Setting the Standard:

An Analysis of the Impact of the 2005 Legislative Reforms on the Texas Workers' Compensation System, 2008 Results



Texas Department of Insurance

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Executive Summary

Introduction

Section 2053.012, Texas Insurance Code and Section 405.0025, Texas Labor Code require the Texas Department of Insurance (Department) to issue biennial reports to the Texas Legislature no later than December 1st every even-numbered year on the impact of the 2005 House Bill (HB) 7 reforms on the affordability and availability of workers' compensation insurance for Texas employers and the impact of certified workers' compensation health care networks on return-to-work outcomes, medical costs, quality of care issues and medical dispute resolution.

The following are key findings from this analysis of the 2005 HB 7 reforms:

The Number of Employers Participating in Networks and Workers Being Treated by Networks Has Significantly Increased; However, a Relatively Small Percentage of Workers' Compensation Claims Are in Network

- Since the Department began accepting applications for workers' compensation health care networks on January 2, 2006, the agency has certified 32 networks covering 234 counties.
- Data calls conducted with 13 of the largest insurance company groups (representing 84 percent of direct workers' compensation premiums written in Texas) indicate that most large insurance companies have contracted with or established a certified workers' compensation network.
- Approximately 34,040 policyholders in 2008 (compared to 7,551 in 2006) have agreed to participate in workers' compensation networks in exchange for premium credits up to 15 percent. However, insurance carriers predict slower growth in the number of policyholders participating in networks over the next biennium.
- The vast majority of policyholders (81 percent) participating in networks are small to mid-sized employers with an annual premium of less than \$25,000.
- Results from data calls with workers' compensation networks indicate that as of February 2008, almost 40,000 injured workers have been treated in 18 networks (an increase from 6,300 in 8 networks a year ago). However, network claims only represent an estimated 16 percent of all new injuries and 9 percent of all new lost-time claims.
- The vast majority of policyholders participating in networks (84 percent) and injuries being treated by networks (70 percent) are associated with one certified network (Texas Star) and one workers' compensation carrier in Texas (Texas Mutual Insurance Company).

Medical Costs Have Stabilized Over Time, While Preliminary Data Indicates That the Impact of Workers' Compensation Networks on Medical Costs and Utilization of Care is Mixed

- The workers' compensation system is beginning to realize the effects of legislative and regulatory reforms enacted by HB 2600 in 2001, so it is still too early to fully evaluate the impact that HB 7, especially the implementation of treatment guidelines and certified health care networks, will have on medical costs in the future.
- Total medical payments in the system have continued to decline since 2003 due to a variety of factors, including fewer claims being filed, an increase in medical and claim denial rates by insurance carriers, and reductions in medical reimbursement amounts as well as the reductions in the amount of certain types of treatments for new claims.

- After controlling for differences in injuries and types of claims over time, the average medical cost per claim has begun to stabilize since the passage of HB 2600, compared to the double-digit percentage increases in medical costs that the system was experiencing in the late 1990's.
- Since the adoption of the 2003 professional services fee guideline (which adopted the Medicare billing rules and payment policies), there have been significant changes in the amount of certain types of medical treatments provided to injured workers in Texas.
- The percentage of injured workers receiving physical medicine modalities has decreased over time; however, the percentage of injured workers receiving evaluation and management services, other physical medicine services, MRIs, other diagnostic services, pathology and laboratory services and other professional services has increased. There has been little change in the percentage of injured workers receiving hospital services.
- Since 2003, there have been significant reductions in the utilization of physical medicine services, CT scans and other types of diagnostic testing billed per worker. However, the amount of nerve conduction studies, surgical services and other types of professional services provided per worker who received these services has increased.
- Given that many certified networks are still in the early stages of implementation, it is still too early to fully evaluate the impact of networks on claims costs and quality of care issues. However, when the results for three of the largest workers' compensation health care networks were compared with non-network claims, one network, Texas Star, had a lower average medical cost per claim than non-network claims.
- Medical cost differences between network and non-network claims at this early stage in network implementation appear to be driven primarily by higher hospital fees, higher pharmacy utilization and higher utilization of certain physical medicine services and diagnostic tests than non-network claims with similar types of injuries.

Some Improvements Can Be Seen in Access to Care over Time, but Generally Workers Have Poorer Perceptions about Access to Care and Satisfaction with Care in Networks

- The implementation of HB 7 initiatives such as the elimination of the Approved Doctors List (i.e., the registration requirement for doctors treating in the workers' compensation system); the adoption of evidence-based treatment guidelines; the Division's adoption of updated fee guidelines that raised reimbursement levels for Texas doctors; and the implementation of health care networks that had the flexibility to reduce other administrative burdens for providers; were all designed to improve health care provider participation in the system and improve injured workers' access to quality medical care.
- The results of recent injured worker surveys conducted by the Department show that a higher percentage (60 percent) of workers surveyed in 2008 reported "no problem" in getting the medical care they felt they needed for their work-related injury, compared with 52 percent of injured workers surveyed in 2005.
- Injured workers who received medical care from workers' compensation networks generally had poorer perceptions regarding their access to care and satisfaction with care than non-network workers. These poorer perceptions about access to and satisfaction with care may be related to injured workers' opinions about the importance of being able to choose their own treating doctor.

- Despite poorer perceptions about access to care for network claims, some networks are able to get an injured worker in to see a non-emergency doctor sooner than non-network claims.
- Based on results from the standardized survey instrument known as the Short Form 12 (SF-12), there are no significant differences in the physical and mental functioning scores for network and non-network claims. However, these physical functioning results show that the functioning of Texas injured workers is poor compared with the general U.S. population.

Return-to-Work Outcomes Continue to Improve, but Preliminary Data Indicates That the Impact of Networks is Also Mixed

- The percentage of injured workers receiving Temporary Income Benefits (TIBs) (i.e., injured employees with more than seven days of lost time) who have initially returned to work within six months post-injury has increased steadily from 70 percent for workers injured in 2001 to 78 percent in 2006.
- The number of days lost from work due to work related injuries has fallen from an average of 153 days (a median of 34 days) for workers injured in 2001 to 124 days (a median of 28 days) in 2005.
- Improvements in return-to-work rates have also resulted in lower TIBs costs for Texas employers. The median number of weeks of TIBs paid to injured workers declined from a median of 8.6 weeks in 2002 to 6.0 weeks in 2006. While workers' wages continue to increase annually, this reduction in TIBs duration has resulted in a 20 percent decline in the median TIBs payment per claim.
- A higher percentage of injured workers surveyed in 2008 reported that they were released to go back to work by their doctor with no or little physical restrictions, compared with workers surveyed in 2005. This may be the result of certain HB 7 provisions, including the adoption of return-to-work guidelines and the ability of designated doctors (i.e., independent doctors assigned by the Division) to review an injured worker's ability to return to work.
- Initial results from the Department's 2008 Workers' Compensation Network Report Card indicate that while there is little difference in the percentage of injured workers who return to work, a higher percentage of injured workers with network claims were released to go back to work with no or some physical restrictions compared to non-network claims.

Medical Disputes and Dispute Durations Have Declined since 2005 and Few Complaints Have Been Filed About Workers' Compensation Health Care Networks

- The percentage of medical disputes over preauthorization denials increased over time, while the percentage of medical disputes over retrospective medical necessity issues decreased. This is likely due to the new requirement that medical services that fall outside of the Division's treatment guidelines be preauthorized by the insurance carrier.
- The total number of medical disputes filed with the Department has declined by approximately one-third since 2005 (from 13,257 disputes filed in 2005 to 8,810 disputes filed in 2007).
- There have been significant improvements made in the number of days to resolve medical disputes since 2005. These reductions resulted from a variety of factors, including changes in HB 7 to more closely align the Independent Review Organization processes for workers' compensation and group health, fewer new disputes being filed and efforts from Division staff to more efficiently process new and legacy (pre-HB 7) medical fee disputes.

• Since the certification of workers' compensation health care networks began in 2006, the Department has received only 140 complaints. These complaints center on issues such as the availability of network health care providers, injured workers' concerns about the delivery of network notices, and providers' concerns about payment issues and their ability to participate in networks.

Employer Participation Rates Have Improved, but Employee Coverage Rates Have Declined

- An estimated 33 percent of year-round Texas employers (approximately 106,308 employers) do not have workers' compensation coverage (i.e., are non-subscribers to the Texas workers' compensation system) the lowest percentage since the employer participation survey started in 1993.
- However, an estimated 25 percent of Texas employees (representing approximately 3 million employees) worked for non-subscribing employers the highest percentage since 1993.
- The increase in the percentage of employees working for non-subscribing employers is driven primarily by the trend of larger employers (i.e., employers with 500+ employees) making the decision to opt out of the Texas workers' compensation system (26 percent of large employers are non-subscribers in 2008, compared to 21 percent in 2006).
- High workers' compensation premium was the most frequent reason cited by non-subscribing employers for not purchasing workers' compensation coverage.
- The most frequent reason cited by Texas employers for participating in the Texas workers' compensation system is that they thought having workers' compensation coverage was required by law followed closely by the availability of workers' compensation health care networks. This may not be surprising since Texas is the only state where workers' compensation coverage is truly optional.
- For large employers (i.e., employers with 500+ employees), network availability was the most frequent reason cited for participating in the Texas workers' compensation system.

Rates and Premiums Have Declined Over Time; However, Additional Reductions May Be Necessary for Some Insurance Companies

- Preliminary data suggests that for carriers that have more than 20 percent of their business in a network, the loss ratios are better for claims in a network than for claims outside a network.
- Insurance companies have earned underwriting profits each year from 2002 to 2007.
- As of November 2008, workers' compensation insurance rates have decreased approximately 30 percent since 2003.
- The average indication from rate filings requested from insurance companies for the first biennial rate hearing is -11 percent. This suggests that the average premium levels for the industry can be further reduced by approximately 11 percent.
- Average premiums have come down from a high of \$2.84 per \$100 of payroll in 2003 to \$1.93 per \$100 of payroll in 2007. This is a reduction of approximately 32 percent.
- As a result of the required HB 7 rate hearing on workers' compensation rates and premiums held on November 5, 2008, the Department is contemplating revisions to the classification relativities and proposed rules regarding rate reductions and better monitoring of the use of schedule rating.

1. Introduction

In 2005, the 79th Legislature passed House Bill 7 (HB 7), which represents the most comprehensive organizational and policy reforms to the Texas workers' compensation system since 1989.

Key aspects of these reforms included:

- the abolishment of the former Texas Workers' Compensation Commission and transfer of its administrative duties to the Division of Workers' Compensation (Division) of the Texas Department of Insurance (Department);
- the creation of the Office of Injured Employee Counsel to serve as a voice for injured workers during rulemaking and assist them during dispute resolution;
- the formation of workers' compensation health care networks approved by the Department to improve the quality of medical care received by injured workers at a reasonable cost for Texas employers;
- the adoption of evidence-based medical treatment guidelines designed to provide guidance to health care providers about appropriate treatment protocols for work-related injuries;
- the streamlining of medical and income benefit dispute resolution processes to improve the timeliness of dispute resolution; and
- an increased focus on improving return-to-work outcomes in Texas.

HB 7 contained several provisions requiring the Department to evaluate the impact of these reforms on a biennial basis and to report the results to the Governor, Lieutenant Governor, Speaker of the House of Representatives and the Legislature no later than December 1 of each even-numbered year. Section 2053.012, Texas Insurance Code, and Section 405.0025, Texas Labor Code require the Department to issue these biennial reports to the Texas Legislature no later than December 1st every even-numbered year on the impact of these legislative reforms on the affordability and availability of workers' compensation insurance for Texas employers and the impact of certified workers' compensation health care networks on return-to-work outcomes, medical costs and quality of care issues and medical dispute resolution.

Specifically, this report examines the impact of the 2005 reforms on:

- the affordability and availability of workers' compensation insurance for Texas employers (per Section 2053.012, Texas Insurance Code), including:
 - 1) projected workers' compensation premium savings realized by Texas employers;
 - 2) employer participation in the system;
 - **3)** market competition, including an analysis of how loss ratios, combined ratios and individual risk variations have changed since the implementation of the reforms; and
 - 4) workers' compensation network participation by small and medium-sized employers; and
- the impact of certified workers' compensation health care networks (per Section 405.0025, *Texas Labor Code*) on:
 - 1) medical costs and utilization of care;
 - 2) access to and satisfaction with medical care;
 - **3)** return-to-work outcomes;
 - 4) health-related functional outcomes; and
 - 5) the frequency, duration and outcome of medical disputes and complaints.

While this report examines numerous trends in terms of costs and quality of care issues within the Texas workers' compensation system, it is important to note that it is still too early to fully evaluate the impact of many aspects of HB 7 (namely workers' compensation health care networks and treatment guidelines). Although the Department began certifying workers' compensation health care networks in 2006, the number of networks treating injured workers and the number of injured workers being treated in networks is still relatively small and highly concentrated in one network associated with the largest workers' compensation insurance carrier in Texas. Additionally, the impact of the May 1, 2007 treatment guideline adoption by the Division cannot be adequately quantified at this point in time despite the amount of time spent by the Division and others in the past year to educate health care providers and insurance carriers about these guidelines and encourage their usage. However, this report provides a detailed analysis of a variety of system trends, including the initial impact of HB 7 as well as previous workers' compensation legislation. The Department will continue to implement the remaining aspects of the HB 7 reforms in the upcoming year (e.g., the adoption of a closed pharmacy formulary and fee guideline and the adoption of new work-search requirements for Supplemental Income Benefits) and to track the results of these reforms in order to fulfill the legislature's intent to improve both the cost and quality of health care provided to injured workers in Texas.

Following the introduction, Section 2 of the report presents the most current information available regarding workers' compensation network participation in the Texas workers' compensation system. This section includes the number of workers' compensation networks certified as well as the geographic distribution by county of network coverage. Additionally, Section 2 summarizes the results of a data call issued to 13 of the largest Texas workers' compensation insurance companies and a data call issued to all certified workers' compensation health care networks regarding their estimates of the number of employers (policyholders) that are participating in workers' compensation networks as well as the number of injured workers being treated in network. Section 2 also provides information about the premium credits certain insurance companies are offering to Texas policyholders in exchange for network participation.

Section 3 of the report presents information about medical cost and utilization of care trends pre- and post-HB 7, including information about how these trends vary by type of medical service. This section also examines how fees for individual medical services have changed over time and how the impact of injury rates, claim frequency and medical denial rates have affected medical payments in the system. Additionally, this section provides preliminary data from the Department's 2008 Workers' Compensation Network Report Card, which compares the medical care and utilization of care results between network and non-network claims.

Section 4 of the report provides an analysis of how access to care, satisfaction with care and health-related outcomes have changed in the workers' compensation system since 2005. This section also compares the perceptions of injured workers who treated in certified networks with injured workers who received non-network medical care.

Section 5 of the report examines how return-to-work trends have improved in Texas over time and provides preliminary information about income benefit savings as a result of reductions in lost time as well as differences in return-to-work outcomes for network and non-network claims. Section 6 of the report looks at the frequency, duration and outcomes for medical disputes in the Texas workers' compensation system and the impact that the HB 7 reforms have had on these disputes. Additionally, this section examines the number and type of complaints that the Department has received since 2005, including complaints regarding workers' compensation health care networks.

Section 7 of the report provides estimates of overall non-subscription rates (i.e., the percentage of Texas employers that have chosen not to carry workers' compensation coverage) and the percentage of the Texas workforce employed by non-subscribers. Section 7 also includes non-subscription rates categorized by industry and employer size and explores the reasons both subscribing and non-subscribing employers gave for their respective workers' compensation coverage decisions. Additionally this section looks at the percentage of Texas employers who are knowledgeable about the HB 7 reforms and how this knowledge is currently impacting their perceptions regarding economic development in Texas.

Section 8 provides an overview of the status of the Texas workers' compensation insurance market prior to and after the implementation of workers' compensation networks under HB 7, including workers' compensation insurance rates and premiums, market competition, financial solvency, and loss and combined ratios. This section also summarizes recent rate filings submitted by workers' compensation insurance companies.

Appendix A includes a complete listing of all Texas counties and the number of certified workers' compensation networks that operate within each county. Appendix B provides detailed medical cost and utilization trend information for various categories of professional medical services and specific types of physical medicine services.

2. Workers' Compensation Health Care Networks

Introduction

An important component of evaluating the impact of the recent HB 7 reforms on the Texas workers' compensation system is the implementation of the cornerstone of these reforms - workers' compensation health care networks. In the years prior to the adoption of these reforms, rising average medical costs per claim, poor return-to-work outcomes, and high workers' compensation premiums resulted in an increase in the percentage of Texas employers that chose to leave the workers' compensation system (see section 7 of this report for a discussion about employer participation trends in the Texas workers' compensation system).

Research studies published by the former Research and Oversight Council on Workers' Compensation, the Department, and the Workers' Compensation Research Institute (WCRI) highlighted that Texas' high medical costs were being driven primarily by the amount of medical care provided to injured workers (often referred to as "the utilization of medical care"). Despite high medical costs, Texas injured workers were not more satisfied with their medical care compared to workers in other states.¹

In response to these trends and stakeholders' (e.g., insurance carriers, employers, injured workers, health care providers etc.) concerns, the 79th Legislature introduced a new workers' compensation health care delivery model, which allows insurance carriers to establish or contract with managed care networks that are certified by the Department using a method similar to the certification of health maintenance organizations (HMOs).

Overview of the Network Provisions in HB 7

Under HB 7, workers' compensation insurance carriers (including insurance companies, certified self-insured employers, group self-insured employers, and governmental entities) may elect to contract with or establish workers' compensation health care networks (networks), as long as those networks are certified by the Department. The Department's certification process includes a financial review, validation that the network meets the health care provider credentialing and contracting requirements established in the Department's rules, and a detailed analysis of the adequacy of health care providers available to treat injured workers in each proposed network's service area. If an employer chooses to participate in the insurance carrier's workers' compensation network, the employer's injured workers are required to obtain medical care through the network provided that the injured worker lives in the network's service area and receives notice of the network's requirements from the employer (including a network provider directory).²

¹ See Research and Oversight Council on Workers' Compensation, Striking the Balance: An Analysis of the Cost and Quality of Medical Care in the Texas Workers' Compensation System: A Report to the 77th Legislature, 2001; Research and Oversight Council on Workers' Compensation, Returning to Work: An Examination of Existing Disability Duration Guidelines and Their Application to the Texas Workers' Compensation System: A Report to the 77th Legislature, 2001; Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Medical Cost and Quality of Care Trends in the Texas Workers' Compensation System, 2004; and Workers' Compensation Research Institute, CompScope Benchmarks for Texas, 6th Edition, 2006.

² By statute, pharmacy services are exempted from workers' compensation networks. Injured workers will continue to obtain pharmaceuticals from any pharmacist willing to accept workers' compensation patients, regardless of whether or not the worker is participating in a workers' compensation network (see § 1305.101(c), Insurance Code).

Employees receiving network notices are asked to sign an acknowledgment form that indicates which certified network the employer is participating in, and acknowledges that the employee understands how to choose a treating doctor, seek medical care within the network or from a network-approved referral provider (with the exception of emergency care), and file a complaint with the network or with the Department.

Health care providers and workers' compensation networks negotiate fees under this new network model rather than utilize the Division's adopted fee guidelines. Additionally, workers' compensation networks may operate under their own treatment guidelines, return-to-work guidelines and preauthorization requirements, although these treatment and return-to-work guidelines must meet minimum statutory criteria.³ Under this new model, workers' compensation networks are required to have case management and return-to-work coordination services, as well as provide annual quality assurance and financial reports to the Department to ensure that these networks continue to provide high quality medical care to injured workers. Additionally, HB 7 requires the Department to publish and disseminate an annual workers' compensation network report card that evaluates certified networks on measures including medical costs and utilization, return-to-work outcomes, and injured worker satisfaction with and access to medical care.⁴

Workers' Compensation Networks Continue to Grow in Texas

The Department began accepting applications for the certification of workers' compensation health care networks on January 2, 2006. As of November 1, 2008, the Department has certified 32 networks extending over 234 counties. The shaded counties shown in Figure 2.1 are Texas counties included in the service area of at least one certified network as of October 23, 2008.

Currently, certified networks cover the vast majority of Texas counties, with the exception of a handful of counties in the Panhandle, the Valley and West Texas. Most Texas counties support multiple networks, allowing insurance carriers and their policyholders various options for network coverage. Larger metropolitan areas such as Houston, Dallas-Ft Worth and Austin-San Antonio support more than 21 networks (see Figure 2.1).

³ Treatment and return-to-work guidelines utilized by certified workers' compensation networks must be "scientifically valid, evidence-based, and outcome-focused" (see §1305.304, Insurance Code).

⁴ In accordance with Section 1305.502, Insurance Code, the first workers' compensation network report card is due no later than 18 months from the date the first workers' compensation network was certified by the Department. The first report card was published in September 2007 and the second report card was published in September 2008 (see http://www.tdi.state.tx.us/reports/report9.html to view a copy of these report cards).

Figure 2.1: The Number of Certified Workers' Compensation Networks per Texas County (as of October 23, 2008)



Source: Texas Department of Insurance, Health and Workers' Compensation Network Certification and Quality Assurance Division, 2008.

Recent Data Call Results Show Insurance Companies are Interested in Using Certified Networks, Although Actual Use is Currently Limited

Results of the Insurance Company Data Call

The Department tracks the participation of both Texas policyholders (employers) and injured employees in workers' compensation health care networks created by HB 7. According to the results of a July, 2008 data call with thirteen of the largest workers' compensation insurance company groups (representing 84 of the 2007 direct workers' compensation premium written in Texas), approximately 34,040 policyholders have agreed to participate in workers' compensation networks in exchange for premium credits that range up to 15 percent.

While twelve of the top thirteen insurance company groups have contracted with or established a certified network for their policyholders, usage of networks among insurance companies varies widely. As of July, 2008, only four of the twelve insurance company groups offering a network option reported that more than 20 percent of their policyholders have agreed to participate in their workers' compensation network. While network participation among Texas policyholders has grown considerably since 2006 (34,040 policyholders in 2008 compared to 7,500 policyholders in 2006), it remains to be seen how differences in insurance company marketing strategies, the concentration of high deductible policies within a company's book of business, the level of premium credits offered for network participation, employer requirements to provide employee network notices, and the impact of the economy on insurance company profitability and market competition will affect the participation rates for Texas policyholders over the next biennium.

Some insurance companies indicated that some policyholders are interested in the networks, but are concerned about the administrative responsibility associated with providing employees notice of the network requirements and securing a signed acknowledgment form at the time of hire and separately at the time the worker reports the injury. Some policyholders reported to companies that they are reluctant to direct employees to see certain doctors and are waiting to see whether networks will reduce medical and indemnity claim costs before making the decision to enter into a managed care arrangement.

Insurance companies also reported that some large deductible policyholders (i.e., large employers who have a workers' compensation insurance policy with a large, negotiated deductible on a per accident basis in exchange for a large premium credit) are reluctant to participate in networks because these policyholders often have multi-state operations, with minimal exposure in Texas. Additionally, since these policies already have significant premium credits applied to them in exchange for the large deductible, some insurance companies are not offering additional premium credits for network participation. For these policyholders as well as for certified self-insured employers, premium credits are not the enticement needed to participate in networks. Rather, if networks can reduce medical and/or indemnity costs and improve return-towork outcomes, these larger policyholders may increase their participation in networks.

All of the insurance companies with a certified workers' compensation network reported that they were offering their workers' compensation network to both new and existing policyholders and the vast majority of these companies reported that they were offering network participation during the middle of the policy period for policies that have not yet expired or been

renewed. This is an area that the Department intends to monitor further since workers' compensation policies are typically renewed annually, and any reluctance on behalf of an insurance company to initially offer its network plan to policyholders during the middle of the policy period will delay the implementation of networks.

Additionally, all of the insurance companies with a certified workers' compensation health care network reported that they were offering this option to all workers' compensation policyholders with employees who live in their network's service area, regardless of premium size, employee classifications, and experience modifier.

As Table 2.1 indicates, the number of Texas policyholders participating in networks has increased significantly since 2006 (from 7,551 policyholders in 2006 to 34,040 policyholders in 2008). Almost half (47 percent) of policyholders participating in networks have an annual premium of less than \$5,000 and 81 percent have an annual premium of less than \$25,000, indicating that the policyholders participating in networks are mostly small to mid-sized employers.

| Table 2.1: Total Number of Policyholders That Are Participating in Worker | 'S' |
|--|-----|
| Compensation Networks over Time for the Top 13 Insurance Carrier Grou | ps |

| Network Participation Measures | As of Fall | As of Spring | As of Fall | As of Summer |
|---|----------------|----------------|-----------------|-----------------|
| | 2006 | 2007 | 2007 | 2008 |
| Total Number of Policyholders Participating | 7,551 | 18,978 | 29,146 | 34,040 |
| By Premium Size*: (Texas only premium) Less than \$5,000 in premium | 3,473 (46%) | 9,091 (48%) | 13,689 (47%) | 15,937 (47%) |
| \$5,000 - \$24,999 in premium | 2,522 | 6,330 | 9,869 | 11,659 |
| | (33%) | (34%) | (35%) | (34%) |
| \$25,000 - \$100,000 in premium | 1,158 | 2,745 | 4,302 | 4,940 |
| | (15%) | (14%) | (14%) | (15%) |
| More than \$100,000 in premium | 398 | 787 | 1,275 | 1,509 |
| | (5%) | (4%) | (3%) | (4%) |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Workers' Compensation Network Participation Data Call, 2008.

While the number of policyholders participating in workers' compensation networks has increased almost 500 percent from 2006 to 2008, the top 13 insurance company groups estimated slower growth in the number of policyholders participating in networks over the next couple of years (17 percent estimated growth in policyholders from 2008 to 2009 and 6 percent growth from in policyholders from 2009 to 2010) (see Table 2.2). The reasons for these projections are somewhat unclear, except that it appears that the majority of the growth in the number of policyholders who agreed to participate in networks between 2006 and 2008 can be attributed to one insurance company. Approximately 84 percent of Texas policyholders who have agreed to participate in networks as of summer 2008 are policyholders of Texas Mutual Insurance Company – the largest workers' compensation insurance company in Texas (representing approximately 26 percent of premium market share as of the second quarter of 2008) and the insurer of last resort.

Table 2.2: Number of Policyholders the Largest Insurance Companies Estimated will Participate in Workers' Compensation Networks

| Network Participation Measures | Estimate at End of CY 2009 | Estimate at End of CY 2010 | |
|--------------------------------|----------------------------|----------------------------|--|
| Overall Estimate | 39,933 | 41,191 | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Workers' Compensation Network Participation Data Call, 2008.

Although insurance companies do not anticipate a significant increase in the number of policyholders that will participate in workers' compensation networks over the next couple of years, they estimate that the number of workers' compensation claims treated in networks will double from 2008 to 2010 (see Table 2.3).

Table 2.3: Number of Claims the Largest Insurance Companies Estimated Will BeTreated in Workers' Compensation Networks

| Network Participation Measures | Estimate at | Estimate at | Estimate at | |
|--------------------------------|----------------|----------------|----------------|--|
| | End of CY 2008 | End of CY 2009 | End of CY 2010 | |
| Overall Estimate | 59,069 | 104,544 | 137,941 | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Workers' Compensation Network Participation Data Call, 2008.

Premium Credits Are Being Offered to Policyholders for Participation in Networks

Before an insurance company begins using a certified network, the Department requires that the insurance company provide notification of the level of premium credits that will be granted for employer network participation. The premium credits on file with the Department currently range up to 15 percent with some insurance companies offering a standard credit to all policyholders who participate in the network, and other companies varying the credit depending on the percentage of the policyholders' employees that live within the network's service area. Table 2.4 summarizes the amount or ranges of premium credits that have been filed with the Department as of October 1, 2008. Section 8 of this report examines some preliminary data regarding the impact of network participation on company loss ratios and estimates the average premium savings per workers' compensation insurance policy for network participation.

Table 2.4: Insurance Companies' Filed Network Premium Credits(as of October 1, 2008)

| Group Name | Credit |
|--|--------|
| America First Ins Grp | 10% |
| American Compensation Insurance Company | 10% |
| American International Grp | 0-5% |
| American Interstate Ins Co | 8-12% |
| Amerisure Co | 12% |
| Arch Ins Co | 0-12% |
| Association Cas Ins Co | 0-12% |
| Berkshire Hathaway Homestate Companies | 5-15% |
| Bituminous Insurance Companies | 10% |
| Combined Safeco Ins Co Grp | 10% |
| Employers Compensation Insurance Company | 15% |
| Employers Mut Co Of Des Moines | 12% |
| Everest National Ins Co | 5% |
| Farmers Ins Grp | 10% |
| Great America Grp | 0-10% |
| Guard Insurance Group | 10% |
| Hartford Ins Grp | 15% |
| Liberty Mutual Ins Grp | 0-10% |
| Lincoln General Insurance Company | 10% |
| Lumbermens Underwriting Alliance | 10% |
| Meadowbrook Ins Grp | 10% |
| Millea Holdings Inc | 10% |
| Old Republic Ins Co | 1-10% |
| OneBeacon Ins Grp | 10% |
| SeaBright Ins Co | 7.5% |
| Sentry Ins Grp | 0-12% |
| Service Lloyds Grp | 12% |
| St Paul Travelers Companies and Affiliates | 12% |
| Texas Alliance of Energy Producers | 20% |
| Texas Mut Ins Co | 12% |
| Unitrin Prop & Cas Ins Grp | 8.5% |
| Utica Natl Ins Grp | 10.0% |
| Wausau Ins Grp | 0-12% |
| Zenith Ins Grp | 5% |
| Zurich Ins Co Grp | 8% |

Source: Correspondence from insurance companies to the Texas Department of Insurance, Property and Casualty Actuarial Division, 2008.

The Number of Workers Being Treated by Networks Has Significantly Increased Since 2006; However, a Relatively Small Percentage of Workers' Compensation Claims Are in Network

In addition to tracking the participation of Texas policyholders in workers' compensation networks, the Department also tracks the number of injured workers who have been treated by networks through separate semi-annual data calls with each certified network. As of February 1, 2008, approximately 39,991 injured workers had been treated by a certified network – a roughly five hundred percent increase from a year earlier (see Table 2.5).

Table 2.5: Total Number of Injured Workers Being Treated by Workers'Compensation Networks over Time

| Network Participation Measures | As of February 1, 2007 | As of September 1, 2007 | As of February 1, 2008 |
|--|---------------------------|----------------------------|---------------------------|
| Total Number of Workers Treated | 6,307 | 25,568 | 39,991 |
| Total Number of Networks Treating Workers | 8 | 16 | 18 |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Workers' Compensation Network Data Call, 2008.

While the number of injuries being treated by certified networks and the number of networks treating injured workers continues to grow, the overall percentage of injuries being treated by networks is still relatively low. The Department estimates that as of February 1, 2008, roughly 16 percent of all new injuries and 9 percent of all new lost-time claims were treated by certified networks. Additionally, the population of injuries being treated by networks is highly concentrated (roughly 70 percent) in one certified network associated with Texas Mutual Insurance Company (see Table 2.6).

Summary

HB 7 introduced a new workers' compensation health care delivery model which allows insurance carriers to establish or contract with managed care networks that are certified by the Department using a method similar to the certification of HMOs. Under this new system, injured workers whose employers have contracted with a certified network are required to obtain medical care through the network, provided that the injured worker lives in the network's service area and receives notice of the network's requirements from the employer. The Department began accepting applications for the certification of workers' compensation networks on January 2, 2006, and has certified 32 workers' compensation networks as of November 1, 2008, extending over 234 counties across Texas.

According to the information gathered in periodic insurance company and network data calls, the number of Texas policyholders and claims participating in workers' compensation networks has increased significantly since networks first became available in 2006. The majority of these participating policyholders are small employers with annual premium averaging less than \$5,000. However, the vast majority of network policyholders and claims are highly concentrated into one certified network – Texas Star, associated with the largest insurance company in Texas – Texas Mutual Insurance Company. Premium credits are being offered to Texas policyholders in exchange for network participation, but it is uncertain, at this point, whether the

Table 2.6: Distribution of Injured Workers Being Treated as of February 1, 2008 byWorkers' Compensation Networks

| TDI-Certified Network | Total | Percent |
|---|--------|---------|
| Aetna Workers' Comp Access (AWCA) | 166 | <1% |
| Bunch-First Health | 124 | <1% |
| Coventry Workers' Comp Network | 1400 | 3.5% |
| Corvel Health Care Corporation/CorCare | 3,456 | 8.6% |
| First Health TX HCN* | 183 | <1% |
| First Health/Travelers HCN | 1,387 | 3.5% |
| First Health/AIGCS TX HCN | 380 | 1.0% |
| Forte, Inc./Compkey/First Health | 91 | <1% |
| Genex Services, Inc./Genex Health Care Network | 124 | <1% |
| Hartford Workers' Compensation Workers' Compensation Health Care Network | 472 | 1.2% |
| Interplan Health Group, Inc./Zenith Health Care Network | 283 | 1.0% |
| International Rehabilitation Associates, Inc./Intracorp | 325 | 1.0% |
| Intracorp/Lockheed Martin Aero Employee Select Network | 210 | 1.0% |
| Liberty Health Care Network | 2,593 | 6.5% |
| Specialty Risk Services Texas Workers' Compensation Health Care Network | 68 | <1% |
| Texas Star Network | 27,463 | 68.7% |
| Zurich Services Corporation Healthcare Network | 1,265 | 3.2% |
| Zurich Services Corporation Healthcare Network/Corvel | 1 | <1% |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Workers' Compensation Network Data Call, 2008.

Note: Totals may not add up to 100 percent due to rounding.

other large insurance company groups in Texas will increase their policyholder participation in networks significantly over the next couple of years. Insurance companies report that policyholders are somewhat reluctant to participate because of administrative burdens associated with providing network notices to employees and obtaining signed acknowledgment forms, while others report that policyholders are concerned about directing their employees to selected doctors and are waiting to see if networks can reduce claims costs. Another issue that may be affecting both the marketing of networks, as well as the network participation rates among Texas employers, is decreasing losses experienced by the Texas workers' compensation system over the past few years and resulting decreases in premiums, which may be reducing the perceived need to offer and utilize workers' compensation networks. Other sections of this report will examine the trend of decreasing claims costs, which may have resulted in lower loss ratios for insurance companies and lower premiums for Texas employers.

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3. Medical Costs and Utilization of Care

Medical costs have been a concern in the Texas workers' compensation system since the 76th Legislature passed House Bill (HB) 3697 in 1999 mandating a series of studies comparing the cost, quality and utilization of medical care provided to injured employees in Texas with injured employees in other states and other health care delivery systems. The results from these and other studies showed that Texas had some of the highest average medical costs per claim and that these costs were primarily driven by the amount of medical care provided to injured employees (also known as the utilization of care).⁵ Additionally, compared with similarly injured employees in other states, these studies highlighted that Texas injured employees had poorer return-to-work outcomes and satisfaction with care. Growing concerns from policymakers and system participants about high medical costs and poor outcomes led to the passage of House Bill (HB) 2600 by the 77th Legislature in 2001, which included key components, such as:

- abolishing the former Texas Workers' Compensation Commission's consensus-based treatment guidelines;
- eliminating the spinal surgery second opinion process and requiring preauthorization for spinal surgeries;
- requiring medical necessity and preauthorization disputes to be reviewed by Independent Review Organizations (IROs) (i.e., panels of independent doctors certified by the Department);
- instituting a registration and training requirement for doctors treating injured employees (i.e., the Approved Doctor's List or ADL);
- increasing training requirements for doctors performing impairment rating examinations; and
- requiring the use of Medicare's reimbursement structure, payment policies, and coding requirements for medical billing.

Since the passage of HB 2600, a significant amount of attention has been placed on the issue of lowering medical costs through a reduction in the overutilization of medical services provided to injured employees. The issue of reducing medical costs and improving the quality of medical care provided to injured employees was also a key component driving the passage of a new health care delivery model in HB 7 – workers' compensation health care delivery networks. It is still too early to effectively gauge the impact that HB 7, especially the implementation of treatment guidelines and certified health care networks, will have on medical costs in the future. The system has just begun to fully realize the effects of the various legislative and regulatory reforms enacted by HB 2600. This section of the report will focus on how medical costs and utilization of care trends have changed in the system over time, as well as some of the factors influencing these cost trends.

⁵ See Research and Oversight Council on Workers' Compensation, Striking the Balance: An Analysis of the Cost and Quality of Medical Care in the Texas Workers' Compensation System: A Report to the 77th Legislature, 2001; Research and Oversight Council on Workers' Compensation, Returning to Work: An Examination of Existing Disability Duration Guidelines and Their Application to the Texas Workers' Compensation System: A Report to the 77th Legislature, 2001; Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Medical Cost and Quality of Care Trends in the Texas Workers' Compensation System, 2004; and Workers' Compensation Research Institute, CompScope Benchmarks for Texas, 6th Edition, 2006.

Medical Costs Have Begun to Stabilize

Figures 3.1 and 3.2 illustrate the medical cost trends that the system was experiencing prior to and just after the implementation of HB 2600 in 2001. Overall, total medical payments in the system have continued to decline since 2003 due to a variety of factors, including fewer claims being filed and reductions in medical reimbursement amounts as well as the amount of care being rendered for new claims.⁶





As injury rates continue to decline in Texas, there have been some changes in the types of injuries and the proportion of lost-time claims that receive medical treatment in the workers' compensation system. Looking at Figure 3.2, it appears that after controlling for differences in injuries and types of claims over time, the average medical cost per claim (at various claim maturities, including 6 months, one-year, 18 months, and 24 months post-injury) has begun to stabilize since the passage of HB 2600, compared to the double-digit increases in medical costs that the system was experiencing in the late 1990's.

When medical costs are examined separately for professional services (i.e., those services performed by individual health care providers) and hospital services (i.e., those services provided by facilities, including inpatient and outpatient hospital services and ambulatory surgical centers), it appears that costs for more mature claims (i.e., 18 and 24 months post-injury) showed the biggest impact from the adoption of the 2003 Medicare-based professional services fee guideline (see Figures 3.3 and 3.4 and Tables 3.2 and 3.3).

While costs have remained relatively stable for professional medical services over the past few years, even with steady increases in medical inflation, hospital costs have begun to rise. This is likely due to the fact that prior to March 1, 2008, the system did not have an outpatient hospi-

Note: Injury year 2004 was excluded from this analysis due to missing data.

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

⁶ On August 1, 2003, the system's first Medicare-based professional service fee guideline took effect. While this fee guideline increased reimbursement for some categories of services, including primary care, reimbursements for specialty surgery services were significantly reduced. On the whole, the reimbursement rates for professional medical services in the Texas workers' compensation system went from approximately 140 percent of Medicare to approximately 125 percent of Medicare.





Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

| Table 3.1: | Average Medical | Cost Per Claim | (Professional | and Hospital), | Adjusted, |
|-------------------|------------------------|----------------|---------------|----------------|-----------|
| Injury Yea | rs 1998-2007 | | | | |

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|-------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$1,702 | \$2,231 | \$2,534 | \$2,718 |
| 1999 | \$1,824 | \$2,396 | \$2,752 | \$2,965 |
| 2000 | \$1,933 | \$2,544 | \$2,955 | \$3,217 |
| 2001 | \$2,033 | \$2,706 | \$3,142 | \$3,397 |
| 2002 | \$2,109 | \$2,772 | \$3,173 | \$3,383 |
| 2003 | \$2,175 | \$2,779 | \$3,085 | \$3,222 |
| 2005 | \$2,171 | \$2,757 | \$3,120 | \$3,325 |
| 2006 | \$2,215 | \$2,813 | | |
| 2007 | \$2,192 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

| Table 3.2: | Average Professional Medical Cost Per Claim | , Adjusted, In | jury Years |
|------------|--|----------------|------------|
| 1998-2007 | | | |

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|-------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$1,190 | \$1,590 | \$1,818 | \$1,949 |
| 1999 | \$1,277 | \$1,711 | \$1,983 | \$2,136 |
| 2000 | \$1,339 | \$1,802 | \$2,105 | \$2,288 |
| 2001 | \$1,446 | \$1,956 | \$2,283 | \$2,467 |
| 2002 | \$1,491 | \$1,989 | \$2,292 | \$2,449 |
| 2003 | \$1,498 | \$1,958 | \$2,203 | \$2,318 |
| 2005 | \$1,561 | \$2,024 | \$2,308 | \$2,460 |
| 2006 | \$1,495 | \$1,955 | | |
| 2007 | \$1,461 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.4: Average Hospital Cost Per Claim, Adjusted, Injury Years 1998-2007

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|-------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$1,563 | \$1,903 | \$2,106 | \$2,250 |
| 1999 | \$1,673 | \$2,039 | \$2,268 | \$2,432 |
| 2000 | \$1,854 | \$2,249 | \$2,545 | \$2,769 |
| 2001 | \$1,842 | \$2,290 | \$2,596 | \$2,794 |
| 2002 | \$1,893 | \$2,336 | \$2,599 | \$2,749 |
| 2003 | \$2,016 | \$2,402 | \$2,574 | \$2,634 |
| 2005 | \$2,038 | \$2,419 | \$2,671 | \$2,829 |
| 2006 | \$2,273 | \$2,668 | | |
| 2007 | \$2,290 | | | |

Table 3.3: Average Hospital Cost Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

tal services fee guideline and the inpatient hospital fee guideline in place was significantly outdated (adopted in 1997), causing an increasing number of inpatient hospital services to be paid at "fair and reasonable" levels, which resulted in a significant number of medical fee disputes between insurance carriers and hospitals in recent years. Section 6 of this report examines medical dispute trends pre- and post- HB 7.

It is important to note that the medical cost and utilization of care analyses presented in this report have been statistically adjusted to account for differences in injury types or claim types (i.e., medical only and lost-time claims) that may have occurred in these claim populations over time. As a result, changes in costs and utilization over time cannot be attributed to changes in the types of injuries sustained by injured workers in Texas or the relative severity of those injuries.

Figures 3.5 through 3.15 examine the average costs per claim for specific categories of professional services (see Appendix B for more detail regarding the specific numbers for each of the following figures). Medical costs are affected not only by the fees for individual units of service, but also by the amount of medical care provided to injured workers (also known as the utilization of medical care). The adoption of the 2003 professional services fee guideline not only changed the reimbursement amounts for individual categories of services, but also adopted by reference, Medicare's billing rules and payment policies, which affected how insurance carriers reviewed the medical necessity of certain types of treatments. As a result, the cost impact of the 2003 fee guideline varied considerably for individual categories of services.

For certain categories of professional services, such as evaluation and management services (e.g., doctor's visits), nerve conduction studies, other surgical services, pathology and laboratory services and other professional services, increased costs appear to be the result of two factors: 1) an increase in fees for these services (the case for evaluation and management services) as a result of the 2003 fee guideline adoption; or 2) an increase in the amount of services provided to injured workers (the case for nerve conduction studies) or both (the case for other surgical services, pathology and laboratory services and other professional services). For other types of services, such as physical medicine services (e.g., physical therapy and chiropractic treatment), CT and MRI scans, other diagnostic testing services, and spinal surgery services, lower costs per claim were the result of lower fees for these services under the fee guideline (the case for MRIs and spinal surgery services). Additionally, lower costs per claim for certain physical medicine services and diagnostic tests were also the result of a combination of fee decreases as well as a decrease in the amount of services provided to injured workers. See Appendix B for more detailed information about the cost for individual categories of professional services.



Figure 3.5: Average Cost Per Claim for Evaluation and Management Services, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.6: Average Cost Per Claim for Physical Medicine Modalities, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.7: Average Cost Per Claim for Other Physical Medicine Services, Adjusted, Injury Years 1998-2007

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.8: Average Cost Per Claim for CT Scans, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.10: Average Cost Per Claim for Nerve Conduction Studies, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.11: Average Cost Per Claim for Other Diagnostic Testing, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.12: Average Cost Per Claim for Spinal Surgery Services, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.13: Average Cost Per Claim for Other Surgery Services, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008. Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.



Figure 3.14: Average Cost Per Claim for Pathology and Laboratory Services, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.15: Average Cost Per Claim for Other Professional Services, Adjusted, Injury Years 1998-2007



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

Factors Affecting Medical Costs in the Texas Workers' Compensation System

Medical costs constitute a significant portion (more than 60 percent) of total benefit costs in the Texas workers' compensation system. These costs can fluctuate up or down depending on a variety of factors, including claim frequency, medical fees, use of managed care arrangements and the amount or utilization of care provided to injured workers. The remaining part of this section of the report examines the various factors influencing medical costs in the Texas workers' compensation system.

Injury Rates and Claim Frequency Continue to Decrease

When examining medical costs in the Texas workers' compensation system, it is important to understand that these cost trends are significantly affected by fluctuations in injury rates and claim frequency. More claims being filed in the system will generally raise system costs since insurance carriers are responsible for paying losses (both medical and income benefits) for those claims.

Over the past few years, the Texas workers' compensation system has experienced marked reductions in both the non-fatal occupational injury and illness rate and the overall number of reportable claims filed with the Division. Between 2000 and 2007, the nonfatal occupational injury illness rate in Texas decreased 28 percent from 4.7 to 3.4 injuries per 100 full-time employees. Compared with the rest of the nation, the injury rate in Texas has been consistent-ly below the national average (see Figure 3.16).



Figure 3.16: Texas and U.S. Nonfatal Occupational Injury and Illness Rates Per 100 Full-time Employees (2000-2007)

Source: Texas Department of Insurance, Division of Workers' Compensation and U.S. Department of Labor, Bureau of Labor Statistics, Annual Survey of Occupational Injuries and Illnesses, 2008.

Similar to the non-fatal occupational injury and illness rates seen in Figure 3.16, the number of workers' compensation claims actually reported to the Division has declined steadily since 2000 (see Figure 3.17). The reasons for these declines, both nationally and in Texas, stem from a variety of factors, including increased safety awareness among employers and employees, enhanced health and safety outreach and monitoring efforts at the federal and state level, improvements in technology, globalization, increased use of independent contractors, and the possibility of under-reporting of workplace injuries and illnesses.

Figure 3.17: Number of Workers' Compensation Claims Reported to the Division of Workers' Compensation, Injury Years 1998-2007



Note: These numbers include the claims that are required to be reported to the Division, including fatalities, occupational diseases, and injuries with at least one day of lost time. Medical-only claims are not required to be reported to the Division.

Source: Texas Department of Insurance, Division of Workers' Compensation, 2008.

Utilization of Care

Previous studies indicated that higher medical costs in Texas were primarily the result of an overutilization of certain types of medical services provided to injured workers in Texas compared with other states. Specifically, Texas injured workers received more physical medicine services, surgical services and diagnostic testing than similarly injured workers in other states. Since the adoption of the 2003 professional services fee guideline (which adopted by reference the Medicare billing rules and payment policies), there have been significant changes in the amount of certain types of medical services provided to injured workers in Texas.

The amount of medical care provided to injured workers can be measured by examining both the percentage of injured workers receiving certain types of medical services, as well as the amount of those services actually received by workers. It is too early to evaluate the impact of the newly adopted treatment guidelines for non-network claims required under HB 7 – the Official Disability Guidelines authored by the Work Loss Data Institute, which were adopted by the Division in May 2007 particularly for surgical services that are often provided to injured workers after other treatments have been exhausted. However, preliminary data for injury year 2007 indicate that the adoption of these treatment guidelines may have resulted in additional utilization decreases for evaluation and management and physical medicine services. Additional data will be necessary to fully evaluate the impact of this treatment guideline and the Department plans to complete a more detailed analysis on this issue in 2009.

Table 3.4 shows that overall, there has been little change over time in terms of the percentage of injured workers receiving professional or hospital services for their work-related injuries.

| Injury Year | Professional Services | Hospital Services | |
|-------------|------------------------------|--------------------------|--|
| 1998 | 96% | 37% | |
| 1999 | 95% | 38% | |
| 2000 | 95% | 36% | |
| 2001 | 95% | 37% | |
| 2002 | 96% | 38% | |
| 2003 | 97% | 37% | |
| 2005 | 98% | 33% | |
| 2006 | 97% | 36% | |

Table 3.4: Percentage of Injured Workers Receiving Professional and HospitalServices, Adjusted, One Year Post-Injury, Injury Years 1998-2006

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

Looking at the various categories of professional services in more detail, it appears that the percentage of injured workers receiving services such as CT scans, nerve conduction studies, and spinal surgery services has not significantly changed over time. However, a significantly lower percentage of workers injured in 2006 received physical medicine modalities (i.e., physical agents that are applied to the body to produce therapeutic changes) (20 percent), compared to workers injured in 1998 (27 percent). This reduction is likely due to the adoption of the Medicare payment policies in 2003 since the Medicare system generally limits the amount and type of these services that are reimbursable. However, the percentage of injured workers receiving evaluation and management services, other physical medicine services, MRIs, other diagnostic services, pathology and laboratory services, other surgical services and other professional services has increased since 1998 (see Tables 3.5 and 3.6).

| Injury Year | Evaluation and Management Services | Physical Medicine Modalities | Other Physical Medicine Services | CT Scans | MRI Scans |
|-------------|--|------------------------------------|---|----------|-----------|
| 1998 | 89% | 27% | 28% | 2% | 11% |
| 1999 | 89% | 28% | 29% | 2% | 11% |
| 2000 | 90% | 28% | 30% | 2% | 12% |
| 2001 | 91% | 29% | 31% | 2% | 14% |
| 2002 | 93% | 30% | 32% | 2% | 15% |
| 2003 | 92% | 29% | 33% | 2% | 15% |
| 2005 | 95% | 23% | 33% | 3% | 17% |
| 2006 | 95% | 20% | 33% | 3% | 17% |

Table 3.5: Percentage of Injured Workers Receiving Certain ProfessionalServices, Adjusted, One Year Post-Injury, Injury Years 1998-2006

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

Table 3.6: Percentage of Injured Workers Receiving Certain ProfessionalServices, Adjusted, One Year Post-Injury, Injury Years 1998-2006

| Injury Year | Nerve Conduction Studies | Other Diagnostic Tests | Spinal Surgery | Other Surgery | Pathology and Laboratory Services | Other Professional Services |
|-------------|--------------------------------|------------------------------|-------------------|------------------|---|-----------------------------------|
| 1998 | 5% | 53% | 1% | 26% | 11% | 75% |
| 1999 | 5% | 52% | 1% | 25% | 11% | 74% |
| 2000 | 6% | 52% | 1% | 25% | 11% | 73% |
| 2001 | 6% | 53% | 1% | 26% | 11% | 75% |
| 2002 | 7% | 55% | 1% | 27% | 11% | 77% |
| 2003 | 6% | 56% | 1% | 28% | 12% | 79% |
| 2005 | 6% | 57% | 1% | 29% | 13% | 80% |
| 2006 | 5% | 58% | 1% | 29% | 14% | 81% |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

In terms of the actual amount of services provided to injured workers in Texas, there have been significant reductions in the utilization of physical medicine services, CT scans and other types of diagnostic testing services since the adoption of the 2003 professional services fee guidelines. However, since 2003, the amount of nerve conduction studies, surgical services (including spinal surgery and other types of surgery) and other professional services (i.e., all other professional services that do not fall into the specific categories of professional services listed in this report) provided per injured worker who received these services has continued to increase.

See Figures 3.18 through 3.28 and Appendix B for more detailed information about the utilization of care per claim for injury years 1998-2007. Appendix B also contains detailed utilization information for specific physical medicine services.



Figure 3.18: Average Number of Evaluation and Management Services Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.19: Average Number of Physical Medicine Modalities Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008. Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.20: Average Number of Other Physical Medicine Services Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.21: Average Number of CT Scans Billed Per Claim, Adjusted, Injury Years 1998-2007



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008. Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.22: Average Number of MRIs Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.23: Average Number of Nerve Conduction Study Services Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.





Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.25: Average Number of Spinal Surgery Services Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.26: Average Number of Other Surgery Services Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Figure 3.27: Average Number of Pathology and Laboratory Services Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.



Figure 3.28: Average Number of Other Professional Services Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008. Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences.

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Preliminary Data Indicate That the Impact of Workers' Compensation Networks on Medical Costs and Utilization of Care is Mixed

Given that many certified networks are still in the early stages of implementation, it is still too early to fully evaluate the impact of networks on claims costs and quality of care issues. However, initial information from the annual workers' compensation network report card produced by the Department in September, 2008 provides some insight into the early implementation of networks.7 Only three certified networks (Texas Star, Liberty HCN and Corvel CorCare) had sufficient claim volume to be compared with each other and with non-network claims. The remaining 15 certified networks that had reported treating injured employees according to the Department's February 2008 certified network data call were combined into an "other networks" category for comparison purposes. All of the cost and utilization findings presented in this report have been statistically adjusted to account for differences in injury types or claim types (i.e., medical only and lost-time claims) that may have occurred in these claim populations over time. As a result, changes in costs and utilization over time cannot be attributed to changes in the types of injuries sustained by injured workers or the relative severity of those injuries. Cost and utilization differences between network and non-network outcomes as well as between the networks can be the result of a wide range of factors such as differing methods of medical care delivery and fees and utilization review.

In general, differences have begun to emerge among individual networks. As Figure 3.29 shows, at six-months post-injury, Texas Star's average medical cost per claim was lower than other networks and non-network claims; however, with the exception of Texas Star, the average medical cost per claim for the other certified networks was higher than non-network claims.

When medical costs are further broken down into professional, hospital and pharmacy services, it becomes clear that with the exception of Texas Star, the average medical cost per claim for professional and pharmacy services was higher for network claims than non-network claims at six months post-injury (see Figures 3.30 and 3.32). In addition to higher professional and pharmacy costs per claim, networks also had higher hospital costs per claim, with the exception of Liberty Mutual's network (see Figure 3.31). It is important to note that higher hospital costs for network claims appear to be primarily driven by higher fees paid in network for hospital services, rather than higher utilization of hospital services. In order to be certified by the Department, a network must offer hospital as well as professional services. HB 7 excluded the delivery of pharmacy services from networks (meaning that networks are not allowed to direct injured workers to an "in-network" pharmacy, but rather injured workers are able to get their prescriptions filled at any pharmacy participating in the Texas workers' compensation system). During the initial formation of many of the networks certified by the Department, networks and hospitals engaged in fierce fee negotiations, which resulted in many hospital fee contracts being reimbursed at levels that are higher than what hospitals are paid for similar services under the Division's hospital fee guidelines.

⁷For more information about how individual networks compare with each other and with non-network claims on a variety of cost, utilization, access to care, satisfaction with care, return-to-work, and health outcomes measurements, see Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008 Workers' Compensation Network Report Card Results, 2008 (http://www.tdi.state.tx.us/reports/report9.html).





Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Figure 3.30: Average Medical Cost Per Claim for Professional Medical Services, Network and Non-Network Claims, Adjusted, Six Months Post-Injury



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

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Figure 3.31: Average Medical Cost Per Claim for Hospital Services, Network and Non-Network Claims, Adjusted, Six Months Post-Injury

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.





Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

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Medical cost differences between network and non-network claims at this early stage in network implementation appear to be driven primarily by higher hospital fees, higher pharmacy utilization (both in the percentage of injured workers receiving pharmacy services and the number of prescriptions per worker) and higher utilization of certain physical medicine services and diagnostic tests than non-network claims with similar types of injuries. Table 3.7 shows the percentage of injured workers receiving professional, hospital and pharmacy services in the three certified networks as well as non-network as highlighted in the 2008 Workers' Compensation Network Report Card. Generally, a higher percentage of injured workers receiving medical treatment in networks received professional and pharmacy services compared with non-network claims, while a lower percentage of network claims are receiving hospital services (e.g., inpatient or outpatient hospital settings and ambulatory surgical centers).

Table 3.7: Percentage of Injured Workers Receiving Professional, Hospital andPharmacy Services, 6 Months Post Injury

| Type of Service | Non-network | Texas Star | Corvel Corcare | Liberty HCN | Other Networks |
|-----------------------|-------------|------------|----------------|-------------|----------------|
| Professional Services | 95% | 98%* | 99%* | 99%* | 99%* |
| Hospital Services | 35% | 31%* | 21%* | 29%* | 29%* |
| Pharmacy Services | 42% | 53%* | 55%* | 62%* | 44% |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups. Asterisks (*) indicates that the differences between the network and non-network are statistically significant.

When the percentage of injured workers receiving professional medical services is examined more closely, it appears that with the exception of Texas Star, a higher percentage of network workers receive evaluation and management services, physical medicine services, MRIs, other diagnostic tests, nerve conduction studies, other surgical services and other professional services than non-network claims (see Table 3.8).

Networks generally provided more pharmacy services (in terms of writing more prescriptions to a higher percentage of similarly injured workers) than non-network claims (see Table 3.9). This is likely due to the statutory provision in HB 7, which allows certified networks to designate the specialties of doctors who serve as treating doctors (i.e., primary care providers). As of this report, certified networks have only designated medical doctors (MDs) or Osteopaths (DOs) as network treating doctors. Chiropractors do not generally serve as network treating doctors, but rather referral providers. This differs from non-network medical care since the Workers' Compensation Act and Rules allow non-network workers to select chiropractors as well as MDs, DOs, podiatrists, dentists, and optometrists as treating doctors. As a result, the doctors who serve as treating doctors in networks are providers who have the authorization to write prescriptions and utilize pharmacy services as part of their treatment protocols.

In addition to a higher percentage of network workers receiving certain types of professional medical services, networks generally provided higher amounts of evaluation and management, physical medicine, other surgical services and other professional services per claim than non-network claims (see Table 3.10). With the exception of spinal surgical services, networks pro-

vide comparable amounts of other types of professional services, such as CT scans, MRIs, nerve conduction studies, other diagnostic testing, and pathology and laboratory services with non-network claims.

| Type of Service | Non- network | Texas Star | Corvel Corcare | Liberty HCN | Other Networks |
|------------------------------|-----------------|------------|-------------------|----------------|-------------------|
| Evaluation & Management | 95% | 96%* | 99%* | 99%* | 98%* |
| Physical Medicine Modalities | 17% | 14%* | 24%* | 30%* | 23%* |
| Other Physical Medicine | 28% | 30%* | 39%* | 48%* | 42%* |
| CT Scans | 2% | 3% | 2% | 2% | 3% |
| MRI Scans | 15% | 13%* | 21%* | 25%* | 21%* |
| Nerve Conduction Studies | 3% | 2%* | 4% | 7%* | 7%* |
| Other Diagnostic Testing | 58% | 58% | 67% | 67% | 64% |
| Spinal Surgery | <1% | <1% | <1% | 1%* | <1% |
| Other Surgery | 27% | 29%* | 28% | 39%* | 33%* |
| Pathology and Lab Services | 13% | 17%* | 9%* | 19%* | 16%* |
| Other Services | 81% | 84%* | 96%* | 88%* | 90%* |

Table 3.8: Percentage of Injured Workers Receiving Professional Medical Services, by Type of Professional Service, 6 Months Post Injury

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups. Asterisks (*) indicates that the differences between the network and non-network are statistically significant.

Table 3.9: Percentage of Injured Workers Receiving Pharmacy Services, byPharmaceutical Classification Group, 6 Months Post Injury

| Drug Group | Non- network | TexasStar | Corvel Corcare | Liberty HCN | Other Networks |
|--------------------------------|-----------------|-----------|-------------------|----------------|-------------------|
| Analgesics- Opioid | 54% | 54% | 57% | 58% | 57% |
| Analgesics- Anti-Inflammatory | 59% | 61%* | 70%* | 72%* | 63%* |
| Musculoskeletal Therapy agents | 32% | 31% | 37%* | 38%* | 30% |
| Mood Stabilizers | 8% | 7%* | 8% | 9% | 9% |
| Other Therapeutic Groups | 42% | 43%* | 40% | 42% | 39% |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups. Asterisks (*) indicates that the differences between the network and non-network are statistically significant.

| Type of Service | Non- network | Texas Star | Corvel Corcare | Liberty HCN | Other Networks |
|------------------------------|-----------------|------------|-------------------|----------------|-------------------|
| Evaluation & Management | 4.3 | 4.1* | 5.6* | 5.8* | 6.4* |
| Physical Medicine Modalities | 12.8 | 9.0* | 10.3* | 12.3 | 13.0 |
| Other Physical Medicine | 34.2 | 27.2* | 34.2 | 41.0* | 41.2* |
| CT Scans | 1.6 | 1.7* | 1.4 | 1.3 | 1.8 |
| MRI Scans | 1.5 | 1.5 | 1.4* | 1.4 | 1.6* |
| Nerve Conduction Studies | 14.8 | 14.9 | 13.4 | 14.3 | 14.9 |
| Other Diagnostic Testing | 2.5 | 2.5 | 2.3* | 2.7* | 2.7* |
| Spinal Surgery | 4.8 | 4.0 | 2.5 | 5.3 | 2.6* |
| Other Surgery | 2.9 | 3.0* | 3.1* | 3.0 | 3.3* |
| Pathology and Lab Services | 4.8 | 4.5* | 10.8* | 4.4* | 4.9 |
| Other Services | 12.0 | 12.1 | 14.9* | 17.3* | 17.6* |

Table 3.10: Average Number of Professional Services Billed Per Claimby Type of Professional Service, 6 Months Post Injury

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups. Asterisks (*) indicates that the differences between the network and non-network are statistically significant.

Impact of the Adoption of the 2003 Professional Services Fee Guideline on Reimbursement Amounts for Specific Types of Services

As previously discussed, the adoption of the 2003 professional services fee guideline aligned the reimbursement structure for medical services provided in the Texas workers' compensation system with the Medicare system. From August 1, 2003 to March 1, 2008, professional medical services were paid at 125 percent of Medicare's reimbursement rates.

While the same reimbursement rate was used across the board for all professional medical services (i.e., 125 percent of Medicare) under the 2003 fee guideline, the difference between the reimbursement rates under the 1996 Medical Fee Guideline and the 2003 Medical Fee Guideline, both of which were adopted by the former Texas Workers' Compensation Commission, varied considerably depending on the category of professional service. Figures 3.33 through 3.38 provide examples of how the average payment for specific types of professional services has changed over time.

Generally, the reimbursement amounts for evaluation and management services (see Figure 3.33 for an example of one of these services) increased under the 2003 Medical Fee Guideline; however, the reimbursement amounts for certain spinal surgeries varied under the 2003 Medical Fee Guideline. For example, the reimbursement levels for laminectomies decreased (see Figure 3.38), while the reimbursement levels for other specific types of spinal fusion procedures actually increased (see Figure 3.39). One note is that the reimbursement levels for unlisted physical medicine procedures (Figure 3.35) have increased significantly over the past few years. An increasing number of physical medicine services are billed under unlisted codes in the Texas workers' compensation system, meaning that these services cannot be specifically

identified without looking at the actual medical documentation. Unlisted medical services do not have specific fee amounts assigned to them under the Division's fee guidelines since the complexity of these services may vary considerably. These services, by rule, are required to be paid at "fair and reasonable" rates by insurance carriers after reviewing the "usual and custom-ary" charges for these services submitted by health care providers. Interestingly, the utilization of these services dropped for workers injured in 2007, which corresponds to the adoption of the Division's new treatment guidelines (see Appendix B). Further analysis is needed to determine whether the implementation of the Division's treatment guidelines under HB 7 will further reduce the amount of these unlisted services provided to injured workers in Texas.



Figure 3.33: Average Cost Per Unit of Service – Established Outpatient Doctor Visit, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.





Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.



Figure 3.35: Average Cost Per Unit of Service – Unlisted Physical Medicine Service, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

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Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.



Figure 3.37: Average Cost Per Unit of Service – MRI Joint of Lower Extremity Without Dye, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

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Figure 3.38: Average Cost Per Unit of Service – Low Back Disc Surgery, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.



Figure 3.39: Average Cost Per Unit of Service – Lumbar Spinal Fusion, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

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Claim and Medical Denials Have Increased Since 2001

One possible reason why medical costs have begun to stabilize in Texas can be found by examining insurance carrier denials of both workers' compensation claims and medical services over time. Since 2001, both the percentage of reportable claims and the percentage of professional medical services initially denied/disputed have increased (see Figures 3.40 and 3.41). In particular, denials of professional medical services increased significantly after the adoption of a new Medicare-based medical fee guideline in August 2003, which included the adoption, by reference, of the Medicare billing rules and payment policies into the Texas workers' compensation system.⁸



Figure 3.40: Percentage of Reportable Claims That Are Initially Denied/Disputed for the Top 25 Workers' Compensation Insurance Carriers, Injury Years 1998-2006°

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008. Note 1: The 2006 figures should be interpreted with caution since the data are incomplete. Note 2: HB 2600, a reform bill aimed at reducing medical costs was passed in 2001.

⁸ It should be noted that these professional medical denials represent denials for medical treatments and services that have already been rendered. Preauthorization denials are not included in these numbers.

⁹ The top 25 insurance carriers represented over 90 percent of the workers' compensation premiums in 2006 and accounted for 60-70 percent of the total amount of medical payments made during 1998-2004. For the purpose of this analysis, the same 25 insurance carriers were used in each year to calculate both the claim and medical billing denial rates.



Figure 3.41: Percentage of Professional Medical Services Denied for the Top 25 Workers' Compensation Insurance Carriers, Service Years 1998-2006

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note 1: Denial rates for 2007 should be interpreted with caution since these numbers are tentative. Denial rates for 2005 were excluded from this analysis due to missing data.

Note 2: House Bill (HB) 2600, a workers' compensation reform bill aimed at reducing medical costs, was passed in 2001.

Summary

In general, medical costs have begun to stabilize and utilization of care has decreased since 2001, especially since the passage of the 2003 professional services fee guidelines. Reductions in injury rates and the total number of reportable claims filed with the Division accounts for much of the reduction in total medical payments over this same time period. However, increased scrutiny by insurance carriers in terms of compensability and medical necessity issues as well as changes in reimbursement amounts and the adoption of the Medicare payment policies in 2003 have also helped to reduce overutilization and medical cost inflation in Texas.

During the 2005 legislative session as well as during the adoption of network rules and certification processes at TDI, there was a lot of concern from various system participants about whether the implementation of new "managed care" health care delivery model in the Texas workers' compensation system would result in workers receiving significantly less medical care and/or poor quality medical care. After reviewing preliminary data from the initial stages of network implementation, it appears that injured workers are receiving as much medical care, and in some cases more medical care, than non-network claims with similar types of injuries. While it is too early to fully evaluate the impact of networks on medical costs and utilization of care in Texas, it is clear that with the exception of hospital services, networks' attempts to lower medical costs through the negotiation of lower fees with health care providers have not produced lower medical costs, but rather increases in the amount of certain types of medical care being billed by network providers. Increased hospital costs for networks appear to be driven by higher fees for these services compared to the Division's fee guidelines. The Department will continue to monitor the implementation of networks as well as the implementation of new medical fee guidelines (effective March 1, 2008) and the impact of the Division's treatment guidelines (effective May 1, 2007) on medical costs and utilization of care outcomes for Texas injured workers. The Department will also monitor what impact, if any, differences in the utilization of medical care between network and non-network claims affects income benefit costs and return-to-work rates. Preliminary data suggest that the Division's new treatment guidelines may result in further reductions in the amount of evaluation and management and physical medicine services billed per claim; however, further analysis is needed to determine what impact, if any, these treatment guidelines will have on surgical services and more mature claims (i.e., claims that are more than a year old). The Department plans to review the impact of treatment guidelines in 2009.

4. Access to Care, Satisfaction with Care and Health-Related Outcomes

Ensuring high quality medical care for injured workers at reasonable costs for Texas employers continues to be a challenge for the Texas workers' compensation system. As the number of claims decrease and costs begin to stabilize in the system, additional pressure is placed on ensuring that every dollar spent on claims is "value-added," meaning that the benefits being provided to injured workers enhance their ability to return to work as quickly and safely as possible. Section 3 highlighted how medical costs and medical utilization has changed over time. This section examines quality of care issues and whether the system has seen improvements in these issues over the past few years. While many elements of HB 7, including health care networks, are too new to be fully evaluated, this section also provides some early indications of the impact of health care networks on access to care, satisfaction with care and health-related outcomes.

Survey Design and Data Collection

The Department conducted two injured worker surveys to compare injured worker experiences with their medical care (access to care, satisfaction with care, health-related outcomes), as well as to collect information regarding their experiences returning to work after their work-related injuries pre- and post-HB 7 implementation. The first survey was conducted in the fall of 2005 and the second survey was conducted in the summer of 2008. For both surveys, the Department drew a random probability sample of workers who received at least one Temporary Income Benefit (TIBs) payment (i.e., those workers with more than 7 days of lost time). The sample was further stratified by injury type and workers were surveyed at approximately 18-22 months post-injury.¹⁰ The survey instrument used for both of these surveys utilized standardized questions from the Consumer Assessment of Health Plans Study, Version 3.0, the Short Form 12, Version 2, the URAC Survey of Worker Experiences and previous surveys conducted by the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group.

More Injured Workers Are Selecting Treating Doctors Recommended by Their Employer or as Part of a Health Care Network

Prior to the passage of HB 7 in 2005, injured workers had the ability to select a treating doctor from the list of doctors who registered and received approval from the Division to participate on the Division's Approved Doctor List (ADL). The ADL contained approximately 14,000 medical doctors (MDs), osteopaths (DOs), chiropractors (DCs), and other doctors (i.e., dentists, podiatrists, etc.) who agreed to participate at some level in the Texas workers' compensation system. In an effort to improve access to care for non-network claims and to reduce administrative burdens for doctors treating injured workers, HB 7 eliminated the ADL.¹¹ At the same time, HB 7 paved the way for certified health care networks to treat injured workers.

¹⁰ A total of 2,039 workers were surveyed in 2005 by the Texas A&M University, Public Policy Research Institute and 600 workers were surveyed in 2008 by the University of North Texas, Survey Research Center.

¹¹ Even though the Approved Doctors List (ADL) expired on August 31, 2007, TDI continues to regulate health care providers treating injured workers in the system. Doctors must continue to disclose financial interest in other providers, practitioners and facilities, etc. to TDI, as well as obtain training and testing for the assignment of impairment ratings and maintain a medical license in good standing in the jurisdiction where care is being provided.

Injured workers, whose employers had agreed to participate in these networks and who lived in the networks' service area and received notice of the networks' requirements, were required to select a treating doctor from the networks' list of contracted doctors.

Interestingly, while injured workers were allowed to select their own treating doctors prior to the passage of HB 7, a significant percentage of workers reported (in this and in previous studies in Texas) that they selected a doctor recommended to them by their employer or insurance carrier. As Figure 4.1 shows, a higher percentage of injured workers surveyed in 2008 (53 percent) reported that they selected a treating doctor that was recommended to them by their employer or part of their network's list of treating doctors, compared to workers surveyed in 2005 (36 percent). This finding is not surprising given the rising usage of workers' compensation health care networks in Texas during this time.

The Workers' Compensation Act and Rules allows a variety of medical specialties, including MDs, DOs, DCs, dentists, podiatrists and optometrists to serve as treating doctors for non-network claims. However, HB 7 allowed certified health care networks to select or designate certain medical specialties

Figure 4.1: Methods Injured Workers Reported Using to Select Their Treating Doctor



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

Note: "Selected in other manner" includes recommendations from family or friends or other coworkers, among others.



Figure 4.2: Type of First Non-Emergency Treating Doctor Selected by Injured Workers

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

of doctors to serve as treating doctors for network claims. In 2008, a significantly higher percentage of injured workers surveyed reported that they selected an MD as their first treating doctor (75 percent), compared with 2005 (57 percent). Interestingly, even with the increased usage of networks, only a slightly smaller percentage reported selecting a DC as their treating doctor in 2008 compared with 2005, but a significantly smaller percentage of workers surveyed

in 2008 reported selecting a DO or other type of doctor as their treating doctor (see Figure 4.2)¹²

A higher percentage of workers surveyed in 2008 (85 percent) indicated that the doctor they saw for their workers' compensation medical care was not the doctor they normally saw for their routine medical care compared with 2005 (80 percent). This change may be the result of more workers seeking medical care through workers' compensation health care networks, which to date, are not generally associated with group health plans that provide routine medical care (see Figure 4.3).

Figure 4.3: Was the doctor who saw you for your work-related injury or illness the doctor that you normally see for your routine medical care?



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

Some Improvements Can Be Seen in Access to Care over Time, but Generally Workers Have Poorer Perceptions about Access to Care in Networks

Going into the 2005 legislative session, concerns were rising about injured workers' access to care within the Texas workers' compensation system. Doctors, particularly surgical specialists such as neurosurgeons and orthopedic surgeons, were refusing to take new workers' compensation patients because of administrative burdens related to treating workers' compensation cases and inadequate reimbursement levels resulting from the Texas Workers' Compensation Commission's adoption of the 2003 Medicare-based professional services fee guideline.¹³ In an attempt to increase health care provider participation in the Texas workers' compensation system, the Division adopted a new professional services fee guideline (effective March 1, 2008), which raised reimbursement levels for doctors and added an annual inflation adjustment based on the annual Medicare Economic Index, the weighted average of price changes for goods and services used to deliver physician services. Additionally, changes made by HB 7, including the adoption of evidence-based treatment guidelines (effective May 1, 2007) and the elimination of ADL registration requirements (effective September 1, 2007) were made to increase certainty regarding the medical necessity of treatments that would be reimbursed in the system and to reduce administrative burdens.

Based on the results of recent injured worker surveys, a higher percentage (60 percent) of workers surveyed in 2008 reported "no problem" in getting the medical care they felt they

¹² As of November 1, 2008, none of the workers' compensation health care networks certified by TDI utilize chiropractors as treating doctors.

¹³ On August 1, 2003, the system's first Medicare-based professional service fee guideline took effect. While this fee guideline increased reimbursement for some categories of services, including primary care, reimbursements for specialty surgery services were significantly reduced. On the whole, the reimbursement rates for professional medical services in the Texas workers' compensation system went from approximately 140 percent of Medicare to approximately 125 percent of Medicare.

needed for their work-related injury compared to 52 percent of workers surveyed in 2005 (see Figure 4.4). However, as Tables 4.1 and 4.2 illustrate, injured workers who received medical care from workers' compensation networks, generally had poorer perceptions regarding their access to care, including the ability to see specialists. These poorer perceptions about access to care may be related to injured workers' concepts about the importance of being able to choose their own treating doctor; however, it is clear that the availability of doctors who are accepting workers' compensation patients is an issue that the Department will be closely monitoring in the future.

A slightly higher percentage of injured workers surveyed in 2008 (15 percent) reported that their ability to schedule a doctor's appointment was worse than their normal health care, compared to 12 percent of workers surveyed in 2005 (see Figure 4.5). This is likely the result of differences in injured workers' perceptions about difficulties scheduling doctor's appointments for network and non-network claims. As Table 4.3 shows, with the exception of the Texas Star network, a higher percentage of workers receiving medical care in networks reported

Figure 4.4: Percentage of Injured Workers Who Reported Having Problems Getting Medical Care for Their Injury



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

Table 4.1: Since you were injured, how often did you get care as soon as you wanted when you needed care right away?

| | Non- Network | Texas Star | Corvel Corcare | Liberty HCN | Other Networks |
|---------------------|-----------------|---------------|-------------------|----------------|-------------------|
| Always | 57% | 59% | 46%* | 53% | 54% |
| Usually | 18% | 13%* | 19% | 13% | 15% |
| Sometimes/ Never | 25% | 28%* | 36%* | 34%* | 31%* |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Notes: Asterisks (*) indicate that the differences between the network and non-network are statistically significant. The figures presented above are adjusted for injury type, type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey, health insurance coverage, and self-rated health differences that may exist between the groups. Percentage for each network may not add up to 100% because of rounding.

that their ability to schedule a doctor's appointment was worse than workers receiving medical care outside of networks.

Despite poorer perceptions about the ability for workers receiving medical care from networks to schedule a doctor's appointment or get specialist care, some networks are able to get an injured worker in to see a non-emergency doctor sooner than non-network claims (see Figure 4.6). Overall, workers injured in 2005 and 2006 were able to receive non-emergency treatment within eight days of their injury, compared 15 days for workers injured in 2004 and 10 days for workers injured in 2003.¹⁴

Workers Who Choose Their Own Treating Doctor Are Generally More Satisfied With Their Medical Care than Workers in Networks

Previous studies conducted by the Department show that injured workers' perceptions regarding the quality of their medical care are closely associated with their ability to choose their own treating doctor.¹⁵ Not surprisingly then, as workers' compensation health care networks are implemented in Texas and workers are increasingly required to choose their treating doctor from a more select list of doctors, satisfaction levels will be impacted. As Figure 4.7 shows, for workers who reported that they selected their own treating doctor, satisfaction levels increased from 2005 to 2008

- 14 The increase in the amount of time from date of injury to date of first non-emergency medical treatment from injury year 2003 (10 days) to injury year 2004 (15 days) was likely a reaction by doctors to the adoption of the 2003 professional service fee guideline, which reduced reimbursement levels for doctors from approximately 140 percent of Medicare to 125 percent of Medicare.
- 15 See Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Medical Costs and Quality of Care Trends in the Texas Workers' Compensation System, 2004 and 2005 Injured Worker Survey Results, 2006, which can be viewed at: http://www.tdi.state.tx.us/reports/ report9.html.

4.6). Overall, workers injured in Table 4.2: Overall for your work-related injury or 2005 and 2006 were able to receive illness, how much of a problem, if any, was it to non-emergency treatment within get a specialist you needed to see? Was it...

| | Non- Network | Texas Star | Corvel Corcare | Liberty HCN | Other Networks |
|--------------------|-----------------|---------------|-------------------|----------------|-------------------|
| Not a problem | 76% | 75% | 60%* | 62%* | 69%* |
| A small problem | 11% | 5%* | 16%* | 11% | 10% |
| A big problem | 13% | 20%* | 25%* | 26%* | 22%* |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Notes: Asterisks (*) indicate that the differences between the network and non-network are statistically significant. The figures presented above are adjusted for injury type, type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey, health insurance coverage, and self-rated health differences that may exist between the groups. Percentage for each network may not add up to 100% because of rounding.

Figure 4.5: Compared to the medical care you usually receive when you are injured or sick, your ability to schedule a doctor's appointment for your work-related injury or illness was:



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

(93 percent surveyed in 2008 reported that the doctor they saw most often provided them good medical care compared to 87 percent surveyed in 2005). However, satisfaction levels were generally lower in 2008 for workers who indicated that they selected a doctor recommended by their employer or network, as well as for workers who selected a doctor some other way (which includes recommendations from family, friends and coworkers). In general, though, satisfaction levels remain high for a majority of injured workers.

Additionally, a slightly higher percentage of workers surveyed in 2008 (22 percent) reported that the medical care they received for their work-related injury was worse than their routine medical care when compared to workers surveyed in 2005 (19 percent) (see Figure 4.8).

It is important to note that while injured workers who received medical care from networks were generally less satisfied with the quality of the care than non-network claims, there are differences in satisfaction levels among individual networks profiled in the 2008 Workers' Compensation Network Report Card (see Tables 4.4 and 4.5). HB 7 included mechanisms to promote quality of care monitoring, including the requirement that every network produce and annually submit to the Department a Quality Improvement Plan. The plan must include the network's goals and plans for measuring health care provider and employee satisfaction,

Table 4.3: Injured Workers' PerceptionsRegarding Their Ability to Schedule a Doctor'sAppointment for Their Work-Related InjuriesCompared to the Medical Care They NormallyReceive When Injured or Sick

| Percentage of injured workers indicating that their ability to schedule a doctor's appoint- ment was: | Non- Network | Texas Star | Corvel Corcare | Liberty HCN | Other Networks |
|---|-----------------|---------------|-------------------|----------------|-------------------|
| Better | 25% | 25% | 17%* | 22% | 20%* |
| About the same | 61% | 61% | 61% | 60% | 64% |
| Worse | 14% | 14% | 22%* | 17% | 16% |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Asterisks (*) indicates that the differences between the individual network and non-network are statistically significant. Figures presented above are adjusted for injury type, type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey, health insurance coverage, and self-rated health differences that may exist between the groups. Percentages for each network may not add up to 100% because of rounding.





Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Notes: The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

as well as the requirement that the network respond to complaints timely and maintain a complaint log that allows the network to track complaint trends and address those issues in real-time.¹⁶

Generally, workers who participated in the Texas Star and Liberty HCN networks are more satisfied with their medical care than workers who participated in Corvel CorCare or Other Networks. As a result of the most recent report card, the Department requested each workers' compensation network that had treated injured workers to address the deficiencies highlighted in the 2008 report card and submit an updated Quality Improvement Plan. The Department plans to initiate quarterly monitoring with each of these networks to ensure that they are adequately addressing complaints as well as implementing the changes put forward in response to the report card results.

Health Outcomes Remain Unchanged Since 2005

While there have been significant changes in the Texas workers' compensation system over the past few years in terms of the amount of medical care provided to injured workers as well as the introduction of new health care networks, there has been little change in injured workers' perceptions regarding their physical and mental functioning since the passage of HB 7. Physical functioning is used to measure whether an injured worker Figure 4.7: Percentage of Injured Workers Indicating Agreement That the Doctor They Saw Most Often Provided Them With Good Medical Care By Doctor Selection Method for First Non-Emergency Doctor



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

Figure 4.8: Compared to the medical care you usually receive when you are injured or sick, would you say the care you received for your work-related injury or illness was:



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

¹⁶ See Texas Administrative Code, Section 10.81.

gets better or physically recovers from the injury, while mental functioning is used to measure whether an injured worker is likely to experience issues such as depression after the injury.

To measure the physical and mental functioning of injured workers, the Department utilized a standardized set of questions, referred to as the Short Form 12 (SF-12) survey instrument, which asks workers to rate their current mental health as well as their current abilities to perform certain daily life activities. The results are calculated into two overall scores: the physical component summary and the mental component summary, which have a range of scores from 0 to 100 and a mean score of 50 in a sample of the U.S. general population. Scores greater than 50 represent above average health status and scores at 40 represent people who function at a level lower than 84 percent of the population (one standard deviation). As Figure 4.9 indicates, injured workers in Texas have not changed their physical or mental functioning status significantly since 2005. The physical functioning status of Texas injured workers remains poor (i.e., more than one standard deviation from the mean) compared with the U.S. population and is similar to those people in the U.S. population who suffer from serious health conditions such as rheumatoid arthritis, cancer and people with limitations in the use of their arms and legs. The mental functioning scores of injured workers are slightly lower, but more comparable to the mental

Table 4.4: The treating doctor for your work-related injury or illness overall provided you with very good medical care that met your needs...

| | Non- network | Texas Star | Corvel Corcare | Liberty HCN | Other Networks |
|----------------------------------|-----------------|---------------|-------------------|----------------|-------------------|
| Strongly Agree or Agree | 81% | 77%* | 69%* | 73%* | 68%* |
| Not Sure | 2% | 4%* | 4% | 4% | 4%* |
| Strongly Disagree or Disagree | 17% | 19%* | 28%* | 23%* | 28%* |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Notes: Asterisks (*) indicate that the differences between the network and non-network are statistically significant. The figures presented above are adjusted for injury type, type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey, health insurance coverage, and self-rated health differences that may exist between the groups. Percentage for each network may not add up to 100% because of rounding.

Table 4.5: Injured Workers' PerceptionsRegarding Medical Care for Their Work-RelatedInjuries Compared to the Medical Care TheyNormally Receive When Injured or Sick

| Percentage of Injured Workers Indicating That the Medical Care for Their Work-Related Injuries Was: | Non- Network | Texas Star | Corvel Corcare | Liberty HCN | Other Networks |
|---|-----------------|---------------|-------------------|----------------|-------------------|
| Better | 28% | 23%* | 14%* | 25% | 23%* |
| About the same | 55% | 58%* | 50% | 48% | 53% |
| Worse | 17% | 19% | 36%* | 27%* | 24%* |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Asterisks (*) indicate that the differences between the individual network and non-network are statistically significant. Figures presented above are adjusted for injury type, type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey, health insurance coverage, and self-rated health difference s that may exist between the groups. Percentages for each network may not add up to 100% because of rounding.

Figure 4.9: Comparison of Injured Worker Self-Reported Physical and Mental **Functioning Scores**



Average Mental Functioning,

Average Physical Functioning, 18-22 Months Post Injury

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Utilization differences between non-network and Texas Star are statistically significant. The figures presented above are adjusted for injury type, type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey medical insurance, and self-rated health differences that may exist between the groups.

functioning scores of the general U.S. population. Overall, there are no significant differences in the physical and mental functioning scores for network and non-network claims.¹⁷

While it is clear that restricting injured worker choice of doctor to a more select list of doctors selected by the insurance carrier's network has a profound impact on workers' perceptions about access and satisfaction with their medical care, it appears that workers' perceptions about these issues does vary somewhat for individual networks. As these and other networks increase their usage and get past their initial "ramp up" period, it will be important for the Department to closely monitor the availability and quality of care being provided in networks to ensure that these networks fully realize the complete vision of HB 7 - a health care delivery model that effectively controls over-utilization of medical care, while promoting quality of care and effective communication about return-to-work options.

¹⁷ For more detailed information about the physical and mental functioning scores for individual health care networks and non-network claims, see the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008 Workers' Compensation Network Report Card Results, 2008, which can be viewed at http://www.tdi.state.tx.us/reports/report9.html.

5. Return-to-Work Outcomes in the Texas Workers' Compensation System

One of the most basic objectives of the Texas workers' compensation system is to return injured employees to safe and productive employment. Effective return-to-work programs can not only help reduce the economic and psychological impact of a work-related injury on an injured employee, but it can also reduce income benefit costs and curb productivity losses for Texas employers.

Previous studies by both the Research and Oversight Council on Workers' Compensation (ROC) and the Workers' Compensation Research Institute (WCRI) indicated that compared to similarly injured employees in other states, Texas injured employees were generally off work for longer periods of time and were more likely to report that their take-home pay was less than their pre-injury pay.¹⁸ Armed with these study findings, policymakers and system participants have, in recent years, placed considerable attention on improving return-to-work outcomes.

Additionally, several components of HB 7 placed considerable focus on the importance of return to work, including a requirement for the Division to adopt return-to-work guidelines; the institution of a return-to-work pilot program geared toward small employers (i.e., less than 50 employees); greater coordination of vocational rehabilitation referrals between the Division and the Department of Assistive and Rehabilitation Services (DARS); a requirement for the Division to refer injured workers to the Texas Workforce Commission (TWC) and local workforce development centers for employment opportunities; improvements in return-to-work outreach efforts; and the ability for the Division to adopt rules to implement changes in the work-search requirements for injured employees who qualify for Supplemental Income Benefits (SIBs), as well as disability management rules that include the coordination of treatment plans and return-to-work planning.

Return-to-Work Rates Continue to Improve

Since 2001, there has been a steady increase in the percentage of injured employees receiving Temporary Income Benefits (TIBs) (i.e., injured employees with more than seven days of lost time) who have initially returned to work post-injury. Of those employees injured in 2001 receiving TIBs, 70 percent initially returned to work within six months post-injury, compared to 78 percent of employees injured in 2006 (see Table 5.1).¹⁹

While the percentage of injured employees who initially return to work is an important benchmark of system performance, whether these injured employees remain employed once they go back to work is a more accurate measure of the system's ability to promote "successful" return to work. As Table 5.2 indicates, the percentage of injured employees receiving TIBs who have initially returned to work and remained employed for at least three successive quarters (or nine months) has also improved since 2001. Roughly 72 percent of employees injured in 2006 who

¹⁸ See Research and Oversight Council on Workers' Compensation, Returning to Work: An Examination of Existing Disability Duration Guidelines and Their Application to the Texas Workers' Compensation System: A Report to the 77th Legislature, 2001; and Workers' Compensation Research Institute, CompScope Benchmarks for Texas, 6th Edition, 2006.

¹⁹ For more information on these and other return-to-work statistics, see Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Return-to-Work Outcomes for Texas Injured Workers, 2006.

Table 5.1: Percentage of Injured Employees Receiving TIBs Who Have Initially Returned to Work (6 months to 3 years post-injury)

| Injury Year | Within 6 Months Post Injury | Within 1 Year Post Injury | Within 1.5 Years Post Injury | Within 2 Years Post Injury | Within 3 years Post Injury |
|-------------|-----------------------------------|---------------------------------|------------------------------------|----------------------------------|----------------------------------|
| 2001 | 70% | 79% | 83% | 85% | 88% |
| 2002 | 71% | 80% | 84% | 86% | 89% |
| 2003 | 72% | 81% | 85% | 87% | 90% |
| 2004 | 74% | 83% | 86% | 91% | 93% |
| 2005 | 75% | 87% | 90% | 92% | |
| 2006 | 78% | 88% | 90% | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note 1: The study population includes 392,331 employees injured in 2001-2006 who also received Temporary Income Benefits (TIBs).

Note 2: Although the increases of initial return-to-work rates were small, they were statistically significant at the 0.01 significance level.

initially returned to work within the first six months of their injuries remained employed for three consecutive quarters, compared to only 61 percent of employees injured in 2001.

Not only have the percentage of injured employees who returned to work and remained employed improved slightly since 2001, but the amount of lost work time among TIBs recipients has decreased somewhat since 2001 (see Table 5.3).

Comparison of Injured Worker Survey Results Pre- and Post- HB 7 Implementation

Table 5.2: Percentage of Injured Employees Receiving TIBs Who Have InitiallyReturned to Work and Remained Employed for Three Successive Quarters(6 months to 3 years post-injury)

| Injury Year | Within 6 Months Post Injury | Within 1 Year Post Injury | Within 1.5 Years Post Injury | Within 2 Years Post Injury | Within 3 years Post Injury |
|-------------|-----------------------------------|---------------------------------|------------------------------------|----------------------------------|----------------------------------|
| 2001 | 61% | 68% | 73% | 76% | 80% |
| 2002 | 62% | 70% | 74% | 77% | 81% |
| 2003 | 64% | 71% | 76% | 79% | 86% |
| 2004 | 66% | 73% | 78% | 84% | 88% |
| 2005 | 68% | 77% | 84% | 86% | |
| 2006 | 72% | 77% | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note 1: The study population includes 392,331 employees injured in 2001-2006 who also received Temporary Income Benefits (TIBs).

Note 2: Employees injured in 2007 were excluded from this portion of the analysis due to insufficient data.

Setting the Standard:

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| Table 5.3: Mean and Median Days Off Work for Injured Employees Who Returne | d |
|--|---|
| to Work At Some Point Post-Injury, Injury Years 2001-2005 | |

| Injury Year | Mean days off work | Median days off work |
|-------------|--------------------|----------------------|
| 2001 | 153 | 34 |
| 2002 | 145 | 33 |
| 2003 | 139 | 31 |
| 2004 | 127 | 29 |
| 2005 | 124 | 28 |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note 1: "Days Off Work" was defined as days from the injury date to the initial RTW date. Please note that these numbers do not take into account any additional time off work that may have occurred after the initial return-to-work date.

Note 2: The analysis was based on the claimants who returned to work, and did not include those who did not return to work by the end of 2007. Injury year 2006 was excluded because of insufficient data.

While it is too early to determine the impact of certain elements of HB 7, such as the Division's adoption of return-to-work guidelines (effective May 1, 2007) and health care networks on return-to-work outcomes, it is clear from both the return-to-work rates shown in Tables 5.1 and 5.2 and recent injured worker survey findings that improvements in return-to-work rates have continued since the passage of HB 7 in 2005.

When the survey results from 2005 were compared with workers surveyed in 2008, a slightly higher percentage of workers surveyed in 2008 reported that they were currently employed at the time of the survey (65 percent in 2008 compared with 64 percent in 2005) and a slightly lower percentage of workers surveyed in 2008 (19 percent in 2008 compared with 20 percent in 2005) reported that they had not yet returned to work 18-22 months after their injuries. Roughly the same percentage of workers (16 percent) in both 2005 and 2008 said they were not currently employed, but had returned to work at some point after their injuries (see Figure 5.1).





Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

Although the percentage of injured workers who reported going back to work after their injuries did not change significantly from 2005 to 2008, Figure 5.2 shows that a significantly higher percentage of injured workers surveyed in 2008 were released to go back to work with no or some physical restrictions than workers surveyed in 2005. This may be an early indication that certain HB 7 provisions, including the adoption of return-to-work guidelines coupled with the ability for a Division selected designated doctor to review an injured worker's ability to return to work, may have increased health care provider communications with injured workers and employers about the importance of getting the worker back to work as quickly and safely as possible.

Figure 5.2: Percentage of Injured Workers Surveyed Who Reported Being Released to Go Back To Work by Their Doctor



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, Survey of Injured Workers, 2005 and 2008.

Early Comparisons Between Network and Non-Network Claims Indicate That The Impact of Networks on Return-to-Work Outcomes Is Mixed

Return-to-work rates have been improving in the Texas workers' compensation system since 2001 and this trend has continued since the passage of HB 7. One important aspect of HB 7 – the formation of certified health care networks – has seen mixed results in terms of improvements in return-to-work outcomes during the initial stage of network implementation. Legislators increased the focus on disability management in this new health care delivery model by requiring certified networks to adopt return-to-work guidelines and increase the use of case management. Additionally, legislators envisioned that networks would be better positioned to facilitate communication between treating doctors and employers about workers' physical abilities to return to work and employers' job requirements or the availability of alternative duty assignments.

While it is still premature to evaluate whether networks will be more effective at returning injured workers to work and reducing the amount of time off work due to work-related injuries, initial results from the 2008 Workers' Compensation Network Report Card produced by the Department indicate that there is little difference in the percentage of workers who return to work after their injuries for network and non-network claims. As Figure 5.3 indicates, with the exception of "other networks" and Liberty HCN, a slightly lower percentage of workers who received medical care from Texas Star and Corvel Corcare networks reported that they returned to work at some point or were currently employed at the time they were surveyed for

the report card compared to non-network claims. It should be noted, however, that these return-to-work outcomes are heavily affected by whether the employers of these workers have effective return-to-work programs and are able to bring workers back to employment that is commensurate with their physical abilities. The existence of networks alone will not improve return-to-work outcomes if employers are not able or willing to bring these workers back to work.

While the initial impact of networks on the percentage of workers who returned to work after their injuries appears mixed, it also appears that with the exception of the Corvel CorCare network, a higher percentage of workers treated by networks reported that they were released to return to work compared with nonnetwork claims (see Figure 5.4).

In addition to an increased percentage of injured workers being released to return to work by their doctors, early report card results indicate that some networks may be more effective at returning workers back to work sooner than non-network claims (see Figure 5.5).

Improvements in Return-to-Work Rates have Resulted in Lower Income Benefit Costs per Claim

Better return-to-work rates in the Texas workers' compensation system have also resulted in a reduction in the number of weeks that Temporary Income Benefits (TIBs) are paid to injured workers in Texas. TIBs are paid to injured workers while they are off work for a maximum of 104 weeks from the date that these benefits begin to accrue (on the 8th day of disability). As Table 5.4 shows, the median number of weeks of TIBs paid to injured workers has declined from a high of 8.6 weeks in 2002 to 6.0





Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Differences between non-network and Texas Star are statistically significant. The figures presented above are adjusted for injury type, and type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey, medical insurance, and self-rated health differences that may exist between the groups.

Figure 5.4: Percentage of Injured Workers Who Indicated That Their Current Treating Doctor Had Released Them To Go Back To Work With or Without Physical Restrictions



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Differences between non-network and Texas Star are statistically significant. The figures presented above are adjusted for injury type, type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey, insurance coverage, and self-rated health differences that may exist between the groups.

weeks in 2006. While workers' wages continue to increase annually, this reduction in TIBs duration from 2002-2006 has resulted in a 25 percent decline in the median TIBs payment per claim.

It will be important to monitor these return-to-work measures on a continuous basis to track the impact of the implementation of treatment and return-to-work guidelines as well as the impact of workers' compensation health care delivery networks on return-to-work outcomes in Texas. However, it appears that the Texas workers' compensation system continues to see progress in return-to-work efforts since the passage of HB 7.

Figure 5.5: Average Number of Weeks Injured Workers Reported Being Off of Work Because of Their Work-Related Injury



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Differences between non-network and Texas Star are statistically significant. The figures presented above are adjusted for injury type, type of claim, race/ethnicity, gender, age, education, age of injury at the time of the survey, insurance coverage, and self-rated health differences that may exist between the groups.

| Injury Year | Median TIBs Payment per Claim | Median Number of Weeks of TIBs Paid | |
|-------------|----------------------------------|--|--|
| 1998 | \$ 1,276 | 5.1 | |
| 1999 | \$1,586 | 6.0 | |
| 2000 | \$ 2,030 | 7.0 | |
| 2001 | \$2,488 | 8.0 | |
| 2002 | \$ 2,564 | 8.6 | |
| 2003 | \$ 2,478 | 8.0 | |
| 2004 | \$2,156 | 7.3 | |
| 2005 | \$1,995 | 7.0 | |
| 2006 | \$1,924 | 6.0 | |

Table 5.4: Median Temporary Income Benefit (TIBs) Payment and Duration,Injury Years 1998-2006

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury year 2007 was excluded from this analysis since some workers receiving TIBs have not yet reached the 104 week statutory maximum duration for these benefits.

6. Medical Dispute Resolution and Complaint Trends

One of the key goals of the workers' compensation system reforms laid out in HB 7 is that each injured worker "shall have access to a fair and accessible dispute resolution process."²⁰ The Sunset Advisory Commission, in its analysis of the former Texas Workers' Compensation Commission, noted that the medical dispute process pre-HB 7 was lengthy and lacked appropriate oversight and transparency in the regulation of Independent Review Organizations (i.e., IROs, which are panels of doctors who are certified by the Department to review preauthorization and retrospective medical necessity disputes). The Sunset Advisory Commission also recommended that the regulatory model for group health insurance should serve as a model for the workers' compensation system. As a result, HB 7 required a few changes: requiring that all IRO decisions meet certain statutory standards;²¹ clarifying that the Department is not a party in the medical dispute decisions go directly to district court (removing the appeal of medical dispute decisions to the State Office of Administrative Hearings or SOAH).

On November 1, 2006, a Travis County District Court determined in HCA Healthcare Corp. v. Texas Department of Insurance and Division of Workers' Compensation, Cause No. D-1-GN-06-000176, that the medical dispute resolution process as revised by HB 7 did not provide due process to parties and determined that the removal of SOAH to be facially unconstitutional. As a result, the 80th Legislature passed HB 724 in 2007, which requires appeals of non-network medical fee disputes in which the amount in dispute does not exceed \$2,000, all non-network preauthorization (medical necessity) disputes, and non-network retrospective medical disputes in which the amount in dispute does not exceed \$3,000 to be heard in a Contested Case Hearing (CCH) in the Division's local field offices. Appeals of non-network medical disputes that do not meet these requirements may be appealed directly to SOAH. If the parties to the dispute, generally the health care provider and the insurance carrier, are not satisfied with the result of the CCH or SOAH appeal, either party may request judicial review.

It should be noted, however, that the medical dispute process is somewhat different for medical services provided in workers' compensation health care networks. Under HB 7, fee disputes that arise between health care providers and workers' compensation health care networks are resolved internally through the network's complaint process rather than by the Division. Also, while network preauthorization and retrospective medical necessity disputes are still reviewed by IROs, appeals of the IRO decision go directly to district court under a de novo appeal standard.²²

This section of the report examines how the frequency, duration and outcomes of medical disputes have changed since the adoption of HB 7 in 2005. Also, this section examines the number of complaints received by the Department during this time, including complaints regarding the focal point of HB 7 – namely workers' compensation health care networks.

²⁰ See §402.021, Labor Code.

²¹ Under HB 7, IRO decisions must contain all of the following elements: the qualifications of the doctor reviewer, a description of the clinical criteria used in making the decision, a list of the medical evidence reviewed, and an analysis and explanation of the decision. See §413.032, Labor Code.

²² See §1305.355, Insurance Code.

The Number and Timeframe to Resolve Medical Disputes Has Decreased Since 2005

Generally, there are three types of medical disputes raised in the workers' compensation system: 1) fee disputes (which may include a dispute over the application of the Division's fee guidelines or a dispute over the fee for a service that is not covered in the Division's fee guidelines); 2) preauthorization disputes²³ (i.e., disputes regarding the medical necessity of certain medical treatments and services that were denied prospectively by the insurance carrier); and 3) retrospective medical necessity disputes (i.e., disputes regarding the medical necessity of medical treatments and services that have already been rendered and billed by the health care provider).

Declining claim frequency, the creation of workers' compensation health care networks in 2006 and the adoption of the Division's medical treatment guidelines in 2007 have resulted in fewer medical disputes being filed with the Department. As Table 6.1 indicates, approximately 13,257 medical disputes were received by the Department in 2005, compared with 8,810 disputes in 2007. Additionally, the percentage of medical disputes associated with preauthorization denials has increased significantly from 13 percent in 2005 to 27 percent in 2007, while the percentage of retrospective medical necessity disputes has declined from 19 percent in 2005 to 1 percent in 2007. This is likely the result of the adoption of the Division's medical treatment guideline rule in May 2007, which requires preauthorization for all medical services that are outside of the guideline's recommendations in addition to the existing preauthorization requirements laid out in the Division's preauthorization rule – 28 TAC 134.600.

In an effort to more closely align the process for resolving workers' compensation medical necessity disputes with the process for resolving these same types of disputes in the group health system, the Division adopted a rule in January 2007 to streamline the intake of medical disputes, including preauthorization and retrospective medical necessity disputes. Part of this streamlining included requiring the insurance carrier's utilization review agent to send all of the medical evidence used to make the medical necessity decision to the IRO assigned by the Department directly instead of sending multiple copies to the Department processes for assigning IROs so that IROs for workers' compensation disputes are now assigned by the Department instead of the Division and are assigned within 24 hours of the receipt of an IRO request. Additionally, fewer incoming fee disputes, combined with the Division's efforts to improve the efficiency of fee dispute resolution have resulted in more timely resolution of fee disputes.

As Table 6.2 indicates, the average timeframe to resolve a medical dispute has declined significantly since 2005 for all dispute types (preauthorization disputes: 59 days in 2005 to 22 days in 2007; fee disputes: 335 days in 2005 to 205 days in 2007; retrospective medical necessity disputes: 123 days in 2005 to 32 days in 2007). These reductions in fee dispute durations are especially remarkable given the backlog of fee disputes (16,562 fee disputes) that were pending at the Texas Workers' Compensation Commission as of September 1, 2005. Since then, 11,910

²³ Section 413.014, Labor Code and 28 TAC §134.600 include a list of medical treatments and services that require preauthorization by the insurance carrier before they can be provided to an injured worker. Workers' compensation health care networks are not subject to these preauthorization requirements and may establish their own lists of medical treatments and services that require preauthorization. See §1305.351, Insurance Code.

Table 6.1: Number and Distribution of Medical Disputes Submitted to the Division,by Type of Medical Dispute, 2002-2007 (as of November, 2008)

| Received Year | Pre-authorization Disputes | Fee Disputes | Retrospective Medical Necessity Disputes | Total |
|---------------|-------------------------------|--------------|--|------------------------|
| 2002 | 15% | 58% | 27% | 8,906 100% |
| 2003 | 11% | 70% | 19% | 17,433 100 % |
| 2004 | 13% | 60% | 27% | 14,291 100 % |
| 2005 | 13% | 68% | 19% | 13,257 100 % |
| 2006 | 16% | 70% | 14% | 9,706 100% |
| 2007 | 27% | 72% | 1% | 8,810 100 % |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: The number of fee disputes submitted to the Texas Workers' Compensation Commission increased significantly from 2002 to 2003 due to the adoption of a new professional medical fee guideline, which incorporated Medicare's payment policies in August 2003. Additionally, a significant number of pharmacy disputes were submitted in 2003 (approximately 4,000) by a handful of health care providers. Most of these disputes were later withdrawn.

(72 percent) of these fee disputes or have been resolved by the Division's medical dispute resolution staff, dismissed or withdrawn. As of November 14, 2008, approximately 12,104 fee disputes remain pending at the Division (7,452 of these disputes were submitted after September 1, 2005). The majority of these pending disputes stem from disputes over the fees for medical services in which there was no Division fee guideline amount applicable (i.e., fair and reasonable disputes), hospital fee disputes regarding the application of the 1997 Texas Workers' Compensation Commission *Acute Inpatient Hospital Fee Guideline* (i.e., hospital stop loss disputes), disputes over pharmacy fees, and other types of fee disputes. The Division staff continues to review pending disputes, particularly pre-HB 7 disputes, in order to eliminate this dispute backlog over the next biennium; however, pending litigation regarding the application of some of these log resolution of these staff.

Over the past few years, the proportion of medical disputes decided in favor of the insurance carrier or the health care provider has changed depending on the type of dispute. For fee disputes, there has been an increase in the percentage of these disputes decided in favor of the health care provider (from 72 percent decided in favor of the provider in 2005 to 81 percent in 2007). However, for preauthorization and retrospective medical necessity disputes, there has been an increase of these disputes decided in favor of the insurance carrier. In particular, there has been a complete reversal in the percentage of retrospective medical necessity disputes, it should be noted that the number of retrospective medical necessity disputes filed with the Department

| Year Dispute Received | Pre-authorization Disputes | | Fee Disputes | | Retrospective Medical Necessity Disputes | |
|--------------------------|-------------------------------|--------|-----------------|--------|---|--------|
| | Mean | Median | Mean | Median | Mean | Median |
| 2002 | 107 | 84 | 265 | 220 | 252 | 223 |
| 2003 | 58 | 48 | 582 | 592 | 205 | 168 |
| 2004 | 53 | 43 | 478 | 413 | 172 | 128 |
| 2005 | 59 | 53 | 335 | 184 | 123 | 79 |
| 2006 | 55 | 51 | 309 | 219 | 132 | 95 |
| 2007 | 22 | 21 | 205 | 193 | 32 | 26 |

Table 6.2: Mean and Median Number of Days to Resolve Medical Disputes(Aggregate Duration, as of November, 2008)

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: These dispute resolution durations were only calculated for disputes that had been concluded as of November 2008 – disputes that were withdrawn or dismissed were excluded from the analysis. Hospital disputes, disputes submitted without the DWC-60 form and disputes with incorrect jurisdiction were also excluded. The duration includes the period from IRO decision date to case closure date.

significantly declined during the same time period (see Table 6.3). While these dispute outcomes may suggest that insurance carriers are utilizing the Division's evidence-based treatment guidelines when making medical necessity decisions and that the IROs are also basing their medical necessity determinations on these treatment guidelines (as required by §413.031(e-1), Labor Code), these outcomes may also indicate that the Department needs to examine whether IROs are receiving all of the medical documentation relevant to the dispute from the insurance carrier.

| Table 6.3: Percentage of Medical Disputes Decided in Favor of Insurance Carrier or |
|--|
| Health Care Provider (Concluded disputes, as of November, 2008) |

| Year Dispute Received | Pre-authorization Disputes | | Fee Disputes | | Retrospective Medical Necessity Disputes | |
|--------------------------|-------------------------------|----------|-----------------|----------|---|----------|
| | Carrier | Provider | Carrier | Provider | Carrier | Provider |
| 2002 | 69% | 31% | 41% | 59% | 43% | 57% |
| 2003 | 77% | 23% | 32% | 68% | 33% | 67% |
| 2004 | 76% | 24% | 31% | 69% | 31% | 69% |
| 2005 | 71% | 29% | 28% | 72% | 17% | 83% |
| 2006 | 65% | 35% | 28% | 72% | 17% | 83% |
| 2007 | 77% | 23% | 19% | 81% | 72% | 28% |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: These dispute resolution outcomes were only calculated for disputes that had been concluded as of November 2008 – disputes that were withdrawn or dismissed were excluded from the analysis. Hospital disputes, disputes submitted without the DWC-60 form and disputes with incorrect jurisdiction were also excluded.

Setting the Standard:

An Analysis of the Impact of the 2005 Legislative Reforms on the Texas Workers' Compensation System, 2008 Results 65 Section 6, *Medical Dispute Resolution and Complaint Trends*

Workers' Compensation Complaints Have Not Decreased Over Time; However, Few Complaints Have Been Filed About Workers' Compensation Networks

While the number of workers' compensation claims has decreased significantly over the past few years, the number of complaints received by the Division has not significantly changed since the passage of HB 7 in 2005. As Table 6.4 shows, a total of 7,433 complaints were received by the Division in 2004, compared to 7,653 in 2008 (as of November 10, 2008). Of the 6,714 complaints received in 2007, almost half (3,278) were "record only," meaning that the Department did not investigate the complaint for a violation of the Act or Rules but did send a letter to the party that was the subject of the complaint (generally the insurance carrier) asking them to resolve the complaint and provide documentation to the Department that the issue is resolved; 21 percent were "unjustified," meaning that there was not a violation of the Act or Rules or a violation could not be substantiated; and the remaining 31 percent were either "justified" complaints that were violations of the Act or Rules and warranted further investigation or inquiries from system participants wanting specific information about statutory or regulatory requirements.

The most frequent types of complaints received by the Division include complaints from health care providers about medical bill processing and prompt payment issues, complaints from injured workers about timely payment of income benefits, and complaints in general about the timely filing and completeness of the DWC-69 impairment rating or maximum medical improvement (MMI) form as well as other required forms.

Table 6.4: Total Number of Complaints Received by the Texas Department ofInsurance, Division of Workers' Compensation January 1, 2004 – November 10, 2008

| | 2004 | 2005 | 2006 | 2007 | 2008 (as of 11/10/2008) |
|--------------------|-------|-------|-------|-------|----------------------------|
| # of complaints | 7,433 | 5,883 | 3,820 | 6,714 | 7,653 |

Source: Texas Department of Insurance, Division of Workers' Compensation, 2008.

Note: Complaint counts for 2005 and 2006 should be viewed with caution since these numbers are incomplete due to the transition of the functions of the former Texas Workers' Compensation Commission to the newly created Division of Workers' Compensation. During the transition, the Division's complaints were placed into TDI's existing complaint tracking system, which initially did not track complaints received through referrals from Division field office staff. Complaints received through internal referrals are now tracked as part of the system.

Overall, the Department²⁴ has received very few complaints about certified workers' compensation networks since 2005 (140 total complaints – of which 41 were deemed justified) given that almost 40,000 injured workers have been treated in networks as of February 1, 2008. The most frequent types of complaints raised by health care providers were complaints about rejections of provider applications to participate in networks, complaints about network fees or payment of medical bills and complaints from providers who said they were improperly listed as being network providers. The most frequent types of complaints raised by injured workers included complaints about the employer's failure to provide a copy of the network's requirements, com-

²⁴ The Health and Workers' Compensation Network Certification and Quality Assurance program within the Department certifies workers' compensation health care networks and resolves complaints filed about networks.
plaints about the availability and/or types of network doctors who were willing to accept new patients, complaints about the failure to provide continuity of care to existing claims that were transferred in to networks and concerns about not receiving an up-to-date and complete directory of network providers. Chapter 1305, Insurance Code, as well as the Department's network rules (Chapter 10 of the Texas Administrative Code) require certified networks to resolve complaints, including disputes over network fees, internally and to maintain a detailed complaint log that is subject to the Department examination.

7. Employer Participation in the Texas Workers' Compensation System

Introduction

Since the Texas workers' compensation law was first enacted in 1913, private sector employers have been allowed to either obtain workers' compensation coverage or opt out of the Texas workers' compensation system.²⁵ Prior to the 1970's, many states had elective workers' compensation laws. Since the 1972 publication of the National Commission on State Workmen's Compensation Laws' essential recommendations, 22 states have made workers' compensation coverage mandatory for most private-sector employers. Several states with mandatory workers' compensation laws provide statutory exemptions to allow small employers or employers from select industries to opt out of their workers' compensation systems.²⁶

Texas is the only state that permits private-sector employers (regardless of employer size or industry) the option of not obtaining workers' compensation coverage and thus, becoming "nonsubscribers" to the workers' compensation system.²⁷ Employers who do not choose to obtain workers' compensation coverage (either through purchasing an insurance policy or becoming a certified self-insured employer or a member of a certified self-insurance group of employers) lose the protection of statutory limits on liability and may be sued for negligence by their injured workers.

Since 1993, the state has periodically monitored the percentage of employers that are nonsubscribers and the percentage of employees employed by nonsubscribers, as well as the types of alternative occupational benefit programs utilized by nonsubscribers and the reasons employers choose or do not choose to participate in the Texas workers' compensation system. Nonsubscription rates remain an important indicator of the relative "health" of the workers' compensation system since these roughly measure employers' perspectives regarding whether the benefits of participating in the workers' compensation system are greater than the costs of obtaining coverage. For this reason, the 79th Legislature required the Department to monitor and report the effect of HB 7 on employer participation in the Texas workers' compensation system as part of this biennial report.

The first study of employer participation in the Texas workers' compensation system was published in 1993 by Texas A&M University for the Texas Workers' Compensation Research Center. In 1996, the Research Center's successor agency, the Research and Oversight Council on Workers' Compensation (ROC) assumed the responsibility of calculating nonsubscription rates using the same methods. In 2004, the Department acquired this responsibility and currently manages the survey.

²⁵ Texas governmental entities, including the state and its political subdivisions are currently required to provide workers' compensation insurance coverage to their employees.

²⁶ Florida, for example, exempts non-construction employers with less than four employees. New Mexico exempts nonconstruction employers with less than three employees, but allows some service and ranch employers the option to purchase coverage.

²⁷ In New Jersey all employers are required to have coverage or be self-insured. Non-compliant employers are fined and their injured employees receive income and medical benefits through the Uninsured Employers' Fund.

Survey Design and Data Collection

A random probability sample, stratified by industry and employment size, was drawn from all year-round private-sector employers in the state using the Texas Workforce Commission's Unemployment Insurance database.²⁸ To address changing issues in the workers' compensation system, the original survey instrument designed by the Research Center has been modified slightly over the years. Specifically, the Department's Workers' Compensation Research and Evaluation Group (REG) included questions in the 2008 survey to measure employer perceptions of the HB 7 legislative reforms and the impacts of these reforms on business decisions affecting economic development as well as questions to collect information about the use of arbitration agreements by nonsubscribing employers.

During the months of June through August 2008, the Public Policy Research Institute (PPRI) at Texas A&M University, on behalf of the Department, surveyed more than 2,800 Texas employers. The results of the survey serve as the basis for the estimates provided in this report.²⁹ This report presents highlights of the findings from this survey, including:³⁰

- Overall employer nonsubscription rates and the percentage of Texas employees employed by nonsubscribers;
- The reasons employers gave for purchasing workers' compensation coverage or becoming nonsubscribers to the workers' compensation system;
- Texas employers' recent experiences with workers' compensation premium costs;
- Employer satisfaction levels for subscribers and nonsubscribers; and
- Employers' knowledge of the HB 7 legislative workers' compensation reforms, including employer perceptions regarding the impact of these reforms on economic development.

Employer Participation Rates Have Improved, but Employee Coverage Rates Have Declined

The percentage of Texas employers that are nonsubscribers to the workers' compensation system decreased from 37 percent in 2006 to 33 percent in 2008 – the lowest percentage since 1993 (an estimated 106,308 employers in 2008). However, an estimated 25 percent of Texas employees (representing approximately 3 million employees in 2008) worked for nonsubscribing employers – the highest percentage since 1993 (see Figure 7.1).

Large Employers Continue to Opt Out of the System

Results from the 2004 and 2006 employer surveys highlighted the trend of larger employers choosing to opt out of the Texas workers' compensation system for reasons that centered primarily on high workers' compensation premium costs and the ability to adequately control medical costs for their injured workers.

²⁸ For the purposes of this study, "year-round" employers are employers with reported wages for four consecutive quarters. Employers with only seasonal employees were excluded from this analysis.

²⁹ The response rate for this survey was 48 percent.

³⁰ Additional findings from this survey, including information regarding the types of alternative occupational benefit programs offered by nonsubscribers, can be viewed on the Department's website at http://www.tdi.state.tx.us/reports/wcreg/documents/2008_Employer_.



Figure 7.1: Percentage of Texas Employers that are Nonsubscribers and the Percentage of Texas Employees that are Employed by Nonsubscribers, 1993-2008

Source: Survey of Employer Participation in the Texas Workers' Compensation System, 1993 and 1995 estimates from the Texas Workers' Compensation Research Center and the Public Policy Research Institute (PPRI) at Texas A&M University; 1996 and 2001 estimates from the Research and Oversight Council on Workers' Compensation and PPRI; and 2004, 2006 and 2008 estimates from the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group and PPRI.

Table 7.1 shows that an increasing percentage of employers with more than 500 employees chose to opt out of the Texas workers' compensation system while an increasing percentage of the small and mid-sized employers chose to be covered in 2008. Since 1995, the percentage of employers with 1-4 employees who are nonsubscribers has fallen from 55 percent to 40 percent, while the percentage of nonsubscribers with 500 or more employees has increased from 14 percent in 1996 to 26 percent in 2008. In fact, the largest category of employers, namely employers with 500 or more employees, was the only category to increase its nonsubscription rate from 2006 to 2008 (21 percent in 2006 to 26 percent in 2008).

| Employment Size | 1995 | 1996 | 2001 | 2004 | 2006 | 2008 |
|-------------------|------|------|------|------|------|------|
| 1-4 Employees | 55% | 44% | 47% | 46% | 43% | 40% |
| 5-9 Employees | 37% | 39% | 29% | 37% | 36% | 31% |
| 10-49 Employees | 28% | 28% | 19% | 25% | 26% | 23% |
| 50-99 Employees | 24% | 23% | 16% | 20% | 19% | 18% |
| 100-499 Employees | 20% | 17% | 13% | 16% | 17% | 16% |
| 500 + Employees | 18% | 14% | 14% | 20% | 21% | 26% |

Table 7.1: Percentage of Texas Employers that Are Nonsubscribers by EmploymentSize, 1995-2008

Source: Survey of Employer Participation in the Texas Workers' Compensation System, 1995 estimates from the Texas Workers' Compensation Research Center and the Public Policy Research Institute (PPRI) at Texas A&M University; 1996 and 2001 estimates from the Research and Oversight Council on Workers' Compensation and PPRI; and 2004, 2006 and 2008 estimates from the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group and PPRI.

Nonsubscription Rates Vary by Industry

Six of the eight primary industry sectors experienced reductions in their nonsubscription rates in 2008. The Wholesale Trade/Retail Trade/Transportation industry sector had the steepest drop from 37 percent of employers reporting that they were nonsubscribers in 2006 to 29 percent in 2008 (see Table 7.2). The Mining/Utilities/Construction and Agriculture/ Forestry/Fishing/Hunting industry sectors increased their nonsubscription rates from 2006 to 2008, although these industry sectors still tend to have lower nonsubscription rates than other industries. While the Arts/Entertainment/Accommodation/Food Services industry sector experienced a significant reduction in its nonsubscription rate from 2006 to 2008, this industry sector continues to have the highest nonsubscription rate (46 percent).

| | - | | | |
|--|----------------------|------|------|--|
| | Nonsubscription Rate | | | |
| Industry Sectors | 2004 | 2006 | 2008 | |
| Agriculture/Forestry/Fishing/Hunting | 39% | 25% | 27% | |
| Mining/Utilities/Construction | 32% | 21% | 28% | |
| Manufacturing | 42% | 37% | 31% | |
| Wholesale Trade/ Retail Trade/Transportation | 40% | 37% | 29% | |
| Finance/Real Estate/Professional Services | 32% | 33% | 33% | |
| Health Care/Educational Services | 41% | 44% | 39% | |
| Arts/Entertainment/Accommodation/Food Services | 54% | 52% | 46% | |
| Other Services Except Public Administration | 39% | 42% | 36% | |

Table7.2: Percentage of Texas Employers that Are Nonsubscribers by Industry,2004, 2006, and 2008 Estimates

Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2004, 2006 and 2008.

Note: Industry classifications were based on the 2002 North American Industry Classification System (NAICS) developed by the governments of the U.S., Canada and Mexico, which replaced the Standard Industrial Classification (SIC) system previously used in the U.S. As a result of this change in industry classifications, industry nonsubscription rates for 2004, 2006, and 2008 cannot be compared to previous years.

Reasons Employers Opt Out of the Workers' Compensation System

The most frequent reasons nonsubscribing employers gave in 2008 for not purchasing workers' compensation coverage were their perceptions that the cost of workers' compensation premiums was too high (26 percent); however, fewer employers cited high premiums as their primary reason in 2008 compared with 2006 (35 percent). Other primary reasons given by nonsubscribers, included their perception that they had too few employees (26 percent), that they were not required to have workers' compensation insurance by law (11 percent), and that medical costs in the workers' compensation system were too high (4 percent) (see Table 7.3).

When these reasons were examined by employer size, the importance of individual reasons varied. Forty-nine percent of employers with more than 500 employees reported that the primary reason for opting out of the system was because they felt that premiums were too high. Given

Table 7.3: Most Frequent Reasons Employers Said They Did Not Purchase Workers' Compensation Coverage

| Primary Reasons Given by Surveyed Employers (All Sizes) | Employers Surveyed in 2006 | Employers Surveyed in 2008 |
|---|-------------------------------|-------------------------------|
| Workers' compensation insurance premiums were too high | 35% | 26% |
| Employer had too few employees | 21% | 26% |
| Employers not required to have workers' compensation insurance by law | 9% | 11% |
| Employer had few on-the-job injuries | 9% | 9% |
| Medical costs in the workers' compensation system were too high | 4% | 4% |

Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

the fact that many large employers within the workers' compensation system have large deductible policies or are certified self-insurers, these employers' concerns regarding high premiums can most likely be associated with their overall concerns about the general cost of participating in the Texas workers' compensation system. Other reasons given by those employers included concerns about high medical costs in the workers' compensation system and their perception that they have too few injuries to warrant participation in the workers' compensation system.

Reasons Employers Gave for Purchasing Workers' Compensation Coverage

The most frequent reason cited by Texas employers for participating in the Texas workers' compensation system is that they thought having workers' compensation coverage was required by law (25 percent) (see Table 7.4). This may not be surprising since Texas is the only state where workers' compensation coverage is truly optional. Twenty four percent of Texas subscribers said they purchased workers' compensation coverage because it was provided through a health care network (see Section 2 of this report for more information about network participation in the Texas workers' compensation system). For large employers (i.e., those with 500 or more employees), the ability to participate in a workers' compensation health care network was the primary reason given for participating in the Texas workers' compensation health care networks, which may impact employers' decisions to remain a subscriber, enter, or re-enter the Texas workers' compensation system. Other key reasons subscribers gave for purchasing workers' compensation coverage included concern about lawsuits (14 percent), workers' compensation coverage was required for government contracts (3 percent), and lower workers' compensation insurance rates (2 percent).

Other Types of Insurance Coverage Carried by Texas Employers

Although employer participation in the Texas workers' compensation system is the focus of this section of the report, it is important to note that there may be a general difference in the propensity of certain employers to carry various types of insurance coverage than other types of employers. Since most nonsubscribers are small employers it is not surprising that these

Table 7.4: Most Frequent Reasons Subscribing Employers Said They Purchased Workers' Compensation Coverage

| Primary Reasons Given | Employers Surveyed in 2006 | Employers Surveyed in 2008 |
|--|-------------------------------|-------------------------------|
| Employer thought having workers' compensation was required by law | 22% | 25% |
| Employer provided workers' compensation coverage through health care network | 20% | 24% |
| Employer was concerned about lawsuits | 20% | 14% |
| Employer needed workers' compensation coverage in order to obtain government contracts | 6% | 3% |
| Workers' compensation insurance rates were lower | N/A | 2% |

Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

employers are less likely to carry a wide spectrum of insurance coverage because of cost concerns than subscribers. However, as Table 7.5 indicates, a smaller percentage of larger nonsubscribers (i.e., employers with 500 or more employees) reported offering health insurance, life insurance and disability insurance benefits to their employees as well as carrying other types of general liability, property, and commercial auto insurance than large subscribers.

Industry differences (such as a high nonsubscription rate in the arts/entertainment/accommodation/food services sector) affect the likelihood of an employer offering certain insurance benefits to employees or purchasing various types of insurance coverage, but it is important to note that employers' decisions to be nonsubscribers are likely part of broader decisions these employers make regarding their insurance needs in a variety of areas.

| Table 7.5: | Other | Types of Insuranc | e Coverage | Carried by | Large Tex | kas Employers |
|-------------------|---------|-------------------|------------|-------------------|-----------|---------------|
| (i.e., 500 d | or More | Employees) | | | | |

| Type of Insurance Coverage | Subscribers | Nonsubscribers |
|---|-------------|----------------|
| General health insurance for employees (excluding dental or vision insurance) | 86% | 68% |
| Life insurance for employees | 83% | 56% |
| Disability insurance for employees (short-term or long-term or both) | 77% | 57% |
| Voluntary accidental death and dismemberment insurance (A, D &D coverage) | 73% | 62% |
| General liability insurance (to protect your company against liability for injury or loss caused by a mistake made by your company) | 92% | 76% |
| Property insurance | 83% | 75% |
| Commercial auto insurance | 79% | 60% |

Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Subscribing Employers Experience Less Premium Pressure in 2006

There are indications that Texas employers continue to face fewer premium pressures in 2008 than in earlier years. As Figure 7.2 shows, approximately 41 percent of midsized and larger employers reported a premium decrease compared to their last year's policy, while almost half (48 percent) of small employers reported no change in premium.

Overall, a smaller percentage of subscribing employers reported premium increases in 2008 than in 2006 and 2004 across all employer sizes (see Figure 7.3).

It's not clear from the survey whether lower insurance rates or other factors caused these reported premium decreases; however, since mid-2006, some insurance companies started offering premium credits for participating in their workers' compensation health care network. See Section 2 of this report for information regarding the range of premium credits filed by numerous insurance companies.

Few Texas Employers are Knowledgeable About the HB 7 Reforms

While employer knowledge of HB 7 reforms has improved slightly since 2006, a majority of Texas employers still have no knowledge of these reforms. When asked about their degree of knowledge regarding the abolishment of the Texas Workers' Compensation Commission and the transfer of its functions to the Department, only 7

Figure 7.2: Percentage of Subscribing Employers that Experienced an Increase in Their Workers' Compensation Insurance Premium by Employment Size



Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance Workers' Compensation Research and Evaluation Group, 2008.

Figure 7.3: Percentage of Subscribing Employers that Experienced an Increase in Their Workers' Compensation Insurance Premium Compared to Previous Policy Years, by Employment Size



Source: Survey of Employer Participation in the Texas Workers' Compensation System, 2004, 2006 and 2008 estimates from the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group and the Texas A&M University, Public Policy Research Institute.

percent of employers considered themselves extremely knowledgeable, while 61 percent said they had no knowledge about that reform. Sixty-three percent of Texas employers reported that they were not aware that HB 7 created a new state agency, the Office of Injured Employee Counsel to advocate for injured workers during rulemaking and to help them resolve their complaints. Additionally, 57 percent were unaware of the most significant aspect of the HB 7 reforms – the creation and use of workers' compensation health care networks (see Table 7.6).

| | Employer knowledge about the 2005 Reforms | | | | | ıs |
|---|---|------|---------------------------|------|----------------------------|------|
| Main aspects of the 2005 reforms | Not at all Knowledgeable | | Somewhat Knowledgeable | | Extremely Knowledgeable | |
| | 2006 | 2008 | 2006 | 2008 | 2006 | 2008 |
| House Bill 7 abolished the Texas Workers' Compensation Commission and transferred its functions to the Texas Department of Insurance | 63% | 61% | 26% | 32% | 11% | 7% |
| House Bill 7 created a new state agency, the Office of Injured Employee Counsel, to assist injured employees with complaints and disputes and advocate for them during rulemaking | 68% | 63% | 25% | 31% | 7% | 6% |
| Under House Bill 7, employers who purchase workers' compensation insurance now have the option to participate in a health care network through their insurance carrier | 64% | 57% | 26% | 33% | 10% | 10% |
| Under House Bill 7, an injured employee who lives in their carrier's network service area and receives a copy of the network requirements must choose a treating doctor from the network | 62% | 53% | 26% | 34% | 12% | 13% |
| Under House Bill 7, small employers who purchase Workers' Compensation insurance and pay for worksite modifications in order to bring their employees back to work may be eligible for a reimbursement from the Texas Department of Insurance, up to \$2,500 annually. | 75% | 68% | 19% | 27% | 6% | 5% |

| Table 7.6: | Employer | Knowledge | About the HE | 3 7 Workers' | Compensation | Reforms |
|------------|----------|-----------|--------------|--------------|--------------|---------|
|------------|----------|-----------|--------------|--------------|--------------|---------|

Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance Workers' Compensation Research and Evaluation Group, 2008.

Knowledge of HB 7 Reforms Affects Employers' Perceptions on Economic Development in Texas

A required element of the Department's evaluation of the impact of the HB 7 reforms on the affordability and availability of workers' compensation insurance is an analysis of the reforms' effect on economic development. However, given the paucity of employer knowledge about these reforms, and the brief time since its inception, it is not surprising that an overwhelming majority (approximately 90 percent) of Texas employers said (as of September 2008) the reforms had no impact on their business decisions (see Table 7.7). The Department will continue to monitor the impact of the HB 7 reforms on employers' business decisions in future reports to see if or how employers' perceptions change once workers' compensation health

care network availability increases. However, recent survey results indicate that expanded employer education efforts about key aspects of the HB 7 reforms are needed.

Even with the low level of employer knowledge of the HB 7 reforms, there are early indications that the passage of these reforms will have a positive impact on economic development in Texas, including increased willingness of Texas employers to hire more employees and expand business operations in Texas. There are also early indications that these reforms will have some positive impact on the likelihood of employers to purchase or maintain workers' compensation coverage, but it also appears that some employers will continue to remain nonsubscribers regardless of the HB 7 reforms.

| Table 7.7: | Impact of the | 2005 Workers | ' Compensation | Reforms | on Texas |
|-------------------|----------------|--------------|----------------|----------------|----------|
| Employers | s' Business De | cisions | | | |

| Business Decisions | Percentage of all Employers Surveyed Who Reported A Positive Impact of HB 7 on Business Decisions | | |
|--|---|------|--|
| | 2006 | 2008 | |
| To hire more employees | 5% | 6% | |
| To expand business operations in Texas | 2% | 9% | |
| To purchase or maintain workers' compensation coverage | 2% | 14% | |

Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2006 and 2008.

In particular, the economic development impact of the HB 7 reforms appears to be primarily dependent on employer knowledge about the key component of these reforms – workers' compensation health care networks. Employers who reported that they were extremely knowledgeable about the availability of workers' compensation health care networks under HB 7 were much more likely to report that they would be more willing to hire more employees, expand business operations in Texas, and purchase or maintain workers' compensation coverage than employers who were somewhat or not knowledgeable at all about the workers' compensation health care network provisions in HB 7.

Since a significant percentage of Texas employers (57 percent) are not knowledgeable about the availability of workers' compensation health care networks, it is possible that, with increased employer education and increased insurance carrier marketing of networks, the HB 7 reforms may improve employers' perceptions about the business climate and economic development opportunities in Texas.

Nonsubscribers Are Generally More Satisfied with Their Programs than Subscribers; However Subscriber Satisfaction Has Increased Somewhat Since 2006

Overall, nonsubscribing employers continue to report higher satisfaction levels with their alternative occupational benefit programs than employers with workers' compensation coverage; however, the gap in overall satisfaction levels between nonsubscribers and subscribers seems to have closed a bit since 2006 (see Table 7.8). The areas that continue to have the largest gap in

satisfaction levels are nonsubscribing employers' perceptions that their occupational benefits plan is a good value for their company and nonsusbcribing employers' satisfaction levels with their ability to effectively manage medical and wage replacement costs, compared with employers who participate in the workers' compensation system.

| Table 7.8: | Percentage of | Employers T | hat Indicated | That They Were | Extremely or |
|-------------------|----------------------|-------------|---------------|----------------|--------------|
| Somewhat | t Satisfied | | | | |

| | 2006 | | 2008 | |
|--|-------------|--------------------|-------------|--------------------|
| Areas of Satisfaction | Subscribers | Non Subscribers | Subscribers | Non Subscribers |
| Overall satisfaction | 56% | 70% | 61% | 69% |
| Adequacy/equity of occupational benefits paid to workers | 53% | 66% | 53% | 62% |
| Whether workers' compensation or occupational benefits plan is a good value for company | 54% | 73% | 56% | 69% |
| Ability to manage medical and wage replacement costs | 50% | 63% | 50% | 68% |

Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Overall, employer satisfaction levels varied by employer size. Gaps in satisfaction between nonsubscribers and subscribers become more pronounced as the size of the employer increases. Eighty-four percent of nonsubscribers with 100 or more employees indicated that they were

extremely or somewhat satisfied with their experience as a nonsubscribing employer, compared to only 59 percent of larger subscribers (see Figure 7.4). The satisfaction gap between large nonsubscribers and large subscribers may explain the increase in the percentage of large employers that have opted out of the workers' compensation system since 2001; however, it is worth noting that the satisfaction levels of larger subscribers increased significantly from 2006 to 2008 (44 percent of larger subscribers indicated that they were extremely or somewhat satisfied in 2006 compared to 59 percent in 2008).





Source: Survey of Employer Participation in the Texas Workers' Compensation System, Public Policy Research Institute at Texas A&M University and the Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Summary

The 2008 employer survey indicates that while the Texas workers' compensation system continues to see improvements in the percentage of employers making the decision to participate in the system, primarily due to lower premiums in recent years, fewer employees are covered by workers' compensation now than when these estimates were first calculated in 1993. The primary reason for this trend is an increasing percentage of larger employers leaving the system as some smaller and medium-sized employers are entering. These larger employers report that the cost of participating in the Texas workers' compensation system was their main reason for becoming nonsubscribers.

Further, although cost concerns still rank high, premium pressures and concerns about medical costs are lessening somewhat. Relatively few Texas employers are knowledgeable about the 2005 legislative reforms enacted with HB 7, including the availability of workers' compensation health care networks. There is an early indication that those employers who are informed, particularly about the availability of workers' compensation health care networks, feel that the reforms will result in positive changes for the system and increase their likelihood to hire more employees, expand business operations in Texas, and purchase or obtain workers' compensation coverage. It is too early to gauge effectively the success of the recent HB 7 reforms on employer decisions to obtain workers' compensation coverage or opt out of the system, but it is important to note that as more Texas employers experience workers' compensation premium reductions and take advantage of the availability of health care networks, satisfaction levels as well as subscribers' willingness to participate in the workers' compensation system increases. However, it is also important to note that nonsubscribing employers' satisfaction levels (particularly regarding whether they feel their nonsubscriber occupational benefit plans are a good value for their company) remain very high.

However, it is clear, that in order for the HB 7 reforms to take full effect, more educational outreach on the various aspects of the HB 7 reforms, particularly the availability of workers' compensation health care networks, is needed for Texas employers.

8. Effects of Reforms on the Insurance Market

Introduction

Another component of the HB 7 reforms focuses on the rates and premiums charged by insurance companies. In particular, HB 7 requires insurance companies to consider the effect of individual risk variations based on loss or expense considerations when evaluating workers' compensation insurance rates. Additionally, workers' compensation rates and premiums may not be "excessive, inadequate, or unfairly discriminatory." Prior to HB 7, these standards applied only to workers' compensation insurance rates. If insurance companies' workers' compensation rate filings or premium levels do not appropriately reflect the savings associated with the HB 7 reforms, the Commissioner of Insurance is required to make recommendations, including any legislative changes that would be necessary for the Department to more effectively regulate workers' compensation rates. HB 7 also requires the Commissioner of Insurance to conduct a hearing every biennium (biennial rate hearing) to review the rates charged for workers' compensation insurance written in Texas and to determine the impact of the reforms enacted by HB 7. The Commissioner may adopt rules as necessary to mandate rate or premium reductions or to modify the use of individual risk variations. The first biennial rate hearing under this requirement was held on November 5, 2008.

It is very difficult to determine the long-term impact of HB 7 and to separate its effects from other historical trends, whether these are trends in premiums, losses, market competition or insurance company financial solvency. An analysis of the workers' compensation insurance market and how insurance company loss ratios, combined ratios, and use of individual risk variations have changed over time is provided in this report as a comparison of the market both before and after HB 7.

Market Share

The current workers' compensation market is healthy with substantial capacity. There are approximately 250 insurance companies writing over \$2.7 billion of workers' compensation premium in Texas. The largest writer is Texas Mutual Insurance Company, formerly The Texas Workers' Compensation Fund, which wrote over \$750 million in direct written premium, or 27.5 percent, of the market in 2007. It was created by the Legislature in 1991 to serve as a competitive force in the marketplace, guarantee the availability of workers' compensation insurance in Texas, and serve as an insurance company of last resort. While Texas Mutual is the insurer of last resort, it predominately writes voluntary business, competing with the rest of the workers' compensation market. Less than one half of one percent of the workers' compensation insurance market is written in the involuntary market, which is referred to as the START program.

Table 8.1 shows the historic market shares for the top 25 insurance company groups in 2007. These groups wrote over 90 percent of the direct written premium for workers' compensation insurance in 2007. The market share for these same groups is shown going back to 2000, even though they may not have all been in the top 25 or at the same rank during those years. Additionally, some groups which may have been top writers historically but are no longer active or a top 25 writer in 2007 would not be represented in the table.

| Group | 2007 Bank | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------------------|--------------|-------|-------|-------|-------|--------|-------|-------|-------|
| Toyas Mutual Ins Co | 1 | 15.4% | 17.0% | 2002 | 2003 | 2004 | 2003 | 2000 | 27.5% |
| | - | £ 20/ | £ 0% | 23.5% | 10.1% | 21.270 | 10.0% | 20.0% | 10.6% |
| | 2 | 0.2% | 0.0% | 8.6% | 12.2% | 13.7% | 13.7% | 10.0% | 12.0% |
| Liberty Mutual Grp | 3 | 8.8% | 7.5% | 8.3% | 8.2% | 8.8% | 9.0% | 10.2% | 9.0% |
| Zurich Ins Co Grp | 4 | 6.2% | 8.3% | 8.4% | 8.0% | 8.1% | 7.9% | 6.9% | 8.6% |
| Hartford Fire Grp | 5 | 3.5% | 3.8% | 4.3% | 5.9% | 6.6% | 8.2% | 6.8% | 6.7% |
| Travelers Cos & Affil | 6 | 5.7% | 4.6% | 5.4% | 6.3% | 5.8% | 5.8% | 5.4% | 6.3% |
| Ace Amer Ins Co & Affil | 7 | 1.0% | 2.4% | 2.9% | 2.9% | 3.3% | 4.8% | 3.9% | 4.8% |
| Continental Cas Grp | 8 | 6.2% | 7.1% | 5.2% | 5.4% | 4.3% | 3.5% | 2.9% | 2.9% |
| Combined Federal Ins Co & Affil | 9 | 1.1% | 1.2% | 1.3% | 1.7% | 1.9% | 2.0% | 1.8% | 1.9% |
| Old Republic Ins Grp | 10 | 1.4% | 1.9% | 1.9% | 2.1% | 2.2% | 2.2% | 2.0% | 1.7% |
| Service Lloyds Grp | 11 | 1.1% | 1.8% | 2.5% | 2.2% | 2.0% | 1.8% | 1.7% | 1.7% |
| Amerisure Co | 12 | 0.8% | 1.1% | 1.5% | 1.7% | 1.7% | 1.6% | 1.5% | 1.6% |
| Zenith Natl Ins Grp | 13 | 0.9% | 1.0% | 1.0% | 1.0% | 1.2% | 0.0% | 1.4% | 1.3% |
| Amcomp Incorp | 14 | 0.2% | 0.5% | 0.6% | 0.8% | 0.9% | 0.9% | 1.1% | 1.0% |
| Republic Companies Inc | 15 | 0.5% | 0.6% | 0.7% | 0.5% | 0.5% | 0.5% | 0.6% | 1.0% |
| Sentry Ins A Mutual Co Grp | 16 | 0.5% | 0.9% | 0.8% | 1.0% | 0.9% | 0.9% | 0.7% | 0.8% |
| SeaBright Ins Co | 17 | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.2% | 0.3% | 0.5% |
| Amerisafe Grp | 18 | 2.1% | 0.8% | 0.6% | 0.7% | 0.7% | 0.5% | 0.7% | 0.5% |
| Arch Capital Grp Inc | 19 | 0.9% | 0.4% | 0.7% | 0.2% | 0.1% | 0.1% | 0.4% | 0.5% |
| TIG Ins Grp | 20 | 1.9% | 1.3% | 0.8% | 0.6% | 0.5% | 0.5% | 0.5% | 0.5% |
| WR Berkley Corp | 21 | 0.1% | 0.2% | 0.2% | 0.3% | 0.3% | 0.4% | 0.4% | 0.4% |
| Federated Mut Grp | 22 | 0.6% | 0.7% | 0.8% | 0.6% | 0.4% | 0.4% | 0.4% | 0.4% |
| Utica Mutual Ins Co & Affil | 23 | 0.6% | 0.5% | 0.5% | 0.6% | 0.5% | 0.5% | 0.4% | 0.4% |
| SUA Ins Co | 24 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.3% | 0.4% |
| Unitrin Prop & Cas Ins Grp | 25 | 1.4% | 1.3% | 1.1% | 0.5% | 0.3% | 0.4% | 0.4% | 0.4% |

Table 8.1: 2000 - 2007 Market Share by Insurance Company Group

Source: The Department's compilation of the Texas Statutory Page 14 of the NAIC Annual Statement for Calendar Years Ending December 31, 2000-2007.

Insurance Companies Have Earned Underwriting Profits in the Last Six years: An Analysis of Loss Ratios and Combined Ratios

Two important measures of the financial health of the Texas workers' compensation insurance market are the loss ratio and the combined ratio. The loss ratio is the relationship between premium collected and the losses incurred (amounts already paid out plus amounts set aside to cover future payments) by the insurance companies. The combined ratio is similar to the loss ratio, except that it compares the premiums collected with both the losses and expenses incurred by the insurance company.

Each year the Department analyzes historical loss ratios and combined ratios on an accident year basis. In an accident year analysis, the losses are tied back to the year in which the accident occurred, regardless of when they are reported or actually paid. For example, accident year 2002 would reflect claims or losses from all accidents that happened in 2002 even if, for example, a loss was initially reported in 2003 and/or paid at a later date. In other words, all payments associated with a particular accident are associated with the year in which the accident occurred, in this case 2002, regardless of when the loss payments are reported or actually paid.

The loss ratio used in the analysis equals the projected direct ultimate incurred losses divided by the direct earned premium. This ratio is a widely accepted tool that gauges underwriting results by comparing losses to premium. Ultimate incurred losses are used in the Department's analysis and are the estimate of what claims from a given accident year will cost when finally settled. It may take several years or more for a claim to be settled because there may be ongoing payments for medical treatment or income benefits. As the name implies, loss ratios focus on the impact of losses; accordingly, it is necessary to factor in other types of expenses to ascertain overall profitability.

The combined ratio literally combines the loss ratio with the expense ratio to gauge overall profitability, before consideration of the investment earnings of insurance companies. The expense ratio includes loss adjustment expenses, other types of expenses, and policyholder dividends. Loss adjustment expenses are those costs incurred in processing, investigating, and settling claims. Other types of expenses include insurance company administrative overhead; commissions; and, taxes, licenses, and fees. Policyholder dividends may be thought of as profit-sharing in the form of a return of a percentage of the premiums to policyholders.

A combined ratio of less than 100 percent indicates that the insurance company earned a profit on its insurance operations (also called an underwriting profit). A ratio greater than 100 percent indicates a loss on insurance operations, although this loss may be more than offset by earnings on investments. For example, in Table 8.2, the projected ultimate combined ratio for 2001 is 114.7 percent. This means that for every \$1.00 in premium that is collected by the insurance company, it is projected that almost \$1.15 will be used to pay losses and expenses incurred by the insurance company. The insurance company will need to find other sources to pay the 15 cents that is not covered by the premium, such as earnings from investments or even a direct charge against the insurance company's surplus. In accident year 2007, the projected combined ratio is 84.0 percent. This means that for every dollar collected by the insurance company, it is estimated that they will pay 84.0 cents to cover losses and expenses. The insurance company then gets to keep the remaining approximately 16 cents as profit.

Table 8.2 (and Figure 8.1) shows that in 2001, insurance companies experienced huge underwriting losses. In the few years prior to 2001, insurance companies suffered even larger underwriting losses. However, they are projected to have earned underwriting profits in the last six years.

| Accident Year | Direct Earned Premium | Projected Ultimate Incurred Loss Ratio | Projected Ultimate Combined Ratio |
|---------------|--------------------------|---|--------------------------------------|
| 2001 | 1,753,392,074 | 76.0% | 114.7% |
| 2002 | 2,014,996,148 | 54.6% | 91.0% |
| 2003 | 2,192,674,882 | 43.6% | 76.3% |
| 2004 | 2,100,318,468 | 41.1% | 74.5% |
| 2005 | 2,133,703,216 | 39.0% | 76.4% |
| 2006 | 2,208,065,754 | 39.5% | 74.0% |
| 2007 | 2,201,199,190 | 48.9% | 84.0% |

Table 8.2: Projected Ultimate Calendar/Accident Year Loss and Combined Ratios*

Source: Texas Workers' Compensation Financial Data Call, Texas Compilation of Statutory Page 14, Texas Compilation of the Insurance Expense Exhibit. Loss development factors used in determining the ultimate losses are from the Financial Data Package as of December 2006.

* Large deductible policies are excluded from the Texas Workers' Compensation Financial Data Call. Losses for all other deductible policies are reported on a gross basis. That is, if the total loss is \$20,000 and the employer has a deductible of \$5,000, the amount reported in the Department's Financial Data call is \$20,000, even though the insurance company ultimately pays only \$15,000 of the loss. The direct earned premium is the amount of premium actually earned prior to the payment of policyholder dividends and the application of credits for deductible policies.





Source: Texas Workers' Compensation Financial Data Call, Texas Compilation of Statutory Page 14, Texas Compilation of the Insurance Expense Exhibit. Loss development factors used in determining the ultimate losses are from the Financial Data Package as of December 2006.

It is important to note that rate changes taken in the recent past are not yet reflected in the ratios shown in Table 8.2 and Figure 8.1. Since 2005, rates have come down about 24 percent. Had the current rates been charged in 2007, the loss ratios and combined ratios in that year would have been closer to 55 percent and 90 percent, respectively.

Rate Filings – More Rate Decreases and Fewer Rate Increases Have Been Filed Since 2005

Figure 8.2 shows the number of workers' compensation rate filings by range of average rate change, effective since 2005, the year HB 7 was enacted, through November 1, 2008. These rate filings are those where the insurance company revised its filed deviation. Since 2005, more rate

decreases and fewer rate increases have been implemented each year. The total number of rate filings with rate decreases in 2005 was 44, rising to 117 in 2008. In 2005 there were a total of 37 rate filings with rate increases; that has dropped to 15 rate filings made in 2008 (as of November 1, 2008).

In addition to these rate filings, the Department also receives an additional couple hundred workers' compensation rate filings that are not reflected in this exhibit mainly because the insurance company is either adopting the new classification relativities with no change in its filed deviation, filing a schedule rating plan, or introducing a network premium credit. These filings are either revenue neutral or reflect only the change in the classification relativities.



Figure 8.2: Rate Filings Effective From January 1, 2005 through November 1, 2008 by Amount of Change

Source: Insurance company rate filings received by the Texas Department of Insurance. The figure does not include filings that were revenue neutral or adopted the classification relativities with no change in the insurance company's filed deviation.

Usually, the revisions to the classification relativities each year are on average, revenue neutral, even though a particular classification's relativity may change by as much as 25 percent up or down. In the recent past, the Department has lowered the average classification relativity twice. Effective January 1, 2005 the overall average of the classification relativities was lowered by 7.1 percent and effective January 1, 2008, the average was lowered by another 7.7 percent. These reductions in the average classification relativity are included in the average cumulative rate decrease of 24 percent since 2005, even though the filings that adopt the relativities with no additional change in the insurance company's deviation are not reflected in Figure 8.2.

Insurance Companies' Indications Suggest That Premium Levels Should Come Down In preparation for the biennial rate hearing, insurance companies were required to provide their "indications," which are the actuarial determination of how the insurance company's rate or premium levels should change going forward. Actuarial indications, unlike the combined ratios, reflect investment income in determining appropriate premium levels, and will reflect estimates of future income needs. While there were some insurance company indications suggesting the need to increase rate and/or premium levels, the majority of the insurance companies' indications suggest that premium levels should come down. The range of individual insurance company indications is very broad: the largest indicated decreases are about 45 percent; the largest indicated increases are about 38 percent. These are based on the insurance companies' own cal-

culations, using their own assumptions, and do not reflect any judgment or assumptions made by the Department.

Figure 8.3 shows the number of insurance companies that filed indications by range of indication. For example, there were 40 companies that filed indications between -20 percent and -10percent. If a group of companies filed an indication based on the group's experience, this group indication is reflected for each individual insurance company within the group. For example, a group with three companies may have filed indications of -16 percent. In this histogram, there would be three counts in the category for rate filings with indications between -20 percent and -10 percent.



Figure 8.3: Summary of Insurance Companies Indications Filed in August 2008 Based on Experience Through December 31, 2007

Source: Insurance company rate filings received by the Texas Department of Insurance in response to Commissioner's Bulletin B-0036-08.

The average filed indication for all companies combined is -11.0 percent. This suggests that premium levels, on average, can be lowered by 11 percent. As noted earlier, the indications vary significantly by insurance company.

There are two points that need to be made regarding the average indication. First, as Department staff finalizes their review, and in some cases, their discussions with companies, this number will likely change as corrections or revisions are made in the insurance company's computations. Staff has found some problems that would make the insurance companies' filed indications go both up and down. Depending on the size of the insurance company, this could have an impact on the overall indication of all companies combined. Second, the expected loss rates used to calculate experience modifiers in the mandatory experience-rating plan were significantly revised, effective January 1, 2008. The effect of this revision on the indications is that premiums charged employers will increase. Since insurance companies were made aware of this change, they may have used other rating tools to offset an increase in premium due to the change in the experience modifiers. To the extent they did not, larger decreases in premium levels may be in order. Given these points, the average indication is somewhat fluid.

The vast majority of the insurance companies did not propose a rate change with their filing even though their indications suggest some change is in order. For those insurance companies

that did file a rate change, the change was usually a significant decrease, with the exception of one very small insurance company that increased its rate level.

Average Premiums Are Coming Down

Even though rates have come down, this does not necessarily mean that premiums have come down. The premiums charged policyholders reflect the final cost of coverage purchased and reflect not only filed rates but any individual price modifications resulting from rating tools such as schedule rating and negotiated experience modifiers. These rating tools can be used to negate or enhance rate changes, or can be used in lieu of rate changes, to achieve desired premium levels. A review of the average premium per \$100 of payroll can be used to determine whether the rate changes described earlier have been passed onto policyholders.

Table 8.3 (and Figure 8.4) shows the average premium per \$100 of payroll for policy years 1998 through 2007, reflecting year-to-year changes in premiums charged. In a policy year, the premiums and losses are tied back to the year in which the policy was written. Starting with policy year 1999 and through policy year 2003, the average premium increased from \$1.87 to \$2.84 per \$100 of payroll. Even if insurance companies did not increase rates, they could raise their average premium charges by reducing or eliminating the percentage credits they applied to employers' premiums through their schedule rating plans and the negotiated experience modi-

fiers. With the increase in premiums, it did not take long before combined ratios were again profitable (see Table 8.2). With policy year 2004, the average premium per \$100 of payroll began to decrease as insurance companies lowered their rates and increased the use of other rating tools. The drop in the average premium per \$100 of payroll continued through 2007, where it is back down to \$1.93 per \$100 of payroll. This drop coincides with the average rate reductions previously mentioned, so employers (the policyholders) are seeing the benefits of the insurance companies' filed rate decreases. The reduction in average premium that is seen at the overall industry level is also generally seen at the insurance company's group level.

During this period, average experience modifiers were also coming down, contributing to the drop in average premiums. It should be

| Table 8.3: Average | Premium | per | \$100 | of | Payroll |
|--------------------|---------|-----|-------|----|---------|
| by Policy Year | | | | | |

| Policy Year | Average Premium per \$100 of Payroll Including All Premium Adjustments Except Deductibles |
|-------------|---|
| 1998 | \$2.10 |
| 1999 | \$1.87 |
| 2000 | \$2.07 |
| 2001 | \$2.44 |
| 2002 | \$2.79 |
| 2003 | \$2.84 |
| 2004 | \$2.69 |
| 2005 | \$2.32 |
| 2006 | \$2.11 |
| 2007 | \$1.93 |

Source: The Texas Workers' Compensation Financial Data Call and the Department's 2008 Classification Relativity Study.

Note: The average premiums reflect insurance companies' manual rate deviations, experience rating, schedule rating, expense and loss constants, the effect of retrospective rating and premium discounts. They do not reflect network premium credits, the effect of discounts due to deductible policies, or policyholder dividends. Additionally, since workers' compensation is an audit line, that is, premiums are based on audited payrolls, the average premiums may change over time, especially for the most recent years.

noted that the revision in the experience rating plan in 2008 will act to increase premiums; so to the extent these revisions are not offset elsewhere in pricing, there may be upward pressure on average premiums in 2008.





Individual Risk Variations Have Reduced Employers' Premiums

One of the revisions made to the workers' compensation statutes as a result of the enactment of HB 7 was that insurance companies shall consider the effect on premiums of individual risk variations based on loss or expense considerations when setting rates. Additionally, the revisions to the statutes state that neither rates, nor premiums, may be excessive, inadequate, or unfairly discriminatory. The evaluation of insurance company's rates and premiums in light of this is based in part on the rate filings made by the insurance companies, and, equally important, on the use of available rating tools used to reflect individual risk variations. Since the effects of these rating tools were not filed with insurance companies' rate filings prior to HB 7, the Department has utilized periodic data calls to gather information on the use of these tools. The Texas Workers' Compensation Financial Data Call also provides information which the Department uses in gauging the effect of these tools.

Once an insurance company determines an employer's rate based on its classification (which depends on the type of business such as office, construction, manufacturing, etc.), and the employer's loss experience, the insurance company can further modify the policy's premium through the use of competitive rating tools such as schedule rating and negotiated experience modifiers.

Schedule rating reflects characteristics of the policyholder (i.e., the employer) which may not be fully reflected in the employer's actual past experience. The general categories that are often used in schedule rating include: the care and condition of the premises; classification peculiarities; medical facilities; safety devices; selection, training, and supervision of employees; and management's cooperation with the insurance company and safety organization. A credit or debit can be applied to the premium based on the underwriter's evaluation of the insured relative to each of these categories (or other categories in the insurance company's schedule rating plan which is filed with the Department) up to an aggregate maximum modification of plus or minus 40 percent.³¹ Application of schedule rating to an employer's premium can result in significant changes in premiums charged even though there has been no change in the insurance company's filed rate. Based on the filings received for the biennial rate hearing, the average schedule rating adjustment in 2007 was a credit of 13.5 percent. Since 2003, the average schedule rating adjustment has been a credit that has increased gradually each year; therefore, lowering premiums each year to a greater extent, all else equal. Market forces often drive schedule rating and the size of credits or debits given may be influenced by conditions in the market, as opposed to being formula-based. Current rules are that the insurance company must be able to support, with documentation maintained by the insurance company, the schedule ratings used in calculating premiums.

Figure 8.5 compares the changes in the average schedule rating credits and average rates to the changes in average premiums since 2003. To put all this on the same scale, the changes in each of these items is shown relative to 2003. Since 2003, the average premium has dropped by 32 percent; the average schedule rating factor has decreased about 9 percent; and the average rate change has been about -30 percent. This demonstrates that both rates and premiums have come down significantly since 2003, both before and after HB 7 in 2005. It would be difficult to conclude that these reductions are due solely to HB 7.



Figure 8.5: Comparison of Relative Change in Average Premiums, Schedule Rating Factors and Rate Changes.

Source: Source: NCCI Financial Data Call and insurance company rate filings.

Another individual risk modification rating tool is negotiated experience modifiers. Experience modifiers reflect an employer's past losses. The more losses, the higher the employer's experience modifier will be, thus producing a higher charged premium, and vice versa. A negotiated experience modifier is a tool which allows an employer and its insurance company to negotiate a lower experience modification, and thus a lower premium, for the employer. This tool appears to be used sparingly today with only four relatively small insurance companies reporting that they use it frequently enough to have a noticeable effect on their average experience modifiers. The use of negotiated experience modifiers is not having a significant impact on premiums for the industry.

³¹ In the case of Texas Mutual Insurance Company's START program, the aggregate maximum modification is plus or minus 75 percent.

Another cost saving tool, which is not reflected in the various analyses of loss ratios, combined ratios, and average premiums that have been discussed, but which is worth mentioning for completeness, is negotiated deductibles. Negotiated deductible credits are available for employers with larger policies or larger deductibles that effectively allow the employer to self-insure. Table 8.4 shows that the average premium credit for these risks was approximately 75 percent in 2003 and has crept up each year

to 79 percent for policy year 2007.

Network Experience Still Immature, but Shows Early Signs of Better Experience

The implementation of certified health care networks provides another opportunity for additional cost savings for employers. Based on the information provided the Department for the 2008 workers' compensation biennial rate hearing, the average dollar savings per policy, for those policies receiving a network-discount, is about \$2,600, but ranges significantly by insurance company.

As the use of the network system expands and more loss experience

emerges, the filed premium credits can be evaluated to determine whether the savings due to networks are being passed through to policyholders. At present, insufficient experience or actuarial data exists to develop experience-based credits, so these premium credits represent the best initial estimates, as determined by insurance companies, of the likely impact of networks on costs. See Section 2 of this report for information about the premium credits filed by insurance companies with the Department.

As experience emerges, the loss ratios can be reviewed to determine whether the premium credits are appropriate or if they should be greater or lesser. If the loss ratios for experience in the networks is better than for experience outside of the networks, this could suggest that the premium credits can be greater than their current levels and vice versa. Table 8.5 shows the undeveloped loss ratios for the most recent four half-accident years for insurance companies that reported their experience in networks under the semi-annual network data call. The accident half-year loss ratios have fluctuated, making it difficult to draw conclusions. However, if only those companies that have 20 percent or more of their business in a network are examined, the loss ratios for claims in a network are more stable and are better than for claims outside a network. This is generally the case for both medical and indemnity.

| Policies Written in Year | Average Premium Credit |
|--------------------------|------------------------|
| 1998 | 83% |
| 1999 | 84% |
| 2000 | 82% |
| 2001 | 82% |
| 2002 | 73% |
| 2003 | 75% |
| 2004 | 76% |
| 2005 | 78% |
| 2006 | 78% |
| 2007 | 79% |

Table 8.4: Average Negotiated Deductible Credit

Source: Texas Department of Insurance, Quarterly Legislative Report on Market Conditions.

Table 8.5: Loss Ratios for Network and Non-Network Experience

All Companies:

| Accident Half Year | Non Network Undeveloped Loss Ratio | Network Undeveloped Loss Ratio | Difference | Total Undeveloped Loss Ratio |
|-----------------------|--|--------------------------------------|------------|------------------------------------|
| 2006:2 | 0.289 | 0.209 | 38.5% | 0.268 |
| 2007:1 | 0.238 | 0.248 | -3.4% | 0.241 |
| 2007:2 | 0.222 | 0.272 | -18.4% | 0.241 |
| 2008:1 | 0.200 | 0.218 | -8.3% | 0.208 |

| Accident Half Year | Medical Non Network Undeveloped Loss Ratio | Medical Network Undeveloped Loss Ratio | Indemnity Non Network Undeveloped Loss Ratio | Indemnity Network Undeveloped Loss Ratio |
|-----------------------|---|---|---|---|
| 2006:2 | 0.165 | 0.113 | 0.124 | 0.096 |
| 2007:1 | 0.122 | 0.123 | 0.116 | 0.125 |
| 2007:2 | 0.141 | 0.141 | 0.081 | 0.131 |
| 2008:1 | 0.126 | 0.133 | 0.074 | 0.085 |

Companies with 20 Percent or More of Their Business in a Network:

| Accident Half Year | Non Network Undeveloped Loss Ratio | Network Undeveloped Loss Ratio | Difference | Total Undeveloped Loss Ratio |
|-----------------------|--|--------------------------------------|------------|------------------------------------|
| 2006:2 | 0.309 | 0.209 | 48.2% | 0.279 |
| 2007:1 | 0.316 | 0.239 | 32.1% | 0.280 |
| 2007:2 | 0.301 | 0.246 | 22.1% | 0.270 |
| 2008:1 | 0.263 | 0.206 | 27.4% | 0.228 |

| Accident Half Year | Medical Non Network Undeveloped Loss Ratio | Medical Network Undeveloped Loss Ratio | Indemnity Non Network Undeveloped Loss Ratio | Indemnity Network Undeveloped Loss Ratio |
|-----------------------|---|---|---|---|
| 2006:2 | 0.170 | 0.113 | 0.139 | 0.096 |
| 2007:1 | 0.150 | 0.125 | 0.166 | 0.114 |
| 2007:2 | 0.190 | 0.134 | 0.110 | 0.112 |
| 2008:1 | 0.155 | 0.130 | 0.108 | 0.077 |

Source: The Department's semi-annual network data call.

Assessments Regarding Insurance Company Solvency are Favorable

The workers' compensation market looks stable and financially healthy. Loss ratios and combined ratios have improved dramatically since 2001 (and prior years) and insurance companies are writing profitably in the market. Assessments regarding insurance company solvency are favorable and no systemic adverse solvency concerns relating to HB 7 have been identified. The effects of the HB 7 reforms will become more apparent with time. Even so, it will be difficult to isolate the effects of the reforms on insurance companies' solvency given the wide range of other economic factors that will influence insurance companies' financial strength. The effects of the overall economy on certain individual insurance companies will continue to be assessed.

Summary

The last six years have been profitable for the insurance industry and they have responded by lowering rates, increasing schedule rating credits, and providing discounts for participation in certified networks. The end result is that average premiums charged to employers have come down. This, along with information from the biennial hearing on workers' compensation rates and premiums, which was held November 5, 2008, is the basis for possible action plans currently under consideration by the Department. These action plans contemplate reductions to the classification relativities and proposed rules regarding rate reductions and better monitoring of the use of schedule rating. These actions are intended to deliver what HB 7 contemplated for rate and premium reductions following the biennial rate hearing.

APPENDIX A

Number of Workers' Compensation Health Care Networks by Texas County (as of October 23, 2008)

| COUNTY NETWORKS COUNTY <th< th=""><th></th><th>NUMBER OF WC</th><th></th><th>NUMBER OF WC</th><th></th><th>NUMBER OF WC</th><th></th><th>NUMBER OF WC</th></th<> | | NUMBER OF WC | | NUMBER OF WC | | NUMBER OF WC | | NUMBER OF WC |
|--|---------------|-----------------|------------|-----------------|--------------|-----------------|-------------|-----------------|
| Anderesson. 12 Colorado 23 Gohzales 14 Herr 14 Andrews. 7 Comal 18 Gray 7 Kimble 6 Angelina 11 Comanche 7 Grayson 17 Kimble 0 Archer 8 Concho 7 Grage 14 Kinney 0 Archer 8 Cooke 21 Grimes 17 Kleberg 18 Archer 8 Cooke 21 Grimes 17 Kleberg 0 Atascosa 23 Cottle 0 Hall 7 Lamar 18 Bailey 7 Crockett 0 Hamilton 7 Lamb 9 Bastrop 7 Culberson 0 Hardeman 0 Lavaca 14 Bayton 8 Dallas 28 Harrison 7 Liberty 23 Bes Dallas 28 Harrison 7 Liberty 23 Berden 11 Dawson 8 <th>COUNTY</th> <th>NETWORKS</th> <th>COUNTY</th> <th>NETWORKS</th> <th>COUNTY</th> <th>NETWORKS</th> <th>COUNTY</th> <th>NETWORKS</th> | COUNTY | NETWORKS | COUNTY | NETWORKS | COUNTY | NETWORKS | COUNTY | NETWORKS |
| Andrews / Comai Is Grayson / Numbe De Angelina 11 Comache 7 Grayson 17 King O Aransas 18 Concho 7 Gregg 14 Kinney O Archer 8 Cooke 21 Grimes 17 King O Arascosa 23 Cottle 0 Hale 9 La Salle 1 Austin 26 Crane 7 Hall 7 Lamar 18 Bandera 16 Crosby 9 Hansford Lama 12 Bastrop 7 Cuberson 0 Hardin 23 Lee 19 Bee 18 Dallas 28 Harrison 7 Liberty 23 Beandera 16 Dallas 28 Harrison 7 Liberty 23 Bea Dallas 28 Harrison 7 <t< td=""><td>Anderson</td><td>12</td><td></td><td>23</td><td>Gonzales</td><td>14</td><td>Kerr</td><td></td></t<> | Anderson | 12 | | 23 | Gonzales | 14 | Kerr | |
| Argelina 11 Comanche / Grayson 17 Ning | Andrews | | | | Gray | | Kimble | 6 |
| Aransas 18 Concho // Griegg 14 Nnney Archer 8 Cooke 21 Grimes T Kleberg Armstrong 11 Coryell 2 Guadalupe T Knox Ausstin 26 Crane Hall T Lamar Baideg 7 Crockett Hamiton Balle Balle Minney Grimes Markins <td< td=""><td>Angelina</td><td></td><td>Comanche</td><td></td><td>Grayson</td><td></td><td>King</td><td>0</td></td<> | Angelina | | Comanche | | Grayson | | King | 0 |
| Archer | Aransas | | Concho | | Gregg | | Kinney | 0 |
| Armstrong 11 Coryell 12 Guadalupe 1/ Knox | Archer | 8 | Cooke | | Grimes | 1/ | Kleberg | |
| Atascosa 23 Cottle 0 Hale 9 La Salle 11 Austin 26 Crane 7 Hall 7 Lamp 18 Bandera 16 Crosby 9 Hansford 7 Lampasas 112 Bastrop 17 Culberson 0 Hardino 12 Lawca 14 Baylor 8 Dallam 7 Hardino 23 Lee 19 Bee 18 Dallas 28 Harrison 7 Liberty 23 Beexa 28 Deaf Smith 15 Hartey 7 Limestone 14 Blanco 23 Delta 11 Haskell 8 Lipscomb 7 Borden 8 Denton 19 Hays 13 Live Oak 8 Bosque 8 Dewitt 27 Hemphill 6 Lano 14 Bowie 18 Dickens 6 Henderson 20 Loving 7 Brazos 16 Donley <td>Armstrong</td> <td></td> <td>Coryell</td> <td>12</td> <td>Guadalupe</td> <td></td> <td>Knox</td> <td>0</td> | Armstrong | | Coryell | 12 | Guadalupe | | Knox | 0 |
| Austin 26 Crane 7 Hall 7 Lamar 18 Bailey 7 Crockett 0 Hamilton 7 Lampasas 12 Bastrop 17 Culberson 0 Hardeman 0 Lavaca 14 Baylor 8 Dallas 28 Harris 26 Leon 15 Bee 18 Dallas 28 Harris 26 Leon 15 Bell 11 Dawson 8 Harrison 7 Liberty 23 Bexar 28 Deaf Smith 15 Harley 7 Liberty 23 Borden 8 Denton 19 Hays 13 Live Oak 8 Bosque 8 DeWitt 27 Hemphill 6 Lano 14 Bowie 18 Dickens 6 Henderson 20 Loving 7 Brazoria 19 Dimmit 1 Hidago 21 Lubbock 9 Brazoria 19 Donley | Atascosa | 23 | Cottle | 0 | Hale | 9 | La Salle | 1 |
| Bailey 7 Crockett 0 Hamilton 7 Lambasas 9 Bandera 16 Crosby 9 Harsford 7 Lampasas 112 Bastrop 17 Culberson 0 Hardeman 0 Lavaca 14 Baylor 8 Dallas 28 Harris 26 Lee 19 Bee 18 Dallas 28 Harris 26 Lee 15 Bell 11 Dawson 8 Harrison 7 Liberty 23 Bexar 28 Deaf Smith 15 Hartley 7 Limestone 14 Blanco 23 Delta 11 Haskell 8 Lipscomb 7 Borden 8 Dewitt 27 Hemphill 6 Llano 14 Bowie 18 Dickens 6 Henderson 20 Loving 7 Brazos 16 Donley 7 Hill 21 Lybock 9 Brazos 19 Dixor | Austin | 26 | Crane | 7 | Hall | 7 | Lamar | |
| Bandera. 16 Crosby 9 Hansford 7 Lampasas 12 Bastrop 17 Culberson 0 Hardeman 0 Lavaca 14 Baylor .8 Dallam 7 Hardin 23 Lee 19 Bee .18 Dallas .28 Harrison 7 Liberty .23 Bell .11 Dawson .8 Harrison 7 Liberty .23 Beta .11 Haskell .8 Lipscomb .77 Limestone .14 Blanco .23 Detta .11 Haskell .8 Lipscomb .77 Borden .8 Dewlit .27 Hemphill .6 Llano .14 Bowie .18 Dickens .6 Henderson .20 Loving .7 Brazoria .19 Dimmit .1 Hidalgo .21 Lubock .9 Brazoria .19 Dimmit .16 Hockley .9 Madison .16 Brazor | Bailey | 7 | Crockett | 0 | Hamilton | 7 | Lamb | 9 |
| Bastrop 17 Culberson O Hardiman O Lavaca 14 Baylor | Bandera | 16 | Crosby | 9 | Hansford | 7 | Lampasas | 12 |
| Baylor. 8 Dallam 7 Hardin 23 Lee 19 Bee 18 Dallas 28 Harris 26 Leon 15 Beal 11 Dawson 8 Harrison 7 Liberty 23 Bexar 28 Deaf Smith 15 Hartiey 7 Limestone 14 Blanco 23 Detta 11 Haskell 8 Lipscomb 7 Borden 8 Detwitt 27 Hemphill 6 Llano 14 Bowie 18 Dickens 6 Henderson 20 Loving .7 Brazos 16 Donley 7 Hill 21 Lynn .9 Brazos 16 Donley 7 Hill 21 Lynn .9 Brazos 16 Donley 7 Hokins 19 Martin .7 Brown 7 Edwards 0 | Bastrop | 17 | Culberson | 0 | Hardeman | 0 | Lavaca | 14 |
| Bee 18 Dallas 28 Harris 26 Leon 15 Bell 11 Dawson 8 Harrison 7 Liberty 23 Besar 23 Delta 15 Hartison 7 Liberty 23 Borden 8 Denton 19 Hays 13 Live Oak 8 Bosque 8 Dewitt 27 Hemphill 6 Llano 14 Bowie 18 Dickens 6 Henderson 20 Loving .7 Brazoria 19 Dinmit 1 Hidalgo 21 Lubbock .9 Brazos 16 Donley 7 Hill 21 Lynn .9 Brewster 0 Duval 16 Hockley .9 Marion .17 Brooks 19 Ector 7 Hopkins 19 Marion .7 Burden 16 Hudspeth 6 | Baylor | 8 | Dallam | 7 | Hardin | 23 | Lee | 19 |
| Bell 11 Dawson 8 Harrison 7 Liberty 23 Bexar 28 Deaf Smith 15 Hartley 7 Limestone 14 Barco 23 Delta 11 Haskell 8 Lipscomb 7 Borden | Bee | 18 | Dallas | 28 | Harris | 26 | Leon | 15 |
| Bexar 28 Deaf Smith 15 Hartley 7 Limestone 14 Blanco 23 Delta 11 Haskell 8 Live Oak 8 Borden .8 Deenton 19 Hays 13 Live Oak .8 Bowie .8 DeWitt .27 Hemphill .6 Llano .14 Bowie .18 Dickens .6 Henderson .20 Loving .7 Brazos .16 Donley .7 Hill .21 Lynn .9 Bresster .0 Duval .16 Hockley .9 Madison .16 Briscoe .8 Eastland .12 Hood .23 Marion .17 Brooks .19 Ector .7 Hopkins .19 Martin .7 Burleson .16 Hudspeth .6 Maverick .0 .0 Burlet .17 Ellis <td< td=""><td>Bell</td><td>11</td><td>Dawson</td><td>8</td><td>Harrison</td><td>7</td><td>Liberty</td><td>23</td></td<> | Bell | 11 | Dawson | 8 | Harrison | 7 | Liberty | 23 |
| Blanco 23 Delta 11 Haskell 8 Lipscomb 7 Borden 8 Denton 19 Hays 13 Live Oak 8 Bosque 8 DeWitt 27 Hemphill 6 Llano 14 Bowie 18 Dickens 6 Henderson 20 Loving 7 Brazoria 19 Dimmit 1 Hidalgo 21 Lubbock 9 Brazos 16 Donley 7 Hill 21 Lynn 9 Brewster 0 Duval 16 Hockley 9 Madison 16 Brooks 19 Ector 7 Hopkins 19 Marin 7 Brown 7 Edwards 0 Houston 14 Mason 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Elis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath | Bexar | 28 | Deaf Smith | 15 | Hartley | 7 | Limestone | 14 |
| Borden 8 Denton 19 Hays 13 Live Oak 8 Bosque 8 DeWitt 27 Hemphill 6 Llano 14 Bowie 18 Dickens 6 Henderson 20 Loving 7 Brazos 16 Donley 7 Hill 21 Lynn 9 Brazos 16 Donley 7 Hill 21 Lynn 9 Briscoe 8 Eastland 12 Hood 23 Marion 17 Brooks 19 Ector 7 Hopkins 19 Martin 7 Brown 7 Edwards 0 Houston 14 Mason 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Elis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath 15 <t< td=""><td>Blanco</td><td>23</td><td>Delta</td><td>11</td><td>Haskell</td><td>8</td><td>Lipscomb</td><td>7</td></t<> | Blanco | 23 | Delta | 11 | Haskell | 8 | Lipscomb | 7 |
| Bosque 8 DeWitt 27 Hemphill 6 Llano 14 Bowie 18 Dickens 6 Henderson 20 Loving 7 Brazoria 19 Dimmit 1 Hidalgo 21 Lubbock 9 Brazos 16 Donley 7 Hill 21 Lynn 9 Brewster 0 Duval 16 Hockley 9 Madison 16 Briscoe 8 Eastland 12 Hood 23 Marion 17 Brooks 19 Ector 7 Hopkins 19 Martin 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Callahan 8 Fannin 2 Irion 7 McLennan 12 Carson 11 Floyd 8 <td>Borden</td> <td>8</td> <td>Denton</td> <td>19</td> <td>Hays</td> <td>13</td> <td>Live Oak</td> <td>8</td> | Borden | 8 | Denton | 19 | Hays | 13 | Live Oak | 8 |
| Bowie 18 Dickens 6 Henderson 20 Loving 7 Brazoria 19 Dimmit 1 Hidalgo 21 Lubbock 9 Brazos 16 Donley 7 Hill 21 Lynn 9 Brewster 0 Duval 16 Hockley 9 Madison 16 Briscoe 8 Eastland 12 Hood 23 Marion 17 Brooks 19 Ector 7 Hopkins 19 Martin 7 Burnet 17 Edwards 0 Houston 14 Mason 7 Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 Galwell 25 Erath 15 Hunt 15 McCulloch 7 Callaon 4 Falls 7 Hutchinson 7 McLennan 12 Callaon 4 Faspette 15 </td <td>Bosque</td> <td>8</td> <td>DeWitt</td> <td>27</td> <td>Hemphill</td> <td>6</td> <td>Llano</td> <td>14</td> | Bosque | 8 | DeWitt | 27 | Hemphill | 6 | Llano | 14 |
| Brazoria 19 Dimmit 1 Hidalgo 21 Lubbock 9 Brazos 16 Donley 7 Hill 21 Lynn 9 Brewster 0 Duval 16 Hockley 9 Madison 16 Briscoe 8 Eastland 12 Hood 23 Marion 17 Brooks 19 Ector 7 Hopkins 19 Martin 7 Brown 7 Edwards 0 Houston 14 Mason 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Caldwell 25 Erath 15 Jack 15 Medina 25 Cameron 18 Fayette 15 Jack 15 Medina 7 Casson 11 Floyd <td>Bowie</td> <td>18</td> <td>Dickens</td> <td>6</td> <td>Henderson .</td> <td>20</td> <td>Loving</td> <td>7</td> | Bowie | 18 | Dickens | 6 | Henderson . | 20 | Loving | 7 |
| Brazos 16 Donley 7 Hill 21 Lynn 9 Brewster 0 Duval 16 Hockley 9 Madison 16 Briscoe 8 Eastland 12 Hood 23 Marion 17 Brooks 19 Ector 7 Hopkins 19 Martin 7 Brown 7 Edwards 0 Houston 14 Mason 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Meladad 7 Casso 18 Foard | Brazoria | 19 | Dimmit | 1 | Hidalgo | 21 | Lubbock | 9 |
| Brewster 0 Duval 16 Hockley 9 Madison 16 Briscoe 8 Eastland 12 Hood 23 Marion 17 Brooks 19 Ector 7 Hopkins 19 Marion 17 Brown 7 Edwards 0 Houston 14 Mason 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 0 Calhoun 14 Falls 7 Hutchinson 7 McLennan 12 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menard 7 Casco 11 Fort Ben | Brazos | 16 | Donley | 7 | Hill | 21 | Lynn | 9 |
| Briscoe 8 Eastland 12 Hood 23 Marion 17 Brooks 19 Ector 7 Hopkins 19 Martin 7 Brown 7 Edwards 0 Houston 14 Mason 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Carson 11 Floyd 8 Jasper 14 Midland 7 Casson 11 Fort Bend 25 Jeff Davis 0 Milam 8 Castro 11 Fort Bend <td< td=""><td>Brewster</td><td>0</td><td>Duval</td><td>16</td><td>Hockley</td><td>9</td><td>Madison</td><td>16</td></td<> | Brewster | 0 | Duval | 16 | Hockley | 9 | Madison | 16 |
| Brooks 19 Ector 7 Hopkins 19 Martin 7 Brown 7 Edwards 0 Houston 14 Mason 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menad 7 Casson 11 Floyd 8 Jasper 14 Midland 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Chambers 24 Franklin <td< td=""><td>Briscoe</td><td>8</td><td>Eastland</td><td>12</td><td>Hood</td><td>23</td><td>Marion</td><td>17</td></td<> | Briscoe | 8 | Eastland | 12 | Hood | 23 | Marion | 17 |
| Brown 7 Edwards 0 Houston 14 Mason 7 Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Calhoun 14 Falls 7 Hutchinson 7 McLennan 12 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menard 7 Casson 11 Floyd 8 Jasper 14 Midland 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0< | Brooks | 19 | Ector | 7 | Hopkins | 19 | Martin | 7 |
| Burleson 16 El Paso 19 Howard 7 Matagorda 20 Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Calhoun 14 Falls 7 Hutchinson 7 McLennan 12 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menard 7 Carson 11 Floyd 8 Jasper 14 Midland 7 Castro 11 Fort Bend 25 Jeff Davis 0 Millam 8 Castro 11 Fort Bend 25 Jefferson 21 Mills 7 Cherokee 19 Freestone <td>Brown</td> <td>7</td> <td>Edwards</td> <td>0</td> <td>Houston</td> <td>14</td> <td>Mason</td> <td>7</td> | Brown | 7 | Edwards | 0 | Houston | 14 | Mason | 7 |
| Burnet 17 Ellis 16 Hudspeth 6 Maverick 0 Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Calhoun 14 Falls 7 Hutchinson 7 McLennan 12 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menard 7 Carson 11 Floyd 8 Jasper 14 Midland 7 Cass 18 Foard 0 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jefferson 21 Mills 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 | Burleson | 16 | El Paso | 19 | Howard | 7 | Matagorda | 20 |
| Caldwell 25 Erath 15 Hunt 15 McCulloch 7 Calhoun 14 Falls 7 Hutchinson 7 McLennan 12 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menard 7 Carson 11 Floyd 8 Jasper 14 Midland 7 Cass 18 Foard 0 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jefferson 21 Mills 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Childress 0 Frio 17 Johnson 17 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 | Burnet | 17 | Ellis | 16 | Hudspeth | 6 | Maverick | 0 |
| Calhoun 14 Falls 7 Hutchinson 7 McLennan 12 Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menard 7 Carson 11 Floyd 8 Jasper 14 Midland 7 Casso 18 Foard 0 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jefferson 21 Mills 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Coke 7 Gaines 8 Jones 7 More 11 Cochran 7 | Caldwell | 25 | Erath | 15 | Hunt | 15 | McCulloch | 7 |
| Callahan 8 Fannin 2 Irion 7 McMullen 9 Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menard 7 Carson 11 Floyd 8 Jasper 14 Midland 7 Cass 18 Foard 0 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jeff Foavis 0 Milam 8 Castro 11 Fort Bend 25 Jefferson 21 Mills 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 Gaines 3 Jones 7 Moore 11 Cochran 7 | Calhoun | 14 | Falls | 7 | Hutchinson . | 7 | McLennan | 12 |
| Cameron 18 Fayette 15 Jack 15 Medina 25 Camp 19 Fisher 7 Jackson 15 Menard 7 Carson 11 Floyd 8 Jasper 14 Midland 7 Carson 11 Floyd 8 Jasper 14 Midland 7 Cass 18 Foard 0 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jefferson 21 Mills 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 Gaines 8 Jones 7 Moore 11 Cochran 7 Galveston 19 Karnes 20 Morris 18 Coleman 7 | Callahan | 8 | Fannin | 2 | Irion | 7 | McMullen | 9 |
| Camp 19 Fisher 7 Jackson 15 Menard 7 Carson 11 Floyd 8 Jasper 14 Midland 7 Cass 18 Foard 0 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jeff ron 21 Mills 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 Gaines 8 Jones 7 Moore 11 Cochran 7 Galveston 19 Karnes 20 Morris 18 Coke 7 Garza 9 Kaufman 20 Motley 6 Coleman 7 Glasscock 7 Kenedy 19 Navarro 22 Collingsworth 0 <td>Cameron</td> <td></td> <td>Fayette</td> <td>15</td> <td>Jack</td> <td>15</td> <td>Medina</td> <td>25</td> | Cameron | | Fayette | 15 | Jack | 15 | Medina | 25 |
| Carson 11 Floyd 8 Jasper 14 Midland 7 Cass 18 Foard 0 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jeff Davis 0 Milam 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 Gaines 8 Jones 7 Moore 11 Cochran 7 Galveston 19 Karnes 20 Morris 18 Coke 7 Garza 9 Kaufman 20 Motley 6 Coleman 7 Gillespie 14 Kendall 24 Nacogdoches 11 Collin <t< td=""><td>Camp</td><td>19</td><td>Fisher</td><td>7</td><td>Jackson</td><td>15</td><td>Menard</td><td>7</td></t<> | Camp | 19 | Fisher | 7 | Jackson | 15 | Menard | 7 |
| Cass. 18 Foard 0 Jeff Davis 0 Milam 8 Castro 11 Fort Bend 25 Jefferson 21 Mills 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 Gaines 8 Jones 7 Moore 11 Cochran 7 Galveston 19 Karnes 20 Morris 18 Coke 7 Garza 9 Kaufman 20 Motley 6 Coleman 7 Gillespie 14 Kendall 24 Nacogdoches 11 Collin 27 Glasscock 7 Kenedy 19 Navarro 22 Collingsworth 0 Goliad 13 Kent 6 Newton 14 | Carson | 11 | Floyd | 8 | Jasper | 14 | Midland | 7 |
| Castro 11 Fort Bend 25 Jefferson 21 Mills 7 Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 Gaines 8 Jones 7 Moore 11 Cochran 7 Galveston 19 Karnes 20 Morris 18 Coke 7 Garza 9 Kaufman 20 Motley 6 Coleman 7 Gillespie 14 Kendall 24 Nacogdoches 11 Collin 27 Glasscock 7 Kenedy 19 Navarro 22 Collingsworth 0 Goliad 13 Kent 6 Newton 14 | Cass | | Foard | 0 | Jeff Davis | 0 | Milam | 8 |
| Chambers 24 Franklin 19 Jim Hogg 16 Mitchell 7 Cherokee 19 Freestone 14 Jim Wells 19 Montague 15 Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 Gaines 8 Jones 7 Moore 11 Cochran 7 Galveston 19 Karnes 20 Morris 18 Coke 7 Garza 9 Kaufman 20 Motley 6 Coleman 7 Gillespie 14 Kendall 24 Nacogdoches 11 Collin 27 Glasscock 7 Kenedy 19 Navarro 22 Collingsworth 0 Goliad 13 Kent 6 Newton 14 | Castro | 11 | Fort Bend | 25 | Jefferson | 21 | Mills | 7 |
| Cherokee19Freestone14Jim Wells19Montague15Childress0Frio17Johnson17Montgomery23Clay15Gaines8Jones7Moore11Cochran7Galveston19Karnes20Morris18Coke7Garza9Kaufman20Motley6Coleman7Gillespie14Kendall24Nacogdoches11Collin27Glasscock7Kenedy19Navarro22Collingsworth0Goliad13Kent6Newton14 | Chambers | 24 | Franklin | 19 | Jim Hogg | | Mitchell | 7 |
| Childress 0 Frio 17 Johnson 17 Montgomery 23 Clay 15 Gaines 8 Jones 7 Moore 11 Cochran 7 Galveston 19 Karnes 20 Morris 18 Coke 7 Garza 9 Kaufman 20 Motley 6 Coleman 7 Gillespie 14 Kendall 24 Nacogdoches 11 Collin 27 Glasscock 7 Kenedy 19 Navarro 22 Collingsworth 0 Goliad 13 Kent 6 Newton 14 | Cherokee | | Freestone | | Jim Wells | | Montague | |
| Clay15GainesJones7Moore11Cochran7Galveston19Karnes20Morris11Coke7Garza9Kaufman20Motris18Coleman7Gillespie14Kendall24Nacogdoches11Collin27Glasscock7Kenedy19Navarro22Collingsworth0Goliad13Kent6Newton14 | Childress | 0 | Frio | | Johnson | | Montgomerv | 23 |
| Cochran7Galveston19Karnes20Morris18Coke7Garza9Kaufman20Motley6Coleman7Gillespie14Kendall24Nacogdoches11Collin27Glasscock7Kenedy19Navarro22Collingsworth0Goliad13Kent6Newton14 | Clay | | Gaines | 8 | Jones | 7 | Moore | |
| Coke7Garza9Kaufman20Motley6Coleman7Gillespie14Kendall24Nacogdoches11Collin27Glasscock7Kenedy19Navarro22Collingsworth0Goliad13Kent6Newton14 | Cochran | 7 | Galveston | | Karnes | | Morris | |
| Coleman | Coke | 7 | Garza | | Kaufman | | Motlev | 6 |
| Collin | Coleman | 7 | Gillespie | | Kendall | | Nacogdoches | s |
| Collingsworth0 Goliad | Collin | | Glasscock | 7 | Kenedy | | Navarro | |
| | Collingsworth | 0 | Goliad | | Kent | 6 | Newton | |

Setting the Standard: An Analysis of the Impact of the 2005 Legislative Reforms on the Texas Workers' Compensation System, 2008 Results A1 Appendix A

Number of Workers' Compensation Health Care Networks by Texas County (as of October 23, 2008) continued

| COUNTY | NUMBER OF WC NETWORKS | COUM |
|------------|-----------------------------|----------|
| Nolan | 8 | Refu |
| Nueces | 12 | Rob |
| Ochiltree | 7 | Rob |
| Oldham | 11 | Rocl |
| Orange | 8 | Run |
| Palo Pinto | 14 | Rusl |
| Panola | 18 | Sabi |
| Parker | 16 | San |
| Parmer | 8 | San |
| Pecos | 7 | San |
| Polk | 16 | San |
| Potter | 15 | Schl |
| Presidio | 0 | Scur |
| Rains | 22 | Sha |
| Randall | 15 | Shel |
| Reagan | 7 | She |
| Real | 6 | Smit |
| Red River | 18 | Som |
| Reeves | 7 | Star |
| | | <u> </u> |

| | NUMBER OF WC |
|---------------|-----------------|
| COUNTY | NETWORKS |
| Refugio | |
| Roberts | |
| Robertson | 15 |
| Rockwall | 26 |
| Runnels | 7 |
| Rusk | |
| Sabine | 14 |
| San Augustine | 14 |
| San Jacinto | 22 |
| San Patricio | |
| San Saba | 14 |
| Schleicher | 7 |
| Scurry | 7 |
| Shackelford | 8 |
| Shelby | 14 |
| Sherman | 7 |
| Smith | 20 |
| Somervell | 17 |
| Starr | 7 |
| Stephens | 11 |

| COUNTY | NUMBER OF WC NETWORKS | COUNTY | NUMBER OF WC NETWORKS |
|--------------|-----------------------------|------------|-----------------------------|
| Sterling | 7 | Walker | 18 |
| Stonewall | 7 | Waller | 26 |
| Sutton | 0 | Ward | 7 |
| Swisher | 11 | Washington | 22 |
| Tarrant | 29 | Webb | 15 |
| Taylor | 8 | Wharton | 23 |
| Terrell | 0 | Wheeler | 0 |
| Terry | 9 | Wichita | 8 |
| Throckmorton | 8 | Wilbarger | 8 |
| Titus | 19 | Willacy | 20 |
| Tom Green | 7 | Williamson | 16 |
| Travis | 23 | Wilson | 22 |
| Trinity | 15 | Winkler | 7 |
| Tyler | 14 | Wise | 25 |
| Upshur | 19 | Wood | 19 |
| Upton | 7 | Yoakum | 8 |
| Uvalde | 13 | Young | 8 |
| Val Verde | 0 | Zapata | 1 |
| Van Zandt | 21 | Zavala | 0 |
| Victoria | 14 | | |

APPENDIX B

Detailed information regarding the cost and utilization of professional medical services

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$338 | \$436 | \$489 | \$518 |
| 1999 | \$351 | \$453 | \$513 | \$547 |
| 2000 | \$356 | \$459 | \$524 | \$562 |
| 2001 | \$373 | \$484 | \$553 | \$589 |
| 2002 | \$392 | \$503 | \$570 | \$604 |
| 2003 | \$406 | \$520 | \$571 | \$585 |
| 2005 | \$425 | \$542 | \$608 | \$644 |
| 2006 | \$428 | \$555 | | |
| 2007 | \$449 | | | |

Average Cost Per Claim for Evaluation and Management Services, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Cost Per Claim for Physical Medicine Modalities, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$312 | \$341 | \$353 | \$359 |
| 1999 | \$318 | \$345 | \$357 | \$363 |
| 2000 | \$321 | \$348 | \$362 | \$370 |
| 2001 | \$326 | \$360 | \$378 | \$387 |
| 2002 | \$327 | \$361 | \$374 | \$377 |
| 2003 | \$268 | \$287 | \$292 | \$290 |
| 2005 | \$214 | \$230 | \$236 | \$238 |
| 2006 | \$155 | \$167 | | |
| 2007 | \$134 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Setting the Standard:

An Analysis of the Impact of the 2005 Legislative Reforms on the Texas Workers' Compensation System, 2008 Results B1 Appendix B

Average Cost Per Claim for Other Physical Medicine Services, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$1,085 | \$1,453 | \$1,632 | \$1,734 |
| 1999 | \$1,221 | \$1,643 | \$1,879 | \$2,018 |
| 2000 | \$1,347 | \$1,832 | \$2,124 | \$2,299 |
| 001 | \$1,424 | \$1,939 | \$2,262 | \$2,457 |
| 2002 | \$1,410 | \$1,926 | \$2,236 | \$2,413 |
| 2003 | \$1,362 | \$1,842 | \$2,079 | \$2,184 |
| 2005 | \$1,298 | \$1,673 | \$1,885 | \$1,997 |
| 2006 | \$1,049 | \$1,376 | | |
| 2007 | \$947 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$315 | \$364 | \$393 | \$410 |
| 1999 | \$322 | \$368 | \$399 | \$415 |
| 2000 | \$313 | \$360 | \$390 | \$415 |
| 2001 | \$313 | \$365 | \$400 | \$423 |
| 2002 | \$308 | \$355 | \$375 | \$380 |
| 2003 | \$252 | \$274 | \$286 | \$288 |
| 2005 | \$207 | \$231 | \$246 | \$254 |
| 2006 | \$209 | \$230 | | |
| 2007 | \$193 | | | |

Average Cost Per Claim for CT Scans, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$767 | \$803 | \$827 | \$844 |
| 1999 | \$817 | \$855 | \$880 | \$896 |
| 2000 | \$853 | \$887 | \$912 | \$930 |
| 2001 | \$882 | \$922 | \$950 | \$968 |
| 2002 | \$886 | \$923 | \$946 | \$954 |
| 2003 | \$772 | \$796 | \$808 | \$804 |
| 2005 | \$681 | \$716 | \$739 | \$751 |
| 2006 | \$656 | \$684 | | |
| 2007 | \$555 | | | |

Average Cost Per Claim for MRIs, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Cost Per Claim for Nerve Conduction Studies, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$592 | \$625 | \$648 | \$668 |
| 1999 | \$640 | \$668 | \$700 | \$724 |
| 2000 | \$686 | \$719 | \$750 | \$779 |
| 2001 | \$725 | \$758 | \$798 | \$813 |
| 2002 | \$725 | \$759 | \$783 | \$800 |
| 2003 | \$695 | \$722 | \$738 | \$734 |
| 2005 | \$820 | \$857 | \$889 | \$910 |
| 2006 | \$795 | \$823 | | |
| 2007 | \$771 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Average Cost Per Claim for Other Diagnostic Testing, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$105 | \$117 | \$123 | \$127 |
| 1999 | \$106 | \$118 | \$125 | \$129 |
| 2000 | \$106 | \$119 | \$127 | \$133 |
| 2001 | \$110 | \$124 | \$133 | \$139 |
| 2002 | \$111 | \$124 | \$131 | \$135 |
| 2003 | \$99 | \$109 | \$113 | \$115 |
| 2005 | \$86 | \$97 | \$102 | \$106 |
| 2006 | \$85 | \$94 | | |
| 2007 | \$83 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Cost Per Claim for Spinal Surgery Services, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$4,513 | \$5,006 | \$5,266 | \$5,559 |
| 1999 | \$4,508 | \$5,009 | \$5,366 | \$5,659 |
| 2000 | \$4,469 | \$5,105 | \$5,486 | \$5,798 |
| 2001 | \$4,451 | \$5,050 | \$5,508 | \$5,770 |
| 2002 | \$4,738 | \$5,058 | \$5,031 | \$4,950 |
| 2003 | \$3,044 | \$2,946 | \$3,067 | \$3,184 |
| 2005 | \$2,309 | \$2,629 | \$2,859 | \$3,005 |
| 2006 | \$2,334 | \$2,591 | | |
| 2007 | \$2,465 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Average Cost Per Claim for Other Surgery Services, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$676 | \$832 | \$929 | \$996 |
| 1999 | \$707 | \$876 | \$990 | \$1,062 |
| 2000 | \$720 | \$904 | \$1,030 | \$1,121 |
| 2001 | \$737 | \$931 | \$1,064 | \$1,141 |
| 2002 | \$705 | \$885 | \$982 | \$1,032 |
| 2003 | \$654 | \$780 | \$854 | \$900 |
| 2005 | \$818 | \$1,006 | \$1,117 | \$1,182 |
| 2006 | \$849 | \$1,027 | | |
| 2007 | \$801 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Cost Per Claim for Pathology and Laboratory Services, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$49 | \$53 | \$55 | \$57 |
| 1999 | \$49 | \$54 | \$56 | \$58 |
| 2000 | \$49 | \$54 | \$57 | \$60 |
| 2001 | \$52 | \$57 | \$61 | \$63 |
| 2002 | \$53 | \$58 | \$61 | \$63 |
| 2003 | \$52 | \$56 | \$58 | \$59 |
| 2005 | \$59 | \$64 | \$68 | \$72 |
| 2006 | \$55 | \$63 | | |
| 2007 | \$58 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Average Cost Per Claim for Other Professional Services, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | \$207 | \$282 | \$326 | \$358 |
| 1999 | \$222 | \$301 | \$353 | \$386 |
| 2000 | \$227 | \$312 | \$369 | \$408 |
| 2001 | \$244 | \$335 | \$395 | \$435 |
| 2002 | \$244 | \$335 | \$390 | \$423 |
| 2003 | \$269 | \$353 | \$400 | \$425 |
| 2005 | \$306 | \$397 | \$453 | \$488 |
| 2006 | \$296 | \$388 | | |
| 2007 | \$290 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Evaluation and Management Services Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 5.8 | 7.1 | 7.8 | 8.3 |
| 1999 | 6.0 | 7.4 | 8.2 | 8.7 |
| 2000 | 6.2 | 7.6 | 8.6 | 9.2 |
| 2001 | 6.5 | 8.2 | 9.2 | 9.8 |
| 2002 | 6.8 | 8.5 | 9.4 | 9.8 |
| 2003 | 6.2 | 7.5 | 7.9 | 7.8 |
| 2005 | 5.1 | 6.2 | 6.8 | 7.1 |
| 2006 | 4.7 | 5.7 | | |
| 2007 | 4.5 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 22.5 | 25.1 | 26.2 | 26.8 |
| 1999 | 22.7 | 25.2 | 26.3 | 26.8 |
| 2000 | 22.6 | 25.0 | 26.3 | 27.1 |
| 2001 | 22.8 | 25.8 | 27.5 | 28.4 |
| 2002 | 23.7 | 26.9 | 28.3 | 28.7 |
| 2003 | 20.5 | 22.6 | 23.2 | 23.1 |
| 2005 | 17.5 | 19.3 | 20.0 | 20.2 |
| 2006 | 13.9 | 15.2 | | |
| 2007 | 12.3 | | | |

Average Number of Physical Medicine Modalities Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Other Physical Medicine Services Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 33.5 | 43.5 | 48.0 | 50.3 |
| 1999 | 37.4 | 48.7 | 54.5 | 57.5 |
| 2000 | 40.7 | 53.2 | 60.4 | 64.4 |
| 2001 | 43.7 | 57.9 | 66.3 | 70.7 |
| 2002 | 46.0 | 61.5 | 69.9 | 74.0 |
| 2003 | 46.3 | 61.0 | 67.3 | 69.5 |
| 2005 | 48.2 | 59.7 | 65.5 | 68.2 |
| 2006 | 39.4 | 49.5 | | |
| 2007 | 36.2 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 2.0 | 2.2 | 2.3 | 2.4 |
| 1999 | 2.1 | 2.2 | 2.3 | 2.4 |
| 2000 | 2.1 | 2.2 | 2.3 | 2.4 |
| 2001 | 2.1 | 2.2 | 2.3 | 2.4 |
| 2002 | 2.1 | 2.2 | 2.3 | 2.3 |
| 2003 | 1.9 | 2.0 | 2.0 | 1.9 |
| 2005 | 1.6 | 1.6 | 1.7 | 1.7 |
| 2006 | 1.6 | 1.7 | | |
| 2007 | 1.6 | | | |

Average Number of CT Scans Billed Per Claim, Adjusted, Injury Years 1998-2007

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of MRIs Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 2.0 | 2.0 | 2.1 | 2.1 |
| 1999 | 1.8 | 1.9 | 2.0 | 2.0 |
| 2000 | 1.7 | 1.8 | 1.9 | 1.9 |
| 2001 | 1.8 | 1.9 | 2.0 | 2.0 |
| 2002 | 1.6 | 1.7 | 1.8 | 1.8 |
| 2003 | 1.6 | 1.6 | 1.7 | 1.7 |
| 2005 | 1.6 | 1.6 | 1.7 | 1.7 |
| 2006 | 1.5 | 1.6 | | |
| 2007 | 1.5 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Average Number of Nerve Conduction Study Services Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 9.8 | 10.3 | 10.6 | 10.9 |
| 1999 | 11.0 | 11.3 | 11.7 | 12.1 |
| 2000 | 11.8 | 12.3 | 12.7 | 13.1 |
| 2001 | 12.9 | 13.4 | 13.9 | 14.2 |
| 2002 | 13.6 | 14.1 | 14.5 | 14.8 |
| 2003 | 13.8 | 14.1 | 14.3 | 14.2 |
| 2005 | 15.5 | 16.0 | 16.5 | 16.9 |
| 2006 | 14.9 | 15.2 | | |
| 2007 | 14.3 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Other Diagnostic Testing Services Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 3.7 | 4.0 | 4.2 | 4.4 |
| 1999 | 3.7 | 4.0 | 4.2 | 4.4 |
| 2000 | 3.7 | 4.1 | 4.3 | 4.5 |
| 2001 | 3.8 | 4.2 | 4.5 | 4.7 |
| 2002 | 3.8 | 4.2 | 4.4 | 4.5 |
| 2003 | 3.5 | 3.7 | 3.8 | 3.8 |
| 2005 | 2.5 | 2.8 | 2.9 | 3.0 |
| 2006 | 2.5 | 2.7 | | |
| 2007 | 2.4 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Average Number of Spinal Surgery Services Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 3.3 | 3.8 | 4.2 | 4.5 |
| 1999 | 3.4 | 4.1 | 4.5 | 4.9 |
| 2000 | 3.5 | 4.3 | 4.8 | 5.2 |
| 2001 | 3.4 | 4.3 | 4.9 | 5.2 |
| 2002 | 3.9 | 4.5 | 5.0 | 5.4 |
| 2003 | 3.9 | 4.7 | 5.1 | 5.5 |
| 2005 | 4.4 | 5.3 | 5.8 | 6.2 |
| 2006 | 4.5 | 5.4 | | |
| 2007 | 5.0 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Other Surgery Services Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 2.4 | 2.8 | 3.1 | 3.3 |
| 1999 | 2.4 | 2.9 | 3.2 | 3.4 |
| 2000 | 2.4 | 2.9 | 3.3 | 3.6 |
| 2001 | 2.5 | 3.1 | 3.5 | 3.8 |
| 2002 | 2.6 | 3.2 | 3.6 | 3.8 |
| 2003 | 2.6 | 3.2 | 3.5 | 3.6 |
| 2005 | 3.0 | 3.7 | 4.1 | 4.3 |
| 2006 | 3.0 | 3.7 | | |
| 2007 | 2.9 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.
Average Number of Pathology and Laboratory Services Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 4.4 | 4.8 | 5.0 | 5.2 |
| 1999 | 4.7 | 5.1 | 5.4 | 5.6 |
| 2000 | 4.6 | 5.0 | 5.4 | 5.6 |
| 2001 | 4.9 | 5.3 | 5.7 | 5.9 |
| 2002 | 4.6 | 5.1 | 5.5 | 5.8 |
| 2003 | 5.5 | 6.0 | 6.2 | 6.2 |
| 2005 | 4.9 | 5.3 | 5.7 | 6.0 |
| 2006 | 4.8 | 5.3 | | |
| 2007 | 5.1 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Other Professional Services Billed Per Claim, Adjusted, Injury Years 1998-2007

| Injury Year | 6 Months Post Injury | 12 Months Post Injury | 18 Months Post Injury | 24 Months Post Injury |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 1998 | 7.5 | 9.7 | 11.0 | 12.0 |
| 1999 | 7.8 | 10.0 | 11.7 | 12.8 |
| 2000 | 8.3 | 11.0 | 13.0 | 14.4 |
| 2001 | 8.9 | 12.0 | 14.3 | 15.8 |
| 2002 | 9.7 | 13.2 | 15.4 | 16.7 |
| 2003 | 11.1 | 14.4 | 15.9 | 16.7 |
| 2005 | 13.6 | 17.4 | 19.7 | 21.0 |
| 2006 | 13.0 | 16.7 | | |
| 2007 | 12.1 | | | |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Specific Physical Medicine Services Billed Per Claim, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

| Injury Year | Hot and Cold Packs | Mechanical Traction | Electrical Stimulation Procedures - Manual | Lontophoresis |
|-------------|-----------------------|------------------------|---|---------------|
| 1998 | 9.3 | 10.3 | 11.9 | 4.4 |
| 1999 | 9.0 | 10.6 | 12.7 | 4.4 |
| 2000 | 8.8 | 10.3 | 12.7 | 4.6 |
| 2001 | 8.7 | 10.4 | 13.2 | 4.5 |
| 2002 | 9.0 | 10.7 | 12.0 | 4.6 |
| 2003 | 8.5 | 11.4 | 12.5 | 4.8 |
| 2005 | 9.0 | 11.7 | 14.1 | 4.7 |
| 2006 | 8.0 | 9.4 | 11.0 | 4.0 |
| 2007 | 7.5 | 8.3 | 10.3 | 3.5 |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Specific Physical Medicine Services Billed Per Claim, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

| Injury Year | Diathermy | Whirlpool Therapy | Unlisted Physical Medicine Modalities | Therapeutic Excercises |
|-------------|-----------|----------------------|--|---------------------------|
| 1998 | 11.0 | 7.6 | 7.8 | 15.5 |
| 1999 | 11.5 | 7.2 | 10.0 | 17.4 |
| 2000 | 11.7 | 7.8 | 9.7 | 19.8 |
| 2001 | 10.7 | 7.4 | 8.1 | 22.0 |
| 2002 | 10.5 | 7.4 | 9.2 | 24.6 |
| 2003 | 10.5 | 8.2 | 8.3 | 24.4 |
| 2005 | 9.0 | 8.1 | 8.3 | 28.1 |
| 2006 | 8.4 | 7.9 | 7.1 | 23.4 |
| 2007 | 8.0 | 7.7 | 6.2 | 21.9 |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Specific Physical Medicine Services Billed Per Claim, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

| Injury Year | Re-education | Neuromuscular Aquatic Therapy | Massage Therapy | Manipulations |
|-------------|--------------|----------------------------------|-----------------|---------------|
| | | | massage morapy | manipulatione |
| 1998 | 10.5 | 16.9 | 10.2 | 22.9 |
| 1999 | 10.4 | 19.9 | 10.3 | 22.6 |
| 2000 | 11.0 | 24.6 | 10.7 | 20.7 |
| 2001 | 12.5 | 28.2 | 10.8 | 20.3 |
| 2002 | 13.6 | 33.7 | 10.8 | 19.4 |
| 2003 | 14.2 | 28.0 | 10.9 | 14.9 |
| 2005 | 14.5 | 31.3 | 12.3 | 17.4 |
| 2006 | 12.5 | 24.7 | 9.6 | 14.6 |
| 2007 | 11.0 | 24.9 | 8.2 | 13.5 |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.

Average Number of Specific Physical Medicine Services Billed Per Claim, Adjusted, Six Months Post-Injury, Injury Years 1998-2007

| Injury Year | Therapeutic Procedure – Group Therapy | Therapeutic Activities – One on One | Unlisted Physical Medicine Procedures |
|-------------|--|--|--|
| 1998 | 8.4 | 9.0 | 7.7 |
| 1999 | 8.3 | 9.3 | 8.7 |
| 2000 | 12.6 | 9.6 | 10.3 |
| 2001 | 12.0 | 10.5 | 7.4 |
| 2002 | 13.7 | 12.0 | 7.3 |
| 2003 | 8.4 | 12.5 | 9.0 |
| 2005 | 7.9 | 12.1 | 14.7 |
| 2006 | 6.0 | 9.8 | 14.1 |
| 2007 | 5.7 | 9.4 | 8.9 |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2008.

Note: Injury Year 2004 was excluded from this analysis due to missing data. Injury Year 2007 data should be considered preliminary due to data reporting lags. The figures presented above are adjusted for injury type and type of claim differences that may exist between the groups.