

# TEXAS Monitor

**SPECIAL EDITION**

Published by the Research and Oversight Council on Workers' Compensation

Vol. 7, No. 2, Special Edition – August 2002

## **Monitoring Programs for Health Care Providers, Designated Doctors, and Insurance Carriers in the Texas Workers' Compensation System**

In this special edition of the *Texas Monitor*, the Research and Oversight Council on Workers' Compensation (ROC) presents information about two new monitoring programs designed to improve the quality and help control the cost of services provided in the Texas workers' compensation system. The two monitoring programs described in this issue focus on 1) health care providers who provide physical medicine services and 2) designated doctors, specially trained health care providers who are utilized to

resolve disputes in the workers' compensation system. A third article in the next issue of the *Texas Monitor* will describe the monitoring program for insurance carriers.

### ***Why Monitor Health Care Providers, Designated Doctors and Insurance Carriers?***

Results from the ROC's medical cost and quality of care studies completed in February 2001 (mandated by House Bill 3697, 76<sup>th</sup> Texas Legislature, 1999) reported that the average medical cost of treating injured workers was significantly higher in Texas than in other comparable states and health care delivery systems.<sup>1</sup> These high medical costs were largely due to the amount and duration of care provided to injured workers (particularly in certain service areas such as surgery, physical medicine, and diagnostic testing). The study also revealed that a small proportion of health care providers, claims, and medical procedures contribute most significantly to the

high medical costs in Texas, and that higher medical costs did not result in better return-to-work outcomes, improved health outcomes, or increased satisfaction with care among injured workers.<sup>2</sup>

Findings from these research studies, compounded by increasing concern from system stakeholders regarding rising medical costs, led to the passage of House Bill 2600 (77<sup>th</sup> Texas Legislature, 2001) – an omnibus workers' compensation bill that resulted in the most significant legislative reforms since the system overhaul in 1989.<sup>3</sup> Article 1 of this bill gave the Texas Workers' Compensation Commission (TWCC) greater authority to monitor and discipline health care providers and insurance carriers (including their utilization review agents, or URAs) whose medical practice and/or review patterns are “substantially different from those [TWCC] finds to be fair and reasonable based on either a

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single determination or a pattern of practice.”<sup>4</sup> It also clarified the statutory role of TWCC’s Medical Advisor and created a Medical Quality Review Panel (MQRP) to conduct quality-of-care reviews and make recommendations to TWCC’s Commissioners regarding possible sanctions or, in the case of health care providers, possible removal from TWCC’s Approved Doctor List (ADL) and/or Designated Doctor List (DDL).<sup>5</sup>

### **What is the Focus of the Monitoring Programs?**

In order to facilitate these new monitoring initiatives at TWCC, ROC staff has worked closely with TWCC’s Medical Advisor over the past year to develop an effective and scientifically valid methodology for identifying individual health care providers, designated doctors and/or insurance carriers that warrant further clinical scrutiny by the MQRP.<sup>6</sup> As part of this collaborative work, several monitoring initiatives were developed:<sup>7</sup>

- A health care provider “data mining tool” (i.e., a computer program that analyzes large quantities of data) to perform an initial review of medical care utilization patterns and later to analyze diagnostic accuracy and return-to-work outcomes for individual health care providers;
- An insurance carrier “data mining tool” that mirrors

the structure of the health care provider program described above by comparing the medical care utilization patterns paid for by insurance carriers for similar types of injuries; and

- A designated doctor “data mining tool” to compare the average impairment ratings assigned by designated doctors to injured workers with similar types of injuries.

### **What Methods and Data Will Be Used to Monitor Health Care Providers, Designated Doctors and Insurance Carriers?**

ROC staff spent six months cleaning and validating TWCC medical payment and claims data for these projects using the same methods employed during the HB 3697 medical cost and quality of care studies.<sup>8</sup> Analyses are focused on individual injury years with “cut-off points” inserted to ensure that all claims analyzed have the same maturity (e.g., one-year post-injury).

To ensure “apples to apples” comparisons between individual health care providers and between different insurance carriers, ROC and TWCC have agreed to group similar types of injuries using diagnostic, or ICD-9, codes.<sup>9</sup> Essentially, this type of diagnostic grouping serves to ensure that injuries with the same severity and the same expected pattern of care are compared with each other. For the health care provider and insurance carrier monitoring programs, the

most frequently billed and paid for diagnostic code for a particular claim was used to assign the claim into a diagnostic group. For the designated doctor monitoring program, the diagnostic code listed on the TWCC-69 impairment rating form completed by the designated doctor was used for assignment. The diagnostic groups for the health care provider and insurance carrier monitoring programs are based on a grouping methodology used by the American College of Occupational and Environmental Medicine (ACOEM). The grouping scheme used for the designated doctor monitoring program was slightly modified because the population of cases with designated doctor impairment ratings is much smaller than the total population of workers’ compensation claims. Thus, it was necessary to collapse some of the similar diagnostic groups into broader groups to ensure that there was an adequate number of observations to yield meaningful analyses.

In May 2002, ROC staff presented TWCC’s Medical Advisor with a list of designated doctors ranked from highest to lowest average impairment rating by injury type (i.e., diagnostic group) as well as the methodology for continuing this data monitoring in the future. This list served as the basis for the first set of MQRP clinical reviews initiated under HB 2600, as TWCC selected 18 designated doctors for a first round of reviews in July and August 2002.

The ROC also presented TWCC with a second list of health care providers analyzed by their utilization of physical medicine services in the summer of 2002, along with the methodology for analyzing physical medicine services in the future.<sup>10</sup> It is anticipated that this second list of health care providers will serve as the basis of the second round of MQRP clinical reviews in early 2003. The total number of designated doctors and health care providers selected for clinical review from these lists in 2003 are subject to budgetary, staffing, and other resource constraints at TWCC; however, it is likely that the resources that are available will be concentrated on those doctors and other health care providers whose practice patterns are least likely to be “fair and reasonable” (i.e., furthest from the norms on a consistent basis) when compared to the universe of designated doctors or health care providers as a whole.

To ensure that one or two extremely severe cases do not result in a health care provider or designated doctor (or a very small insurance carrier) being identified for an unjustified clinical review, only “high volume” providers, designated doctors and insurance carriers will have their results compared with the total population of providers and carriers. “Low volume” providers and carriers will not necessarily escape review, however, since it is likely that TWCC will randomly select certain cases from these providers and carriers for clinical reviews in the future.

### ***What Happens To a Health Care Provider, Designated Doctor or Insurance Carrier Who is Identified by the Data Analysis?***

The data mining tools set up by the ROC and TWCC merely help TWCC’s Medical Advisor and MQRP narrow the field for their clinical reviews. No disciplinary action will be taken on a provider or carrier without a thorough clinical review of sample cases by MQRP members. To help decide whether a clinical analysis is warranted, TWCC will request copies of the patient’s medical records from the insurance carrier or the health care provider (or both) and review those records to determine if the data mining results match the actual patient records, or were a result of misreported data. If the information from the patient records validates the need for a clinical review, TWCC’s Medical Advisor will prioritize the review and assign it to selected MQRP members. For more information on the types of sanctions that may result from an MQRP review and the appeal process, see Section 408.0231 of the *Texas Labor Code* and TWCC Rules 180.26-27. A variety of sanctions are possible, from required education to monetary penalties to removal from the system.

### ***How Can Health Care Providers, Designated Doctors and Insurance Carriers Determine Whether Their Practice or Review Patterns Are in Line With Their Peers?***

This special edition *Texas Monitor* (and subsequent moni-

toring articles) will help health care providers, designated doctors, and insurance carriers understand how their own practice or review patterns compare with those of their peers (i.e., the health care provider, designated doctor or carrier population as a whole). It is anticipated that these aggregated results will be updated and published on a regular basis, most likely annually by either TWCC or ROC. Readers should understand that these benchmarks will continue to evolve as providers and carriers tighten or loosen practice standards and as the medical literature continues to highlight best practices. It is also important to note that the Medicare payment policies required to be adopted by TWCC (by reference as part of the workers’ compensation professional services fee guideline) will potentially alter these benchmarks in the future, since they change the way some services are billed and paid for by insurance carriers.<sup>11</sup>

Exact levels of utilization or departure from the median that will trigger a review, and exact methodologies used by TWCC for this identification will likely remain flexible and evolve over time. In part, this helps the program effectiveness by ensuring that system participants who believe it likely they will be identified for review do not modify their practices just enough to avoid a review, without making substantive improvements. Such a strategy is also consistent with the way that the Medicare program analyzes and selects pro-

viders for “probe reviews” (similar to the case reviews performed by the MQRP).

The following articles in this issue highlight the findings from ROC’s work to date on two of the three monitoring programs: health care providers of physical medicine and designated doctors.

### Notes to pages 1-3

<sup>1</sup> See Research and Oversight Council on Workers’ Compensation (ROC), *Striking the Balance: An Analysis of the Cost and Quality of Medical Care in the Texas Workers’ Compensation System*, 2001 and *Recommendations for Improvements in Texas Workers’ Compensation Safety and Return-to-Work Programs*, 2001. Summaries and ordering information are available at: <http://www.roc.state.tx.us/pubform.htm>.

<sup>2</sup> The HB 3697 studies found that the top 7 percent (approximately 4,000) of the health care providers, the top 20 percent of claims and the top 2 percent of approximately 7,000 medical procedures accounted for 80 percent of the medical costs in the Texas system.

<sup>3</sup> For a detailed description of the various components of HB 2600, see the ROC’s *Texas Monitor*, vol. 6, no. 2, Summer 2001, special legislative edition, available at [www.roc.state.tx.us/txmon6-2.htm](http://www.roc.state.tx.us/txmon6-2.htm).

<sup>4</sup> See *Texas Labor Code*, Section 408.0231.

<sup>5</sup> See *Texas Labor Code*, Sections 413.0511 and 413.0512.

<sup>6</sup> Three different monitoring projects were included on ROC’s FY 2002 approved Research Agenda: one each for health care providers, insurance carriers (URAs), and designated doctors.

<sup>7</sup> Other Medical Advisor and MQRP initiatives include reviews of medical disputes and Independent Review Organization (IRO) decisions.

<sup>8</sup> This same cleaned medical payment data will serve as the basis for the regional health care delivery network feasibility study mandated by Article 2 of House Bill 2600.

<sup>9</sup> ICD (International Classification of Disease) is a coding scheme that specifies disease type.

<sup>10</sup> This list consisted of the median number of services per patient and the median duration of care for all providers (the comparison group) and a list of high-volume providers whose patterns of care placed them at various percentiles.

<sup>11</sup> The recently adopted professional services fee guideline is currently the subject of a lawsuit by the Texas Medical Association (TMA) and the Texas AFL-CIO against TWCC. On August 21, 2002 the Travis County State District Court issued a temporary injunction that prevents TWCC from implementing the new fee guideline on September 1, 2002.

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## Health Care Provider Monitoring Results for Physical Medicine Services

by Amy Lee and D.C. Campbell

As stated in the introductory article, ROC and TWCC staff have worked closely over the past year to develop a methodology to monitor the amount and duration of medical care provided to injured workers in Texas by individual health care providers.<sup>1</sup> As part of this monitoring effort, ROC and TWCC staff envision initiatives for several different categories of medical services monitoring, including:

- Physical medicine;
- Injections;
- Diagnostic testing;
- Surgery;
- Inpatient hospitalization;
- Durable medical equipment;

- Pharmaceuticals;
- Mental Health services; and
- Evaluation and management services.

This article presents the results from the first of these health care provider monitoring initiatives – physical medicine services. Future *Texas Monitor* articles will present results for the other medical service categories. Physical medicine services include modalities (e.g., hot and cold packs) and active or passive therapies (e.g., therapeutic exercises, massage). Several types of providers can provide these services in the Texas workers’ compensation system, including

physical therapists, occupational therapists, chiropractors, osteopaths, and medical doctors.

### Methods and Data

Using TWCC’s medical billing database, ROC staff selected claims with a 2000 injury year and analyzed all physical medicine services that had been billed and paid for within one year of the injury date. Based on the methodology outlined in the introduction to this *Texas Monitor*, ROC staff then assigned these claims to diagnostic groups (using the most frequently billed and paid for diagnosis during the analysis period to select the appropriate group) to control for

**Table 1**  
**Median # of Physical Medicine Modalities or Services per Patient with Low Back Soft Tissue or Low Back Nerve Compression Injuries, Injury Year 2000 – One-Year Post-Injury**

Types of Physical Medicine Modalities or Passive Therapies (CPT codes in parentheses)	Low Back Soft Tissue Injuries		Low Back Nerve Compression Injuries	
	# of Services Per Patient – All Providers (50 <sup>th</sup> Percentile)	# of Services Per Patient – High Volume Providers (95 <sup>th</sup> Percentile)	# of Services Per Patient – All Providers (50 <sup>th</sup> Percentile)	# of Services Per Patient – High Volume Providers (95 <sup>th</sup> Percentile)
<b>Hot and Cold Packs</b> (97010)	4	17	4	20
<b>Mechanical Traction</b> (97012)	4	20	5	23
<b>Electrical Stimulation – Unattended</b> (97014)	4	19	5	24
<b>Electrical Stimulation – Manual</b> (15 minute increments) (97032)	4	23	6	32
<b>Iontophoresis</b> (15 minute increments) (97033)	2	11	2	16
<b>Phonophoresis</b> (97139 – PH)	2	13	4	20
<b>Diathermy</b> (97024)	4	21	5	25
<b>Whirlpool Therapy</b> (97022)	3	16	3	15
<b>Hubbard Tank</b> (15 minute increments) (97036)	1	24	2	8
<b>Unlisted Modalities</b> (97039)	3	16	3	33
<b>Therapeutic Exercises (15 minute increments)</b> (97110)	6	41	9	61
<b>Manual Traction</b> (97122)	3	24	5	32
<b>Neuromuscular Re-education</b> (97112)	4	23	5	35
<b>Aquatic Therapy</b> (97113)	8	52	10	61
<b>Massage Therapy</b> (97124)	4	21	5	28
<b>Acupuncture</b> (97139 – AC)	3	36	6	24
<b>Manipulation</b> (97260)	6	35	7	48
<b>Joint Mobilization</b> (97265)	3	20	4	28
<b>Myofascial Release</b> (97250)	4	23	5	32
<b>Therapeutic Procedures -Group</b> (97150)	4	30	4	19
<b>Therapeutic Activities – One on One</b> (15 minute increments) (97530)	3	26	5	46
<b>Unlisted Physical Medicine Procedures</b> (97799)	5	253	6	298

Source: Research and Oversight Council on Workers' Compensation, 2002.

differences in injury type and severity. Two separate diagnostic groups – low back soft tissue and low back nerve compression injuries – served as the focus for most of these analyses since these two diagnostic groups are the most common and most costly (in terms of total medical costs) types of injuries in the Texas system. Results for the entire population of health care providers are expressed in terms of the median (i.e., the 50<sup>th</sup> percentile) rather than the mean, or average, since the median is more representative of a provider’s usual practice patterns, and the mean is more easily skewed by one or two extremely high or low utilization cases.

As mentioned in the introductory article, high volume health care providers will be closely monitored and have their results measured against the health care provider population as a whole. For comparison purposes, this article presents findings for the 50<sup>th</sup> percentile of all providers (essentially, the population median) and the 95<sup>th</sup> percentile of high volume health care providers (essentially, those who are most likely to be selected for Medical Quality Review Panel (MQRP) clinical reviews) for individual physical medicine services by CPT code.<sup>2</sup>

As Table 1 indicates, there is significant disparity in the median number of services provided per patient between the entire provider population and the high volume health care providers. The number of services per patient provided by high vol-

ume health care providers at the 95<sup>th</sup> percentile is at least four times the amount provided by the entire provider population for all physical medicine services, and as much as fifty times the amount of care provided for some services (such as unlisted physical medicine procedures, i.e., procedures that do not have a CPT code).

Figures 1-3 provide some real world examples of how the proposed health care provider monitoring program works. Each graph contains the median number of services provided per patient (e.g., therapeutic exercises, manipulation, and unattended electrical stimulation procedures) for all providers compared to the median number of these same types of services for four actual health care providers in the Texas workers’ compensation system. Each of the health care providers illustrated in these graphs provides a very high amount of medical care for the same type of injury compared to the rest of the health care provider population.

As described in the introductory article, the next step in this analysis would be for TWCC staff to request medical records for the identified providers and compare those records with the medical billing dataset. If the record review suggests that the provider’s practice pattern represents behavior outside the norms, TWCC’s Medical Advisor will then prioritize the provider for review by the MQRP.

The duration of treatment (i.e., the number of days from

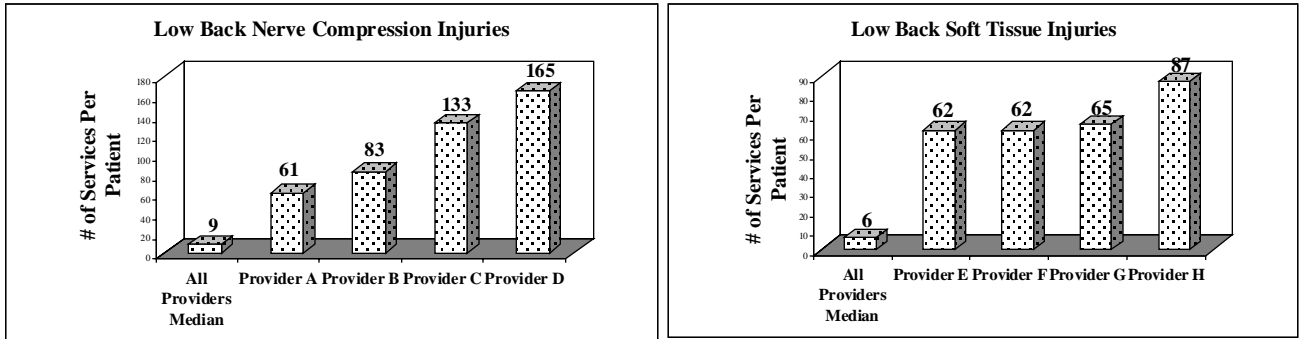
the first date of service to the last date of service) is another indicator of potentially inappropriate medical care that will be monitored for health care providers. As Table 2 indicates, there is a great deal of disparity between the average medical care duration for the entire provider population and for high volume health care providers for each of the physical medicine services listed. The greatest disparities can be seen in procedures such as manipulation, acupuncture, joint mobilization, iontophoresis and Hubbard tank usage.

Figures 4-6 also illustrate some examples of the median duration of specific services (e.g., therapeutic exercises, manipulation, and unattended electrical stimulation procedures) for all providers compared to the median duration of these same types of services for four actual health care providers treating injured workers in the Texas workers’ compensation system. Comparing these median durations helps demonstrate that each of the health care providers illustrated in Figures 4-6 provides (in most cases) medical care for an exceptionally long time period for the same type of injury compared to the rest of the health care provider population.

## Conclusion

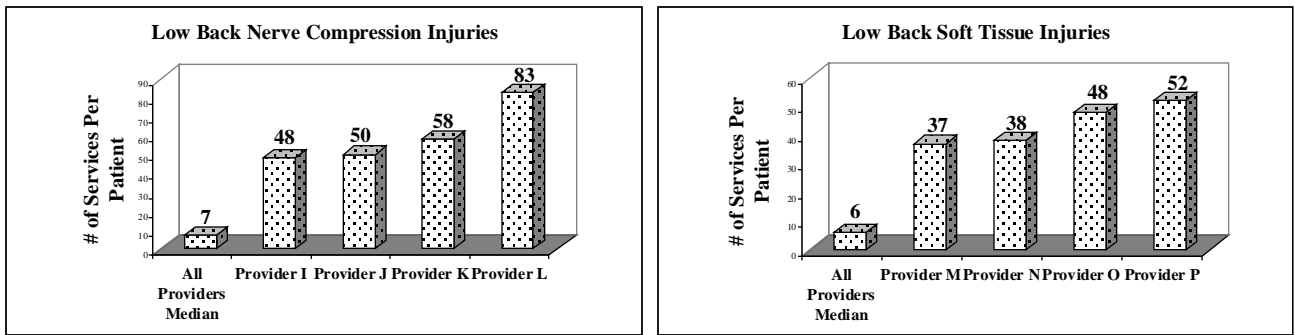
As a result of HB 2600 (77<sup>th</sup> Legislature, 2001), TWCC now has greater authority to monitor and sanction health care providers whose practice patterns are “substantially different from those [TWCC] finds to be fair and

**Figure 1**  
**Comparison of the Median Number of Therapeutic Exercises Per Patient for Selected Health Care Providers Compared with the Results for All Providers**  
**Injury Year 2000 – One-Year Post-Injury**



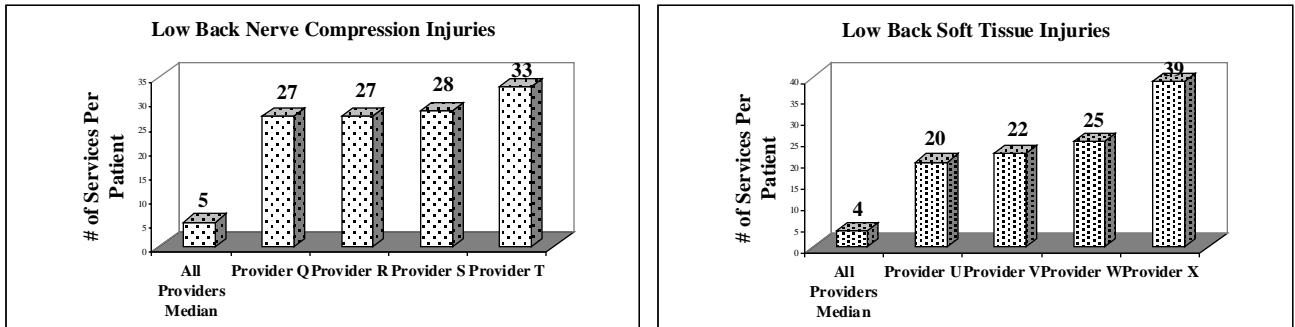
Source: Research and Oversight Council on Workers' Compensation, 2002.

**Figure 2**  
**Comparison of the Median Number of Manipulations Per Patient for Selected Health Care Providers Compared with the Results for All Providers**  
**Injury Year 2000 – One-Year Post-Injury**



Source: Research and Oversight Council on Workers' Compensation, 2002.

**Figure 3**  
**Comparison of the Median Number of Unattended Electrical Stimulation Procedures Per Patient for Selected Health Care Providers Compared with the Results for All Providers**  
**Injury Year 2000 – One-Year Post-Injury**



Source: Research and Oversight Council on Workers' Compensation, 2002.

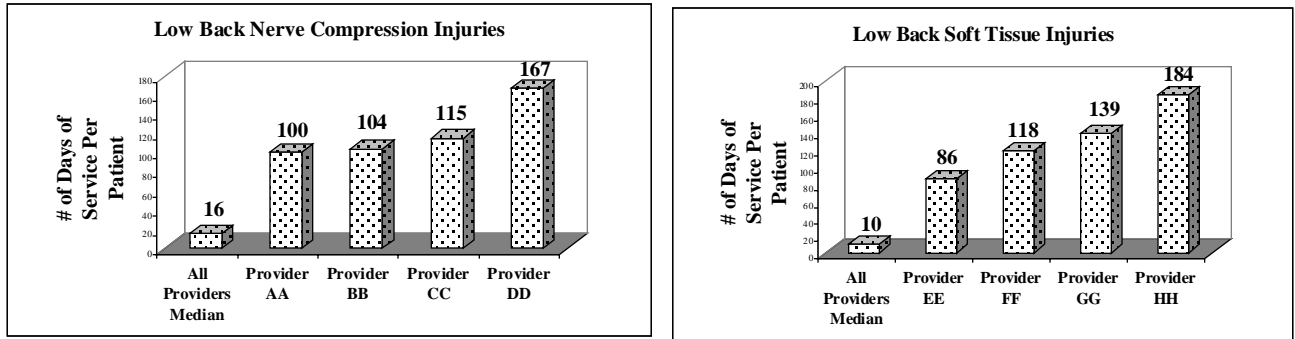
**Table 2**  
**Median Duration (in days) of Physical Medicine Modalities or Services**  
**per Patient with Low Back Soft Tissue or Low Back Nerve Compression Injuries**  
**Injury Year 2000 – One-Year Post-Injury**

Types of Physical Medicine Modalities or Passive Therapies  (CPT codes in parentheses)	Low Back Soft Tissue Injuries		Low Back Nerve Compression Injuries	
	# of Days Per Patient – All Providers (50 <sup>th</sup> Percentile)	# of Days Per Patient – High Volume Providers (95 <sup>th</sup> Percentile)	# of Days Per Patient – All Providers (50 <sup>th</sup> Percentile)	# of Days Per Patient – High Volume Providers (95 <sup>th</sup> Percentile)
Hot and Cold Packs (97010)	9	66	12	96
Mechanical Traction (97012)	13	80	15	112
Electrical Stimulation – Unattended (97014)	11	70	15	96
Electrical Stimulation – Manual (15 minute increments) (97032)	9	77	15	111
Iontophoresis (15 minute increments) (97033)	2	33	1	84
Phonophoresis (97139 – PH)	4	38	7	93
Diathermy (97024)	11	83	13	132
Whirlpool Therapy (97022)	6	77	11	85
Hubbard Tank (15 minute increments) (97036)	1	62	1	95
Unlisted Modalities (97039)	6	58	15	195
Therapeutic Exercises (15 minute increments) (97110)	10	65	16	99
Manual Traction (97122)	9	78	21	107
Neuromuscular Re-education (97112)	10	75	16	127
Aquatic Therapy (97113)	10	66	11	85
Massage Therapy (97124)	11	67	13	91
Acupuncture (97139 – AC)	8	104	19	276
Manipulation (97260)	27	197	41	239
Joint Mobilization (97265)	7	84	15	146
Myofascial Release (97250)	11	85	18	121
Therapeutic Procedures -Group (97150)	8	56	8	74
Therapeutic Activities – One on One (15 minute increments) (97530)	6	59	13	94
Unlisted Physical Medicine Procedures (97799)	5	61	5	68

Source: Research and Oversight Council on Workers' Compensation, 2002.

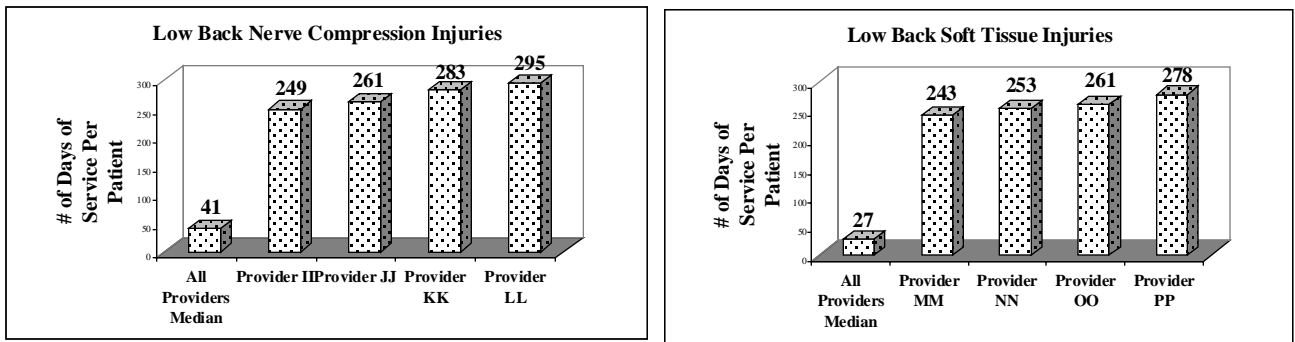


**Figure 4**  
**Comparison of the Median Duration (in days) of Therapeutic Exercises Per Patient for Selected Health Care Providers Compared with the Results for All Providers**  
**Injury Year 2000 – One-Year Post-Injury**



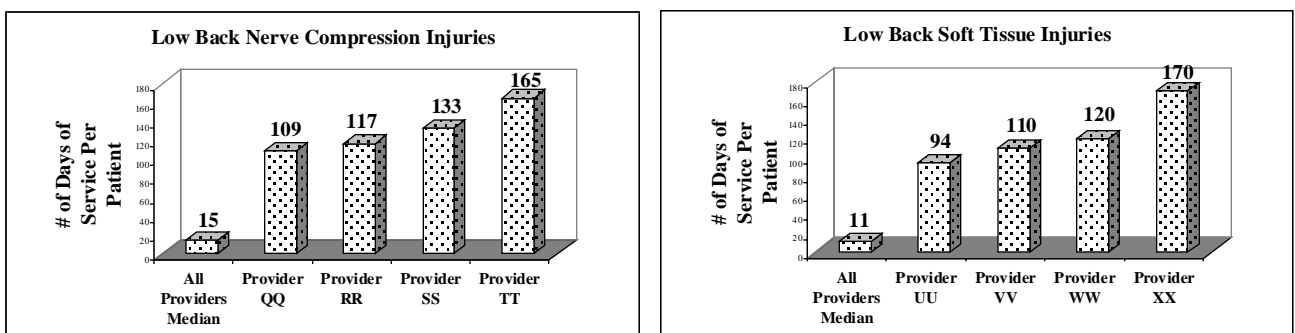
Source: Research and Oversight Council on Workers' Compensation, 2002.

**Figure 5**  
**Comparison of the Median Duration (in days) of Manipulations Per Patient for Selected Health Care Providers Compared with the Results for All Providers**  
**Injury Year 2000 – One-Year Post-Injury**



Source: Research and Oversight Council on Workers' Compensation, 2002.

**Figure 6**  
**Comparison of the Median Duration (in days) of Unattended Electrical Stimulation Procedures Per Patient for Selected Health Care Providers Compared with the Results for All Providers**  
**Injury Year 2000 – One-Year Post-Injury**



Source: Research and Oversight Council on Workers' Compensation, 2002.

reasonable based on either a single determination or a pattern of practice.”<sup>3</sup> This means that health care providers who consistently render an extremely high (or even possibly an extremely low) number of medical services per patient, or provide care for excessive periods of time will be subject to increased scrutiny in the future from TWCC’s Medical Advisor and MQRP. This is not to say that these extreme utilization or duration of care patterns are not justifiable in some cases based on the actual medical records; however, these high levels of care warrant further examination in light of the high medical cost situation in Texas.

It should also be noted that the methodology described here for identifying potential overutilizers can also be used to identify high quality health care providers who may warrant reduced utilization review or

preauthorization requirements per Section 408.0231 (a) (4) of the *Texas Labor Code*. In fact, one positive outcome of these monitoring programs would be a greater degree of self-regulation on the part of high quality providers and less reliance on the system-wide control mechanisms (such as preauthorization and utilization review) that are necessary for the few but burdensome for all.

While these monitoring programs should encourage sound practice patterns that promote high quality health care, some providers may simply attempt to alter practice patterns in such a way as to avoid detection. However, the monitoring methodologies developed by ROC and TWCC will be flexible to allow for any adjustments necessary to ensure program effectiveness.

While similar to the types of quality management reviews cur-

rently utilized in other health care delivery systems (such as Medicare, Medicaid, and group health), the MQRP reviews for workers’ compensation cases are still in the formative stages. The scope of these monitoring initiatives will change and/or expand over time to include important quality of care measures such as functional and return-to-work outcomes. However, these initial utilization and duration monitoring efforts provide an important basis for quality of care comparisons in the future.

#### **Notes to pages 4-9**

<sup>1</sup> The amount of medical care provided to injured workers is often referred to as “medical care utilization” by health care providers, insurance carriers and system administrators.

<sup>2</sup> CPT (Current Procedural Terminology) is a coding scheme that specifies type of medical procedure.

<sup>3</sup> See *Texas Labor Code*, Section 408.0231.

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## **Designated Doctor Monitoring Results: Wide Variation in Average Impairment Ratings**

*by Joseph Shields and Xiaohua Lu*

The Research and Oversight Council on Workers’ Compensation (ROC) and the Texas Workers’ Compensation Commission (TWCC) have been working closely over the past several months on the design and implementation of a monitoring program for designated doctors, focusing on the accuracy of the permanent impairment ratings assigned by these health care pro-

viders. Designated doctors are selected by TWCC to settle unresolved issues related to the certification of Maximum Medical Improvement (MMI), the degree of permanent impairment caused by a work-related injury (also known as an impairment rating), and provide opinions on other medical issues related to the claim.<sup>1</sup> Although all doctors who perform impairment rating ex-

aminations will be subject to monitoring and oversight by TWCC, this article will focus primarily on the designated doctor monitoring program.

The statistical findings reported in this article are based on the analysis of designated doctor impairment ratings assigned (using the 3<sup>rd</sup> Edition of the *AMA Guides*) to injured workers between January 1, 1998 and Sep-

**Table 3**  
**Distribution of Claims by Diagnostic Group**  
**Diagnostic Groupings: 1/1/98 – 9/30/01 TWCC-69 Receive Dates**

Injury Type (Diagnostic Group)	Number of Designated Doctor Impairment Ratings	Percentage of Designated Doctor Impairment Ratings	Number of Designated Doctors Issuing Impairment Ratings
Soft Tissue Injury	36,113	47.8%	1,846
Neurologic Problems Including Neuropathy and Nerve Compression	11,907	15.8%	1,472
Degenerative Disease	2,509	3.3%	714
Skeletal Trauma	2,446	3.2%	882
Internal Derangement	2,230	3.1%	806
Disc Displacement	1,926	2.6%	728
Superficial Injury/Trauma	1,876	2.5%	718
Myelopathy	1,183	1.6%	432
Amputation or Crush	793	1.1%	432
Hernia	319	0.4%	230
Burns	100	0.1%	88
Other Injuries/Symptoms	14,019	18.6%	1,587

Source: Texas Workers' Compensation Commission, TWCC-69 Database, and Research and Oversight Council on Workers' Compensation, 2002.

tember 30, 2001. This period was selected to ensure that other factors (e.g., statutory changes enacted by the 77th Texas Legislature that have modified some key system procedures, and the change to the 4th Edition of the *AMA Guides*, which became effective October 15, 2001) were not the source of variation in impairment ratings among designated doctors. These factors, which will continue to impact future impairment ratings, are discussed at the end of this article.<sup>2</sup> Only “high volume” designated doctors, who assigned at least 30 impairment ratings over

the 1998-2001 time period noted, were included in the analysis.

#### **Overview of the Program**

The broad objective of Article 1 of HB 2600 (77th Texas Legislature, 2001) was to better control the cost and quality of medical care provided to injured workers. In addition, it required that TWCC develop appropriate doctor training and quality of care monitoring requirements in the system. Part of this mandate involves ensuring that designated doctors provide fair and accurate determinations of MMI and the degree of permanent impairment

resulting from a compensable on-the-job injury. This is especially important since the findings of the designated doctor are given presumptive weight in the TWCC dispute resolution process.

As noted, the first step in this process was an analysis of impairment ratings assigned by designated doctors between January 1, 1998 and September 30, 2001. All claims with designated doctor impairment ratings were grouped into one of 12 “diagnostic buckets” (i.e., grouped by injury type) based on the diagnosis, or ICD-9, code reported by the designated doctor on the Report

of Medical Evaluation (i.e., TWCC-69 Form).<sup>3</sup> These “diagnostic buckets” are used to control for differences in the mix of injury types rated by the population of designated doctors in Texas. Based on the ICD-9 code provided by the designated doctor, each claim was classified into one of the 11 most common diagnostic groups or into a 12<sup>th</sup> category, “other injuries/symptoms.” Table 3 illustrates the number of claims with impairment ratings in the various diagnostic groups, the percentage of overall ratings for which they account, and the number of designated doctors that have rated injuries included in each of the groups.

The most frequently rated injury type in the workers’ compensation system is “soft tissue injuries” (48 percent), followed by injuries involving neurological problems (16 percent).<sup>4</sup>

Within each diagnostic group, all designated doctors who had given three or more ratings were sorted by average impairment rating assigned.<sup>5</sup> This allowed for identification of statistical outliers at both the high and low ends of the impairment rating spectrum for each diagnostic group. Based on these average impairment ratings, each doctor received a ranking within the diagnostic group. The rankings were then weighted, based on the number of exams a particular designated doctor performed within a group expressed as a percentage of all impairment ratings assigned by that designated doctor. Again, the final rankings

of designated doctors is restricted to those who assigned at least 30 total ratings (across all diagnostic groups) over the period of analysis (i.e., 1998-2001).

TWCC will also develop criteria upon which designated doctors will be selected, from the weighted rankings described above, for reviews to be conducted by doctors on the Medical Quality Review Panel (MQRP). TWCC will select cases to be reviewed by MQRP doctors for each designated doctor whose impairment ratings are in question. It is important to note that selection for review, based on statistical data, does not necessarily mean that the designated doctor’s impairment ratings are invalid. It simply indicates that the doctor selected for review issued impairment ratings that were statistically outside the range (either higher or lower) of the impairment ratings assigned by other designated doctors. It is the role of the MQRP reviewer to determine if the doctor in question has utilized the *AMA Guides* appropriately in assessing impairment.

#### **Distribution of Impairment Rating Assigned by Designated Doctors**

As Table 4 indicates, there is wide variation among designated doctors’ average impairment ratings in virtually every diagnostic group analyzed. For example, the mean designated doctor impairment rating for soft tissue injuries ranged from 3.3 percent at the 1<sup>st</sup> percentile (i.e., the lowest 1 percent of impair-

ment ratings) to 17.7 percent at the 99<sup>th</sup> percentile (i.e., the highest 1 percent of impairment ratings), with the median designated doctor averaging 8.7 percent.<sup>6</sup> Likewise, the mean designated doctor impairment ratings for neurological problems (including neuropathy and nerve compression) ranged from 4.0 percent at the 1<sup>st</sup> percentile to 23.5 percent at the 99<sup>th</sup> percentile, with the median designated doctor averaging 11.4 percent.

Additionally, as Table 4 shows, impairment ratings varied substantially among the 12 diagnostic groups included in this analysis. For each diagnostic group, mean (or average) impairment ratings are calculated for all designated doctors who assigned at least three ratings within a diagnostic group. The doctors are then ordered by mean impairment rating to determine the percentiles presented in Table 4. Average impairment ratings tended to be highest among injuries involving disc displacement (16.8 percent) and myelopathy (15.8 percent), and lowest among injuries resulting in hernias (3.8 percent) and superficial injuries/traumas (5.3 percent).

Table 4 provides summary statistics for each of the 12 diagnostic groups used in this analysis. In addition to the variation in impairment ratings observed within diagnostic groups and between groups, it is important to note that within each diagnostic group, the mean and median designated doctor impairment ratings are very close.

**Table 4**  
**Distribution of Mean Designated Doctor Impairment Ratings by Diagnostic Groups**

Injury Type (Diagnostic Group)	Avg. (Mean) Rating	Percentile						
		99 <sup>th</sup>	95 <sup>th</sup>	75 <sup>th</sup>	50 <sup>th</sup> (Median)	25 <sup>th</sup>	5 <sup>th</sup>	1 <sup>st</sup>
Soft Tissue Injury (N=818 Designated Docs)	8.9%	17.7%	14.1%	10.5%	8.7%	6.9%	4.9%	3.3%
Neurologic Problems Including Neuropathy and Nerve Compression (N=734 Des Docs)	11.9%	23.5%	18.4%	13.9%	11.4%	9.5%	6.5%	4.0%
Degenerative Disease (N=222 Designated Docs)	12.7%	25.0%	20.9%	15.3%	12.2%	9.8%	6.3%	4.5%
Skeletal Trauma (N=274 Designated Docs)	7.7%	21.5%	14.7%	9.8%	7.3%	5.0%	1.8%	0.5%
Internal Derangement (N=229 Designated Docs)	9.4%	16.7%	15.0%	11.3%	9.0%	7.3%	4.5%	3.3%
Disc Displacement (N=217 Designated Docs)	16.8%	30.7%	24.7%	20.0%	16.6%	13.5%	9.3%	6.7%
Superficial Injury/Trauma (N=188 Designated Docs)	5.3%	17.2%	11.7%	7.1%	4.7%	3.0%	1.0%	0.0%
Myelopathy (N=81 Designated Docs)	15.8%	31.3%	27.7%	17.8%	14.0%	12.2%	9.7%	5.0%
Amputation or Crush (N=71 Designated Docs)	9.4%	26.7%	17.7%	11.4%	8.4%	6.0%	3.7%	1.0%
Hernia (N=18 Designated Docs)	3.8%	11.7%	11.7%	5.7%	3.3%	0.8%	0.0%	0.0%
Burns* (N=3 Designated Docs)	7.3%	8.0%	8.0%	8.0%	8.0%	6.0%	6.0%	6.0%
Other Injuries/Symptoms (N=784 Designated Docs)	11.0%	25.4%	18.5%	13.2%	10.3%	8.0%	5.3%	3.0%

Source: Research and Oversight Council on Workers' Compensation and the Texas Workers' Compensation Commission, TWCC-69 Database, 2002.

Note: Percentages reflect the mean impairment rating for the designated doctor at the specified percentile (e.g., 99<sup>th</sup> Percentile, 50<sup>th</sup> Percentile, 1<sup>st</sup> Percentile). Figures reflect the experiences of 812 designated doctors who have assigned at least 30 total impairment ratings over the 1/1/98 to 9/30/01 period. In addition, only the mean impairment ratings of designated doctors with at least 3 ratings in a particular diagnostic group are included in the results presented in Table 4.

\* Data for "Burns" should be interpreted with caution due to the very small number of designated doctors with three or more ratings.

This indicates that there is a fairly even distribution of impairment ratings across the percentiles.

### **Factors that May Impact Impairment Ratings in the Post HB 2600 Period**

In addition to the doctor monitoring provisions required by HB 2600, the following five factors are also likely to have an impact on impairment ratings issued by designated doctors in the future:

1) Change in the RME Process. HB 2600 modified Section 408.0041 of the *Texas Labor Code* to revise the required medical examination (RME) process for MMI and impairment rating issues. Previously, an insurance carrier was allowed to request an RME by a carrier-selected doctor prior to an examination by a designated doctor. Under the new law, when a carrier or an injured worker requests a medical exam to resolve MMI or impairment rating issues, the worker is directed to an independent, TWCC-designated doctor first. While a carrier still has the right to a subsequent examination by a provider of its choosing (after the designated doctor's evaluation has been completed), the designated doctor's findings regarding MMI and permanent impairment still carry presumptive weight.

2) Move to the 4th Edition of the *AMA Guides*. Effective October 15, 2001, providers issuing impairment ratings in Texas are required to use the 4<sup>th</sup> Edition of the *AMA Guides*, as opposed to

the 3<sup>rd</sup> Edition, which was used previously.<sup>7</sup>

3) Repeal of the "90-Day Rule." TWCC Rule 130.5 (e) (also known as the "90-Day Rule") states that an assessment of MMI and/or the assigned impairment rating was final if it was not disputed within 90 days. The 3<sup>rd</sup> Court of Appeals in Austin issued an opinion on April 12, 2001 that "Rule 130.5(e) is invalid to the extent that it prevents reassessment of MMI certification because the impairment rating or MMI was not disputed within 90 days." The Court found that the statute did not give TWCC the authority to place any time limitations on these types of disputes. In response to the Court's decision, TWCC repealed the 90-day provision of the amended rule effective January 2, 2002.<sup>8</sup> The impact of the repeal of Rule 130.5 (e) is significant because it removed the ability of insurance carriers to close out claims within a defined period by invoking the "90-Day Rule" after an impairment rating was assigned.

4) Change in the Designated Doctor Appointment Criteria. HB 2600 allows a doctor with a different licensure than the injured worker's treating doctor who is "trained and experienced" with the medical issue involved in the case to be assigned as a designated doctor. This replaces a "same licensure" requirement previously in effect, and creates a shift in the pool of designated doctors that may be eligible for

assignment to specific cases in dispute.

5) *AMA Guides* Testing for Designated Doctors. HB 2600 reinforced the requirement that doctors be trained and tested on their knowledge of the *AMA Guides* before they can be approved as a designated doctor. This change in the law should improve the accuracy and consistency of ratings for injured workers.

It is likely that all five of these changes to the way in which MMI determinations are made and impairment ratings are assigned in Texas will have a substantial impact on system participants in the years to come. These issues will be closely monitored by the ROC as more data become available.<sup>9</sup>

### **Conclusion**

It is clear from the findings presented in this article that there is wide variation in the average impairment ratings assigned by designated doctors in Texas for similar types of injuries. The variance in the average ratings among designated doctors cannot be explained by differences in the mix of cases rated by doctors, since wide variation in ratings exists within each "diagnostic bucket." Most designated doctors who tended to assign high ratings relative to other doctors rating the same type of injury, did so across all "diagnostic buckets" in which they assigned ratings. Similarly, most designated doctors who assigned low ratings relative to other doctors

rating the same type of injury also did so across all “diagnostic buckets.” Since the designated doctor’s evaluation carries presumptive weight in the dispute resolution process, it is imperative that impairment ratings assigned by designated doctors are accurate.

The designated doctor monitoring program is an important first step in ensuring that injured workers receive accurate evaluations of permanent impairment, and subsequently, receive appropriate compensation in the form of impairment income benefits and/or supplemental income benefits.<sup>10</sup> With the statutory change in the RME process – which first directs injured workers to a designated doctor as opposed to a doctor selected by an insurance carrier— careful monitoring of the work performed by designated doctors will be more critical than ever.

Although this monitoring program is in its initial stages, TWCC has taken the findings from this first set of rankings and selected approximately 18 designated doctors as the subjects of the first MQRP reviews in 2002. Although TWCC has not yet decided how many designated doctor reviews will be completed on an annual basis, it is likely that this data mining tool will be applied to designated doctors every year in order to help TWCC focus its MQRP reviews.

#### **Notes to pages 10-14**

<sup>1</sup> See *Texas Labor Code* 408.0041; in addition to determinations of MMI and impairment ratings, a designated doctor can also conduct examinations of in-

jured workers receiving Supplemental Income Benefits (SIBs) to determine return-to-work capability (*Texas Labor Code* 408.151).

<sup>2</sup> This time period was selected to ensure that a statistically adequate number of examinations were performed by designated doctors and that all impairment ratings were assigned using the same version of the *AMA Guides* (i.e., the 3<sup>rd</sup> Edition). When enough data are compiled on designated doctor impairment ratings under the 4<sup>th</sup> Edition of the *AMA Guides*, TWCC and ROC will work together to prepare a new weighted ranking of doctors and utilize the MQRP to evaluate cases. TWCC staff will be trained in the use of the “data mining” programs developed by ROC to conduct future analyses on their own.

<sup>3</sup> The diagnostic buckets used in the HB 3697 studies, released by the ROC in 2001, were modified slightly for this analysis. The modifications involved collapsing some of the original diagnostic groupings to ensure that enough ratings were represented to make meaningful statistical comparisons between diagnostic groups. This was necessary since the population of claims with designated doctor impairment ratings is much smaller than the larger population of claims examined in the HB 3697 studies.

<sup>4</sup> Soft tissue injuries include all types of body parts in addition to back injuries.

<sup>5</sup> The threshold of three or more ratings was used to ensure that designated doctors included in a diagnostic bucket had some range of experience with rating injuries in the particular diagnostic group.

<sup>6</sup> The 1<sup>st</sup> percentile refers to designated doctors with average impairment ratings lower than 99 percent of the rest of the designated doctors included in the analysis. The 99<sup>th</sup> percentile refers to designated doctors with average impairment ratings higher than 99 percent of the rest of the designated doctors included in the analysis.

<sup>7</sup> See *Texas Labor Code* 408.124 (c). The authority to move to the 4<sup>th</sup> Edition was allowed by HB 2510 (76<sup>th</sup> Legislature, 1999).

<sup>8</sup> See Texas Workers’ Compensation Commission, *Advisory 2002-04*, “Status

of the Fulton Decision,” available online at [www.twcc.state.tx.us/news1/advisories/ad2002-04.html](http://www.twcc.state.tx.us/news1/advisories/ad2002-04.html).

<sup>9</sup> The ROC will be conducting an analysis of the change in the RME process for MMI and impairment rating issues as per Article 5 of HB 2600. A final report will be delivered to the Texas Legislature no later than December 31, 2004.

<sup>10</sup> The duration of impairment income benefits (IIBs) is directly tied to the impairment rating. In addition, an impairment rating of 15 percent or higher qualifies an injured worker for supplemental income benefits (SIBs).

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### **New Chair Appointed; ROC Report Receives 2002 IAIABC Award**

The ROC is pleased to report that Representative Scott Hochberg of Houston has been named Chair of the ROC Board of Directors by the Texas Speaker of the House, Pete Laney. Many thanks to outgoing Chair Senator Troy Fraser and his staff for their many contributions to the agency over the past two years.

A recent ROC report, *A Study of Nonsubscription to the Texas Workers’ Compensation System: 2001 Estimates*, won first place in the research category for the 2002 Workers’ Compensation Information Products Award, sponsored by the International Association of Industrial Accident Boards and Commissions. Congratulations to principal authors Joseph Shields and D.C. Campbell.

### **Errata**

A recent ROC report, *An Analysis of Managed Care Network Standards in Other State Workers’ Compensation Systems*, incorrectly reported that New Jersey does not require certification for its managed care organizations. In fact, New Jersey certifies MCOs through the Department of Banking and Department of Health and Senior Services. For more information, see [www.nj.gov/dobi/mcos.htm](http://www.nj.gov/dobi/mcos.htm).

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