. Percentage of paid wage-loss claims with discontinuance disputes.
4. Percentage of paid indemnity claims with *Medical Requests.*
5. Percentage of paid indemnity claims with *Rehabilitation Requests.*
6. Percentage of filed indemnity claims with any disputes.
7. Not available before 1989.

Figure 6.2 Dispute types as share of total, disputes filed in 2002 [1]



1. Data from DLI.

Figure 6.3 Indemnity claim denial rates, injury years 1984-2002 [1]



Injury Year	Filed Indemnity Claims [2] Total	Filed Indemnity Claims [2] Pctg. Ever Denied [3]	Paid Indemnity Claims Total	Paid Indemnity Claims Pctg. Ever Denied [3]	Pctg. of Denied Filed Indemnity Claims Ever Paid
1984	43,400	7.8%	40,200	3.7%	43.9%
1991	47,300	14.1	42,000	8.8	55.3
1998	38,200	16.0	32,700	8.2	43.8
2000	39,800	14.3	34,700	7.5	45.4
2001	36,600	15.9	31,700	8.5	46.5
2002	33,800	15.5	29,400	8.0	44.9

1. Developed statistics from DLI data (see Appendix C).
2. Filed indemnity claims are claims for indemnity benefits, whether ultimately paid or not.
3. Denied claims include claims initially denied (some of which are eventually paid) and claims initially paid but later denied.

Denials

Denials of primary liability are of interest because they frequently generate disputes. Denials are also important because if they are improperly made, workers' compensation fails in its purpose of providing benefits to injured workers. Denial rates have fluctuated somewhat over the last eight years with no clear trend.

- The denial rate among filed indemnity claims has remained between 14 and 16 percent since 1991.
- The proportion of paid indemnity claims ever denied has been near 8 percent since 1991. (These include cases denied and then paid or paid and then denied.)
- Among filed indemnity claims that were denied, the proportion ever paid has ranged from 41 to 55 percent, with the highest rates occurring in the early 1990s.

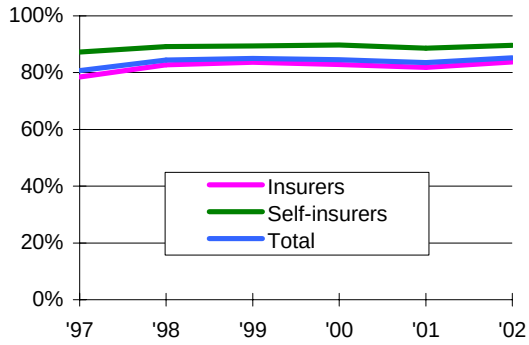
Prompt first action

Insurers must either begin payment on a wage-loss claim or deny the claim within 14 days of when the employer has knowledge of the injury.[42] This "prompt first action" is important not only for the sake of the injured worker, but also because disputes are less likely if the insurer responds promptly to the claim. The prompt-first-action rate has change little since 1998.[43]

- The fiscal-year 2002 prompt-first-action rate was about 85 percent. This was somewhat higher than 2001, but close to the rates for 1998-2000.

- The prompt-first-action rate is higher for self-insurers than for insurers. This is expected, because self-insurers are able avoid the step of communicating between employer and insurer.

Figure 6.4 Percentage of lost-time claims with prompt first action, fiscal claim-receipt years 1997-2002 [1]



Fiscal Year of Claim Receipt	Insurers	Self-Insurers	Total
1997	78.5%	87.3%	80.7%
1998	82.8	89.2	84.4
2001	81.9	88.6	83.5
2002	83.8	89.6	85.2

1. Computed from DLI data by DLI Compliance Services. See DLI Compliance Services, *2002 Prompt First Action Report.* Fiscal claim-receipt year means the fiscal year in which DLI received the claim. Fiscal years run from July 1 through June 30; for example, July 1, 2001 - June 30, 2002 is fiscal year 2002.

[42] Minn. Stat. § 176.221.

[43] To improve system performance, DLI Compliance Services publishes the annual *Prompt First Action Report* on the prompt-first-action performance of individual insurers and of the overall system.

Dispute resolution proceedings

Most informal dispute resolution activity takes place in the DLI Customer Assistance unit. Most formal dispute resolution activity occurs at the Office of Administrative Hearings.

- The most common means of dispute resolution is CA intervention in "potential disputes" (see note 2 in figure).
- Next most common are settlement conferences at OAH, noncertifications by CA (see note 4 in figure), and administrative conferences at OAH.

Figure 6.5 Dispute resolution activities, fiscal year 2003 [1]

DLI Customer Assistance	
Resolutions of potential disputes [2]	6,754
Resolutions of *Medical and Rehabilitation Requests [3]*	796
Noncertifications [4]	1,714
Mediation awards	340
Administrative conference orders and agreements	811
Nonconference decision-and-orders	127
Office of Administrative Hearings	
Settlement conferences	3,143
Administrative conferences—discontinuance	1,551
Administrative conferences—medical and rehabilitation	601
Hearings [5]	895
Workers' Compensation Court of Appeals	
Cases received [6]	271

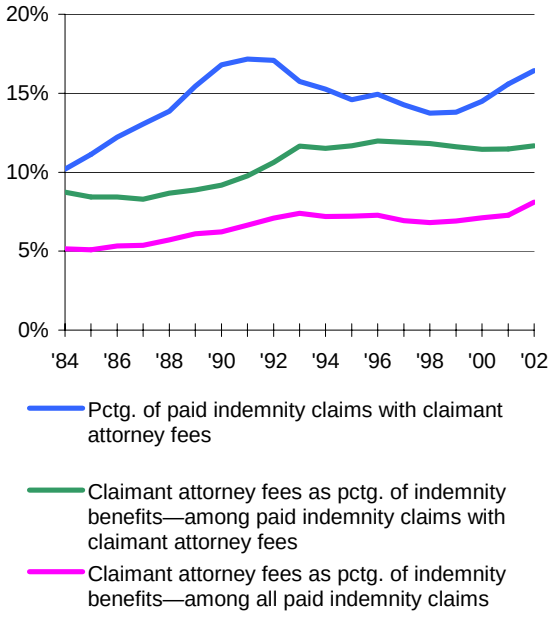
1. Data from DLI, OAH, and the Workers' Compensation Court of Appeals.
2. Potential disputes are cases in which a party to a claim contacts CA and, in the judgment of the CA specialist, a dispute would likely have arisen without CA involvement. In most of these cases, there has been little or no attorney involvement before CA was contacted.
3. These are resolutions achieved in ways other than a mediation award or an administrative conference (or nonconference) order and agreement.
4. These are cases in which CA determined a medical or rehabilitation dispute to be "not certified" after it intervened and resolved the dispute or determined that there was no dispute.
5. Excludes attorney fee hearings.
6. Includes cases with and without hearings. Cases with hearings are usually disposed of by decisions but sometimes by settlement. Cases without hearings are usually disposed of by settlement but sometimes by decisions. Statistics are unavailable on the number of hearings held.

Claimant attorney involvement

Claimant attorney involvement increased during the last three years, after eight years of general decrease.

- The percentage of paid indemnity claims with claimant attorney fees[44] rose from 13.8 percent in 1999 to 16.4 percent in 2002, a 19-percent increase.[45] This parallels a similar increase in the dispute rate (Figure 6.1).
- Among paid indemnity claims with claimant attorney fees, these fees have represented 11.4 percent to 12.0 percent of indemnity benefits since 1993.[46]
- Among all paid indemnity claims, the ratio of attorney fees to indemnity benefits rose from 1999 to 2002 because of the increase in the percentage of claims with attorney fees.
- Total claimant attorney fees are estimated at $32 million for injury year 2002. This represents 2.4 percent of total workers' compensation system cost for that year.

Figure 6.6 Claimant attorney fees paid with respect to indemnity benefits, injury years 1984-2002 [1]



Injury Year	Pctg. of Paid Indemnity Claims with Claimant Attorney Fees	Claimant Attorney Fees as Pctg. of Indemnity Benefits: Among Paid Indemnity Claims with Claimant Attorney Fees	Claimant Attorney Fees as Pctg. of Indemnity Benefits: Among All Paid Indemnity Claims
1984	10.2%	8.7%	5.1%
1991	17.2	9.8	6.7
1993	15.8	11.6	7.4
1996	14.9	12.0	7.3
1999	13.8	11.6	6.9
2001	15.6	11.5	7.3
2002	16.4	11.7	8.1

1. Developed statistics from DLI data. Includes claimant attorney fees determined as a percentage of indemnity benefits plus additional amounts awarded to the claimant attorney upon application to a judge. See Appendix C.

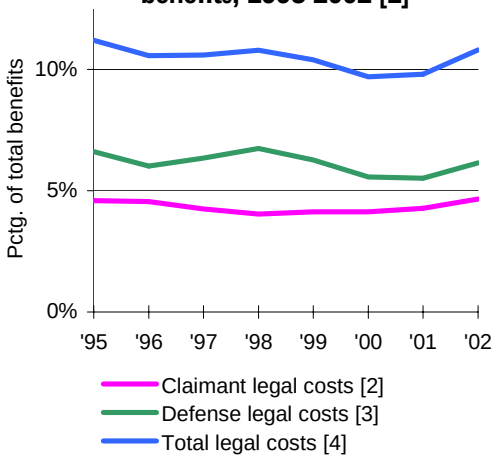
[44] See note 1 in figure.
[45] See note 39 on p. 33.
[46] This percentage is higher than for prior years because the 1992 law change raised the claimant attorney fee limit (see Appendix B).

Claimant and defense legal costs

Both claimant and defense legal costs increased in 2002 relative to total benefits.

- Relative to total benefits (medical and indemnity):
  - Claimant legal costs increased 9 percent from 2001 to 2002;
  - Defense legal costs increased 11 percent;
  - Total legal costs increase 10 percent.[47]
- Claimant and defense legal costs were at about the same level relative to benefits in 2002 as in 1996.
- In 2002, claimant legal costs were equal to 4.7 percent of total benefits, as compared with 6.1 percent for defense legal costs.
- In 2002, total legal costs were about $98 million, or 7.4 percent of total workers' compensation system cost.

Figure 6.7 Total legal costs as percentage of total benefits, 1995-2002 [1]



Year	Claimant Legal Costs [2]	Defense Legal Costs [3]	Total Legal Costs [4]
1995	4.6%	6.6%	11.2%
1996	4.6	6.0	10.6
2000	4.1	5.6	9.7
2001	4.3	5.5	9.8
2002	4.7	6.1	10.8

1. Data from DLI and MWCIA. Includes claimant and defense attorney fees and other legal costs paid with respect to indemnity, medical, and rehabilitation benefits. Benefits (in the denominator) include indemnity, medical, and rehabilitation benefits. See Appendix C.
2. Numerator and denominator are developed statistics on an injury-year basis. See Appendix C.
3. Numerator and denominator are on a payment-year basis. See Appendix C.
4. Sum of first two columns.

[47] See note 39 on p. 33.

Appendix A

Glossary

Accident year. The year in which the accident or condition occurred giving rise to the injury or illness. In accident year data, all claims and costs are tied to the year in which the accident occurred. Accident year, used with insurance data, is equivalent to injury year, used with Department of Labor and Industry data.

Administrative conference. An expedited, informal proceeding where parties present and discuss viewpoints in a dispute. If agreement is not achieved, a "decision and order" is issued which is binding unless appealed. Currently, the Customer Assistance Unit of the Department of Labor and Industry conducts administrative conferences on medical issues involving$1,500 or less and on vocational rehabilitation issues, and the Office of Administrative Hearings conducts conferences on medical issues involving more than $1,500 and on discontinuance disputes presented on a Request for Administrative Conference.

Assigned risk plan (ARP). The workers' compensation insurer of last resort, which insures employers unable to insure themselves in the voluntary market. The ARP is necessary because all nonexempt employers are required to have workers' compensation insurance or self-insure. The Department of Commerce operates the ARP through contracts with private companies for administrative services. The Department of Commerce sets the ARP premium rates, which are different from the voluntary market rates.

Claim petition. A form by which the injured worker contests a denial of primary liability or requests an award of indemnity, medical, or rehabilitation benefits. In response to the claim petition, the Office of Administrative Hearings generally schedules a settlement conference or formal hearing.

Cost-of-living adjustment. An annual adjustment of temporary total disability, temporary partial disability, permanent total disability, and dependents' benefits computed from the annual change in the statewide average weekly wage (SAWW). The percent adjustment is equal to the proportion by which the SAWW in effect at the time of the adjustment differs from the SAWW in effect one year earlier, not to exceed a statutory limit. The timing of the first adjustment and the annual percent limit have changed over time, as described in Appendix B.

Customer assistance (CA). A unit in the Department of Labor and Industry that provides information and clarification on workers' compensation statute, rules, and procedures; carries out a variety of dispute prevention activities; conducts informal dispute resolution activities including mediations; and holds administrative conferences on some issues (see administrative conference).

Dependents' benefits. Benefits paid to dependents of a worker who has died from a work-related injury or illness. These benefits are equal to a proportion of the worker's gross pre-injury wage and are paid for a specified period of time, depending on the dependents concerned.

Developed numbers. Estimates of what the number of claims or their cost will be at a given maturity. Developed numbers are relevant for accident year, policy year, and injury year data. They are obtained by applying development

factors, based on historical rates of development of claim and cost figures, to tabulated numbers.

Development. The change over time in the reported number or cost of claims for a particular accident year, policy year, or injury year. Claim costs develop whether the costs are paid or incurred. The reported figures develop both because of the time necessary for claims to mature and, in the case of Department of Labor and Industry data, because of reporting lags.

Discontinuance of wage-loss benefits. The insurer may propose to discontinue wage-loss benefits (temporary total, temporary partial, or permanent total disability) if it believes that one of the legal conditions for discontinuance have been met. See "Notice of Intention to Discontinue," "Request for Administrative Conference," "Objection to Discontinuance," and "petition to discontinue benefits."

Full-time-equivalent (FTE) covered employment. An estimate of the number of full-time employees that would work the same number of hours during a year as the actual workers' compensation covered employees, some of whom are part-time. It is used in computing workers' compensation claims incidence rates.

Hearing. A formal proceeding on a disputed issue or issues in a workers' compensation claim, held at the Office of Administrative Hearings or Workers' Compensation Court of Appeals, after which the judge issues a decision that is binding unless appealed.

Indemnity benefit. A benefit to the injured or ill worker or survivors to compensate for wage loss, functional impairment, or death. Indemnity benefits include temporary total disability, temporary partial disability, permanent partial disability, and permanent total disability benefits; supplementary benefits; dependents' benefits; and, in insurance industry accounting, vocational rehabilitation costs.

Indemnity claim. A claim with paid indemnity benefits. Most indemnity claims involve more than three days of total or partial disability, since this is the threshold for qualifying for the temporary total disability or temporary partial disability benefits paid on most of these claims. Indemnity claims typically include medical costs in addition to indemnity costs.

Injury year. The year in which the injury occurred or the illness began. In injury year data, all claims, costs, and other statistics are tied to the year in which the injury occurred. Injury year, used with Department of Labor and Industry data, is essentially equivalent to accident year, used with insurance data.

Mediation. A voluntary, informal proceeding conducted by the Customer Assistance Unit of the Department of Labor and Industry to facilitate agreement among the parties in a dispute. If agreement is reached, its terms are formally recorded. A mediation occurs when one party requests it and the others agree to participate. This often takes place after attempts at resolution by phone and correspondence have failed.

Medical cost. The cost of medical services and supplies provided to the injured or ill worker, including payments to providers and certain reimbursements to the worker. All reasonable and necessary medical costs related to the injury or illness are covered, subject to a maximum-fee schedule.

Medical-only claim. A claim with paid medical costs and no indemnity benefits.

Medical request. A form by which a party to a medical dispute requests assistance from the Department of Labor and Industry (DLI) in resolving the dispute. The request may lead to mediation or other efforts toward informal resolution by DLI Customer Assistance (CA), or to an administrative conference. The conference is held by CA if the disputed amount is $1,500 or less; otherwise it is held by the Office of Administrative Hearings.

Medical dispute. A dispute over a medical issue, such as choice of providers, nature and timing of treatments, or appropriate payments to providers.

Minnesota workers' compensation insurers association (MWCIA). Minnesota's workers' compensation data service organization (DSO). State law specifies the duties of the DSO and the Department of Commerce designates the entity to be the DSO. Among other activities, the MWCIA collects data on claims, premium, and losses from insurers and annually produces pure premium rates.

Non-conference decision and order. A decision issued by the Customer Assistance Unit of the Department of Labor and Industry, without an administrative conference, on a dispute for which it has administrative conference authority (see "administrative conference"), when it has sufficient information without conducting a conference. The decision is binding unless appealed or overturned by review at the Office of Administrative Hearings.

Notice of intention to discontinue (NOID). A form by which the insurer informs the worker of its intention to discontinue wage-loss benefits (temporary total, temporary partial, or permanent total). In contrast with the Petition to Discontinue Benefits, the NOID brings about benefit termination if the worker does not contest it.

Objection to discontinuance. A form by which the injured worker requests a formal hearing to contest a proposed discontinuance of wage-loss benefits (temporary total, temporary partial, or permanent total disability). The hearing is held at the Office of Administrative Hearings.

Office of administrative hearings (OAH). An executive branch body that conducts hearings on administrative law cases. One section is responsible for workers' compensation cases; it conducts administrative conferences and settlement conferences in addition to hearings.

Permanent partial disability (PPD). A benefit that compensates for permanent functional impairment resulting from a work-related injury or illness. The benefit is based on the worker's impairment rating, which is a percentage of whole-body impairment determined on the basis of health care providers' assessments according to a rating schedule in rules. The PPD benefit is calculated under a schedule specified in law, which assigns a benefit amount per rating point with higher ratings receiving proportionately higher benefits. The scheduled amounts per rating point were fixed for injuries from 1984 through September 2000, but were raised in the 2000 law change for injuries on or after Oct. 1, 2000. The PPD benefit is paid after temporary total disability (TTD) has ended. For injuries from October 1995 through September 2000, it is paid at the same rate and intervals as TTD until the overall amount is exhausted. For injuries on or after October 2000, the PPD benefit may be paid as a lump-sum, computed with a discount rate not to exceed 5 percent. See Appendix B for related law changes.

Permanent total disability (PTD). A wage-replacement benefit paid if the worker sustains a severe work-related injury specified in law. Also paid if the worker, because of a work-related injury or illness in combination with other factors, is permanently unable to secure gainful employment, provided that, for injuries on or after Oct. 1, 1995, the worker has a PPD rating of 13-17 percent, depending on age and education. The benefit is equal to two thirds of the worker's gross pre-injury wage, subject to minimum and maximum weekly amounts, and is paid at the same intervals as wages were paid before the injury. For injuries on or after Oct. 1, 1995, benefits end at age 67 under a rebuttable presumption of retirement. Minimum and maximum weekly benefit provisions are described in Appendix B. Cost-of-living adjustments are described in this appendix and Appendix B.

Petition to discontinue benefits. A document by which the insurer requests a formal hearing to allow a discontinuance of wage-loss benefits (temporary total, temporary partial, or permanent total disability). The hearing is held at the Office of Administrative Hearings.

Policy year. The year of initiation of the insurance policy covering the accident or condition that caused the injury or illness. In policy year data, all claims and costs are tied to

the year in which the applicable policy took effect. Since policy periods often include portions of two calendar years, the data for a policy year include claims and costs for injuries occurring in two different calendar years.

Primary liability. The overall liability of the insurer for any costs associated with a claim once the injury is determined to be compensable. An insurer may deny primary liability (deny that the injury is compensable) if it has reason to believe the injury was not work-related, was intentionally self-inflicted, resulted from intoxication, or happened during participation in a nonrequired recreational program.

Pure premium rates. Rates of expected indemnity and medical losses per year per $100 of covered payroll, also referred to as "loss costs." Pure premium rates are determined annually by the Minnesota Workers' Compensation Insurers Association for approximately 560 insurance classes in the voluntary market. They are based on insurer "experience" and statutory benefit changes. "Experience" refers to actual losses relative to pure premium for the most recent report periods. The pure premium rates are published with documentation in the annual *Minnesota Ratemaking Report* subject to approval by the Department of Commerce.

Pure premium. A measure of expected losses, equal to the sum, over all insurance classes, of payroll times the applicable pure premium rate(s) (the rate(s) for the insurance class(es) concerned), adjusted for individual employers' prior loss experience. It is different from (and somewhat lower than) the actual premium charged to employers because actual premium includes other insurance company costs plus taxes and assessments.

Rehabilitation request. A form by which a party to a vocational rehabilitation dispute requests assistance from the Department of Labor and Industry (DLI) in resolving the dispute. The request may lead to mediation or other efforts toward informal resolution by DLI Customer Assistance, or to an administrative conference.

Request for administrative conference. A form by which the injured worker requests an administrative conference to contest a proposed discontinuance of wage-loss benefits (temporary total, temporary partial, or permanent total disability).

Special compensation fund (SCF). A fund within the Department of Labor and Industry (DLI) that, among other things, pays uninsured claims and reimburses insurers (including self-insured employers) for supplementary and second-injury benefit payments. (The supplementary benefit and second-injury provisions only apply to older claims because they were eliminated by the law changes of 1995 and 1992, respectively.) Revenues come primarily from an assessment on paid indemnity benefits. The SCF also funds the operations of DLI, the workers' compensation portion of the Office of Administrative Hearings, the Workers' Compensation Court of Appeals, and workers' compensation functions in the Department of Commerce.

Second-injury claim. A claim for which the insurer (or self-insured employer) is entitled to reimbursement from the Special Compensation Fund because the injury was a subsequent (or "second") injury for the worker concerned. The 1992 law eliminated reimbursement (to insurers) of "second-injury" claims for subsequent injuries occurring on or after July 1, 1992.

Self-insurance. A mode of workers' compensation insurance in which an employer or employer group insures itself or its members. To do so, the employer or employer group must meet financial requirements and be approved by the Department of Commerce.

Settlement conference. A proceeding at the Office of Administrative Hearings to resolve issues presented on a claim petition when it appears possible to settle the issues without a formal hearing. If a settlement is reached, it typically includes an agreement by the claimant to release the employer and insurer from future liability for the claim other than for medical treatment.

Statewide average weekly wage (SAWW). The average wage used by insurers and the Department of Labor and Industry (DLI) to adjust certain workers' compensation benefits and by DLI to adjust provider fee limits. This report uses the SAWW to adjust average benefit amounts for different years so they are all expressed in constant (2000) wage dollars. The SAWW, from the Department of Employment and Economic Development, is the average weekly wage of nonfederal workers covered under Unemployment Insurance.

Stipulated benefits. Indemnity and/or medical benefits specified in a "stipulation for settlement," which states the terms of settlement of a claim among the affected parties. A stipulation usually occurs in the context of a dispute, but not always. The stipulation may be incorporated into a mediation agreement, or may be reached in a settlement conference or associated preparatory activities, in which case it must be approved by a workers' compensation judge. Stipulated benefits are usually paid in a lump-sum.

Supplementary benefits. Additional benefits paid to certain workers receiving temporary total disability (TTD) or permanent total disability (PTD) benefits for injuries prior to October 1995. These benefits are equal to the difference between 65 percent of the statewide average weekly wage and the TTD or PTD benefit. The Special Compensation Fund reimburses insurers (and self-insured employers) for supplementary benefit payments. For injuries on or after Oct. 1, 1995, supplementary benefits were repealed (see Appendix B).

Temporary partial disability (TPD). A wage-replacement benefit paid if the worker is employed with earnings that are reduced because of a work-related injury or illness. (The benefit is not payable for the first three calendar days of total or partial disability unless the disability lasts, continuously or intermittently, for at least ten days.) The benefit is equal to two thirds of the difference between the worker's gross pre-injury wage and his or her gross current wage, subject to a maximum weekly amount, and is paid at the same intervals as wages were paid before the injury. For injuries on or after Oct. 1, 1992, TPD benefits are limited to a total of 225 weeks and to the first 450 weeks after the injury (with an exception for approved retraining). Maximum weekly benefit provisions are described in Appendix B. Cost-of-living adjustments are described in this appendix and Appendix B.

Temporary total disability (TTD). A wage-replacement benefit paid if the worker is unable to work because of a work-related injury or illness. (The benefit is not payable for the first three calendar days of total or partial disability unless the disability lasts, continuously or intermittently, for at least ten days.) The benefit is equal to two thirds of the worker's gross pre-injury wage, subject to minimum and maximum weekly amounts, and is paid at the same intervals as wages were paid before the injury. Currently, TTD stops if (1) the employee returns to work, (2) the employee withdraws from the labor market, (3) the employee fails to diligently search for work within his or her physical restrictions, (4) the employee is released to work without physical restrictions from the injury, (5) the employee refuses an appropriate offer of employment, (6) 90 days have passed after the employee has reached maximum medical improvement or completed an approved retraining plan, (7) the employee fails to cooperate with an approved vocational rehabilitation plan or with certain procedures in the development of such a plan, or (8) 104 weeks of TTD have been paid (with an exception for approved retraining). Minimum and maximum weekly benefit provisions are described in Appendix B. Cost-of-living adjustments are described in this appendix and Appendix B.

Vocational rehabilitation (VR) dispute. A dispute over a vocational rehabilitation issue, such as whether the employee should be evaluated for VR eligibility, whether he or she is in fact eligible, whether certain VR plan provisions are appropriate, or whether the employee is cooperating with the plan.

Vocational rehabilitation plan. A plan for vocational rehabilitation services developed by a qualified rehabilitation consultant (QRC) in consultation with the employee and the employer and/or insurer. The plan is developed after the QRC determines the injured worker to be eligible for rehabilitation services, and is filed with the Department of Labor and Industry and provided to the affected parties. The plan indicates the vocational goal, the services necessary to achieve the goal, and their expected duration and cost.

Voluntary market. The workers' compensation insurance market associated with policies issued voluntarily by insurers. Insurers may choose whether to insure a particular employer. See Assigned Risk Plan.

Workers' compensation reinsurance association (WCRA). A nonprofit entity created by law to provide reinsurance to workers' compensation insurers (including self-insureds) in Minnesota. Every workers' compensation insurer must purchase "excess of loss" reinsurance (reinsurance for losses above a specified limit per event) from the WCRA. Insurers may obtain other forms of reinsurance (such as aggregate coverage for total losses above a specified amount) through other means.

Workers' compensation court of appeals (WCCA). An executive branch body that hears appeals of workers' compensation decisions from the Office of Administrative Hearings. The next and final level of appeal is the Minnesota Supreme Court.

Written premium. The entire "bottom-line" premium for insurance policies initiated in a given year, regardless of when the premium comes due and is paid. Written premium is "bottom-line" in that it reflects all premium modifications in the pricing of the policies.

Appendix B

Workers' compensation law changes

This appendix summarizes those components of the 1992, 1995, and 2000 workers' compensation law changes relevant to this report. Other components of the law changes, as well as law changes from other years, are not described.

1992 law change

Indemnity benefits

The indemnity benefit changes in the 1992 law took effect for injuries on or after Oct. 1, 1992. The new permanent partial disability (PPD) rating schedule, promulgated by the Department of Labor and Industry (DLI) after clarifications of statutory authority in the 1992 law, took effect for injuries on or after July 1, 1993.

Temporary total disability (TTD) and permanent total disability (PTD) minimum benefit. The minimum weekly TTD and PTD benefit became the lesser of 20 percent of the statewide average weekly wage (SAWW) or the employee's pre-injury wage. Previously, the minimum was the lesser of 50 percent of the SAWW or the pre-injury wage, but no less than 20 percent of the SAWW.

TTD, temporary partial disability (TPD), and PTD maximum benefit. The maximum weekly TTD, TPD, and PTD benefit was increased from 100 percent of the SAWW to 105 percent of the SAWW.

Additional TPD weekly benefit limit. An additional limit was placed on the weekly TPD benefit, restricting it to no more than 500 percent of the SAWW minus the employee's weekly wage earned while receiving TPD benefits.

TPD duration limit. TPD benefits were limited to 225 weeks of total duration and to the first 450 weeks after the injury (with an exception for approved retraining).

Supplementary benefit eligibility. Supplementary benefit eligibility was limited to PTD beneficiaries. Previously, TTD beneficiaries were also eligible. The law retained the provision that (for injuries on or after Oct. 1, 1983) eligibility begins four years after the beginning of temporary total or permanent total disability.

Cost-of-living adjustments. Cost-of-living adjustments were limited to 4 percent per year and delayed until the second anniversary of the injury. Previously, adjustments were limited to 6 percent per year and began on the first anniversary of the injury. Cost-of-living adjustments are further described in Appendix A.

PPD rating schedule. The 1992 law clarified that PPD ratings must be based on objective medical evidence, and further provided that (1) the rating schedule must be reviewed periodically to determine whether any omitted impairments should be included, and must be amended accordingly; (2) the schedule may contain zero ratings for minor impairments; and (3) an impairment must be rated exclusively according to the categories in the schedule or, if it is not in the schedule, according to the most similar condition in the schedule. DLI promulgated a new permanent impairment rating schedule reflecting these provisions, effective for injuries on or after July 1, 1993. The department devised the schedule with the intent of following a pre-existing statutory provision

that total PPD benefits should remain the same, to the extent possible, as under the old schedule.

The old schedule had assigned ratings primarily on the basis of diagnoses and surgeries performed. The new schedule relies less on these factors and more on objective findings of functional impairment and clinical test results. Thus, some cases that would have received a positive rating under the old schedule because of a diagnosis or surgery do not receive such a rating under the new schedule if the condition has completely resolved with no remaining functional impairment. The new schedule contains more zero-rated categories than the old schedule, but also some positively rated categories for impairments not in the old one.

Medical services and fees

Maximum medical reimbursements. The 1992 law froze maximum medical reimbursements from October 1992 through September 1993 at the previous year's levels and provided for a relative-value fee schedule for non-inpatient-hospital services with a 15 percent overall payment reduction. The new fee schedule took effect in December 1993. Annual adjustments of the new reimbursement limits may not exceed growth in the SAWW; previously these adjustments were pegged to growth in medical charges. From 1993 through 2001, reimbursement limits were increased by the percent change in the SAWW; in 2002 and 2003, they were increased by the percent change in the producer price index for physicians.

Medical treatment parameters. The law required DLI to institute medical treatment parameters. An emergency one-year rule took effect on May 18, 1993; a permanent rule took effect on Jan. 4, 1995.

Certified managed care organizations (CMCOs). The law allowed employers and insurers to require workers (with certain exceptions) to obtain medical care for work injuries from providers in a CMCO network. CMCOs are certified by DLI on the basis of statutory criteria. They began to be used early in 1993.

Other provisions

Second-injury reimbursement. The 1992 law ended Special Compensation Fund (SCF) reimbursement of insurers (including self-insured employers) for subsequent ("second") injuries to the same worker, effective for subsequent injuries on or after July 1, 1992.

Insurance policy deductibles. The law required all insurers, including the Assigned Risk Plan, to offer deductibles in workers' compensation policies. Under deductible provisions, employers directly bear costs up to the deductible amount (through reimbursements to insurers) in exchange for a reduced premium.

Fraud. The law required DLI to establish a unit to investigate fraudulent and other illegal practices of health care providers, employers, insurers, attorneys, employees, and others. It also stipulated that knowingly misrepresenting or concealing information in order to receive workers' compensation benefits to which a person is not entitled is theft punishable as a criminal offense.

Safety committees. The law required all private and public employers with more than 25 employees, and smaller employers in high-hazard industries, to establish and use joint labor-management safety committees.

Insurer safety consultation services. The law required insurers to offer safety consultation services to their insured employers.

Vocational rehabilitation. The vocational rehabilitation system was modified so that eligibility for services is determined in a consultation (by a qualified rehabilitation consultant) only at the request of the employee, the employer (or insurer), or DLI. For this purpose, the insurer must notify DLI when temporary total disability is likely to exceed 13 weeks, but no later than 90 days from the injury. Previously, the injured worker had to be referred into the vocational rehabilitation system after 30 days of lost work time for back injuries and after 60 days of lost work time for all other injuries.

Attorney fees. Effective for fee determinations on or after July 1, 1992, all claimant attorney fees related to the same claim became cumulative (with some exceptions) and were limited to 25 percent of the first $4,000 and 20 percent of the next $60,000 of disputed benefits awarded, not to exceed $13,000 except by petition. Previously, claimant attorney fees were limited to 25 percent of the first $4,000 and 20 percent of the next $27,500 of disputed benefits awarded, not to exceed $6,500 except by petition. The 1992 law change also introduced a limit on defense attorney costs of $13,000 per claim, with exceptions by petition.

Mandated 16 percent rate reduction. The law prohibited insurers from increasing their filed rates from April 1 through Oct. 1, 1992, mandated a 16 percent filed rate reduction effective Oct. 1, 1992, and prohibited filed rate increases from that date until April 1, 1993, at which time insurers were again free to file rate increases.

1995 law change

Indemnity benefits

The following provisions took effect for injuries occurring on or after Oct. 1, 1995.

TTD minimum benefit. The minimum weekly TTD benefit was fixed at $104, not to exceed the employee's pre-injury wage. Previously, the minimum was 20 percent of the SAWW, not to exceed the pre-injury wage; 20 percent of the SAWW would have been $101 as of Oct. 1, 1995.

TTD, TPD, and PTD maximum benefit. The maximum weekly TTD, TPD, and PTD benefit was fixed at $615. Previously, the maximum was 105 percent of the SAWW; this amount would have been $530.25 as of Oct. 1, 1995.

TTD duration limit. TTD benefits were limited to a total of 104 weeks (regardless of when paid), with an exception for approved retraining.

PPD benefits. The higher tier of the two-tier PPD benefit schedule was eliminated. Previously, a PPD beneficiary received either "impairment compensation" (IC) or "economic recovery compensation" (ERC). The IC benefit was equal to the impairment rating (in percentage points) times a scheduled amount per rating point, with increasing amounts per point for higher ratings. The ERC benefit depended on both the impairment rating and the pre-injury wage, and was substantially higher than the IC benefit. If the employee received a "suitable job" offer, they received the IC benefit, paid in a lump-sum if they accepted the offer or in the same weekly amounts and intervals as TTD if they did not. If the employee did not receive a "suitable job" offer, they received the ERC benefit, paid in the same weekly amounts and intervals as TTD. The 1995 law eliminated ERC and provided for all PPD benefits to be determined under the previous impairment compensation schedule, which has been fixed since 1984, and to be paid in the same weekly amounts and intervals as TTD.

Supplementary benefits and PTD minimum benefit. Supplementary benefits, available only to PTD beneficiaries after the 1992 law change, were repealed, and the PTD minimum weekly benefit was raised to 65 percent of the SAWW. In contrast with supplementary benefits, the new minimum (1) is available to all PTD beneficiaries regardless of the amount of time since the first day of total disability, and (2) is subject to the offset provision along with the remainder of the PTD benefit.[48] Under the offset provision, after $25,000 of PTD benefits have been paid, the weekly PTD benefit is reduced by the amount of any other government disability benefits for the same disability and by the amount of any social security retirement or survivor benefits.

PTD eligibility threshold. The law required that for PTD eligibility, the injured worker must have (1) a 17 percent permanent impairment rating, (2) a 15 percent impairment rating if he

[48] Vezina v. Best Western Inn and Shelton v. National Painting and Sandblasting, 627 N.W.2d 324 (Minn. 2001), May 31, 2001.

or she is at least 50 when injured, or (3) a 13 percent impairment rating if he or she is at least 55 when injured and has not completed high school or obtained an equivalency certificate.

PTD benefit termination. The law provided that PTD benefits end at age 67 under a rebuttable presumption of retirement.

Cost-of-living adjustment. Cost-of-living adjustments were limited to 2 percent per year and delayed until the fourth anniversary of the injury. Previously, adjustments were limited to 4 percent per year and delayed until the second anniversary of the injury. Cost-of-living adjustments are further described in Appendix A.

Other provisions

Attorney fees. The legislature removed the provisions allowing claimant and defense attorney fees to be paid above the statutory limits by petition. However, in 1999 the Minnesota Supreme Court ruled in the case of claimant attorney fees that absolute limits on attorney fees, without the right to petition for additional fees, were unconstitutional because they infringed on the authority of the judicial branch to oversee attorneys.[49] In 2000, the Workers' Compensation Court of Appeals applied this ruling to defense attorney fees.[50]

2000 law change

Indemnity benefits

The following provisions took effect for injuries on or after Oct. 1, 2000.

TTD minimum benefit. The minimum weekly TTD benefit was raised from $104 to $130, not to exceed the employee's pre-injury wage.

TTD, TPD, and PTD maximum benefit. The maximum weekly TTD, TPD, and PTD benefit was raised from $615 to $750.

PPD benefits. Benefit amounts were raised for all impairment ratings. In addition, the PPD award may be paid as a lump sum, computed with a discount rate not to exceed five percent. Previously, PPD benefits were only payable in installments at the same interval and amount as the employee's TTD benefits.

Death cases. A $60,000 minimum total benefit was established for dependency benefits. In death cases with no dependents, a $60,000 payment to the estate of the deceased was established and the $25,000 payment to the Special Compensation Fund was eliminated. The burial allowance was increased from $7,500 to $15,000.

Other provisions

Assigned Risk Plan surplus. $325 million of Assigned Risk Plan surplus was transferred to the Special Compensation Fund (SCF) to reduce liabilities in the second injury and supplementary benefit programs through claim settlement. DLI was required to reduce the SCF assessment rate (applied to indemnity payments) by at least 30 percent from the Jan. 1, 2000 rate. DLI reduced the rate from 30 percent to 20 effective July 1, 2000.

2002 law change

Assigned Risk Plan surplus. $250 million of Assigned Risk Plan surplus was transferred back from the Special Compensation Fund (SCF) to the state general fund to help balance the budget. In response, DLI raised the SCF assessment rate back to 30 percent effective January 1, 2002.

[49] Irwin v. Surdyk's Liquor, 599 N.W.2d 132 (Minn. 1999), Sept. 2, 1999.
[50] Tucker v. Plymouth Plumbing, 60 W.C.D. 160 (May 25, 2000).

Appendix C

Data sources and estimation procedures

This appendix describes data sources and estimation procedures for those figures where additional detail is needed. Two general procedures are used throughout the report — (1) "development" of statistics to incorporate the effects of claim maturation beyond the most current data and (2) adjustment of benefit and cost data for wage growth to achieve comparability over time. After a general description of these procedures, additional detail for individual figures is provided as necessary. See Appendix A for definitions of terms.

Developed statistics. Many statistics in this report are by accident year or policy year (insurance data) or by injury year (Department of Labor and Industry [DLI] data) (see Appendix A for definitions). For any given accident, policy or injury year, these statistics grow, or "develop," over time because of claim maturation and reporting lags. This affects a range of statistics including claims, costs, dispute rates, attorney fees and others. Statistics from the DLI database develops constantly as the data is updated from insurer reports received daily. With the insurance data, insurers submit annual reports to the Minnesota Workers' Compensation Insurers Association (MWCIA) giving updates on prior accident and policy years along with initial data on the most recent year. If the DLI and insurance statistics were reported without adjustment, time series data would give invalid comparisons because the statistics would be progressively less mature from one year to the next.

The MWCIA uses a standard insurance industry technique to produce "developed statistics." In this technique, the reported numbers are adjusted to reflect expected development between the current report and future reports. The adjustment uses "development factors" derived from historical rates of growth (from one report to the next) in the statistic in question. The result is a series of statistics developed to a constant maturity, e.g., to a "fifth-report" or "eighth-report" basis. The developed insurance statistics in this report are computed by the DLI Research and Statistics unit using tabulated numbers and associated development factors from the MWCIA.

Research and Statistics has adapted this technique to DLI data. It tabulates statistics at regular intervals from the DLI database, computes development factors representing historical development for given injury years, and then derives developed statistics by applying the development factors to the most recent tabulated statistics. In this manner, the annual numbers in any given time series are developed to a constant maturity, e.g., a 19-year maturity for the claim and cost statistics in Chapters 2 and 3 since the DLI database extends back to injury year 1983 for claim and cost data. An example: In Figure 2.1, the developed number of indemnity claims for injury year 2002 (in the numerator of the indemnity claim rate) is 29,300 (rounded to the nearest hundred). This is equal to the tabulated number as of Oct. 1, 2003, 24,862, times the appropriate development factor, 1.1792.

All developed statistics are estimates, and are therefore revised each year in light of the most current data.

Adjustment of cost data for wage growth. For reasons explained in Chapter 1, all costs in this report (except those expressed relative to payroll) are adjusted for average wage growth. The cost number for each year is multiplied by the ratio of the 2002 statewide average weekly wage (SAWW) to the SAWW for that year, using the SAWW reflecting wages paid during the respective year. Thus, the numbers for all years represent costs expressed in 2002 wage-dollars.

Figure 2.1. The developed number of paid indemnity claims for each year is calculated from the DLI database. The annual number of medical-only claims is estimated by applying the ratio of medical-only to indemnity claims for insured employers to the total number of indemnity claims. (The ratio is unavailable for self-insured employers.) The MWCIA, through special tabulations, provides this ratio by injury year for compatibility with the injury year indemnity claims numbers.

The number of full-time-equivalent (FTE) workers covered by workers' compensation is estimated as total nonfederal Unemployment Insurance (UI) covered employment from the Department of Employment and Economic Development (DEED) times average annual hours per employee (from the annual survey of occupational injuries and illnesses, conducted jointly by the U.S. Bureau of Labor Statistics and state labor departments) divided by 2,000 (annual hours per full-time worker). Nonfederal UI-covered employment is used because there is no data on workers' compensation-covered employment.

Figure 2.2. For insured employers, total cost is computed as written premium adjusted for deductible credits, minus paid policy dividends. Written premium and paid dividends for the voluntary market are obtained from the Department of Commerce. Written premium for the Assigned Risk Plan (ARP) is obtained from the Park Glen National Insurance Company, the plan administrator. (There are no policy dividends in the ARP.)

Written premium is adjusted upward by the amount of premium credits granted with respect to policy deductibles, to reflect that portion of cost for insured employers that falls below deductible limits. Premium credit data through policy year (PY) 2001 is from the MWCIA. The 2002 figure is estimated using the ratio of premium credits to written premium for 2001 (applying this to the 2002 premium figure). When the actual amount becomes available for 2002, that year's total cost figure will be revised.

For self-insured employers, the primary component of estimated total cost is pure premium from the Minnesota Workers' Compensation Reinsurance Association (WCRA). A second component is administrative cost, estimated as 10 percent of pure premium. The final component is the total assessment paid to the Special Compensation Fund (SCF), net of the portion used to pay claims from defaulted self-insureds, since this is already reflected in pure premium.

Total workers' compensation covered payroll is computed as the sum of insured payroll, from the MWCIA, and self-insured payroll, from the WCRA. Insured payroll was not yet available for 2002, and self-insured payroll is not available for 1980 to 1989. These figures were estimated by extrapolating from actual figures using the trend in nonfederal UI-covered payroll (from DEED) and the trend in the relative insured and self-insured shares of total pure premium (from the WCRA).

Figure 2.3. Paid indemnity claims are from the DLI database. The percentages are taken from undeveloped claim counts. Using undeveloped rather than developed claim counts has little effect on the percentages, because the number of indemnity claims develops at nearly the same rate for the different insurance arrangements.

Figure 2.4. Claim and loss data is from the MWCIA's *2004 Minnesota Ratemaking Report.* This data comes from insurance company reports on claim and loss experience for individual policies for the voluntary market and the ARP. The reported losses include paid losses plus case-specific reserves. Data is developed to a fifth-report basis using the development factors in the *Ratemaking Report,* which produces statistics at an average maturity of 5.5 years from the injury date; the statistics are then adjusted for average wage growth.

Figures 2.6 and 2.7. Following the procedure in the MWCIA's *Ratemaking Report,* Figures 2.6 and 2.7 are based on "paid plus case reserve" losses. The data is from financial reports to the MWCIA by voluntary market insurers only.

Paid losses are developed to a uniform maturity of eight years (an "eighth-report basis") using the selected development factors in the 2004 *Ratemaking Report,* and then converted to an incurred basis using the selected ratios of paid to incurred losses at eighth report from the *Ratemaking Reports* of different years. The resulting figures thus represent incurred losses at eighth report.

Payroll data for Figure 2.6 is from insurer reports on policy experience.

The statistics in Figures 2.6 and 2.7 are different than in prior system reports because in prior reports they were based on paid losses rather than paid-plus-case losses. This report made the change to paid-plus-case losses because the MWCIA made this change in its rate-making procedure.

Figure 3.1. Statistics are derived in the same manner as for Figure 2.4, with one modification. Figure 3.1 presents data by claim type. For permanent total disability (PTD) and death cases, the number of claims and their average cost (at any given maturity) fluctuate widely from one policy year to the next because of small numbers of cases. Therefore, to produce more meaningful comparisons among claim types, the data on PTD and death claims was averaged over policy years 1992 to 1998. The years 1999 and 2000 were excluded to avoid the relatively large variability in development for these claim types between first and third report.

Figures 4.1 to 4.4 and Appendices D and E. The statistics in these figures were calculated from detailed claim data supplied by a large insurer. To remove the effects of changing claim composition with respect to gender, age and injury type, these statistics were computed as fixed-weight averages over gender, age and injury groups.[51] In this technique, the first step is to compute each statistic (e.g., the percentage of claims with evaluation and management services) for each year for each of several groups defined by gender, age and injury type.[52] Then the statistic for each year is computed as the average of that statistic over the gender, age and injury groups, using fixed weights for these different groups. This means that the weight given to each group is the same for each year, so that changes in the relative sizes of the groups have no effect on the statistics. In these computations, the fixed weights were equal to the percentages of claims in the respective groups for the whole analysis period.

The statistics in these figures and appendices were computed by injury year at an average maturity of 2.75 years after the date of injury. Specifically, for the claims that arise in each year, medical services and costs were counted through March 31 of the third year following the year of injury. For injury years 2001 and 2002, data of this maturity was not yet available.[53] Therefore, the figures for those years were projected to the same level of maturity as for previous years, using development factors computed from earlier injury years.

How well does the research data represent the overall population of insured claims? A partial answer is given by Figure A-1. For insured claims overall and for the research data, average medical cost per claim fell 30 percent from 1990 to 1997, after adjusting for wage growth. After 1997, however, the two data sources show different rates of cost increase. In the overall insurance data, average medical cost per claim increased 32 percent from 1997 to 2001. For the research data, the comparable increase was 4 percent from 1997 to 2001. The 15-percent increase in the research data for 1997-2002, the period of analysis in Chapter 4, is just less than half the increase for 1997 to 2001 in the overall insurance data.

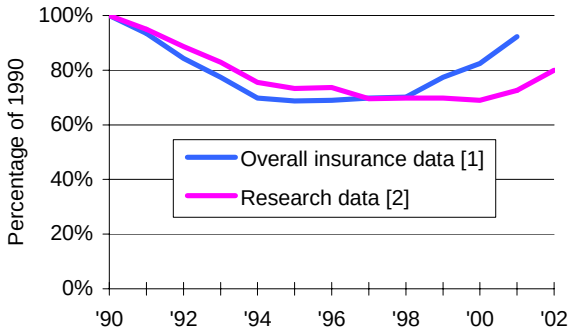
One possible reason for this difference could be that (1) the overall insurance data is developed to a greater maturity (average of 5.5 years past injury compared with 2.75 years for the research data) and (2) the overall insurance data includes paid and reserved amounts while the research data includes paid amounts only. However, further analysis showed that this is not the case. When the research data was developed to a maturity of 13 years, the trend in average medical cost per claim was quite similar to how it appears in Figure A-1. Further, when the overall insurance data was developed to maturity of 2.5 rather than 5.5 years, the resulting trend was almost the same as in Figure A-1.

[51] Changing claim composition is an issue not only because it occurs in the general population of claims. It is particularly an issue in this instance because of changes in the employer clientele of the insurer supplying the data.

[52] The age groups were 14-29, 30-39, 40-49, and 50+. The injury groups were musculo-skeletal injuries of the back, musculo-skeletal injuries of limbs, other musculo-skeletal injuries, rheumatic and orthopedic injuries, internal and late-effect injuries, burns, contusion and crushing injuruies, disease, fractures, lacerations and amputations, multiple injuries and complex injuries (the last two categories involve different combinations of the other categories). There were 96 weighting groups (2 gender x 4 age x 12 injury type).

[53] DLI received the data in the summer of 2003.

Figure A-1 Average medical cost per claim, overall insurance data and research data, injury years 1990-2002



Injury Year	Overall Insurance Data [1] Amount per Claim	Pctg. of 1990	Research Data [2] Amount per Claim	Pctg. of 1990
1990	$3,110	100.0%	$2,160	100.0%
1994	2,170	69.8	1,630	75.5
1997	2,170	69.8	1,500	69.6
1998	2,180	70.1	1,510	69.8
1999	2,410	77.4	1,510	69.8
2000	2,560	82.5	1,490	69.0
2001	2,870	92.2	1,570	72.6
2002	[3]	[3]	1,730	79.9

1. From Figure 2.4
2. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between the respective year and 2002. (See text.)
3. Not yet available.

Because of the difference for the post-1997 period shown in Figure A-1, the estimated magnitudes of different components of the overall medical cost increase in the research data are likely to understate, on the whole, the corresponding magnitudes for all insurers combined. The implications are different, however, for different figures in Chapter 4.

Figures 4.1 and 4.2 show percent contributions to total cost (Figure 4.1) and to the total cost change per claim (Figure 4.2). Therefore, these figures would not *necessarily* be different if the overall cost increase in the research data were the same as for all insurers (although this seems a likely possibility). Figures 4.3 and 4.4, by contrast, indicate changes in different components of the overall increase in average medical cost per claim (14.9 percent, shown in Figure 4.3). If this overall increase were as great as in the insurance data, the increase in the different components would have to be larger on the whole, although this would probably be true in varying degrees for the different cost components (and might not be true for some of them).

Figure 4.4 and Appendix E. For selected service groups, the change in the average cost of the service group per claim with services in the group was decomposed into (1) the change in average units of service per claim, (2) the change in average cost per unit of service (with a fixed service mix) and (3) the change in expensiveness of the service mix. This was only done for selected service groups because it requires well-defined codes for all types of service within the group, which was not the situation for all service groups. The first of the three components is self-explanatory. The last two were calculated as follows:

Change in average cost per unit of service (fixed service mix). For each pair of adjacent years, the average cost per unit of service was computed for each year using *the average payment per unit for each type of service for the year in question* along with *the average service mix for the two years combined.*[54] The index of change for the two-year interval was then computed as the percent change between the two years in average cost per unit so computed. This index thus reflects only changes in the costs of particular services, not changes in service mix.

Change in expensiveness of service mix. For each pair of adjacent years, the average cost per unit of service was computed for each year using *the service mix for the year in question* along with *the average payment per unit for each type service for the two years combined.*[55] The index of change for the two-year interval was then computed as the percent change between the two years in average cost per unit so computed. This index thus reflects only changes in service mix, not changes in the costs of particular services.

Figure 6.7. Insurers submit an annual report to DLI indicating total defense legal costs paid during the year (divided into attorney fees and other legal costs). For the percentage in the figure, these costs are compared to total indemnity and medical benefits paid during the year, compiled by DLI primarily from insurer reports to the SCF.

[54] This is a simplified version of the computation. More detail is available upon request.

[55] This is a simplified version of the computation. More detail is available upon request.

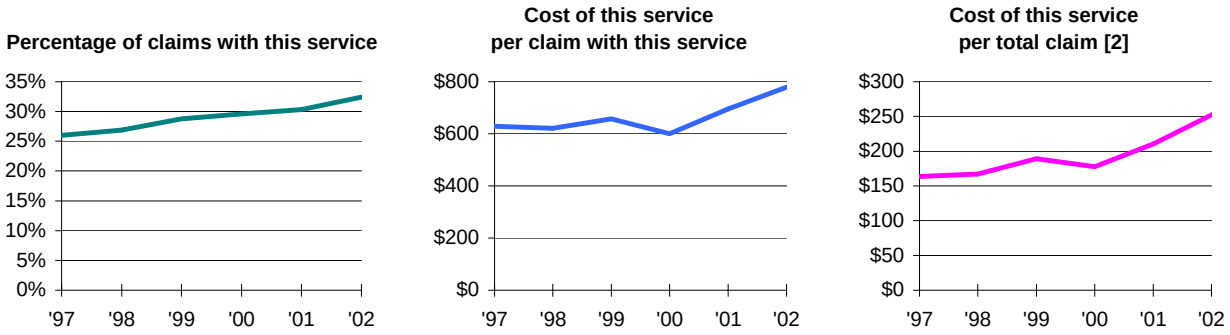
Appendix D

Medical cost trends, part 1: costs of service groups per total claim

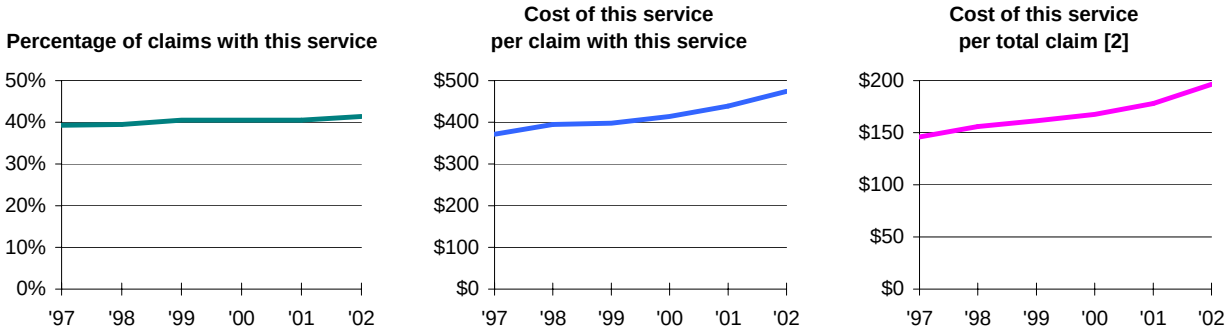
This appendix presents the medical-cost trend data behind Figure 4.3. For each service group, trends are presented for (1) the percentage of claims with the service, (2) the average cost of the service for claims with the service, and (3) the average cost of the service per total claim. The last of these items is the product of the first two.

Costs of medical service groups per total claim, injury years 1997-2002 [1]

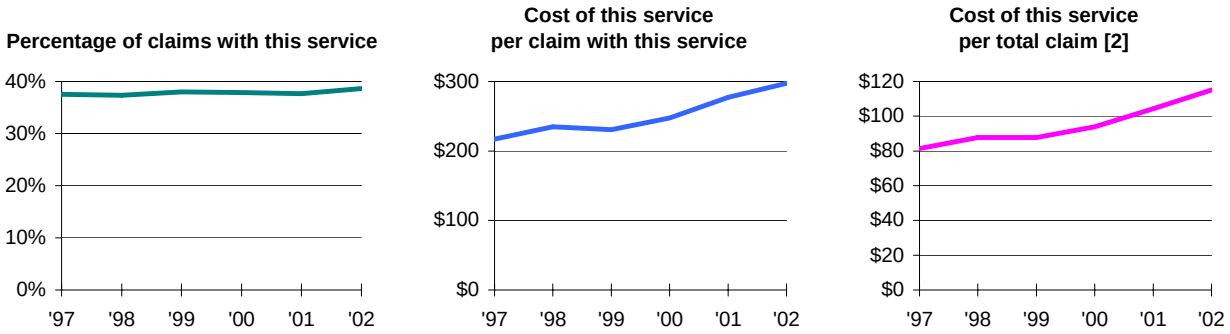
Outpatient hospital facility services



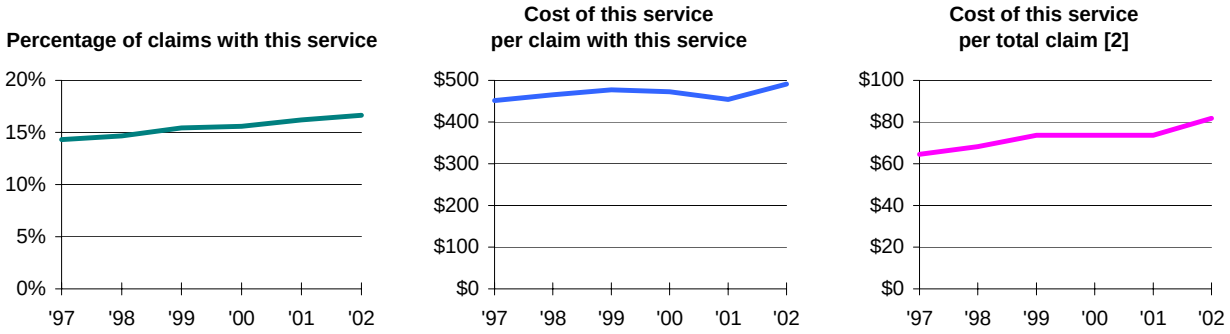
Radiology (total)



Radiology (nonhospital providers)

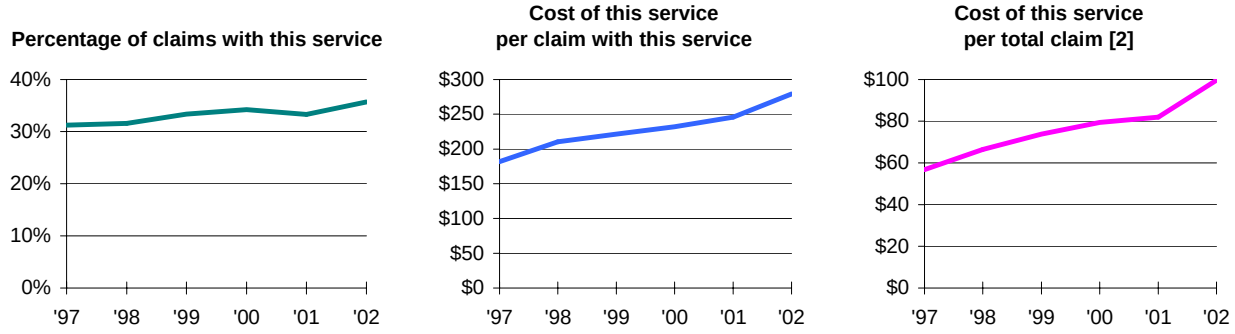


Radiology (hospital providers)

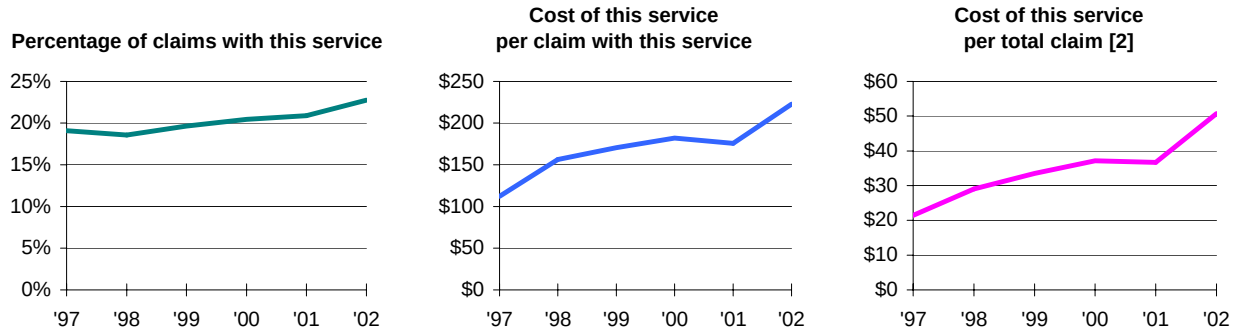


(Notes at end of figure.)

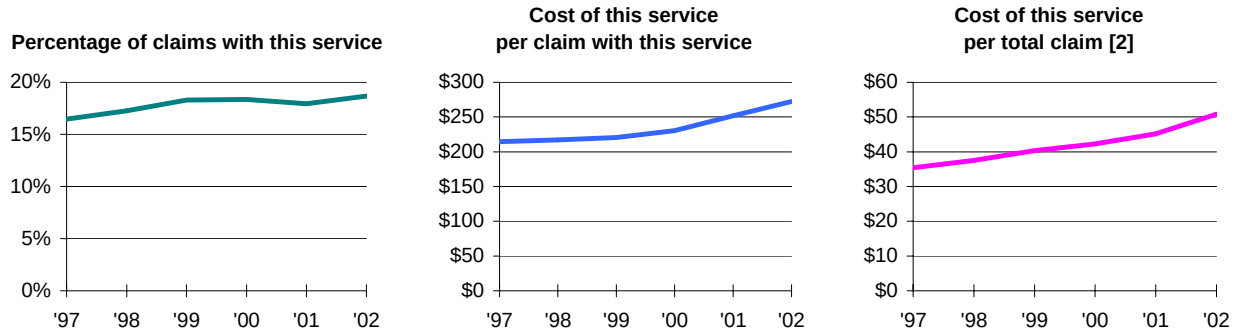
Drugs (total)



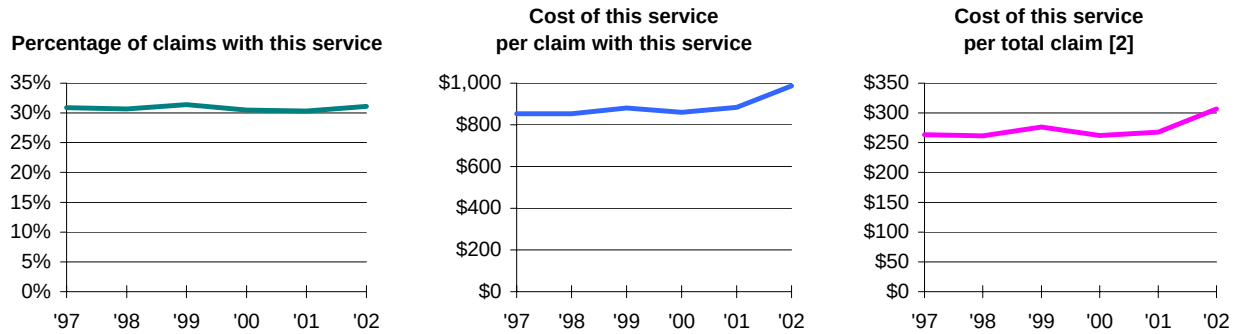
Drugs (nonhospital providers)



Drugs (hospital providers)



Surgery and anesthesia (total)



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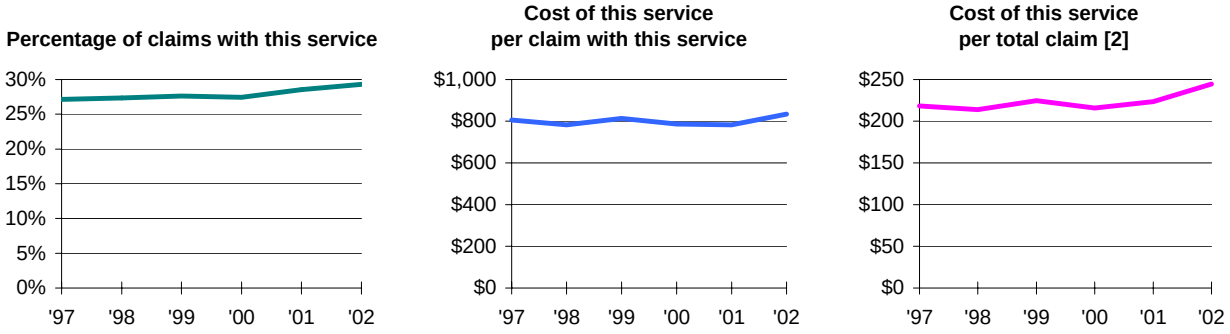
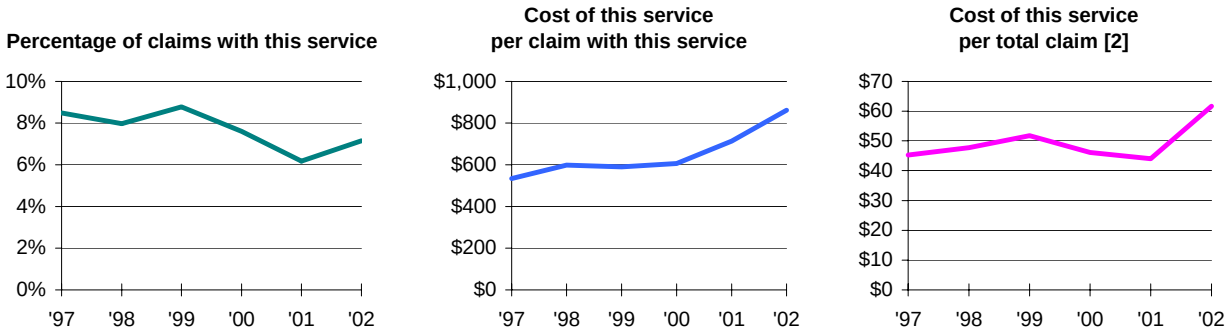
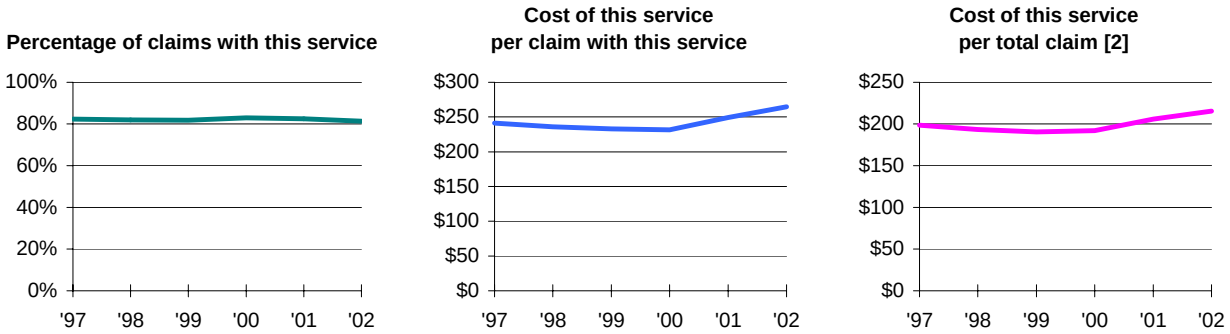
Surgery and anesthesia (nonhospital providers)



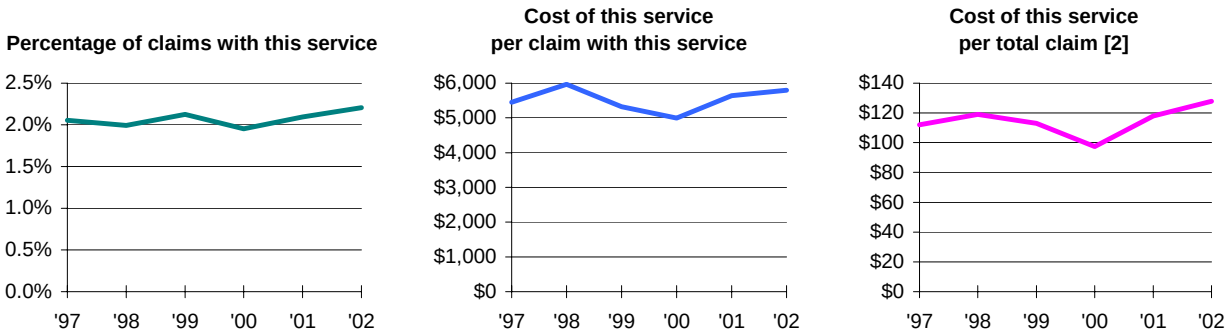
Surgery and anesthesia (hospital providers)



Evaluation and management



Inpatient hospital facility services



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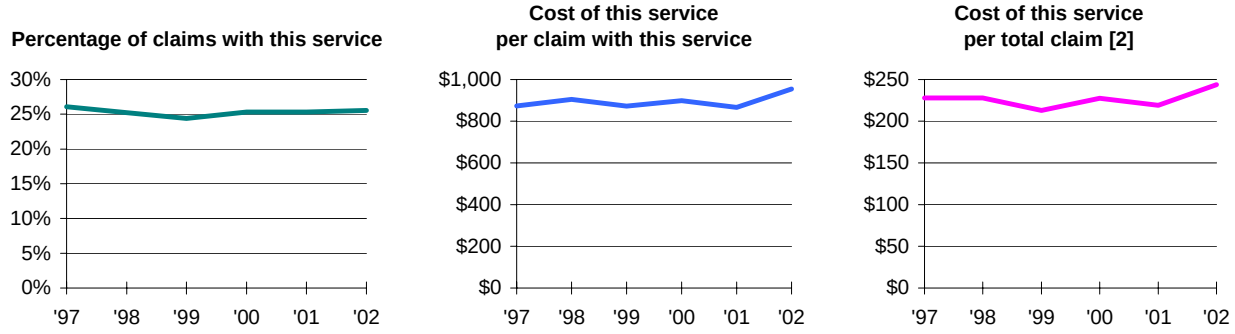
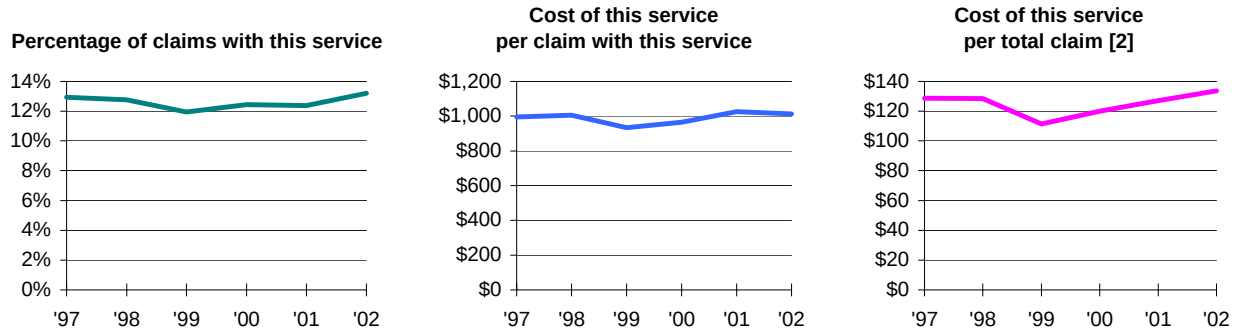
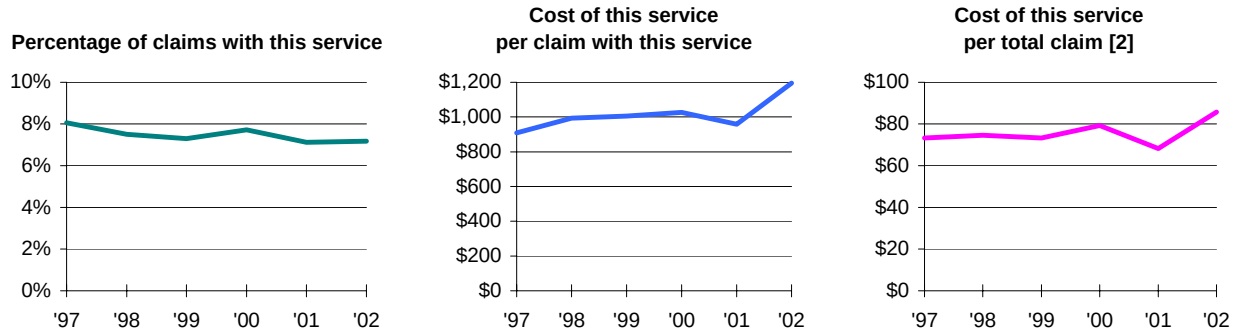
Physical medicine (total)



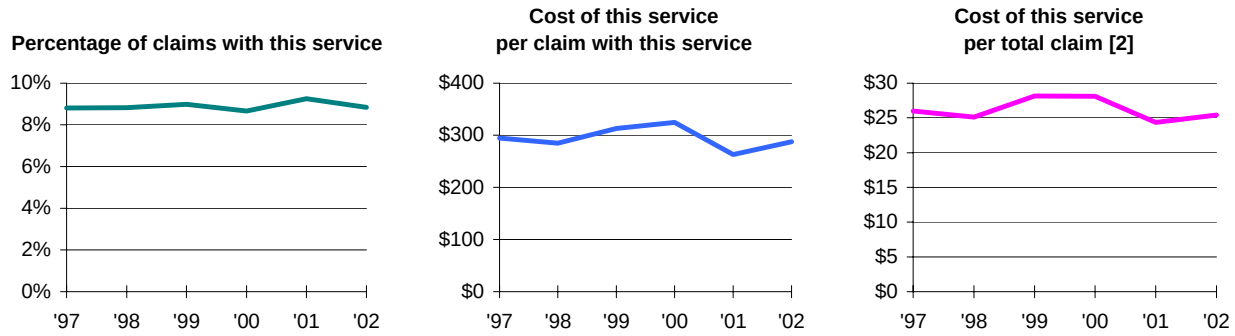
Physical medicine (physical therapist providers)



Physical medicine (hospital providers)



Physical medicine (chiropractic providers)



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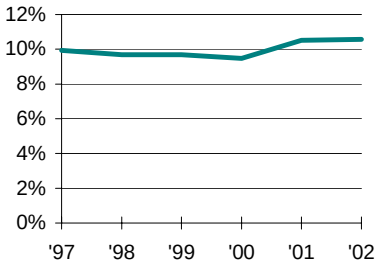
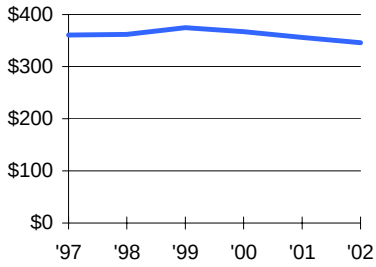
Chiropractic manipulations

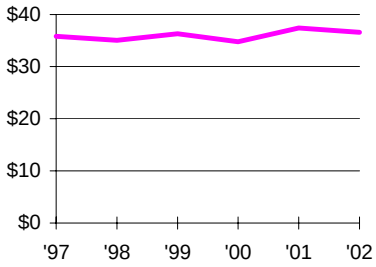
Percentage of claims with this service



Cost of this service per claim with this service

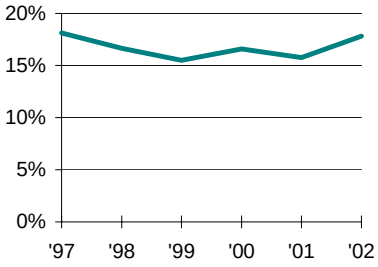


Cost of this service per total claim [2]

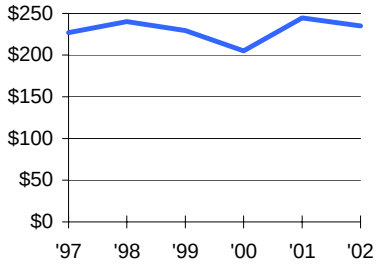


Other medicine

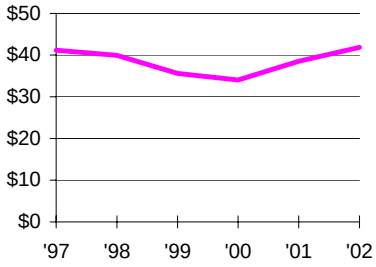
Percentage of claims with this service



Cost of this service per claim with this service

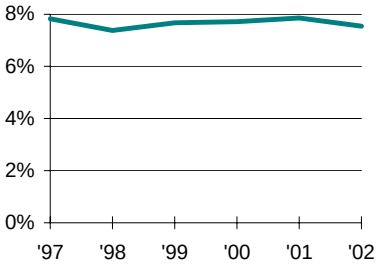


Cost of this service per total claim [2]

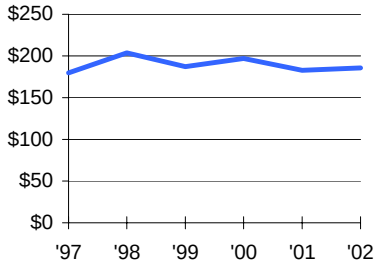


Pathology and laboratory services

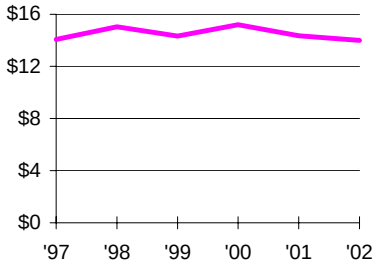
Percentage of claims with this service



Cost of this service per claim with this service

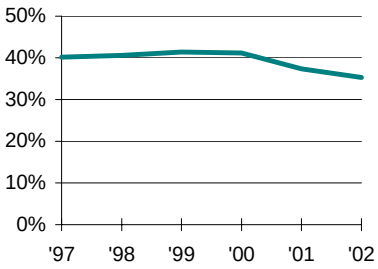


Cost of this service per total claim [2]

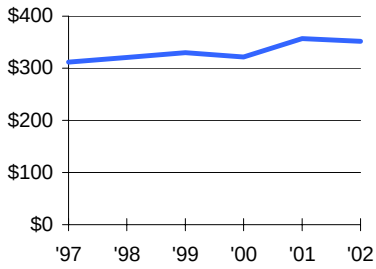


Equipment and supplies (total)

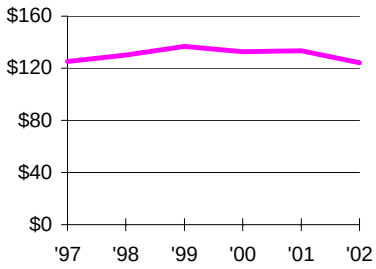
Percentage of claims with this service



Cost of this service per claim with this service



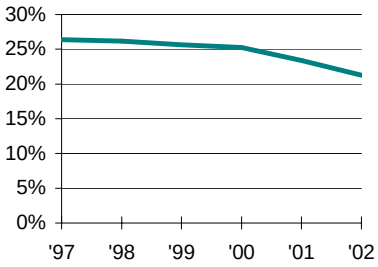
Cost of this service per total claim [2]



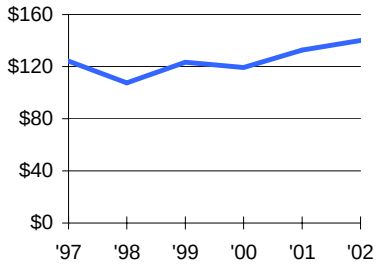
(Notes at end of figure.)

Equipment and supplies (nonhospital providers)

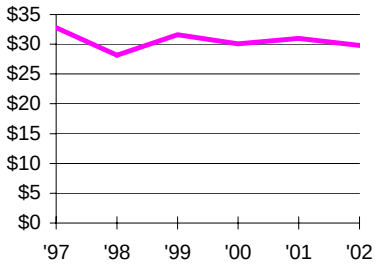
Percentage of claims with this service



Cost of this service per claim with this service

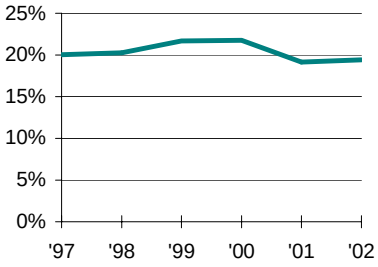


Cost of this service per total claim [2]

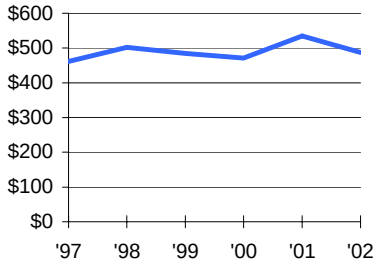


Equipment and supplies (hospital providers)

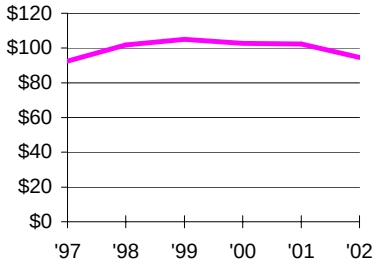
Percentage of claims with this service



Cost of this service per claim with this service



Cost of this service per total claim [2]



1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Costs are adjusted for average wage growth between the respective year and 2002. (See Appendix C.) Service categories are shown in the same order as in Figures 4.2 and 4.3.
2. Equal to the product of the first two trends for each service group.

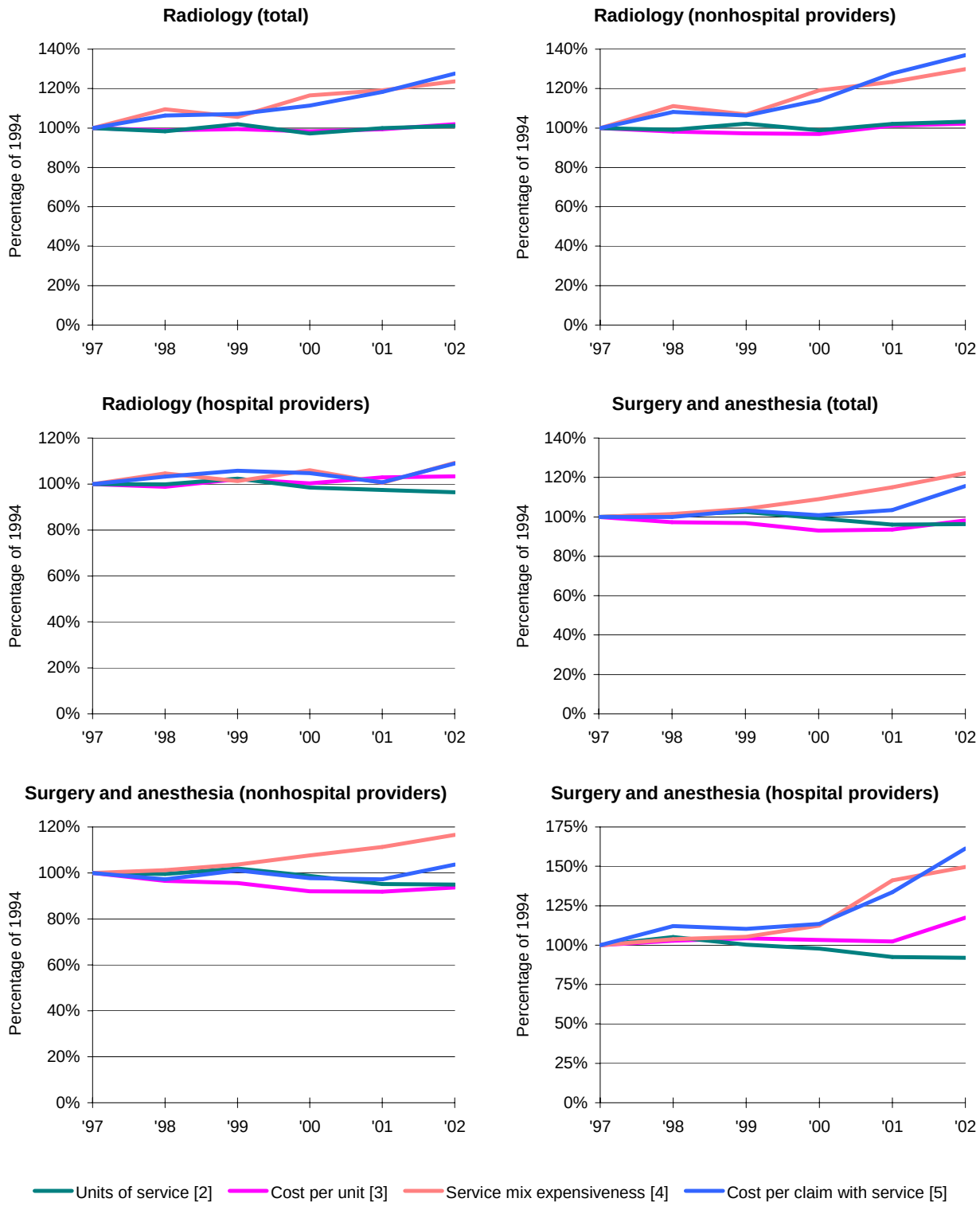
Appendix E

Medical cost trends, part 2: quantity, unit cost and service mix indices

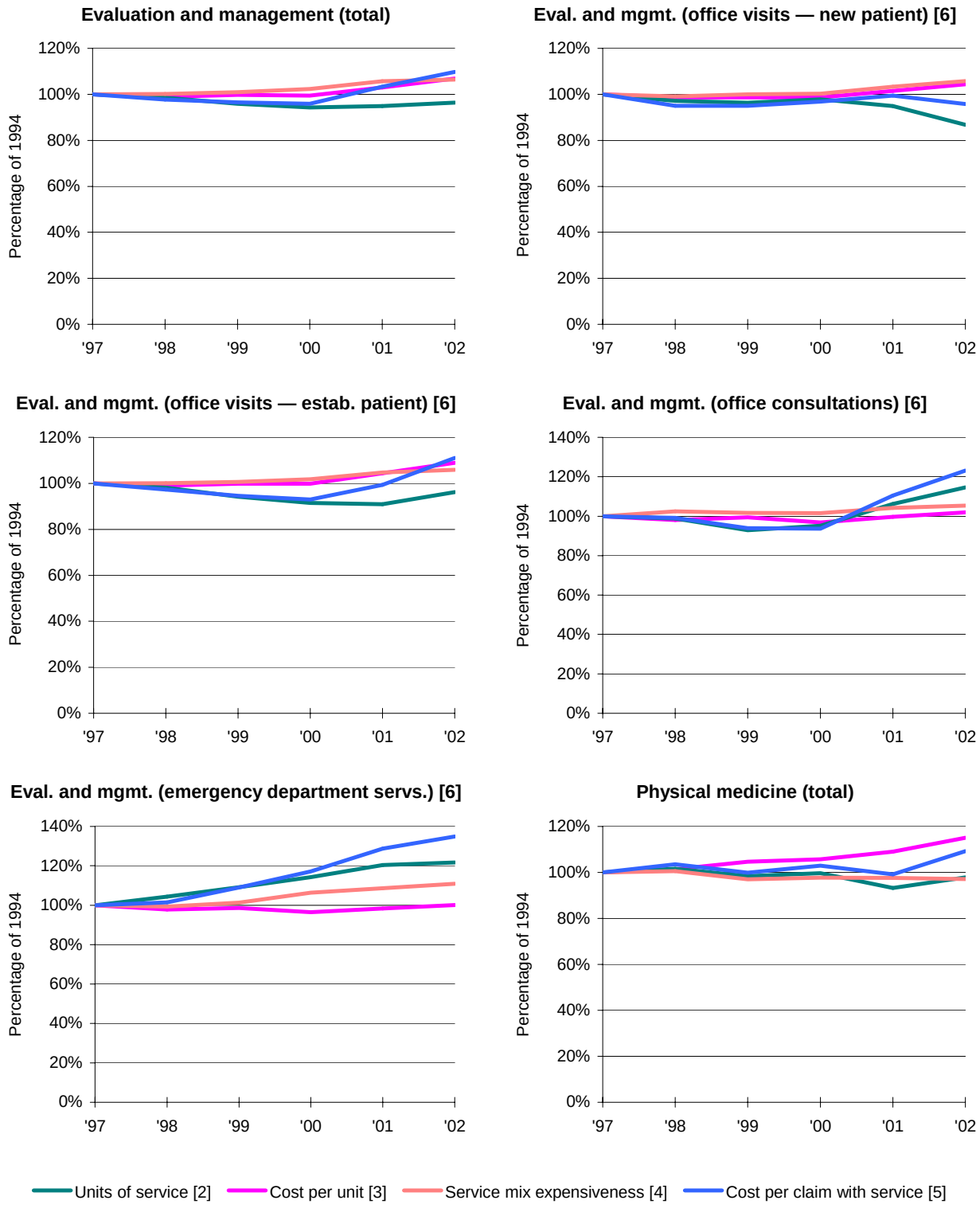
This appendix presents the medical-cost trend data behind Figure 4.4. For selected service groups, trends are presented for (1) the number of units of service per claim with the service, (2) the average cost per unit of service, (3) the expensiveness of the service mix, and (4) the average cost of the service per claim with the service. The trends are presented in index form, meaning that the value for each year is expressed as a percentage of the base year, 1997. The last of the four items is the product of the first three.[56]

[56] See note 5 at the end of the figure.

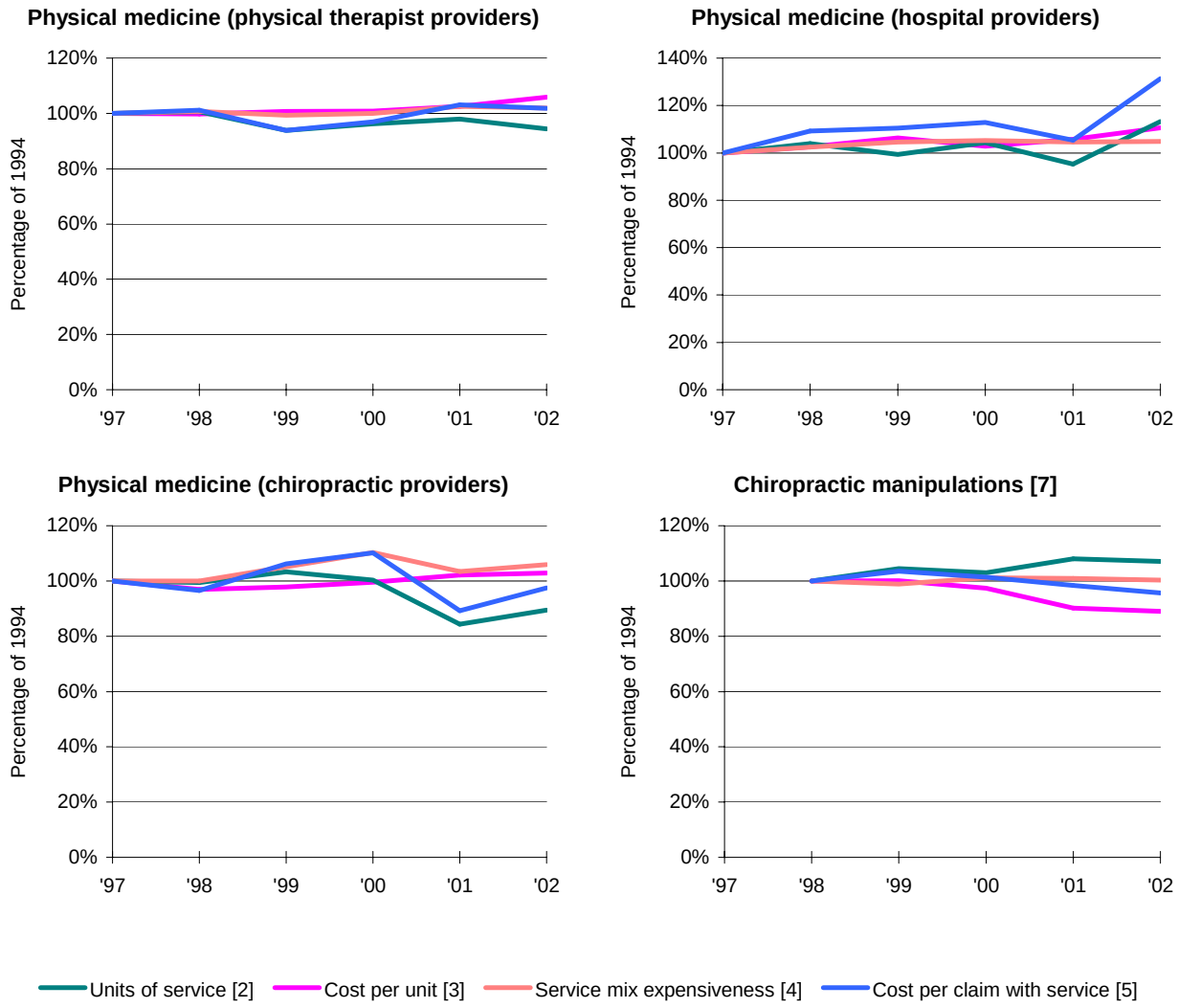
Quantity, unit cost, and service mix indices, injury years 1997-2002 [1]



(Notes at end of figure.)



(Notes at end of figure.)



1. Developed statistics computed from data from a large insurer with fixed weights for gender, age and type of injury. Service groups are shown in the same order as in Figure 4.4. Only some service groups are represented because the service codes (for individual types of service within the group) do not allow the computation of these indices for all service groups. (See Appendix C.)
2. Units of service per claim with service.
3. Average cost per unit of service, holding constant the service mix within the service group. Adjusted for average wage growth. (See Appendix C.)
4. Average cost per unit of service as affected by changes in the service mix within the service group, holding constant the average cost of particular types of service (see Appendix C).
5. Cost of the service per claim with service, adjusted for average wage growth (see Appendix C). Equal to the product of the indices of units of service, cost per unit and service mix expensiveness. As an approximation, the percent change in the cost of the service per claim with the service is roughly equal to the sum of the percent changes in the three component indices.
6. For the four subgroups under evaluation and management, units of service and cost per claim with service are expressed relative to the number of claims with any evaluation and management services.
7. The indices for chiropractic manipulations begin with 1998 because service-coding changes prevent comparisons with earlier years.