Comparison of State Workers' Compensation Programs Supplementary Analysis

Texas Department of Insurance

Workers' Compensation Research Group

Purpose of This Analysis

- To analyze the factors that drive medical and income benefit cost differences among the state self-insured workers' compensation programs.

The State's WC programs include:

- State Office of Risk Management (SORM)
- University of Texas System (UT)
- Texas A&M University System (A&M)
- Texas Department of Transportation (TXDOT)

Five areas of focus for this analysis:

- Percentage of injured workers who received physical medicine and diagnostic testing services
- Number of physical medicine and diagnostic testing services received per injured worker
- Geographic distribution of state WC claims
- Wage differences between injured state workers
- Sick and annual leave usage by injured state workers

Data Sources

- Texas Workers' Compensation Commission (TWCC) medical database
- SORM medical data
- TWCC benefit database
- Sick and annual leave data from SORM, UT, and A&M

Methods for Medical Cost and Medical Care Utilization Analysis

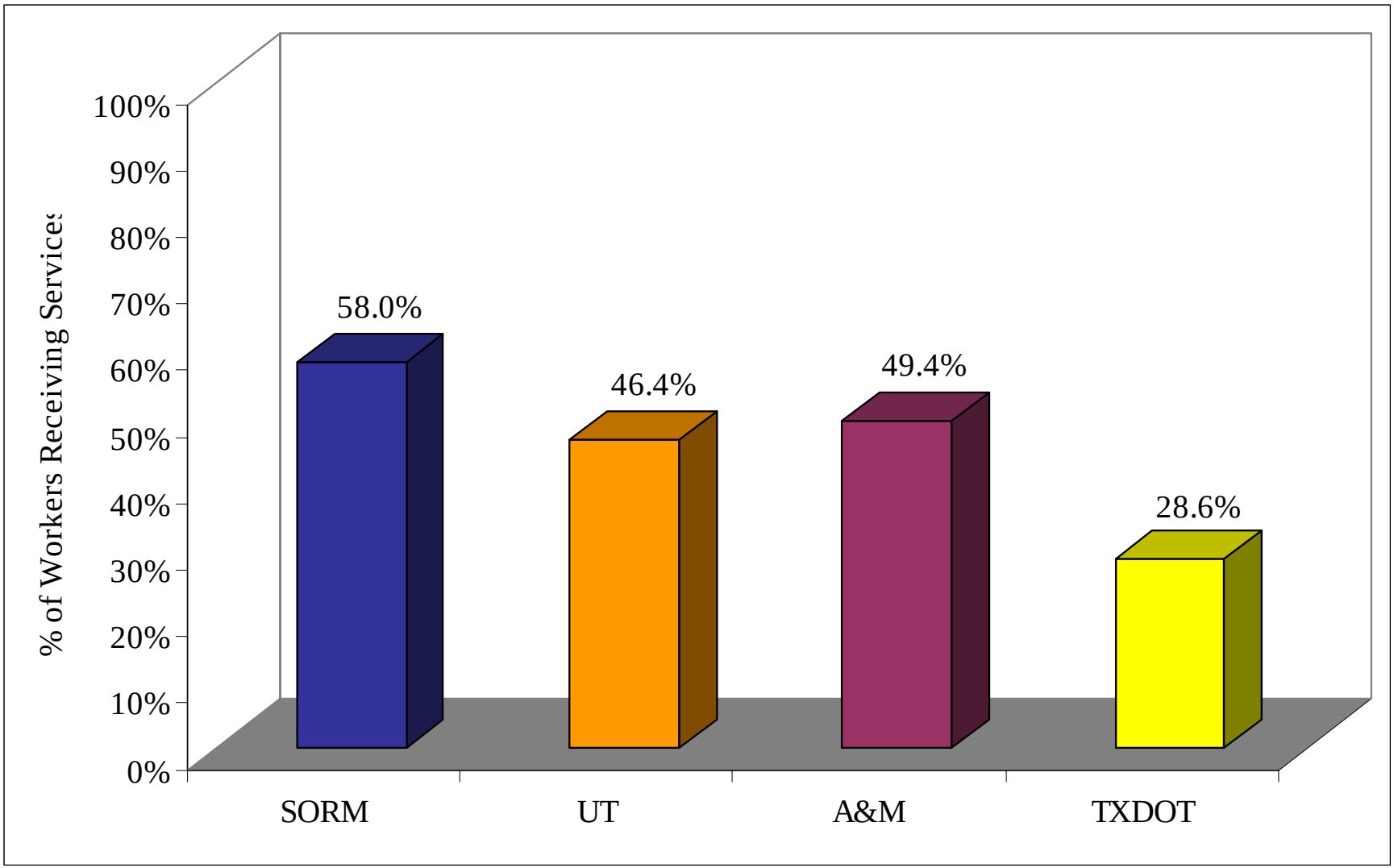
- To ensure an “apples to apples” comparison, TDI grouped all diagnoses into diagnostic “buckets” according to a methodology prescribed by the American College of Occupational and Environmental Medicine (ACOEM).

- Medical and indemnity cost comparisons in this presentation were calculated for injury years 1999-2001 at twelve months post-injury to ensure that all claims included in the analysis have the same claim maturity.

- Given the relatively small number of claims for each of the state WC programs, it is difficult to compare the utilization of specific physical medicine and diagnostic testing services for each state WC program for each injury year. However, to compare the overall utilization of physical medicine and diagnostic testing services among the state WC programs, TDI combined all of the claims for injury years 1999-2001.

Physical Medicine Findings

Percentage of Injured State Workers Who Received Physical Medicine Services, Injury Years 1999-2001 Combined, All Injuries, One-Year Post Injury



Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Mean (Average) Number of Physical Medicine Services Per Injured State Worker Who Received These Services, Injury Years 1999-2001 Combined, All Injuries, One-Year Post Injury

(results shown for 10 most frequent physical medicine services provided to injured state workers)

Type of Physical Medicine Service	SORM	UT	A&M	TXDOT
Therapeutic Exercises	26.0	18.2	24.4	18.7
Hot & Cold Packs	9.6	8.1	9.9	7.6
Electrical Stimulation – unattended	10.9	8.8	10.8	9.5
Myofascial Release	11.9	8.0	12.7	8.6
Therapeutic Exercises – one on one	12.8	8.5	14.1	8.2
Manipulation	22.0	15.3	24.6	13.3
Massage Therapy	12.7	7.8	12.0	8.3
Electrical Stimulation – manual	13.7	8.8	15.3	6.7
Joint Mobilization	9.7	5.2	7.6	6.2
Neuromuscular Education	10.3	8.0	7.4	8.6

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

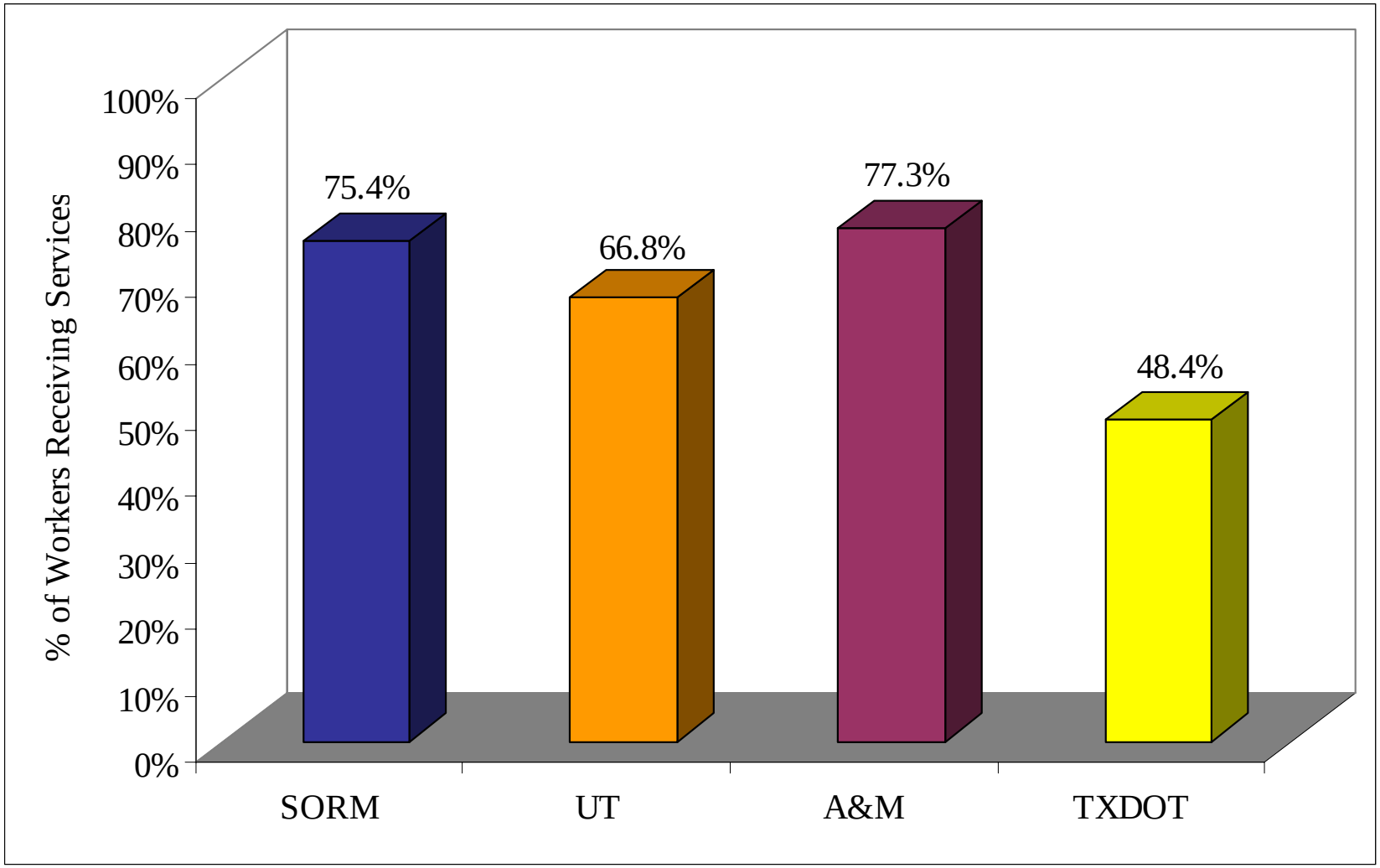
Median Number of Physical Medicine Services Per Injured State Worker Who Received These Services, Injury Years 1999-2001 Combined, All Injuries, One-Year Post Injury

(results shown for 10 most frequent physical medicine services provided to injured state workers)

Type of Physical Medicine Service	SORM	UT	A&M	TXDOT
Therapeutic Exercises	13.0	11.0	13.0	10.0
Hot & Cold Packs	6.0	6.0	8.0	5.0
Electrical Stimulation – unattended	7.0	6.0	8.0	6.0
Myofascial Release	7.0	5.0	10.0	5.0
Therapeutic Exercises – one on one	5.0	4.0	10.0	3.0
Manipulation	13.0	12.0	16.0	6.0
Massage Therapy	7.0	5.0	7.0	6.0
Electrical Stimulation – manual	8.0	6.0	12.0	4.0
Joint Mobilization	5.0	2.0	4.5	3.0
Neuromuscular Education	6.0	5.0	3.0	5.0

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Percentage of Injured State Workers Who Received Physical Medicine Services, Injury Years 1999-2001 Combined, Low Back Soft Tissue Injuries, One-Year Post Injury



Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Average Number of Physical Medicine Services Per Injured State Worker Who Received These Services, Injury Years 1999-2001 Combined, Low Back Soft Tissue Injuries, One-Year Post Injury

(results shown for 10 most frequent physical medicine services provided to injured state workers)

Type of Physical Medicine Service	SORM	UT	A&M	TXDOT
Therapeutic Exercises	22.7	16.1	26.2	16.9
Hot & Cold Packs	9.1	7.2	9.6	6.6
Electrical Stimulation – unattended	10.6	7.0	12.6	9.3
Myofascial Release	10.5	7.2	10.1	8.1
Therapeutic Exercises – one on one	12.9	7.7	12.9	5.6
Manipulation	19.5	14.6	19.0	14.3
Massage Therapy	11.5	6.9	10.0	6.6
Electrical Stimulation – manual	13.4	9.4	11.4	5.9
Joint Mobilization	7.1	4.0	7.1	5.4
Neuromuscular Education	10.1	4.9	8.8	9.5

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Median Number of Physical Medicine Services Per Injured State Worker Who Received These Services, Injury Years 1999-2001 Combined, Low Back Soft Tissue Injuries, One-Year Post Injury

(results shown for 10 most frequent physical medicine services provided to injured state workers)

Type of Physical Medicine Service	SORM	UT	A&M	TXDOT
Therapeutic Exercises	12.0	8.0	10.0	12.0
Hot & Cold Packs	6.0	5.0	6.0	5.0
Electrical Stimulation – unattended	7.0	5.0	12.0	6.0
Myofascial Release	6.0	5.0	6.0	6.0
Therapeutic Exercises – one on one	5.0	5.0	8.0	2.0
Manipulation	12.0	12.0	16.0	4.0
Massage Therapy	7.0	4.0	6.5	5.0
Electrical Stimulation – manual	8.0	7.0	5.0	4.5
Joint Mobilization	3.0	1.0	4.5	3.0
Neuromuscular Education	6.0	4.0	3.5	7.5

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Additional Physical Medicine Services That Warrant Further Review by Each of the State WC Programs

- **For SORM:** Diathermy, Whirlpool Therapy, Unlisted Modalities, Manual Traction, Aquatic Therapy, Acupuncture, Therapeutic Exercises – Group, Manual Therapy, Activities of Daily Living and Unlisted Procedures

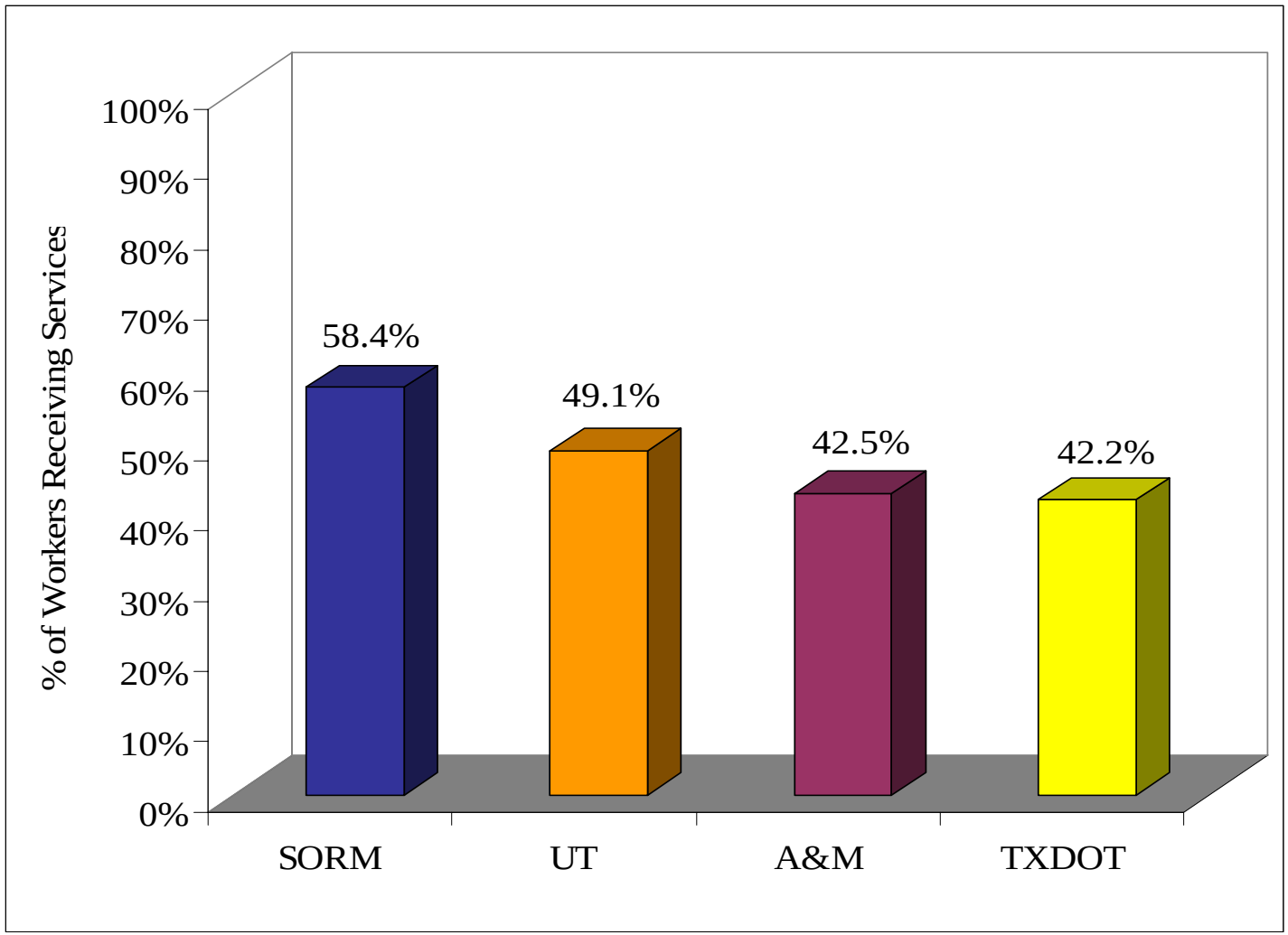
- **For A&M:** Phonophoresis, Muscle Testing, Mechanical Traction, Chronic Pain Management

- **For UT:** Work Hardening

- **For TXDOT:** Chronic Pain Management, Work Conditioning

Diagnostic Testing Findings

Percentage of Injured State Workers Who Received Diagnostic Testing Services, Injury Years 1999-2001 Combined, All Injuries, One-Year Post Injury



Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Mean (Average) Number of Diagnostic Testing Services Per Injured State Worker Who Received These Services, Injury Years 1999-2001 Combined, All Injuries, One-Year Post Injury

(results shown for 3 most frequent types of diagnostic testing services provided to injured state workers)

Type of Diagnostic Testing Service	SORM	UT	A&M	TXDOT
Nerve Conduction Studies	11.6	8.1	8.2	11.0
MRIs	1.6	1.4	1.4	1.4
CT Scans	1.4	1.2	1.2	1.5
Other Diagnostic Tests	2.8	2.2	2.0	2.3

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Note: "Other Diagnostic Tests" include radiologic examinations, myelography, and diskography, among others.

Median Number of Diagnostic Testing Services Per Injured State Worker Who Received These Services, Injury Years 1999-2001 Combined, All Injuries, One-Year Post Injury

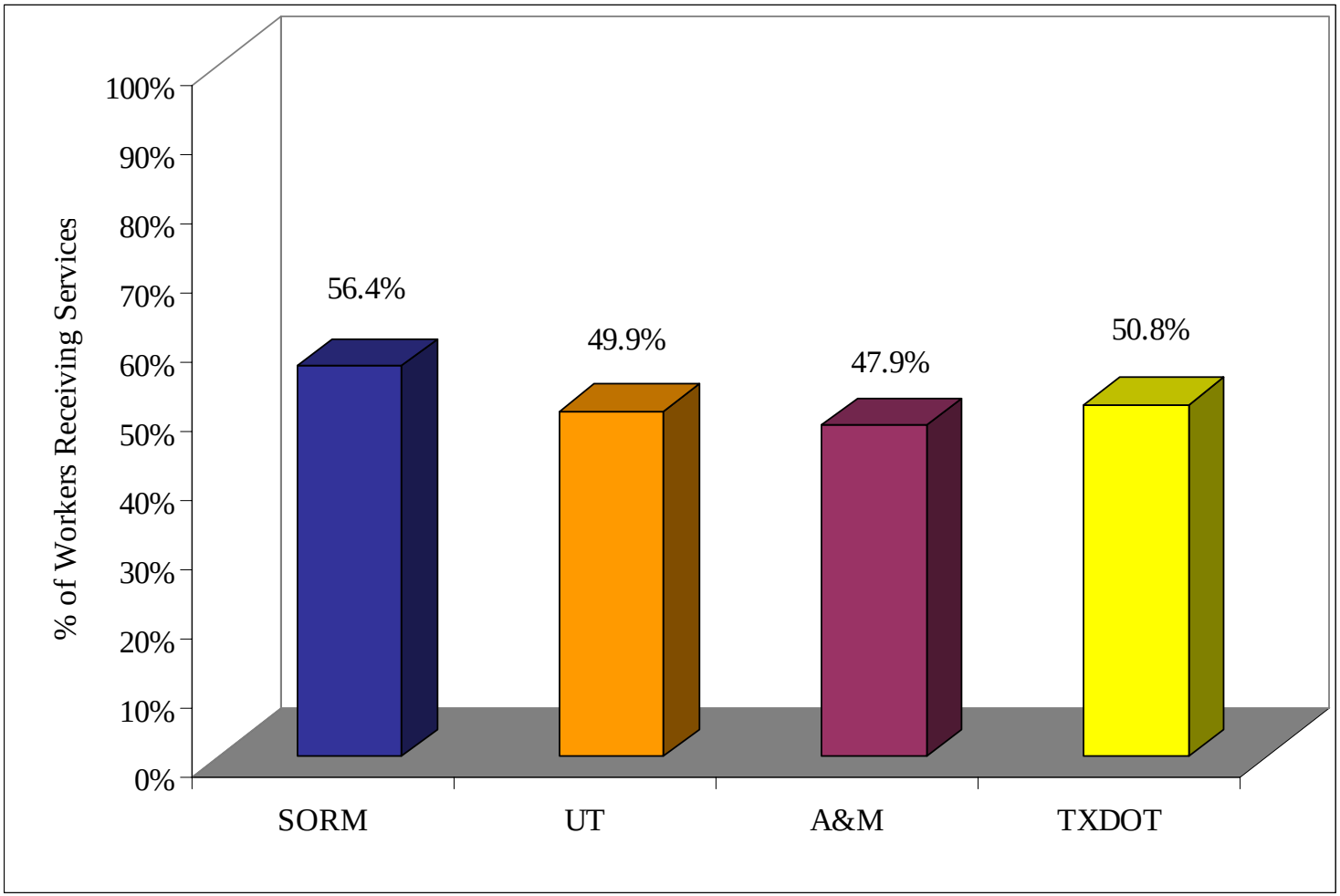
(results shown for 3 most frequent types of diagnostic testing services provided to injured state workers)

Type of Diagnostic Testing Service	SORM	UT	A&M	TXDOT
Nerve Conduction Studies	8	6	6	8
MRIs	1	1	1	1
CT Scans	1	1	1	1
Other Diagnostic Tests	2	1	1	1

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Note: "Other Diagnostic Tests" include radiologic examinations, myelography, and diskography, among others.

Percentage of Injured State Workers Who Received Diagnostic Testing Services, Injury Years 1999-2001 Combined, Low Back Soft Tissue Injuries, One-Year Post Injury



Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Mean (Average) Number of Diagnostic Testing Services Per Injured State Worker Who Received These Services, Injury Years 1999-2001 Combined, Low Back Soft Tissue Injuries, One-Year Post Injury

(results shown for 3 most frequent types of diagnostic testing services provided to injured state workers)

Type of Diagnostic Testing Service	SORM	UT	A&M	TXDOT
Nerve Conduction Studies	12.4	8.1	4.4	8.3
MRIs	1.5	1.3	1.7	1.4
CT Scans	1.5	1.0	1.4	1.1
Other Diagnostic Tests	2.7	2.0	1.9	1.7

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Note: "Other Diagnostic Tests" include radiologic examinations, myelography, and diskography, among others.

Median Number of Diagnostic Testing Services Per Injured State Worker Who Received These Services, Injury Years 1999-2001 Combined, Low Back Soft Tissue Injuries, One-Year Post Injury

(results shown for 3 most frequent types of diagnostic testing services provided to injured state workers)

Type of Diagnostic Testing Service	SORM	UT	A&M	TXDOT
Nerve Conduction Studies	9	8	3	8
MRIs	1	1	1	1
CT Scans	1	1	1	1
Other Diagnostic Tests	2	1	1	1

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Note: "Other Diagnostic Tests" include radiologic examinations, myelography, and diskography, among others.

Geographic Analysis of State WC Claims

Distribution of State WC Reportable Claims by the Ten TWCC Field Offices with the Highest Average Medical Costs per Claim, Injury Years 1999-2001 Combined, All Injuries, One-Year Post Injury

Rank	TWCC Field Office	% of SORM Reportable Claims	% of UT Reportable Claims	% of A&M Reportable Claims	% of TXDOT Reportable Claims
1	Missouri City	3.5%	3.4 %	1.3 %	3.7 %
2	Weslaco	2.4%	1.9 %	0.9 %	1.7 %
3	Dallas	2.7%	7.3 %	2.2 %	5.4 %
4	Fort Worth	2.2%	3.3 %	3.3 %	6.1 %
5	Victoria	3.7%	1.8 %	2.5 %	3.4 %
6	Houston	11.3%	31.4 %	6.5 %	13.0 %
7	Lufkin	5.0 %	2.2 %	1.0 %	2.4 %
8	Midland/Odessa	3.1 %	0.5 %	0.0 %	2.8 %
9	Beaumont	2.8 %	1.1 %	.1 %	2.8 %
10	Corpus Christi	2.6 %	.5 %	8.4 %	3.0 %
TOTAL		40%	53%	26%	44%

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

- In order to understand whether the high medical costs associated with certain state WC programs were a result of having a large percentage of their claims in high cost geographic areas of the state, TDI created a medical cost index for each state WC program.

- Medical cost index for SORM, UT, A&M and TXDOT = SUM{(% of reportable claims for each TWCC field office) * (the average medical cost per claim for each TWCC field office)}

- Conclusion: Based on the medical cost index analysis, UT should have the highest medical cost per claim, followed by TXDOT, SORM, and A&M.

Findings Regarding Wage Differences Among the State WC Programs

Average Weekly TIBs Compensation Rates for Each State Workers' Compensation Program, Injury Years 1999-2001

(Weekly TIBs Compensation Rate = 70% of Workers' Average Weekly Wage)

State Workers' Compensation Program	Injury Year 1999	Injury Year 2000	Injury Year 2001
SORM	$303.41	$320.47	$335.00
UT	$317.47	$333.89	$339.91
A&M	$250.46	$267.17	$263.95
TXDOT	$350.35	$295.06	$285.18

Source: Texas Department of Insurance, Workers' Compensation Research Group, 2004.

Sick and Annual Leave Usage by Injured State Workers

- In order to analyze the usage of sick and annual leave by state employees, TDI requested data from all of the state WC programs and received data from SORM, UT, and A&M.

- However, after closer analysis of this data, it appears that each state WC program is collecting this data differently making it difficult to accurately compare sick and annual leave usage by injured state workers in each state WC program.

- If the legislature is interested in comparing the sick and annual leave usage by injured state workers, there needs to be standardization in the collection of this information by the state workers' compensation programs.

Summary

- Compared to the other state WC programs, a higher percentage of SORM's claimants are receiving physical medicine and diagnostic testing services.

- Both SORM and A&M appear to have higher utilization of physical medicine services than the other state WC programs, while SORM and TXDOT appear to have higher utilization of diagnostic testing services than the other state WC programs.

- Based on the geographic distribution of claims for each of the state WC programs and an analysis of the geographic areas of the state with the highest average medical costs per claim, it appears that UT should have the highest average medical cost per claim rather than SORM.

Summary

- After analyzing the average weekly Temporary Income Benefit (TIBs) compensation rates for injured workers in each of the state WC programs, it appears that UT injured workers have slightly higher weekly compensation rates. However, this slight differential in compensation rates does not fully explain why UT has higher TIBs payments per claim, when compared with SORM, A&M and TXDOT.

- Given the differences in the current sick and annual leave data collection processes for each of the state WC programs, it is not possible to accurately compare the usage of sick and annual leave by injured state workers.

Future Analyses

- In the third phase of this project, the TDI Workers' Compensation Research Group plans to compare the medical treatment utilization of surgical procedures and injections for each of the state WC programs;

- Compare the negotiated discounts off the 1996 TWCC fee guideline for each of the state WC programs; and

- Analyze the distribution of each state WC program's medical costs by health care specialty.