

**Survey of Injured Workers
Regarding Work-Related
Health Problems:**

**Comparison of State and
Private Sector Worker Experiences**

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EXECUTIVE SUMMARY

As part of its work on the development of regional workers' compensation (WC) health care network report cards to assist in the evaluation of a legislatively-mandated health care network feasibility study, the Research and Oversight Council on Workers' Compensation (ROC) conducted a survey of injured workers regarding their health status. Interviews with employees injured in 2000 were conducted in the fall of 2002, some 21 to 33 months after the on-the-job injury or illness occurred. The sample of injured workers was restricted to those with soft tissue injuries affecting their back, neck or shoulder areas.¹ Research findings are based on telephone interviews with 970 injured employees, conducted in the fall of 2002.²

This report provides useful baseline data regarding various patient satisfaction, health status (emotional and physical), return-to-work, and earnings outcomes than can be compared to other populations of injured workers who may, at some point in the future, be receiving care through regional health care networks or through traditional fee-for-service health care providers in Texas.

Specifically, the following key research questions are addressed:

- 1) How did injured workers select doctors for the treatment of emergency medical care and non-emergency medical care, and was the selection process different in any meaningful way for public sector (i.e., workers employed by the state of Texas) and private sector workers?

¹ These soft tissue injuries were selected to control for injury type differences between the state and private sector samples, and because they represent a significant proportion of the workers' compensation claims in Texas. The sample was randomly drawn from the TWCC Medical Forms Database and included all soft tissue back, neck, and shoulder claims, regardless of whether the injured worker lost time from work due to the injury. The survey found that the vast majority of the survey respondents (81 percent) did lose some time from work due to the injury.

² The telephone survey was designed by the Research and Oversight Council on Workers' Compensation and MED-FX, LLC, and include a subset of questions from the standardized SF-12 Health Survey. The survey was administered by the Survey Research Center at the University of North Texas.

- 2) What were the overall impressions of the quality of medical care received by injured workers, and did the post-injury experiences of public sector employees and private sector employees, as they relate to the medical care they received for their work-related injury, differ in any meaningful ways?
- 3) What was overall post-injury health status of injured workers, and did that status differ for public and private sector workers? and
- 4) What was the overall post-injury return-to-work (RTW) experience of injured workers, and were there significant differences in RTW patterns for public and private sector workers?

Key Findings

Findings are reported below for three critical areas: 1) satisfaction with the quality of medical care received; 2) post-injury health status; and 3) post-injury return-to-work and wage earnings experience.

Choice of Doctor and Quality of Medical Care

- Overall, 61 percent of the survey respondents indicated that they received emergency medical care for their on-the-job injury, and the majority (57 percent) said that they were satisfied with the quality of the emergency medical care they received. State workers (71 percent) were much more likely to be satisfied with the quality of the emergency care they received for their on-the-job injury than employees injured at private-sector companies (57 percent).
- Though by law Texas employees have the first choice of treating doctor, a significant proportion (33 percent) indicated that they selected a doctor from an employer-provided list or went to a doctor recommended by their employer. Further, a higher proportion of private sector employees (34 percent) had their non-emergency medical care directed by their employer than state employees (21 percent).

- An equal percentage (45 percent) of state and private-sector employees changed treating doctors (i.e., primary care doctors) at some time during the treatment of their occupational injury.
- The vast majority (84 percent) of injured workers were in agreement with the statement that they were provided with very good medical care (by the doctor they saw most often) that met their needs—including 43 percent who strongly agreed that this was the case.
- Most workers felt that the doctor they saw most often took their condition seriously (89 percent), gave them a thorough exam (84 percent), tried to understand their daily tasks and duties (85 percent), and had their complete trust (81 percent). These strong, positive sentiments regarding medical treatment were voiced by injured workers employed by both state agencies and private-sector firms.
- While some differences were observed in the patient satisfaction levels between injured workers who chose their own treating doctor and those whose choice of doctor was influenced by their employer, it is important to note that the large majority of both injured worker groups tended to be satisfied with the quality of the medical care received for the treatment of their on-the-job injury.
- Injured workers who chose their own treating doctor were somewhat more likely than workers whose choice of doctor was influenced by their employer to feel that: their doctor took their medical condition seriously (92 percent vs. 83 percent); that the doctor gave them a thorough medical exam (87 percent vs. 74 percent); and that the doctor has their complete trust (84 percent vs. 74 percent).
- Injured workers who selected their own treating doctor were also more likely to say they would recommend their doctor to a relative or friend for a similar

- problem (82 percent vs. 71 percent), and a smaller percentage of those workers who chose their own doctors felt that the doctor seemed to care more about what the insurance company or employer thought about their medical care (18 percent) than those workers who had their care directed by their employer (31 percent).
- Nearly three quarters (74 percent) of the survey respondents were satisfied with the medical care they received from the doctor they saw most often—including 50 percent who indicated that they were “extremely satisfied.” While these proportions were roughly the same for state and private sector workers, workers who selected their own doctor (77 percent) were significantly more likely to be satisfied with the quality of care than were injured employees who chose a doctor with their employer’s input (64 percent).

Post-Injury Health Status

It is important to note that all findings related to the injured employees’ health status reflect their self-reported condition 21 to 33 months after the occupational injury occurred, depending on the exact date of injury in 2000.

- When asked about their health status 21 to 33 months post-injury, injured workers reported a wide spectrum of condition levels. While just 7 percent of the workers said their current health was “excellent”, 18 percent said it was “very good”, and 33 percent reported their health status as “good.” One quarter of the survey respondents said their health condition was “fair”, and the remaining 16 percent reported their condition as “poor.”³
- While no significant differences in *overall health status* were observed between state and private sector employees, state employees were significantly more prone than private-sector employees to have physical limitations (particularly to more strenuous activities) at the time of the interview.

³ Percentages do not total to 100 percent due to rounding.

- A significant percentage of injured workers indicated that, as a result of their physical health they accomplished less than they would have liked (57 percent), or were limited in the type of work or activities they were able to perform (63 percent).
- Emotional problems also tended to limit the activities of survey respondents after a significant amount of time had passed since their on-the-job injury took place: 45 percent of the injured workers said that, due to emotional problems, they accomplished less than they would have liked and 40 percent said they didn't do activities as carefully as usual due to emotional problems.
- A substantial proportion of injured workers indicated that, despite the significant amount of time that has elapsed since their injury, pain still interfered with their work either "quite a bit" (22 percent) or "extremely" (15 percent).⁴
- Approximately two years after their on-the-job injuries took place, the population of Texas workers with work-related soft tissue back, neck, and shoulder injuries had significantly lower mean physical health (39.1) and mental health (45.9) scores (on the SF-12 Health Survey questions) than the 1998 general U.S. population (mean score of 50 for the physical and mental health measures).
- The population of workers with work-related soft tissue injuries in 2000 had slightly higher physical health scores (39.2 vs. 37.6) than the population of Texas workers injured in 1997 and 1998 who were surveyed for the ROC's 2001 study (See *Striking the Balance: An Analysis of the Cost and Quality of Medical Care in the Texas Workers' Compensation System*).

⁴ These percentages refer to all injured workers surveyed, not just those who indicated that they were employed at the time of the interview.

- The population of workers with work-related soft tissue injuries in 2000, also had slightly higher mean mental health scores (45.9 vs. 44.4) than Texas workers injured in 1997 and 1998 who were surveyed for the ROC's 2001 study.

Post-Injury Return-to-Work Outcomes

As was the case with the health status findings, it is important to keep in mind that all findings related to the injured employees' employment status reflect their self-reported work and earnings activity 21 to 33 months after the occupational injury occurred, depending on the exact date of injury in 2000.

- Approximately one-third (34 percent) of the workers injured in 2000 reported that they were not working at the time of the interview. Seventy-one percent of state workers said they were employed at the time of the interview compared to 66 percent of workers who were employed by private sector firms at the time of their injury.
- After controlling for whether the unemployment status was related to their on-the-job injury, approximately the same percentage of state (26 percent) and private sector workers (25 percent) said that they were out of work due to their injury.
- Overall, 66 percent of the workers injured in 2000 were employed at the time of the interview (Fall 2002), while 19 percent were unemployed but did return to work at some point after the injury. The remaining 15 percent had still not returned to work 21 to 33 months after their work-related injury took place.
- Of the workers unemployed at the time of the survey, the majority (69 percent) indicated that lost *at least one year* of work following their injury.⁵ It is important to note that this represents the total amount of time off work and may include periods of non-work that are not due to the injury.

⁵ This total duration of lost time includes cases involving intermittent periods of lost time, as well as one continuous period of lost time following the workplace injury.

- Of the nearly two-thirds of the workers who said they were employed at the time of the interview, the majority 65 percent said they were working for the same employer they worked for at the time of their injury (i.e., their injury-site employer). State workers (84 percent) were much more likely than private sector employees (65 percent) to be working for their injury-site employer.
- Due to the relative stability of state employment, state workers (73 percent) were also more likely than private sector workers (65 percent) to be doing the same type of work they were doing before the on-the-job injury occurred.
- Of the workers employed at the time of the interview, a much higher proportion of private sector workers (34 percent) than workers employed by the state at the time of their injury (17 percent) reported that they were earning less money at the time of the interview than they did before the injury.
- The overwhelming majority of the survey respondents (81 percent), who reported that they were working at the time of the injury, indicated that they had lost some time from work due to their on-the-job injury.
- Of those injured workers employed at the time of the survey, significantly more state workers (37 percent) reported losing *less than one month of time* from work (due to the injury) than workers employed by private sector firms at the time of the injury (28 percent).
- While state workers tended to lose less time from work due to the injury, they were also more likely than private sector workers to indicate that they went back to work “too soon” following their occupational injury (37 percent vs. 29 percent).

- The vast majority of the survey respondents (89 percent) characterized their employer as a “good employer before the work-related injury took place.” This held for both state and non-state workers.
- While the majority of survey respondents (59 percent) said their employer treated them with respect following their on-the-job injury, state workers (68 percent) were more likely than private sector workers (59 percent) to feel this way.
- Very few employers asked injured workers not to file a claim (8 percent); however, a higher proportion of survey respondents indicated that their employer questioned whether or not an injured worker’s injury was work related (22 percent).
- After an injury occurred, it was much more likely that return-to-work related discussions would take place between the employer and injured worker if the worker were employed by the state of Texas, as opposed to a private sector firm. For example, 59 percent of injured state workers (versus 42 percent of private sector workers) said that their employer provided them with a written copy of the their return-to-work plan, and 70 percent of state workers (versus 61 percent of private sector workers) indicated that their employer worked with their treating doctor regarding treatment and return-to-work options.⁶
- Longer pre-injury employment tenure was found to be associated with better perceived (by employee) post-injury treatment by the employer . For example, almost three-quarters (71 percent) of workers who were on the job for more than 5 years before the injury felt their employer treated them with respect after the

⁶ These differences may be due to the fact that Texas state agencies are strongly encouraged by the risk-reward program (as well as other statutory requirements) to adopt a written return-to-work plan for injured workers, as an effective loss control strategy. Further, state agencies are required to report to Legislature (along with its biennial budget request) data related to the number of injuries, the dollar value of indemnity and medical payments made to injured workers, the injury rate per 100 employees, and a description of efforts made by the agency to reduce injuries and WC losses. See *Texas Labor Code* § 501.048.

injury, compared to just 47 percent of the workers with job tenures of less than one year prior to the occurrence of the on-the-job injury.

- Injured workers employed by their injury-site employer for more than 5 years prior to the injury were also significantly more likely to indicate that their employer worked with their doctor regarding treatment and return-to-work plans, that their employer tried to understand what tasks they were capable of performing when they returned to work, and that their employer provided them with a written copy of the company/agency return-to-work plan.

Conclusion

This study provides important information regarding various patient satisfaction metrics, post-injury return-to-work and earnings outcomes, and the physical and emotional health of state and private sector employees in Texas who suffered work-related soft tissue injuries. The interviews with injured workers reveals that there are meaningful differences between state and private sector workers when issues related to the selection of doctors, the post-injury health status of injured workers, and the likelihood of successful post-injury return-to-work and earnings outcomes.

A key, if not unexpected, finding that emerges from this analysis is that allowing an injured worker to choose his or her own treating doctor seems to impact the perception of the quality of medical care received in a positive way. Injured workers who chose their own doctors were significantly more satisfied with the medical care they received than workers who were directed to a provider either through an employer-provided list or through an employer recommendation. This has important implications for the possible implementation of regional health care networks to treat work-related injuries. It is, however, important to note that regardless of how the treating doctor was selected (e.g., by the injured worker, from an employer-provided list of medical providers), workers tended to be fairly satisfied with the perceived quality of the medical care they received.

I: INTRODUCTION

Studies conducted by the Research and Oversight Council on Workers Compensation (ROC) and the Workers Compensation Research Institute (WCRI) clearly show that the medical cost of workers' compensation (WC) claims in Texas is significantly higher than comparable states.⁷ The ROC's 2001 report further concludes that the interstate differences in medical costs are primarily the result of higher utilization of medical services in Texas, and that injured workers in Texas do not appear to be any more satisfied with their medical care than do workers in other, lower cost, states.

In response to the body of evidence that Texas medical costs are excessive, the 77th Texas Legislature passed House Bill (HB) 2600, which contained a provision (in Article 2 of the bill) aimed at improving the quality and cost monitoring of medical care in the WC system through the use of voluntary, regional networks.

Article 2 of HB 2600 commissioned a study to determine the feasibility of establishing voluntary participation regional health care delivery networks that include effective cost-control and monitoring mechanisms while ensuring quality medical outcomes for injured workers.⁸ TWCC would administer the regional health care networks on behalf of a Governor-appointed Health Care Network Advisory Committee (HNAC).⁹ In late 2002, a feasibility study indicated that these networks would be feasible, assuming adequate participation by injured workers, and should be attempted on a pilot basis for state employees. As part of the implementation of these networks, HNAC and ROC are to develop report cards to measure participant satisfaction, as well as health and return to work outcomes. The report card must include a an evaluation of:¹⁰

- employee access to care;

⁷ See Telles, Carol, Anko Laszlo, and Te-Chun Liu, *CompScope Benchmarks: Multistate Comparisons, 1994-2000* (Workers' Compensation Research Institute, 2003); and 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*, 2001.

⁸ Texas currently allows injured employees to select any treating doctor from the Texas Workers' Compensation Commission's (TWCC's) approved doctor list.

⁹ Section 408.0221 (c), *Texas Labor Code*.

¹⁰ Section 408.0221 (h), *Texas Labor Code*.

- coordination of care and return to work;
- communication among system participants;
- return-to-work outcomes;
- health-related outcomes;
- employee, health care provider, employer, and insurance carrier satisfaction;
- disability and re-injury prevention;
- appropriate clinical care;
- health care costs;
- utilization of health care; and
- statistical outcomes of medical dispute resolution provided by Independent Review Organizations (IROs).

As noted, any networks created under Article 2 of HB 2600 are voluntary for both insurance carriers/employers and employees. These report cards are intended to help employers and injured workers make informed decisions as to whether or not to participate in the network. Three potential types of report cards have been discussed by the feasibility consultant:

- *A Network Performance Report Card (or NPRC)* containing various quality of care and financial performance measures, which would allow system stakeholders, HNAC members, network administrators, and policymakers to evaluate and compare the performance of individual networks.
- *An Injured Worker and Employer Report Card (or IWERC)*, a “pared down” version of the NPRC geared toward helping employees make decisions about network participation, emphasizing basic aspects of satisfaction with care and outcomes.
- *A Network Effectiveness Report Card (or NERC)*, which would allow system stakeholders to compare the cost and quality of medical care provided to injured

workers participating in the network and injured workers receiving medical care outside of the network.

The injured worker survey used in this study will provide some of the baseline data for the network report cards, once the networks are operational. The following research questions are addressed by a telephone survey of injured employees:

- What were injured workers' overall impressions of the quality of medical care they received, and did the post-injury experiences of public sector employees and private sector employees, as they relate to the medical care they received for their work-related injury, differ in any meaningful ways?
- What was the overall post-injury health status of injured workers, and did that status differ for public and private sector workers? and
- What was the overall post-injury return-to-work (RTW) experience of injured workers, and were there significant differences in RTW patterns for public and private sector workers?

Purpose

The purpose of this research project is to provide baseline measures related to medical treatment and return-to-work outcomes for injured workers in Texas, who employed in the public (i.e., Texas state employees) and private sectors of Texas.

Research Methodology

The research findings presented in this report are based on a telephone survey of 970 Texas workers who suffered back, neck, or shoulder soft tissue injuries in 2000. The sample for the study was derived from two sources: 1) the Texas Workers' Compensation Commission's (TWCC's) administrative claims database was used to randomly select injured workers meeting the sampling criteria (e.g., injury year, injury type); and 2) the State Office of Risk Management's (SORM's) claims database was used

to supplement the sample of state workers with the most current telephone numbers available. The sample for the private sector included 5,000 injured workers, and the public sector (or state employee) sample consisted of 708 injured workers.

The survey was administered by the Survey Research Center at the University of North Texas between September 23 and October 15, 2002. A total of 814 surveys were completed with state workers, and 156 surveys were completed with injured workers employed by private sector firms. This represents a survey response rate of 17 percent.

For a more detailed account of the research methodology, survey fielding results, and weighting approach, please refer to Appendix A.

Organization

Following this introduction, the report is organized into three main sections. Section II describes results related to the quality of medical care provided to injured workers by the health care providers who treated them. Section III provides key information about the health status of injured workers at the time of the interview (i.e., 21 to 33 months after the injury). Lastly, Section IV details the post-injury return-to-work experiences of injured workers in Texas. Where applicable, key differences observed between the state and private sector employee populations (i.e., workers employed by state and private sector firms at the time of the work-related injury) are reported.

A detailed account of the research approach employed on this project can be found in Appendix A, and a copy of the survey instrument used to collect information from injured workers is contained in Appendix B.

SECTION II: INJURED WORKER EXPERIENCES WITH MEDICAL CARE AND PERCEPTIONS REGARDING PROVIDER CONCERN

Since both the medical care received immediately after an injury takes place (i.e., emergency medical care), and on-going care provided by the injured workers' treating doctor are important components of an injured worker's overall medical treatment, questions specific to these two types of care were posed to injured workers. Therefore, this section explores in detail these two types of medical care that may have been provided to injured workers: 1) emergency medical care administered immediately after an on-the-job injury; and 2) medical care provided by the health care provider they saw most often (typically, the injured worker's treating doctor) in the treatment of their work-related injury.¹¹

Emergency Medical Care

Overall, 61 percent of the injured workers surveyed indicated that they received emergency medical care immediately after suffering an on-the-job injury. While there was little difference in the overall percentage of state (64 percent) and private sector (61 percent) employees receiving emergency care, differences did emerge when employees in each group were asked *how they received this medical treatment*.

Almost one-third (33 percent) of the injured workers who received emergency care indicated that they went to an emergency room (ER) immediately after their on-the-job injury took place (17 percent went on their own, and 16 percent were taken to the ER by their employer). Employees were split almost evenly between whether they saw a emergency care doctor on their own or went to a clinic of their choice (25 percent), or whether their employer took them to a company doctor or off-site clinic (24 percent). State employees (13 percent) who suffered a work-related injury were somewhat more likely than private sector workers (8 percent) to see a company doctor or nurse *at the*

¹¹ Some (23 percent) continued to receive care from the doctor they received emergency care from, but most (69 percent) continued to receive care from another doctor. A small proportion (6 percent) stopped receiving medical care for their injury after the initial emergency medical care.

worksite.¹² As Table 1 shows, injured workers employed in the private sector (24 percent) were almost twice as likely to indicate that their employer took them directly to a company doctor or an offsite clinic than were state employees injured at work (13 percent).

Table 1
Description of How Emergency Medical Care was Provided:
State Employees vs. Private Sector Employees

Description of How the Injured Worker Received Emergency Medical Care for Their Work-Related Injury	Percent of State Workers	Percent of Private Sector Workers
You saw a company doctor or nurse at your worksite	13%	8%
Your employer took you directly to a company doctor or clinic off-site	13%	24%
Your employer took you to the emergency room	17%	16%
You went to the emergency room on your own	22%	17%
You saw a doctor or went to a clinic of your own choice	28%	25%
Other	5%	9%

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

The vast majority (75 percent) of the injured workers surveyed indicated that they saw a medical doctor for their emergency care, rather than a nurse or some other type of health care provider. This proportion did not vary significantly for injured workers employed by the state or private sector firms. Similarly, no significant differences were observed in the percentage of state (9 percent) and private sector (10 percent) employees who indicated that they saw a chiropractor for their emergency medical care. Two percent of the survey respondents said that they received emergency medical care from a nurse, and the remaining 12 percent noted that some other type of medical practitioner provided the care.

¹² This may be function of a disproportionately large percentage of injured state employees work for agencies, such as the Department of Mental Health and Mental Retardation (MHMR) or other agencies with medical staff on-site.

Overall, the majority (57 percent) of injured workers said that they were satisfied with the quality of the emergency medical care they received.¹³ However a higher proportion of state workers (71 percent) said they were satisfied with the quality of care than did private sector employees (57 percent). Likewise, a higher proportion of state workers indicated that they were “Extremely Satisfied” with the quality of the emergency medical care received (state workers: 46 percent vs. private sector workers: 35 percent).

After receiving emergency medical care, more than two-thirds (69 percent) of injured workers shifted to a different doctor to continue their treatment. Just under one-quarter (23 percent) continued to receive care from the emergency provider and 8 percent stopped receiving medical care for their on-the-job injury. There were no discernible differences between state and non-state workers in these patterns of care.

Non-Emergency Medical Care

Selection of Treating Doctor

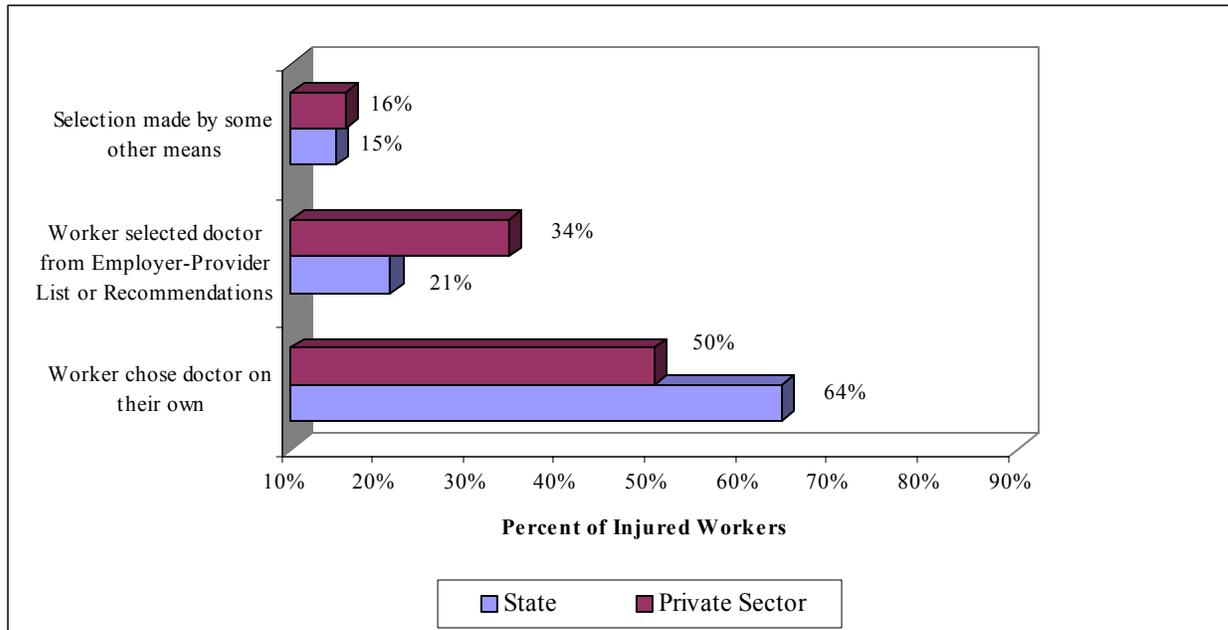
Injured workers were asked who chose the first non-emergency doctor they saw for continued treatment of their work-related ailment. Despite the fact that Texas workers have the first choice of treating doctor, a significant proportion (33 percent) said that they selected a doctor from an employer-provided list or went a doctor recommended by their employer. Just over half (51 percent) said that they selected a doctor on their own.¹⁴

As Figure 1 illustrates, private sector workers were significantly more likely to have their medical care directed by their employer than were state workers. Likewise, a higher proportion of state workers (64 percent) chose their first non-emergency doctor on their own than did injured workers employed by private sector companies (50 percent).

¹³ Satisfied is defined as rating the care a “4” or a “5” of a 5-point scale where 1 means “Extremely Dissatisfied” and 5 means “Extremely Satisfied.”

¹⁴ The remaining 15 percent of the survey respondents noted that there was some “other” means by which they selected their first non-emergency doctor.

Figure 1
Selection of First Non-Emergency Doctor



Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Just over half (54 percent) of the injured workers said that their first non-emergency doctor was a medical doctor (MD), while just over one fifth (21 percent) noted that they saw a chiropractor to treat their on-the-job injury. Injured workers employed by private sector firms (22 percent) were somewhat more likely than state workers (14 percent) to choose a chiropractor as their treating doctor.

Interestingly, the doctor that injured workers chose to treat their work-related injury was *not typically* the doctor that they normally saw for routine medical care. This was the case for both state and non-state workers. Forty percent of the state workers surveyed said their treating doctor was the doctor they routinely visited (for general health concerns) compared to 27 percent of private sector workers.

In equal proportions (45 percent), state and non-state workers indicated that they changed treating doctors at some time during the treatment of their on-the-job injury. When asked why they changed doctors, dissatisfaction with the doctor's care or manner (26 percent)

and a feeling that the treatment was not helping (21 percent) were the two most common specific answers. However, the majority of workers were nonspecific—indicating that some “other reasons” drove them to switch doctors. It is important to note that the percentage of workers who switched doctors may include those that formally switched doctors through the TWCC change of treating doctor process, as well as those who saw a different doctor at some point after they began treatment with their first treating doctor.

Quality of Care from the Doctor Seen Most Often

Injured workers were asked to indicate their level of agreement or disagreement with a series of statements related to the quality of medical care they received from the doctor they saw most often for their work-related injury.

By and large, the majority of both state workers and those employed in the private sector were satisfied with how they were treated by their treating doctor (i.e., the doctor they saw most often), and with the quality of medical care they received. Overall, 84 percent of injured workers agreed that they were provided with very good medical care that met their needs—including 43 percent who strongly agreed with this assertion. On specific issues related to quality of care, the majority of the injured workers surveyed felt that:

- their condition was taken seriously (89 percent) and that they were given a thorough exam (84 percent);
- they were treated with respect (93 percent); and
- the doctor tried to understand their daily tasks and job duties (85 percent); and
- the doctor that they saw most often had their complete trust (81 percent).

Table 2 provides detailed information about how injured workers felt regarding the quality of care they received. Since very few differences were observed between state and non-state workers, only the overall results are reported.

Table 2
Percentage of Injured Workers Indicating Agreement or Disagreement
With Various Statements About the Doctor They Saw Most Often

The Doctor I saw Most Often for My Work-Related Injury or Illness...	<i>Strongly Agree</i>	Somewhat Agree	<i>Not Sure</i>	Somewhat Disagree	Strongly Disagree
Overall, provided me with very good medical care that met my needs.	43%	41%	2%	10%	4%
Is generally the type of doctor I would recommend to a relative or friend for this type of problem.	45%	34%	3%	11%	8%
Gave me a thorough medical examination.	44%	40%	3%	9%	3%
Took my medical condition seriously.	49%	40%	2%	6%	3%
Explained my medical condition in a way that I could understand it.	46%	43%	1%	8%	2%
Seemed willing to answer any medical questions I may have had.	45%	46%	1%	7%	2%
Has my complete trust.	41%	40%	3%	10%	6%
Treated me with respect.	50%	43%	0%	5%	2%
Tried to understand my daily job tasks and duties.	43%	42%	2%	10%	3%
Doubted that I was really sick or injured.	8%	14%	3%	40%	35%
Seemed to care more about what the insurance company or employer thought about my care.	10%	16%	5%	38%	30%

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

When the responses to the statements in Table 2 are stratified by whether the treating doctor was referred by the injured worker's employer or whether the injured worker found the treating doctor on their own, some interesting differences emerge. However, it is important to note that patient satisfaction levels are still fairly high for both the state workers and private sector worker populations. The more profound differences seem to relate to doctor/patient trust issues. A higher proportion of injured workers *who selected their own doctors* felt the doctor:¹⁵

¹⁵ Percentages in this section compare the responses of injured workers that selected their own treating doctor with injured workers who were sent to a doctor recommended by their employer.

- Took their medical condition seriously (92 percent vs. 83 percent);
- Has their complete trust (84 percent vs. 74 percent);
- Is generally the type of doctor they would recommend to a relative or friend for this type of problem (82 percent vs. 71 percent); and
- Gave them a thorough medical examination (87 percent vs. 74 percent).

In contrast a lower proportion of injured workers *who selected their own doctor* felt the doctor:

- Doubted that they were really sick or injured (19 percent vs. 25 percent); and
- Seemed to care more about what the insurance company or employer thought about their care (18 percent vs. 31 percent).

Not surprisingly, since many of the specific patient satisfaction outcomes tended to favor injured workers who chose their own treating doctors, a higher percentage of these injured workers felt that overall, the doctor that they saw most often provided them with very good medical care that met their needs (85 percent), compared to 77 percent of those who did not choose their own doctor.

Table 3 provides complete results regarding the quality of medical care stratified by the method by which the treating doctor was selected (i.e., from an employer-provided list or recommendation from employer, or by the employee's choice).

Table 3
Percentage of Injured Workers in Agreement With Various Statements
About the Doctor They Saw Most Often

By Method of Doctor Selection

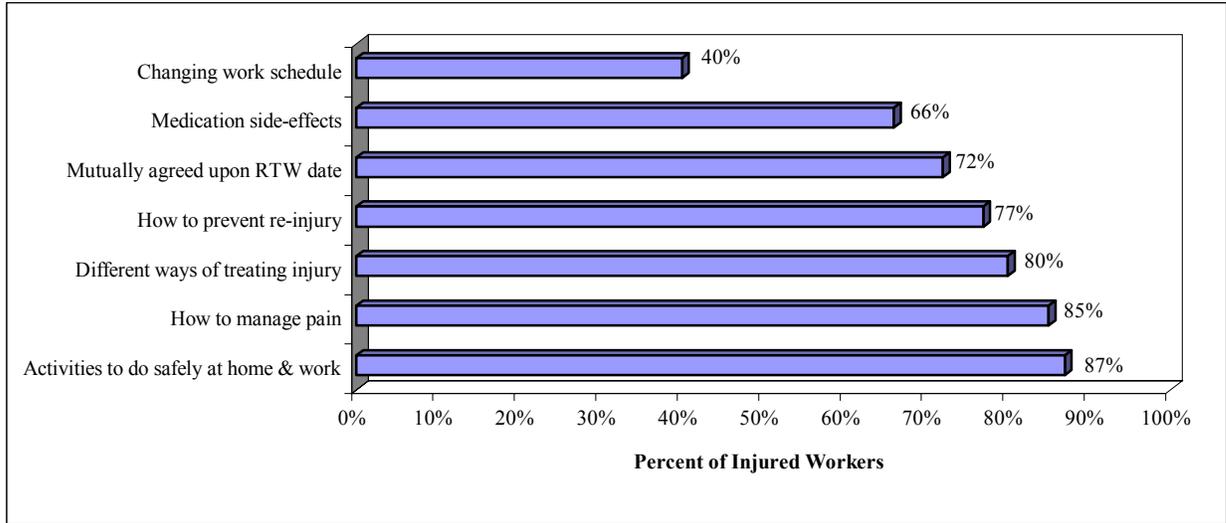
The Doctor I saw Most Often for My Work-Related Injury or Illness...	Doctor Selected from Employer Provided List or Recommended by Employer	Doctor Selected by Injured Worker
Overall, provided me with very good medical care that met my needs.	77%	85%
Is generally the type of doctor I would recommend to a relative or friend for this type of problem.	71%	82%
Gave me a thorough medical examination.	74%	87%
Took my medical condition seriously.	83%	92%
Explained my medical condition in a way that I could understand it.	83%	92%
Seemed willing to answer any medical questions I may have had.	88%	91%
Has my complete trust.	74%	84%
Treated me with respect.	90%	93%
Tried to understand my daily job tasks and duties.	82%	89%
Doubted that I was really sick or injured.	25%	19%
Seemed to care more about what the insurance company or employer thought about my care.	31%	18%

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Injured workers were asked if the doctor that they saw most often for their on-the-job injury or illness spoke with them about a series of important issues related to their recovery (e.g., activities that can be safely performed at home, how to manage pain, how to prevent re-injury, changing work schedule). As Figure 2 reflects, the majority of injured workers indicated that their treating doctors discussed a wide variety of recovery-related topics with them.

Figure 2

Percentage of Injured Workers Indicating that the Doctor They Saw Most Often Discussed the Following Topics with Them



Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

For each of the discussion topics cited in Figure 2 above, a slightly higher proportion of injured workers who chose a treating doctor on their own indicated that the issues were discussed with their doctor more often than did those injured workers who selected a doctor from an employer provided list or by an employer recommendation. The largest disparities were as follows:

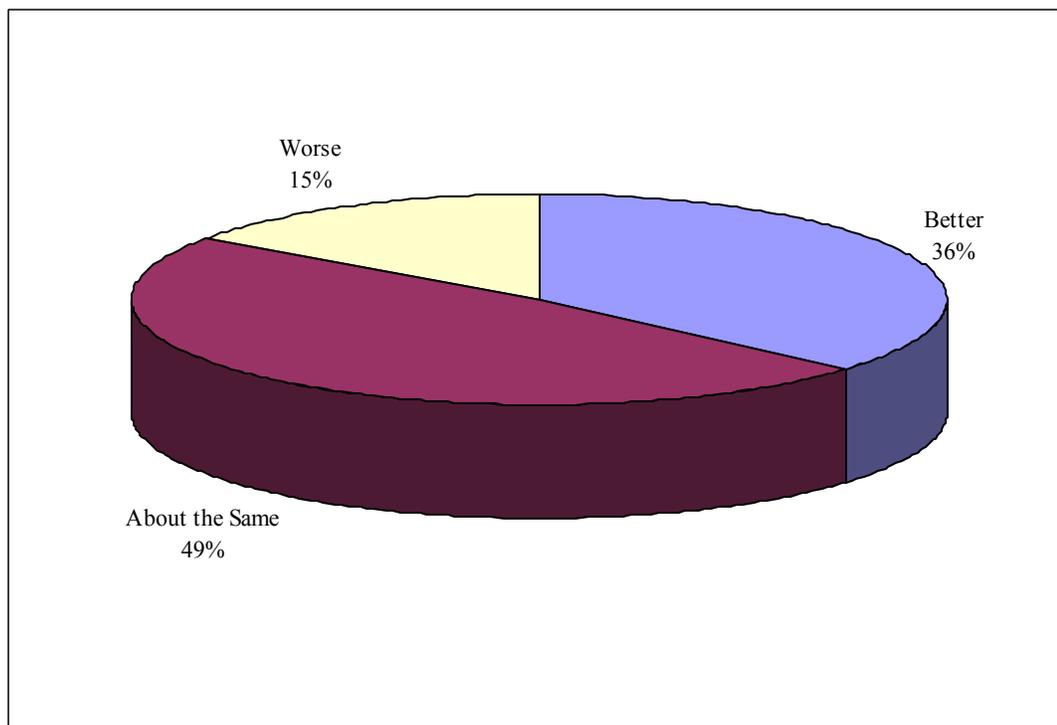
- Doctor seen most often talked to injured worker about activities that can safely be done at work and school (88 percent vs. 81 percent);
- Doctor seen most often talked to injured worker about how to manage pain (88 percent vs. 80 percent); and
- Doctor seen most often talked to injured worker about different ways of treating the work-related injury or illness (80 percent vs. 72 percent)

While almost half (48 percent) of the injured workers surveyed indicated that the quality of medical care they received for their work-related injury or illness was “about the same” as the care they usually receive when they are injured or sick, 36 percent of the survey respondents said the services they received for their on-the job injury were better

than their customary medical care. Only 15 percent of the injured workers surveyed noted that the medical care was worse than they typically receive. (See Figure 3.) No discernible differences were observed between state and private sector employees. Similarly, there were no significant differences (regarding the comparison of the medical care they received for their work-related injury and the care they typically receive) between injured workers who chose their own doctor than those whose choice of doctor was influenced by their employer.

Figure 3

Comparison of Medical Care Received for their On-the-Job Injury Versus Medical Care Typically Provided When Sick or Injured



Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

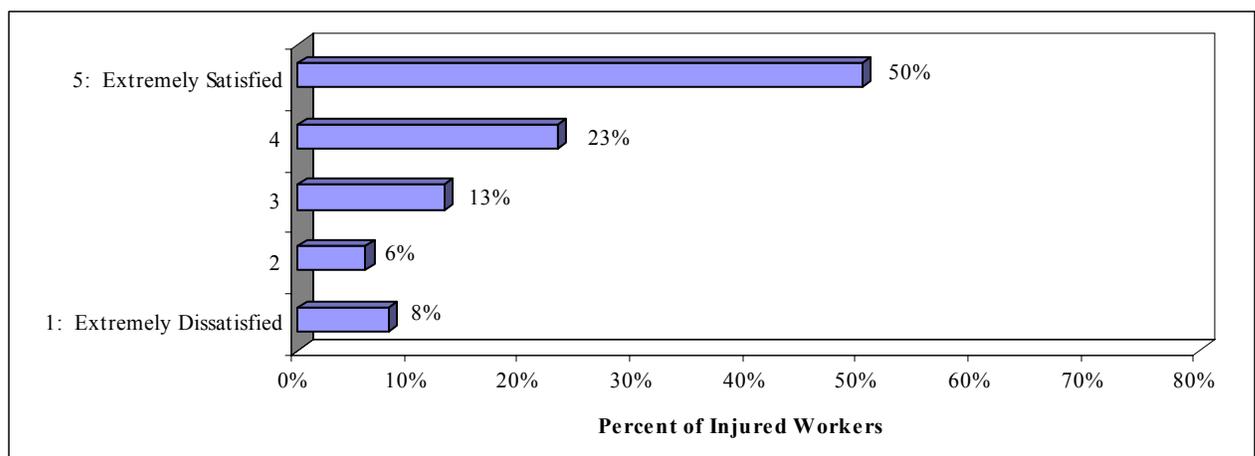
Injured workers were also asked about their ability to access medical care for the treatment of their work-related injury. Overall, just over half (52 percent) of the survey respondents indicated that the ability to schedule an appointment to see a doctor about their injury was about the same as their typical ability to schedule an appointment with their regular doctor. Thirty-seven percent said access was for the on-the job injury and

11 percent said it was worse. Some differences were observed when the experiences of state workers are compared to private sector workers. Injured workers employed by private sector firms were more likely (37 percent) than state workers (29 percent) to indicate that they have better access to doctor’s appointments for their work-related injury than they typically have when they are sick or need to see the doctor. This may be a result of state employees having an easier time accessing health care on a regular basis, due to the relatively comprehensive group health coverage offered by the State of Texas.¹⁶

To further support the findings previously presented in Table 2, nearly three quarters (73 percent) of the injured workers surveyed said that they were satisfied with the quality of the medical care they received from the doctor they saw most often. In fact, 50 percent of the workers indicated that they were “extremely satisfied” with the quality of care administered to them (See Figure 4). While these proportions were about the same for both state and non-state workers, workers who selected their own treating doctor were significantly more likely to be satisfied with their medical care (77 percent) than were injured workers who chose a doctor with input from their employer (64 percent).

Figure 4

**Satisfaction with Quality of Medical Care
Received from the Doctor They Saw Most Often**



¹⁶ No significant differences in access to care were observed when the data were stratified by who chose the doctor (e.g., worker selected, or employer influenced choice).

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

SECTION III: HEALTH STATUS OF INJURED WORKERS

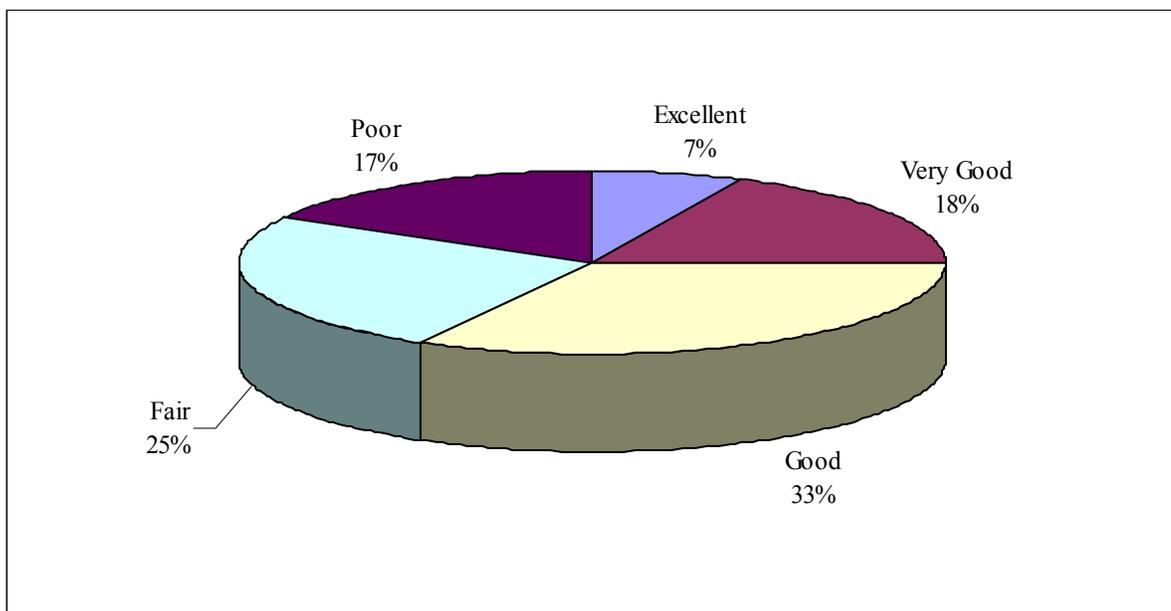
This section focuses on the health status of injured workers at the time of the interview, which was conducted between 21 and 33 months after the actual date the work-related injury occurred in 2000. The questions address both physical and emotional problems the workers may have faced following their injury or illness.

Health Status at the Time of the Interview

While the majority of injured workers (58 percent) indicated that their health status was “good” or better at the time of the interview, a significant proportion of survey respondents said that their health is “fair” (25 percent) or “poor” (17 percent). No significant differences were observed in health status when state workers are compared with those employed in the private sector. (See Figure 5.)

Figure 5

Current Health Status: 21 to 33 Months Post-Injury



Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Injured workers were asked a series of questions that attempted to gauge the degree to which their current health condition limits them from performing various physical activities. It is important to keep in mind that the current health condition of survey respondents may or may not be a direct result of their work-related injury.

State employees tended to be more prone to having physical limitations 21 to 33 months after the workplace injury or illness occurred than their counterparts in the private sector. Even though no discernible differences were observed in how state and non-state workers described their current health status, a larger percentage of private sector employees who were injured at work indicated that they have *no physical limitations* than did state workers.

Some of the most profound state/private sector differences were observed among the more vigorous activities. For example, 44 percent of state workers said they were “limited a lot” at climbing several flights of stairs compared to 33 percent of injured employees working for private sector firms.¹⁷ A significantly larger proportion of state workers (41 percent) said they were “limited a lot” by walking more than one mile compared to just 31 percent of private sector employees. Also a larger percentage of state employees (59 percent) than private sector workers (47 percent) said they were “limited a lot” from doing vigorous activities, such as running, lifting heavy objects, and strenuous sports. When less physically demanding activities (e.g., walking one block, climbing one flight of stairs) are considered much of the state/private sector differences disappeared. These results may be related to generally poorer health conditioning of state employees relative to the population employed by private sector firms, but this is somewhat speculative.

A complete account of how state and non-state workers described their physical limitations is provided in Table 4.

¹⁷ Likewise 29 percent of state employers indicated they were “not limited at all” at climbing several flights of stairs, compared to 41 percent of private sector employees who noted no limitations with this activity.

Table 4
Degree to which Current Health Condition Limits Selected Activities:
State vs. Private Sector Employees

Physical Activity	Employee Type	Limited a Lot	Limited a Little	Not Limited at All
Vigorous Activities (e.g., running, lifting heavy objects, strenuous sports)	State	59%	27%	13%
	Private Sector	47%	32%	21%
Moderate Activities (e.g., moving a table, pushing a vacuum cleaner)	State	35%	37%	28%
	Private Sector	31%	34%	35%
Lifting or carrying groceries	State	39%	35%	26%
	Private Sector	24%	37%	39%
Climbing several flights of stairs	State	44%	27%	29%
	Private Sector	33%	26%	41%
Climbing one flight of stairs	State	18%	38%	44%
	Private Sector	17%	29%	54%
Bending, kneeling, or stooping	State	42%	33%	26%
	Private Sector	33%	32%	35%
Walking more than a mile	State	41%	26%	34%
	Private Sector	31%	24%	45%
Walking several blocks	State	27%	33%	40%
	Private Sector	25%	27%	48%
Walking one block	State	16%	30%	54%
	Private Sector	13%	28%	59%
Bathing or dressing yourself	State	15%	32%	53%
	Private Sector	12%	29%	60%

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

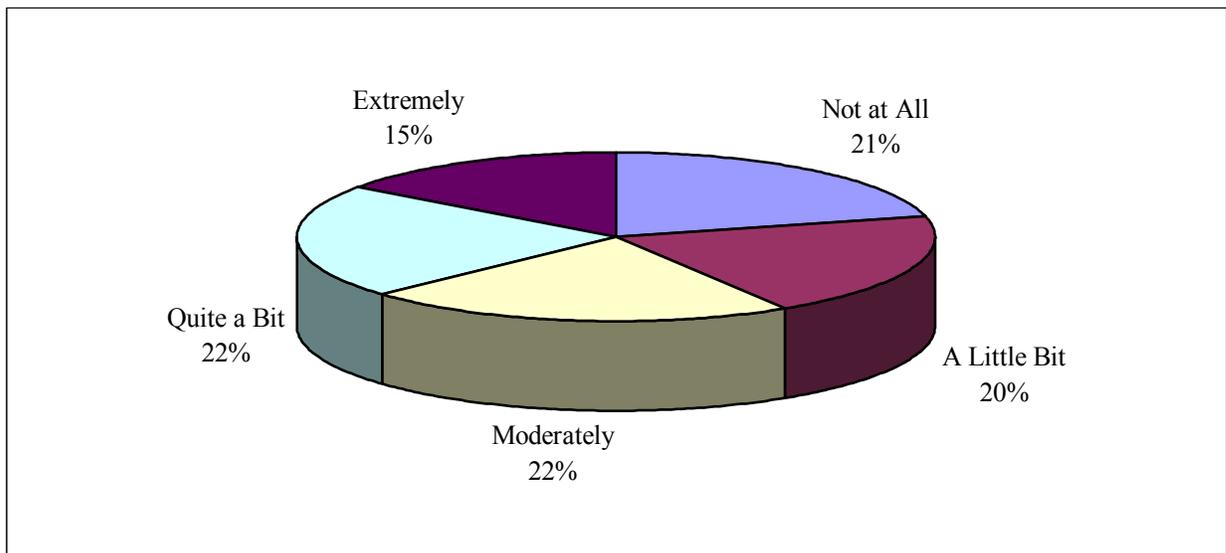
Injured workers were asked if they encountered any problems with their work or other regular daily activities during the past 4 weeks *as a result of their physical health*. Overall, 57 percent of the injured workers indicated that they accomplished less than what they would have liked, and 63 percent said that they were limited in the type of work or other activities they were able to do. Survey respondents were asked if they had any

problems with their work or other regular daily activities during the past 4 weeks *as a result of any emotional problems*. A substantial proportion of workers (45 percent) indicated they accomplished less than they would have liked, and 40 percent expressed that they didn't do work or other activities as carefully as usual. No significant differences were observed when the responses to these questions provided by state and private sector workers were compared.

Survey respondents provided information on how much pain interfered with their normal work during the past 4 weeks. As Figure 6 illustrates, a significant proportion of the employees surveyed (37 percent) said that pain interfered with their work "quite a bit" (22 percent) or "extremely" (15 percent). Another 22 percent of the injured workers said that the interference was "moderate." State and private sector workers answered this question comparably.

Figure 6

**Degree to Which Pain Interfered with Normal Work During the Past 4 Weeks:
21 to 33 Months Post-Injury**



Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

In order to get a sense of the emotional health of injured workers after a significant amount of time has elapsed from the date of injury, survey respondents were asked if (during the most recent 4 week period) they have:

- 1) felt calm and peaceful;
- 2) have a lot of energy; or
- 3) felt downhearted and blue.

Injured workers were evenly split between those that *felt calm and peaceful* “a good bit of the time” or more, and those that feel this way just “some of time” or less. Similarly, 42 percent of the survey respondents reported that they *have a lot of energy* “a good bit of the time” or more, compared to 57 percent that feel this way just “some of time” or less.¹⁸ Just over a quarter (26 percent) of the injured workers surveyed indicated that they *felt downhearted and blue* at least “a good bit of the time.” Since there was very little difference observed between state and non-state workers, only the overall results are presented in Table 5.

Table 5
How Injured Workers Have Been Feeling During the Past 4 Weeks

	All of the Time	Most of the Time	A Good Bit of the Time	Some of the Time	A Little of the Time	None of the Time
Felt Calm and Peaceful	10%	30%	9%	22%	21%	7%
Have a lot of Energy	7%	23%	12%	26%	23%	8%
Felt Downhearted & Blue	7%	11%	8%	19%	26%	29%

Source: Research and Oversight Council on Workers’ Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Note: Percentages do not total to 100 percent due to rounding.

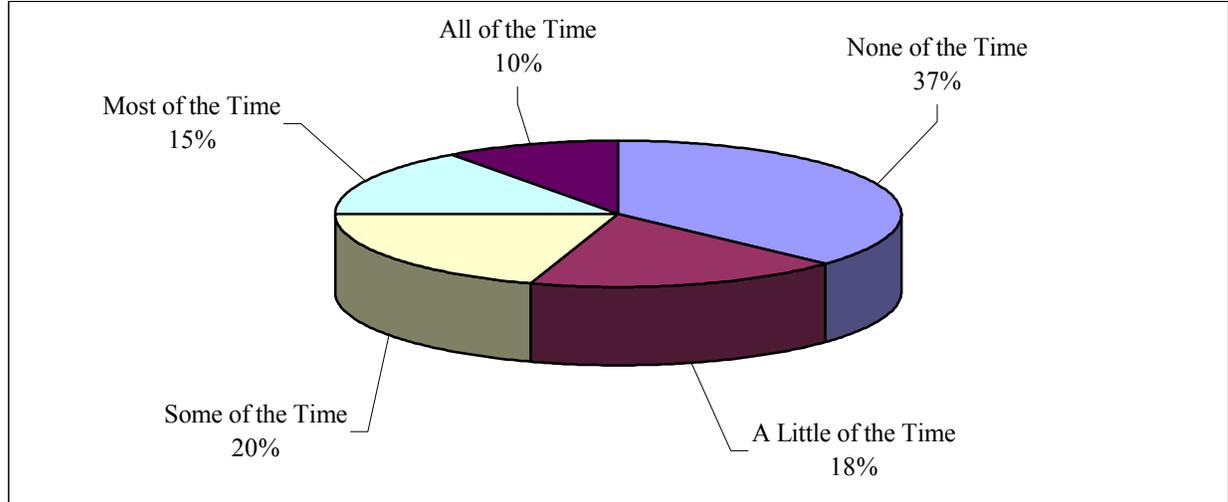
Lastly, injured workers were asked how much of the time their physical and emotional problems interfered with social activities (e.g., visiting with friends, relatives, etc.) during the most recent 4 weeks. As Figure 7 shows, the majority (55 percent) of injured workers

¹⁸ Percentages do not total to 100 percent due to rounding.

said that their social activities were impacted either “none of the time” (37 percent) or “a little of the time (18 percent). Private sector employees (37 percent) were a bit more prone to indicate that their social activities were interfered with “none of the time” than were injured workers employed by the State of Texas (30 percent).

Figure 7

Degree to Which Physical Health or Emotional Problems Interfered with Social Activities During the Past 4 Weeks: 21 to 33 Months Post-Injury



Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Scoring of SF-12 Questions Related to Physical and Emotional Health of Workers

There were a series of health-related questions included in this survey of injured workers that were featured on the nationally recognized SF-12 Health Survey.¹⁹ The SF-12 includes 12 questions that were extracted from the more lengthy, SF-36 survey.²⁰ The SF-12 measures an injured worker's physical and mental functioning capabilities. This subsection uses a standardized scoring approach to compare the physical and mental health of this Texas population of injured workers with soft tissue back, neck, and shoulder ailments, to the 1998 general U.S. population, and to a previous survey of workers injured in 1997/ in Texas and other states published by the ROC in 2001.²¹

¹⁹ Version 1 of the SF-12 survey was administered to injured workers in this study.

²⁰ See Ware, J.E., M. Kosinski and S.D. Keller, "A 12-item short form survey: Construction of scales and preliminary tests of reliability and validity," *Medical Care*, 1996; 34(3): 220-33. Also see Ware, J.E., M. Kosinski and S.D. Keller, et al., *SF-12: How to Score the SF-12 Physical and Mental Summary Scales* (1995).

²¹ For further detail regarding the SF-12 Health Survey and the scoring approach utilized, please refer to Ware, John E., Jr., Mark Kosinski, et al, *How to Score Version 2 of the SF-12 Survey (With a Supplement Documenting Version 1)*, QualityMetric Incorporated and Health Assessment Lab (October 2002).

The physical functioning score (PCS) measures the degree to which an injured worker recovers after an injury and the mental functioning score captures the worker's post-injury psychological state as it relates to depression and alienation. The PCS and MCS scores may range from 0 to 100, with a general 1998 U.S. population having a score of 50 for each of the measures.

SF-12 Physical Component Summary (PCS-12)

The 1998 U.S. population has been standardized to have a mean score of 50 (and a standard deviation of 10) for the physical health component of the survey. The study population of workers who suffered soft tissue injuries in 2000 tended to be less physically healthy at the time of their interview (September/October 2002) than the general U.S. population. The mean PCS-12 score for this injured worker population was 39.2. There was also a bit more variance observed within the study population of injured workers (standard deviation of 11.7) than it found in the general U.S. population (standard deviation of 10). The study population of injured workers hurt in 2000 with soft tissue diagnoses had a slightly higher mean PCS-12 score than the population of Texas workers injured in 1997 and 1998 (37.6) and lower than the injured workers in other states (42.4).²²

The difference in the physical health of the 1998 general U.S. population and this population of injured workers in Texas may be explained by a number of factors, including residual pain or discomfort caused by the work-related injury. Since the workers' pre-injury physical health score is not known, it is also possible that this population of workers who suffered soft tissue injuries may have related chronic problems that would lower their physical health score regardless of the injury.

SF-12 Mental Component Summary (MCS-12)

As is the case with physical health, the 1998 U.S. population has a mean score of 50 (and a standard deviation of 10) for the mental (or emotional) health component of the survey.

²² See Research and Oversight Council on Workers' Compensation, *Striking the Balance: An Analysis of the Cost and Quality of Medical Care in the Texas WC System* (January 2001).

The mean MCS-12 score for this population of Texas injured workers with soft tissue ailments is 45.9. While the mean MCS-12 score for study population of Texas injured workers did not vary from the general U.S. population mean as much as the physical health score, at 45.9. Similar to the findings for the PCS-12, the standard deviation in MCS-12 scores was higher within the study population of injured workers (12.7) than in the general U.S. population (10). The study population of workers suffering soft tissue injuries in 2000 had a slightly higher mean MCS-12 score than the population of Texas workers with 1997 and 1998 injuries studied in 2001 (44.4), but lower than injured workers from other states (48.5).²³

Table 6 summarizes the results of the SF-12 physical and mental functioning scoring and compares the scores to three other populations: 1) 1998 general U.S. population; 2) Texas workers injured in 1997 and interviewed in 2000 (from the ROC's 2001 *Striking the Balance* study); 3) Injured workers in other states with 1997 injuries interviewed in 2000 (from the ROC's 2001 *Striking the Balance* study).

Table 6
Comparison of SF-12 Physical and Mental Function Scores
With Other Study Populations

	2000 Texas Soft Tissue Injuries: Surveyed in Fall 2002	1998 General U.S. Population	1997 Texas Injuries: Surveyed in 2000 <i>ROC Striking the Balance Study</i>	197 Injuries outside of Texas: Surveyed in 2000 <i>ROC Striking the Balance Study</i>
Physical Functioning Score	39.2	50	37.6	42.4
Mental Functioning Score	45.9	50	44.4	48.5

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

²³ Ibid.

SECTION IV: EMPLOYMENT STATUS OF INJURED WORKERS AND RELATED RETURN-TO-WORK ISSUES

This section of the report details the post-injury return-to-work (RTW) experiences of employees who suffered a work-related injury or illness in 2000. As was the case with the health-related results presented in Section III, the perspectives reported in this section reflect the responses of workers interviewed between 21 and 33 months after the date of injury.

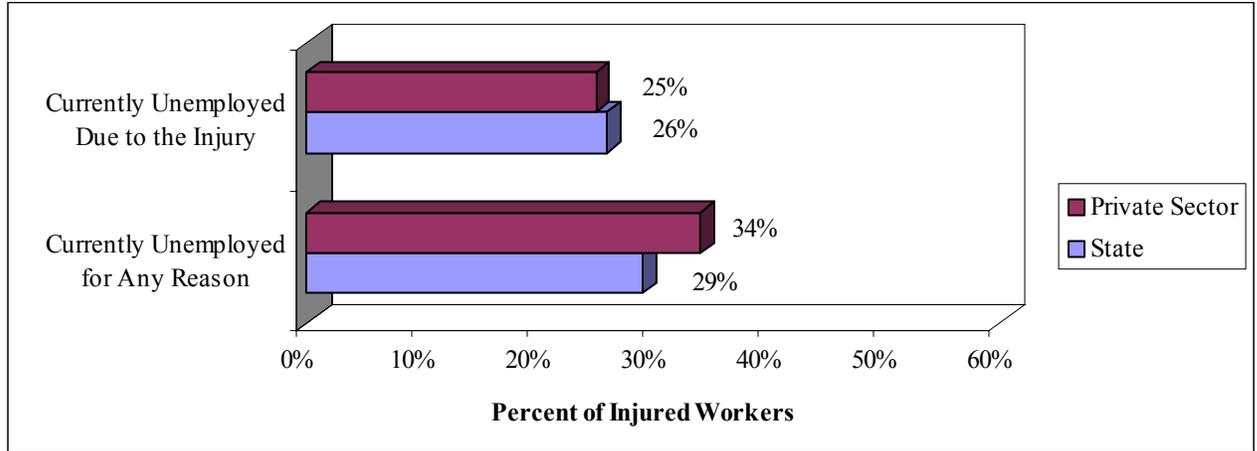
Employment Status

Overall, almost two-thirds (66 percent) of the injured workers indicated that they were employed at the time of the interview. This included 71 percent of state workers and 66 percent of workers employed by private sector firms at the time of their injury who told surveyors that they were currently employed.

However, after controlling for whether or not current unemployment was due to the on-the-job injury based on the worker's survey response), 26 percent of state workers indicated that they were out of work due to their injury compared to 25 percent of private sector workers. (See Figure 8.)

Figure 8

**Percent of Injured Workers Currently Unemployed:
21 to 33 Months Post-Injury**

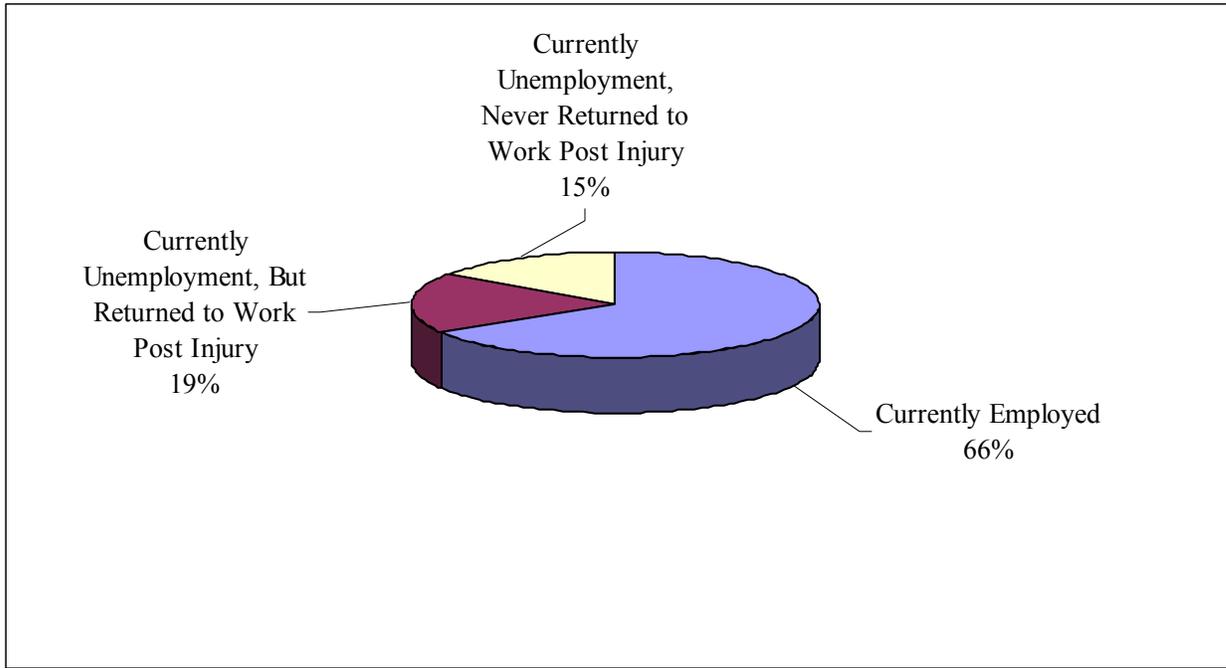


Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Of the approximately one-third of survey respondents who were unemployed at the time of the interview, 55 percent said that they did return to work at some point after the work-related injury occurred. Thus overall, 66 percent of the workers injured at work in 2000 were employed 21 to 33 months post-injury 19 percent were unemployed but did return to work at some point after the injury, and the remaining 15 percent never returned to work following their on-the-job injury in 2000. (See Figure 9.)

Figure 9

Return-to-Work Status: 21 to 33 Months Post-Injury



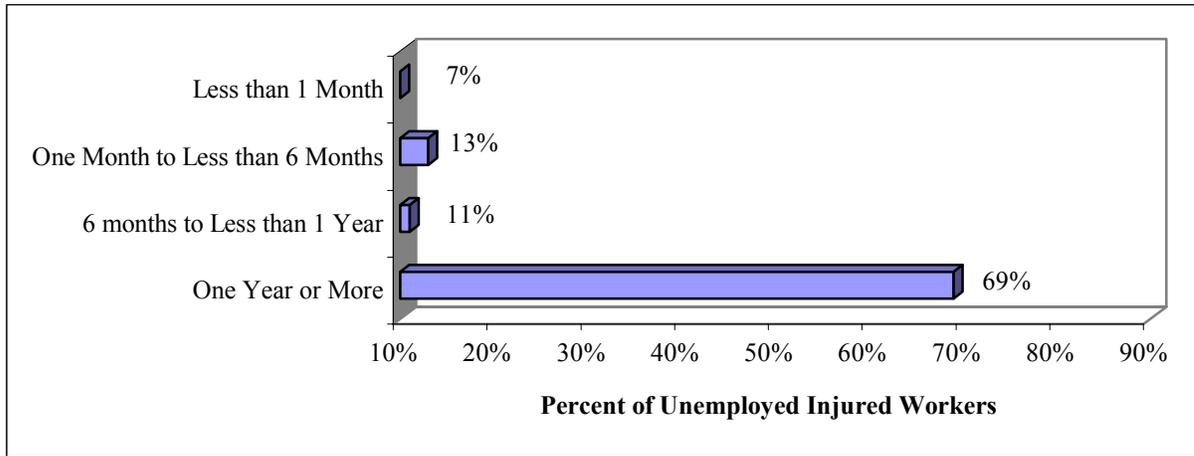
Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Unemployed Workers

Considering the fact that significant time had elapsed between the date of injury and the interview, it is interesting to note that most workers who were unemployed at the time of the survey were off work for a significant amount of time (almost two years, at least) after the injury. As Figure 10 illustrates, 69 percent of the currently unemployed survey respondents were off work for at least one year, and another 11 percent missed between 6 and 12 months of work.

Figure 10

**Currently Unemployed Workers:
Amount of Time Off Work After the Injury**



Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Almost half (48 percent) of the unemployed workers surveyed said that they were released to return to work without any physical restrictions. In addition, sizable percentages of workers were either released to return to work with certain physical restrictions (31 percent) or not released to return to any type of work (21 percent). These proportions were nearly identical for state and private-sector workers. The fact that almost half of Texas workers released to return to work (with no restrictions) were still not working suggests that there is a serious problem with one of the most fundamental outcome goals of a workers' compensation system, namely, to return the injured worker to productive employment.

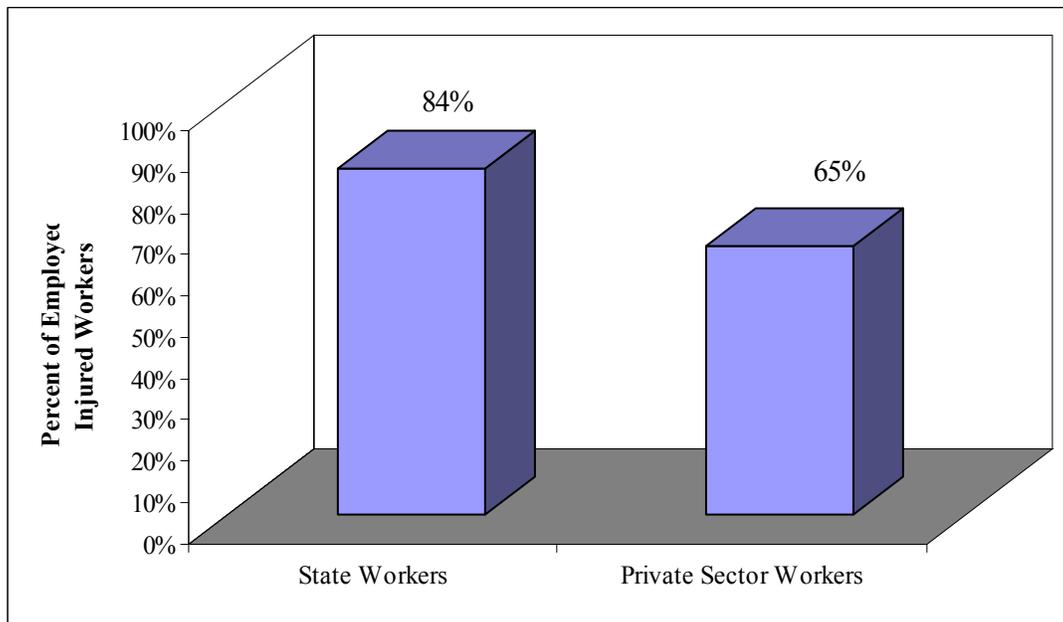
Employed Workers

Of the nearly two thirds of the injured workers interviewed who said they were employed 21 to 33 months after the on-the-job injury took place, the majority (65 percent) indicated that they were working for their at-injury employer (i.e., the same employer they worked for at the time of the work-related injury). Due to the generally stability of state government employment, and the economic downturn that profoundly impacted Texas businesses in 2001 and 2002, it is not surprising that workers employed by the state at the

time of their 2000 injury (84 percent) were much more likely than those employed by private sector firms (65 percent) to still be working for their 2000 at-injury employer. (See Figure 11.)

Figure 11

**Percentage of Employed Workers Still with their At-Injury Employer:
21 to 33 Months Post-Injury**



Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

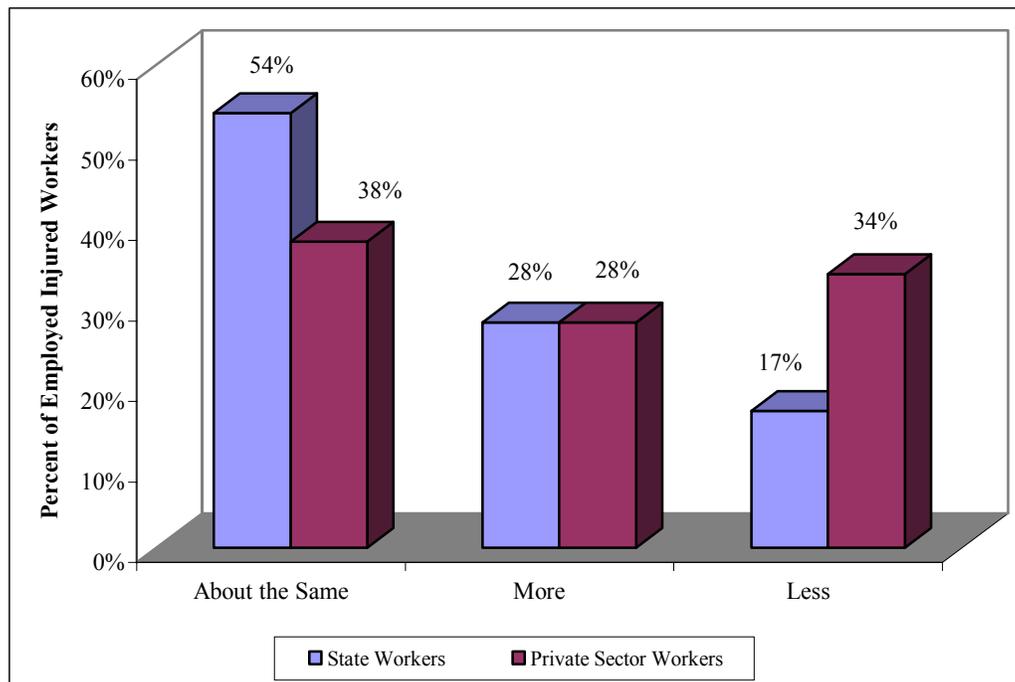
Similarly, workers employed by the state at the time of their 2000 injury (73 percent) were also somewhat more likely than private sector workers (65 percent) to be doing the same kind of work at the time of the interview (in 2002) that they were doing when they were injured (in 2000). This again, is likely the result of the relative stability of state employment over the 2000 to 2002 period.

Overall, just over a third (34 percent) of the employed injured workers surveyed indicated that they were making less money 21 to 33 months post-injury than they were before their work-related injury occurred. Thirty-eight percent of the survey respondents employed at the time of the interview said that their take-home pay was about the same as before the injury, and 28 percent noted that their current pay was higher than before the

injury. It is interesting to note that the earnings experience of state and non-state workers differed significantly. As Figure 12 shows, state workers were far more likely than private sector workers to be earning about as much as they did prior to the injury, and far less likely to be earning less than they did prior to the occurrence of their work-related injury.

Figure 12

**Post-Injury Take-Home Pay When Compared to Pre-Injury Wages:
21 to 33 Months After the Date of Injury**



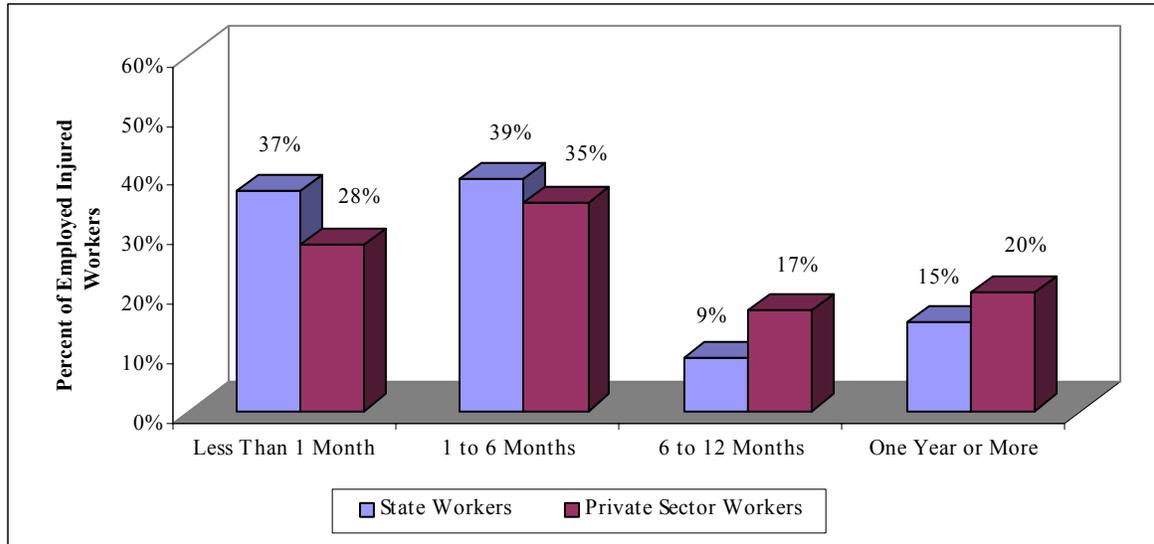
Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

The vast majority (81 percent) of the injured workers interviewed said that they lost time from work because of their on-the-job injury. Similar percentages of state (84 percent) and private sector (81 percent) employees indicated that they lost time from work. The duration of lost time from work tended to be longer for private sector workers than for state workers injured on-the-job. As Figure 13 illustrates, 37 percent of injured employees who were working for private sector firms *lost at least 6 months* of work due to their injury compared to just 23 percent of state employees. Likewise, a higher

proportion of state workers (37 percent) had very short disability durations (less than one month), compared to 28 percent of employees of private sector companies.

Figure 13

**Number of Months Missed from Work Due to the On-the-Job Injury:
State vs. Private Sector Workers**

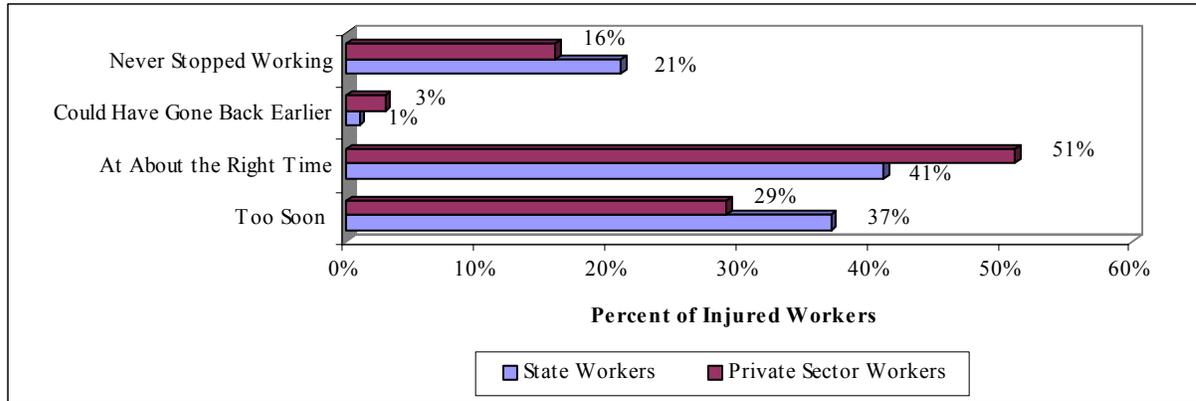


Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

While state workers lost significantly less time from work than their private sector counterparts, it is interesting to note that employees of the State of Texas were somewhat more likely than private sector workers to indicate that they went back to work “too soon” (37 percent vs. 29 percent). Similarly, a smaller proportion of state workers (41 percent) felt that they went back to work “at about the right time” than did private sector employees (51 percent). These findings are illustrated in Figure 14.

Figure 14

**Injured Worker Perspectives on when they Returned to Work:
State vs. Private Sector Workers**



Source: Research and Oversight Council on Workers’ Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Injured workers were also asked a series of questions regarding the treatment they received from their employer after their on-the-job occurred. As a starting point, the vast majority of survey respondents (90 percent) characterized their employer as a “good employer before their work-related injury took place.” This included 88 percent of state workers who felt their employer was a good one (*before* the work-related injury occurred) and 90 percent of private sector workers who held a positive opinion of their employer.

Approximately six out of every ten survey respondents (61 percent) felt that their employer was concerned about the safety of employees—68 percent of state workers and 61 percent of workers employed by private sector firms felt this way.

While the majority of injured workers (61 percent) indicated that their employer treated them with respect while they were off work due to their injury, state workers were more likely to feel this way (71 percent) than injured employees working for private sector companies (61 percent).

As Table 6 shows, very few injured employees (8 percent) indicated that their employer tried to deter them from filing a claim after they were injured. A higher proportion of private sector employees (19 percent) said that they were fired after they made a claim or after they returned to work.²⁴ A significant minority of injured workers (23 percent) reported that their employer questioned whether or not their claim was work related. As Table 7 reflects, only subtle differences were observed between state and non-state workers.

Table 7
Percentage of Injured Workers Indicating Certain Employer Actions Occurred:
State vs. Private Sector Employees

	State Workers	Private Sector Workers	All Workers
Employer asked worker not to file a claim	5%	8%	8%
Employer questioned whether or not worker's injury was work-related	29%	23%	23%
Fired worker after they made a claim or returned to work	13%	19%	19%

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Survey respondents who were employed by the state of Texas at the time of their 2000 injury were more likely than their private sector counterparts to indicate that their employer was actively involved in return-to-work activities (e.g., working with doctor and his/her recommendation regarding return to work, understanding tasks worker was physically able to perform after the injury, sharing a return-to-work plan with the injured employee) designed to get them back to work in a safe and timely manner. This is likely a function of state agencies being more prone than their private-sector counterparts to have written return-to-work policies for workers injured on the job.

The most profound RTW-related differences observed between state and non-state injured workers were in the area of alternate or light duty discussions. While 59 percent

²⁴ It is not known whether or not the employee's termination was related to their work-related injury or the filing of a workers' compensation claim.

of employees who were working for the state of Texas at the time of their injury indicated that their employer provided them with a written copy of their return-to-work plan, just 42 percent of the injured workers employed by private sector companies said that they had similar discussion with their employers. Likewise, 70 percent of workers employed by the state of Texas at the time of their injury indicated that their state agency worked with their treating doctor regarding treatment and return to work, compared to just 61 percent of workers employed by private sector firms. These differences are reflected in Table 8.

Table 8
Percentage of Injured Workers Indicating Certain Post-Injury Employer
Return-to-Work Related Actions Occurred:
State vs. Private Sector Employees

	State Workers	Private Sector Workers	All Workers
Employer worked with injured worker's doctor regarding treatment and return to work.	70%	61%	61%
Employer tried to understand what tasks the injured worker was able to physically perform when they returned to work.	68%	61%	61%
Provided worker with a copy of their written return-to-work plan.	59%	42%	42%
Employer discussed alternate duty or light duty with worker.	46%	41%	41%

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

Another factor that is related to an injured worker's perception of how they are treated by their employer is their tenure of employment. Employees who were working for their employer for a longer period of time prior to the injury were significantly more likely to feel that their employer treated them with more respect, worked more closely with them and their doctor on return-to-work issues, and treated them more positively on other employer-related actions after the on-the-job injury took place.

For example, 71 percent of the employees with more than 5 years of tenure felt their employer treated them with respect after their on-the-job injury, compared to just 60

percent of the workers with 1 to 5 years of tenure, and only 47 percent of the workers who were on the job for less than one year prior to the injury.

Similarly, injured workers employed by their at-injury employer for more than 5 years were significantly more likely to indicate that:

- Their employer worked with their doctor regarding treatment and return to work;
- Their employer tried to understand what tasks they were able to physically perform when they returned to work; and
- Their employer provided them with a copy of their written return-to-work plan.

Table 9 compares some of the key employer/employee relations metrics for injured workers with varying degrees of employment tenure.

Table 9
Percentage of Injured Workers Indicating
Selected Post-Injury Employer Actions Occurred
by Employment Tenure

Employer Action	Worker's Employment Tenure at Time of Injury		
	Less than 1 Year	1 to 5 Years	More than 5 Years
Employer treated worker with respect after they were injured and when they were off work.	47%	60%	71%
Employer asked worker not to file a claim.	8%	11%	5%
Employer questioned whether or not injury was work related.	28%	25%	22%
Employer fired worker after the claim was filed or at some point after they returned to work.	33%	17%	13%
Employer seemed concerned about the safety of employees.	48%	59%	70%
Employer worked with injured worker's doctor regarding treatment and return to work.	51%	60%	69%
Employer tried to understand what tasks the injured worker was able to physically perform when they returned to work.	45%	60%	71%
Provided worker with a copy of their written	27%	44%	53%

return-to-work plan.			
Employer discussed alternate duty or light duty with worker.	36%	42%	43%

Source: Research and Oversight Council on Workers' Compensation, Survey of Worker Experience with Work-Related Health Problems, 2002.

CONCLUDING OBSERVATIONS

This study provides important information regarding various patient satisfaction outcome measures, the return-to-work and earnings experiences after the occurrence of an on-the-job injury, and the physical and emotional health of state and private sector employees in Texas who suffered work-related soft tissue injuries. Significant differences were observed between state and private sector workers regarding the selection of doctors, the post-injury health status of injured workers, and the likelihood of successful post-injury return-to-work and earnings outcomes. Employment tenure also tended to play a significant role in injured workers' perceived post-injury treatment by their employer. Those workers, who had been on the job for a longer period of time, were significantly more likely than shorter-tenured employees to report more positive treatment by their employers.

A key finding that emerged from this study, which may impact the use of managed care networks, is that allowing an injured worker to choose his or her own treating doctor seems to impact the perception of the quality of medical care received in a positive way. Though injured workers in Texas have first choice of treating doctor, one-third indicated that they selected a doctor from an employer-provided list or went to a doctor recommended by their employer. It is interesting to note that injured workers who chose their own doctors were significantly more satisfied with the medical care they received than workers who were directed to a provider either through an employer-provided list or through an employer recommendation. This has important implications for the possible implementation of regional health care networks to treat work-related injuries. However, it is important to mention that workers tended to be fairly satisfied with the perceived quality of the medical care they received, regardless of how the treating doctor was

selected (e.g., by the injured worker, from an employer-provided list of medical providers).

There was a significant degree of variation in the health status of injured workers some 21 to 33 months after the occurrence of the on-the-job injury. Well over half of the workers interviewed said that as a result of their physical health they accomplish less than they would have liked (57 percent), or are limited in the type of work or activities they can perform (63 percent). Emotional problems also tended to limit the activities of injured workers. State employees were significantly more likely than private-sector workers to have physical limitations (particularly to more strenuous activities) at the time of the survey.

A surprisingly high proportion of workers (34 percent) injured in 2000 were not working 21 to 33 months after the work-related incident occurred. Of those workers employed at the time of the interview, almost two-thirds said they were still working for their at-injury employer. State workers were much more likely to be working for their at-injury employer than were people injured at private-sector companies. In addition, state employers were much more likely than their private-sector counterparts to provide injured workers with a written copy of a return-to-work plan and work with their treating doctor regarding return-to-work issues.

APPENDIX A:

RESEARCH METHODOLOGY FOR THE INJURED WORKER SURVEY

Appendix A outlines the research methodology, survey population, sampling and weighting procedures, and fielding results for the telephone survey of injured workers regarding work-related health problems.

Survey Population and Sampling Procedures

According to the medical records of claims in the MedForms database maintained by the Texas Workers' Compensation Commission (TWCC), there are totally 239,805 records for workers injured in year 2000. This report focuses on soft tissue injuries affecting three areas of the injured workers' body: 1) lower back; 2) neck; and 3) shoulder. The sampling frame for the study consists of all workers' compensation claimants in these three categories. The total number of workers' claimants in these three injury categories is 56,914 and the frequency distribution of claimants by injury type and employer type is provided in Table A1.

Table A1
Frequency Distribution of Injured Workers in the
Population
by Employer Type and Injury Type

Employer Type	Low Back Soft Tissue	Neck Soft Tissue	Shoulder Soft Tissue
Non-state Agency	33,542	9,758	12,660
State Agency	589	169	196

Source: Texas Workers' Compensation Commission, Administrative Databases, and the Research and Oversight Council on Workers' Compensation, 2002.

In order to obtain current telephone numbers necessary for telephone interviews, the claimants in the population is matched to the TWCC administrative database, Claims, resulting in a reduction in the number of claimants that could be used as samples for interviews from 56,914 to 32,082.

For injured workers employed by private sector firms and employees of political subdivisions (i.e., all employers other than the state of Texas), a random sample of 5,000 workers' compensation claimants was drawn from the population of 31,374 non-state agency claimants. For state agencies, the total number of claimants in the population is 708, which is small. To make any survey-based comparisons between state and non-state agencies meaningful, all 708 claimants from state agencies were included in the sample. Consequently, the sample for the survey consists of 5,708 claimants in total, of which 708 are from state agencies and 5,000 are from non-state agencies. Table A2 shows the frequency distribution of claimants included in the sample by agency type and injury type.

Table A2
Injured Workers Included in the Sample of Survey
by Employer Type and Injury Type

Employer Type	Low Back Soft Tissue	Neck Soft Tissue	Shoulder Soft Tissue
Non-state Agency	2,898	998	1,124
State Agency	448	119	141

Source: Texas Workers' Compensation Commission, Administrative Databases, and the Research and Oversight Council on Workers' Compensation, 2002.

Fielding Results

The University of North Texas conducted the telephone interviews. Due to bad phone numbers, interview refusals, and other problems encountered during the administration of surveys, a total of 970 interviews were successfully completed with injured workers. This represents a completion rate of 17 percent. Table A3 shows the frequency distribution of claimants that completed interviews by agency type and injury type.

Table A3
Frequency Distribution of Completed Interviews
by Employer Type and Injury Type

Employer Type	Low Back Soft Tissue	Neck Soft Tissue	Shoulder Soft Tissue
Non-state Agency	458	178	178
State Agency	88	32	36

Source: University of North Texas, Survey Research Center, and the Research and Oversight Council on Workers' Compensation, 2002.

Weighting Methodology

The percentage of completed interviews (in relation to the size of population) are calculated for each cell or strata using the corresponding numbers in Tables A1 and A3. The result is presented below in Table A4.

Table A4

Percent of Completed Interviews by Employer Type and Injury Type

Employer Type	Low Back Soft Tissue	Neck Soft Tissue	Shoulder Soft Tissue
Non-state Agency	1.45%	1.82%	1.41%
State Agency	14.94%	18.93%	18.37%

Source: University of North Texas, Survey Research Center, and the Research and Oversight Council on Workers' Compensation, 2002.

As shown in Table A4, injured workers employed by state agencies are over-represented in the sample of completed interviews as a result of over-sampling of state agencies. Other factors, such as missing phone numbers that caused imperfect completion rates, may also have contributed to the uneven distribution of completed interviews. To obtain more accurate estimates for the sample population, the state agencies and non-state agencies, all survey responses to each of the questions were weighted, by strata.

There are six strata in total, which is represented by six cells in Table A4. For each question, the responses were weighted and the weights were calculated using the following equation:

$$w_{hi} = \frac{N_h}{n_h}$$

where w_{hi} is the weight for the i^{th} claimant from stratum h who provided a valid answer to the question during the interview, n_h is the total number of such claimants from stratum h , and N_h is the total number of claimants in stratum h , which is given by Table A1. Given the weights, survey responses to each of the questions were estimated, using the following equation:

$$\hat{y} = \frac{1}{N} \sum_{h=1}^H \sum_{i=1}^{n_h} w_{hi} y_{hi}$$

where, y_{hi} is the response of claimant i in stratum h to the question, H is the total number of strata, and $N = \sum_{h=1}^H N_h$ is the total number of claimants in the respective population. For overall estimates, H equals 6 and N is 56,914. For state agency estimates, H equals 3 and N is 954. For non-state agency estimates, H equals 3 and N is 55,960. Please note that the weights used to calculate the estimates for different questions may be different for the reason that some claimants might have answered one question but not the other.