

New York State Workers' Compensation Medical Treatment Guidelines:

Analysis of Variances Submitted by Orthopaedic Surgeons

Prepared by the New York State Society of Orthopaedic Surgeons

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On March 13, 2007, former New York Governor Spitzer directed the New York State Insurance Department to draft medical treatment guidelines (MTG) to govern the care and treatment of injured workers. The development of MTG's in New York was initiated by the state government in an attempt to improve access to and delivery of medical care to injured workers while simultaneously reigning in steep increases in workers' compensation insurance premiums for businesses. The MTG's that were adopted in NY were primarily based on MTG's developed by the State of Colorado, the State of Washington and the American College of Occupational and Environmental Medicine (ACOEM). The MTG's included in this analysis apply to treatment for injuries to the hip, knee, shoulder, lumbar spine and cervical spine.¹

When the MTG's were adopted in NY, the Board of Directors of the New York State Society of Orthopaedic Surgeons (NYSSOS) was concerned that the treatment protocols would lead to a two-tier system of medical care in this state: one system of medical treatment for injured workers and another centered on evidenced-based principles of treatment for everyone

¹ See New York Mid and Low Back Injury Medical Treatment Guidelines, First Edition, June 30, 2010; New York Neck Injury Medical Treatment Guidelines, First Edition, June 20, 2010;; New York Knee Injury Medical Treatment Guidelines, First Edition, June 30, 2010 and New York Shoulder Injury Medical Treatment Guidelines, First Edition, June 30, 2010. A complete copy of each of these guidelines is available at <http://www.wcb.ny.gov/content/main/hcpp/MedicalTreatmentGuidelines/2010TreatGuide.jsp>.

else. This concern was based upon the fact that none of the members of the task force that developed the MTG's were orthopaedic surgeons, yet many of the protocols adopted in the MTG's relate to the surgical care of musculoskeletal conditions. The physicians on the taskforce were specialists in physical medicine and rehabilitation and occupational and environmental medicine and participated as representatives of labor unions or were medical directors for workers' compensation insurance carriers or private companies.²

When NYSSOS reviewed the MTG's, the Board of Directors noted several serious concerns. The initial NYSSOS review was conducted during the fall of 2010 and was concluded prior to the effective date of the MTG's, December 1, 2010. NYSSOS met with the NY Workers' Compensation Board (WCB) prior to the MTG's effective date and shared these concerns as well as possible solutions.

As noted above, the MTG's provide step-by-step guidance for physicians treating injured workers for injuries to the knee, shoulder, cervical spine and lumbar spine. When a health care provider believes a medical treatment is necessary for the patient that is outside of the MTG recommendations, he or she may pursue either an "authorization" for treatment or a "variance request" for treatment. It is important to note that the WCB included these two pathways for medical providers to secure payment approval for procedures not pre-authorized in the MTG's. The "authorization" process must be followed by providers who wish to perform any of the following twelve procedures including lumbar fusions, artificial disk replacement, vertebroplasty, kyphoplasty, the use of electrical bone growth stimulators for treatment, the use

² See *Development of Medical Treatment Guidelines*, NYS WCB, <http://www.wcb.ny.gov/content/main/hcpp/MedicalTreatmentGuidelines/GuidelinesHistory/MTGDevelopment.jsp>

of spinal cord stimulators for treatment, anterior acromioplasty of the shoulder³; chondroplasty⁴; osteochondral autograft, autologous chondrocyte implantation, meniscal allograft transplantation, and knee arthroplasty (total or partial knee joint replacement). Alternatively, for procedures not authorized in the MTG's nor included in the list of procedures requiring authorization, providers can submit a variance request to the carrier. In a variance request, a provider describes the patient, describes the injury, includes information about the proposed treatment recommendation and states why this treatment would be beneficial for the patient. The carrier must review the variance request and either approve the request or deny the request. Appeals processes have been included in the MTG's and the Chair of the WCB is the final arbiter of any dispute that may arise.

Upon review of the MTG's NYSSOS was concerned that the variance request process was too cumbersome and would lead to delays in the provision of quality evidenced-based care for injured workers. Because the precise surgical pathology and treatments needed cannot always be known prior to surgery, supplementary necessary procedures based on intraoperative findings are an important part of high-quality care. Uncertainty about appropriate authorization to perform necessary treatment creates a difficult practice environment for orthopaedic surgeons.

In an effort to thoroughly review the MTG's, NYSSOS sent the MTG's to the Research and Scientific Affairs Department of the American Academy of Orthopaedic Surgeons (AAOS) for their review and comment. In response to our inquiry, Charles M. Turkelson, Ph.D., Director of Research and Scientific Affairs, AAOS, sent a letter to the WCB on June 19, 2009 which discussed the standards for evidence-based practice guidelines and highlighted significant concerns about NY's guidelines. A copy of this letter is enclosed at Appendix A.

³ As of March 1, 2013, acromioplasty will no longer require pre-authorization under amended MTG's.

⁴ As of March 1, 2013, chondroplasty will no longer require pre-authorization under amended MTG's.

The Study Parameters:

In an effort to determine if the MTG's were disruptive to the provision of high-quality evidenced-based care, NYSSOS developed a program designed to trace and analyze the variance requests submitted by orthopaedic surgeons relative to the MTG's. This study was supported in part by NYSSOS and by the AAOS through a grant from the AAOS Board of Councilors State Legislative and Regulatory Affairs Committee. The program tracked instances where physician variance requests were denied or approved by carriers. By tracking this information, NYSSOS was able to identify areas where permanent amendments of the MTG's are needed. Due to the fact that the MTG's are incorporated by reference into the regulations governing workers compensation, amendments will not require legislative approval. Instead, the regulatory amendment process may be utilized to update the MTG's. This will hopefully result in timely amendments to the MTG's when needed. The WCB intentionally established the MTG's in this manner in an effort to be flexible, recognizing that medical treatments evolve over time.

The NYSSOS MTG variance review formally commenced in February 2011. At that time, NYSSOS began regular meetings with the WCB Executive Director Jeffrey Fenster, Deputy Director Mark Humowiecki and Co-Medical Director Elain Sobol-Berger, MD. Through these meetings the WCB agreed to share information with NYSSOS to facilitate our project and NYSSOS learned that all WCB provider authorization numbers contained a unique identifier which included the provider's specialty area. Therefore, NYSSOS was able to collect data on variance requests submitted by orthopaedic surgeons only. This significantly assisted our research as we learned that approximately 10,000 – 12,000 variances were submitted to NY carriers on a monthly basis during the first few months following implementation of the MTG's.

The volume of the variances far exceeded anticipated levels and a backlog of data quickly accumulated in the offices of carriers and WCB officials.

As a result of meetings with the WCB, NYSSOS received variance data specific to orthopaedic surgeons in August 2011, November 2011 and January 2012. The full period of the data collected is December 1, 2010 through December 31, 2011 and NYSSOS received one hundred percent of the variances submitted by orthopaedic surgeons during that timeframe. The total number of individual variance requests NYSSOS received was 1,814.⁵

Summary of Data:

With the assistance of a data-analytics partner, the data was reviewed and analyzed. The dataset included de-identified patient information including the treating physician, date of service, workers' compensation carrier, description of requested treatment, date of action for request, granted/denied status from carrier, granted/denied status of the NYS WCB Medical Director and date of action by the Medical Director.

In the dataset, 34 of 1,814 (1.6%) variance requests were incomplete and not appropriate for analysis. This was due to errors in completing the MG-2 forms by orthopaedic surgeons and/or their staffs. This reduced the total study set to 1,780 total variance requests by orthopaedic surgeons during the thirteen month study time frame. Overall, 1,281 variance requests were made for only one type of treatment; 160 requests were made for two types of treatment; 107 requests were made for both three or four types of treatment; and 125 requests were made for 5 types of treatment.

⁵ According to informal conversations with the NYS WCB relative to variances received during the same time period, variance requests from orthopaedic surgeons constitute approximately 1.5% of the total number of variance requests received by the WCB.

The data included 638 variance requests for shoulder treatment; 631 requests for knee treatment; 343 requests for low back treatment; and 130 requests for neck treatment. Total variance requests were divided among the following treatments: 1,338 for physical therapy, 215 for MRI's, 13 for other diagnostic imaging, 58 for nonsurgical management, and 173 for surgical treatment.

For physical therapy, 494 were for shoulder treatment (449 preoperative and 45 postoperative); 488 were for knee treatment (387 preoperative and 101 postoperative); 266 were for low back treatment; and 90 were for neck treatment. There is no designation in the MTG's for postoperative physical therapy for low back or neck treatment.

For imaging treatment, only the shoulder had any recordable amount of diagnostic requests other than MRI, with 11 requests for shoulder arthrograms or MRI-arthrograms. MRI requests by region were: knee – 86, shoulder – 53, low back – 43, neck – 22.

Surgical variance requests for the knee included: meniscectomy, 68; ACL repair, 6; chondroplasty, 6; and patellar component of TKR, 1. Surgical variance requests for the shoulder were: rotator cuff repair, 14; acromioplasty, 13; SLAP lesion repair, 9; biceps tenodesis, 8; general arthroscopy, 8; rotator cuff repair with acromioplasty, 5; distal clavicle resection, 4; and labral repair, 4. Surgical variance requests for the low back were: lumbar decompression, 7 and lumbar discectomy, 5. There were no variance requests for lumbar arthrodesis recorded. Surgical variance requests for the neck were: anterior cervical discectomy and fusion, 3; and anterior cervical corpectomy and fusion, 1.

Of all surgical variance requests (173), 24 were for surgeries which required preauthorization. These included 18 anterior acromioplasty of the shoulder cases, 13 for impingement alone and 5 in conjunction with a rotator cuff repair. For the knee these included 6

chondroplasty cases. 149 cases of surgical variance requests (86% of the total) were automatically authorized under the directives of the MTG's.

Carrier responses to variance requests by region were: shoulder 84% granted; knee 80% granted; low back 73% granted; neck 76% granted. Of those variance requests not granted by the carrier, the WCB or the Law Judge decided in favor of the provider with the following percentages: shoulder 91%; knee 92%; low back 92%; neck 87%. Follow-up analysis by NYSSOS will include a report identifying cases which included variance requests for procedures that were approved in the MTG's and therefore did not require an authorization prior to treatment. It is unclear if such authorization request would have resulted in a carrier denying the authorization request based upon the criteria that the procedure did not require the authorization, or approval by the carrier even through the approval was not required because authorization existed under the MTG's.

Orthopaedic surgeons as a profession were very focused in their variance requests, with 72% of the requests being for only one type of treatment. Emphasis was on diagnosis and quick implementation of nonsurgical treatment, with surgical treatment constituting only 10% (173/1,780) of the variance requests, and 90% constituting diagnostic or nonoperative treatment modalities.

Of the surgical variance requests, 86% were for surgeries that should have required no preauthorization under the Guidelines. Reasons for this, based on survey of our membership, were intransigence of the Carrier, concern of the surgeon for reimbursement, and institutional requirement for hospitalization.

Specific Data Findings:

A summary of all of the data reviewed demonstrates that the following categories of treatment were the most frequent subject of the variance requests submitted by orthopaedic surgeons:

Table 1

Variance Request	Frequency	Percentage
Physical Therapy	1204	70.8
Imaging	138	8.1
Arthroscopy	118	6.9
Condroplasty	86	5.1
Injections	39	2.3
Disectomy	8	0.5
Traction	6	0.4
ACL Repair	5	0.3
Laminectomy	4	0.2
Other	92	5.4
TOTAL	1700	

Table 2

Variances submitted related to the lumbar spine included:

Variance Request	Frequency	Percentage
Physical Therapy	247	74.8
Imaging	42	12.7
Injections	9	2.7
Traction	6	1.8
Disectomy	4	1.2
Laminectomy	4	1.2
Other	18	5.5
TOTAL	330	

Table 3

Variances submitted related to the cervical spine included:

Variance Request	Frequency	Percentage
Physical Therapy	84	66.1
Imaging	24	18.9
Other	15	11.8
Disectomy	4	3.1
TOTAL	127	

Table 4

Variances submitted related to the knee:

Variance Request	Frequency	Percentage
ACL Repair	5	0.8
Arthroscopy	79	12.7
Imaging	86	13.8
Injections	28	4.5
Physical Therapy	392	63.1
Other	31	5.0
TOTAL	621	

Table 5

Variances submitted related to the shoulder:

Variance Request	Frequency	Percentage
Acromioplasty	3	0.5
Imaging	72	11.4
Physical Therapy	481	76.5
Arthroscopy	39	6.2
Other	34	5.4
TOTAL	629	

Outcomes and Recommendations:

The NYSSOS Board of Directors is of the opinion that this study was very beneficial and a worthwhile undertaking. Several outcomes manifested themselves during the pendency of this study and have had a positive impact on orthopaedic surgeons in New York State. Specifically, Edward Tanner, MD, NYSSOS Past-President, was invited and accepted a position on the newly established Medical Advisory Committee (MAC) established by the WCB to consider and review new MTG's. The MAC is currently working on MTG's relating to pain management.

NYSSOS has also learned that the vast majority of variance requests submitted by orthopaedic surgeons relate to requests for additional physical therapy. While the variance process is somewhat cumbersome and can delay care in certain instances, coupled with the fact that the majority of variance requests relating to physical therapy are approved, NYSSOS recommends that the process for securing such approvals be changed to provide for greater ease of obtaining such services.

Acknowledgements:

NYSSOS is deeply grateful to both the AAOS for supporting this research project and the New York State Workers' Compensation Board for their assistance in obtaining the data that made this report possible.

Appendix A



AMERICAN ACADEMY OF
ORTHOPAEDIC SURGEONS

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June 19, 2009

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Honorable Zachery S. Weiss
Chairman
New York State Workers' Compensation Board
20 Park Street – Suite 400
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Dear Mr. Weiss:

We are pleased to have the opportunity to comment on the most recent workers' compensation guidelines of the State of New York. Specifically, we are commenting on the Cervical Spine Injury Medical Treatment Guidelines, the Low Back Injury Medical Treatment Guidelines, the Shoulder Injury Medical Treatment Guidelines, and the Knee Injury Medical Treatment Guidelines of the State of New York.

Our comments are from the perspective of an organization that develops clinical practice guidelines. In particular, we considered the New York State guidelines in the same way we would consider any clinical practice guideline. We have also considered the New York State guidelines as we would any other evidence-based guideline. We have taken this approach because the letter from Eric Dinallo on the New York State website

(<http://www.wcb.state.ny.us/content/main/hcpp/CoverLetter123.pdf>) suggests that the New York State guidelines are evidence-based.

As you know, the purpose of evidence-based medicine goes far beyond using the best available data to inform medical decisions. Equally important is that evidence-based medicine makes every effort to ensure that the selection, appraisal, and analysis of the relevant published studies are all free from bias. Because evidence-based medicine claims to combat bias, it is obligated to demonstrate that it did so. This demonstration, in well-done guidelines, takes the form of extensive documentation. An example of the extent of this documentation is provided by the American Academy of Orthopaedic Surgeons (AAOS) clinical practice guidelines that can be found at <http://www.aaos.org/research/guidelines/guide.asp>. (We stress that the fact that we make our guidelines and all of their extensive supporting documentation publically available, and available free of charge, is not unique. This is the rule followed by almost all professional societies.)

The New York State guidelines offer no documentation. Indeed, readers of the above-mentioned guidelines are informed that any given guideline is “adopted, with modification” from a guideline from the State of Colorado. However, the

state of Colorado website does not contain all of the guidelines to which we refer in the above paragraph and, when it does, these guidelines, like the New York State guidelines, do not contain bibliographic citations. Although the Colorado website contains a bibliographic listing for each guideline on its site, there is again no way to determine how (or if) the evidence is linked to the recommendations. Given this, and given the fact that unspecified modifications have been made to documents created by others, there is no way to determine if, in fact, the New York State guidelines follow the best available evidence.

Of equal concern is that some information in the New York State guidelines is apparently derived from two un-named commercial guideline sets (as stated in Mr. Dinallo's above-cited letter). Given that these sources are un-named, there is again no way to verify that the State's guidelines are, indeed, evidence-based or if they follow the best available evidence.

The New York State guideline contains no "evidence tables." These tables are universally included in all good evidence-based products. Their purpose is to not only allow readers the opportunity to independently examine the information used to construct a guideline, but to also allow readers to perform an intellectual audit, the purpose of which is to verify that the guideline developers followed the methods they purportedly used to construct their guideline.

The New York State guidelines contain no detailed description of the methods used to develop the guidelines. Such sections are universally incorporated in good clinical guidelines, and serve to reassure readers that the guideline development process was geared to combat bias (please see the AAOS guidelines referred to above for a typical description of methods). Guideline reviewers and end-users use such "methods" sections, in combination with a guideline's extensive documentation, to determine whether these methods were actually followed during the development of a guideline.

There is no appraisal of the evidence in the New York State guidelines. As is well-known, the clinical literature is of uneven quality. Appraisal of quality is the way that evidence-based medicine (and guidelines in particular) conveys to end-users the degree of confidence they can have in the information on which the guideline is based and, hence, the likelihood that a guideline's recommendations will be overturned by future (and better) research. The need to conduct an appraisal of the literature is one of the most fundamental contributions of evidence-based medicine.

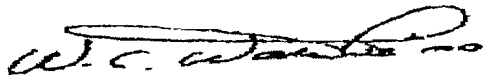
In short, the New York State guidelines do not meet the most basic requirements of evidence-based medicine. There is a common misconception that evidence-based medicine consists of finding evidence to support a given position. In fact, quite the opposite is true; in well-conducted evidence-based medicine, one forms one's opinion *after* examining the evidence. The New York State guidelines do not provide end-users with the tools needed to demonstrate they are not based on data chosen to support a particular position or point of view.

We urge the State of New York to implement more rigorous and transparent methodology in developing its guidelines. Doing so will likely enhance the confidence that physicians can have in them. Should the State want additional information on the methods and processes used to develop evidence-based guidelines, the AAOS will be happy to assist in whatever way we can. We thank you for the opportunity to comment on these guidelines, and look forward to hearing from you.

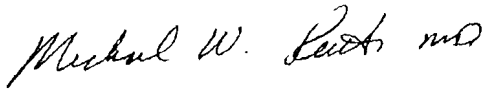
Sincerely,



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✓ CMT/hjf
CC: Heather G. Bennett, JD
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