Appendix B

ODG Treatment in Workers' Comp
Methodology Description using the AGREE Instrument

Back to ODG - TWC Index

Background

AGREE stands for "Appraisal of Guidelines Research and Evaluation". It originates from an international collaboration of researchers and policy makers who work together to improve the quality and effectiveness of clinical practice guidelines by establishing a shared framework for their development, reporting and assessment. [www.agreecollaboration.org](http://www.agreecollaboration.org)

In mid-2004 the RAND Corporation used the AGREE Instrument to compete the study, "Evaluating Medical Treatment Guideline Sets for Injured Workers in California." This study was prepared for the Commission on Health and Safety and Workers’ Compensation and the Division of Workers’ Compensation, California Department of Industrial Relations, and first published in November 2004. After identifying 73 relevant guidelines, Rand narrowed the list to five guideline sets meeting all the screening criteria, and they performed a detailed technical evaluation using AGREE. The results of this evaluation are reported on page 32 of the study as Table 5.2 (as well as page xx of the Executive Summary as Table S.2) as shown here.

Taking the average rating for each guideline, McKesson was first, ODG was second, ACOEM was third, Intracorp was fourth, and AAOS was fifth. Since this evaluation was based on the first edition of ODG Treatment in Workers’ Comp, the purpose of this document is to provide updated information on ODG according to the AGREE Instrument, using the 2007 edition of ODG Treatment, the fifth edition.

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1 See [Exhibit A](http://www.rand.org/pubs/monographs/2005/RAND_MG400.sum.pdf)

Executive Summary: By AGREE Instrument Domains below

**Scope and purpose** (items 1-3): The scope and purpose of *ODG Treatment in Workers’ Comp* (ODG-TWC) is to improve outcomes for any claim that might be seen in a jurisdictional workers’ compensation system. Therefore, critically important to achieving this scope is comprehensiveness. If conditions are missing from a treatment guideline, or treatments are not covered for any condition, there will be uncertainty, and the guideline cannot accomplish its purpose. Delays in treating injured workers or under treatment can result, because providers will not have confidence about reimbursement, and payers may deny necessary care if a treatment is not covered in the guideline. The scope of ODG-TWC is fully comprehensive -- it covers virtually any condition seen in workers’ compensation, as well as any possible treatment for those conditions. Being comprehensive also means covering new technologies as they are introduced, requiring frequent updating. While the overall scope of patients to whom the guideline is meant to apply covers all workers’ comp patients, the focus of the guideline recommendations is on patient selection, i.e., not just whether or not a specific treatment should be approved, but, if it works, what types of patients can it be recommended for.

**Stakeholder involvement** (items 4-7): The guideline development group includes individuals from all the relevant professional groups (primary care physicians, occupational health specialists, orthopedic surgeons, neurologists, neurosurgeons, physical medicine specialists, physical therapists, chiropractors, radiologists, and others). ODG is independent of any medical specialty group and multidisciplinary in scope, and represents all medical specialties. ODG also strives for patient involvement in the process, and ODG added a Patient Information Resource section in 2006, designed to provide patient education and self care techniques to improve outcomes. Because of the ongoing update process used by ODG, along with ODG’s encouragement of stakeholder suggestions, combined with the widespread use of ODG, ODG receives many editorial suggestions from patient advocacy groups, and these suggestions may prompt additional research into the scientific evidence, and in some cases, updates to the guidelines. This open process is one reason that stakeholders have described ODG as “fair and balanced.” With more editions and more users than any other WC medical treatment guideline, ODG has been well tested. ODG has also been adopted, and is being used successfully, by more states than any other guidelines.

**Rigor of development** (items 8-14): *ODG Treatment in Workers Comp* is the most thoroughly developed guideline used in workers’ comp. ODG is unique in taking evidence-based guidelines to their logical end point; the conclusions are linked directly to the evidence in the studies and references. *ODG Treatment* is based on a comprehensive and ongoing medical literature review with preference given to high-quality systematic reviews, meta-analyses and clinical trials. Each recommendation is linked to a summary of the supporting medical evidence, provided in abstract form, which has been ranked, highlighted and indexed. Full text copies of these studies are used by physician editors in formulating recommendations and are available on request. ODG is continuously updated reflecting the findings of new studies as they are conducted and released; subscribers are always up to date. ODG undergoes a comprehensive annual update process based on scientific medical literature review, survey data analysis and expert panel validation. In addition, as new studies are released, the Web version is updated throughout the year to reflect these new studies. WLDI is in the guideline business, focused on researching and publishing evidence based medical guidelines. As new technologies are introduced, evidence reviews are initiated and new summaries are added to the Procedure Summaries. This also happens when users contact the help desk because they cannot find something, and ODG editors discover that the topic has not been sufficiently covered. In the five years of previous editions of ODG Treatment, there have been a total over 42,000 paid users, far more than any other medical treatment guideline used in workers’ comp, so these users represent a powerful force for suggesting updates.
Clarity and presentation (items 15-18): Ease-of-use and clarity are the hallmark of ODG, and they reduce uncertainty and facilitate early access to treatment for the injured worker. While hard copy books are published each year with each annual edition, ODG is primarily accessed in a user-friendly Web-based version, which users can access from any location with an Internet connection. ODG Treatment is designed to be used for utilization review (UR) as well as clinical practice, so ODG seeks clarity and lack of ambiguity in recommendations, and ODG allows the ability to copy & paste, saving time and effort in documenting approvals or denials of treatment. Entries in the Procedure Summaries always start with the words, “Recommended,” “Not recommended,” or “Under study.” ODG can be integrated into claims management systems. The ODG ICD9-CPT© Crosswalk UR Advisor file contains every possible combination of ICD9 diagnosis code and CPT procedure code seen in workers’ comp. For each ICD9-CPT combination, it provides information on frequency as well as number of visits, plus recommendations from ODG. The file also provides a "Bill Review Payment Flag" which is Green, Yellow, Red, or Black, for use in automating claims management decision-making. The ODG guidelines have integrated both medical treatment guidelines and return-to-work guidelines (also known as lost time guidelines or disability duration guidelines). Treatment and duration guidelines must work together to be effective (timeframes for duration correspond precisely to treatment pathways). There are many specific tools available to help use the guidelines.

Applicability (items 19-21): There is extensive training available so that the guidelines can be applied successfully, and there are tools to monitor and review outcomes compared to the guidelines. There are many training options for ODG customers, including complimentary online demos of ODG Treatment before or after purchase of the product, the ODG Helpdesk for general questions and guidance about the product, several versions of self-paced training online training presentations, and in depth courses offering CME or CE credit. Tools to monitor outcomes include the ODG Crosswalk UR Advisor and the ODG Benchmarking Absence tool. ODG is cost effective for all types of users, and in states that have adopted ODG, users within those states can purchase the guidelines at a 50% discount, bringing the cost down to $162.50. There are also substantial discounts available to organizations with quantity users. In addition, because ODG has been accepted by AHRQ for inclusion in the National Guidelines Clearinghouse, summaries of the guidelines are available at no charge on www.guidelines.gov, and these summaries may be all some users need, including providers doing a limited amount of workers’ comp, as well as small employers and even some injured workers. The goal is for the guidelines to be a communication tool so that all parties are on the same page when it comes to expectations for treatment and return to work. For guidelines to be successful, they need to facilitate early access to appropriate care for the injured worker, when all providers know up-front that they will get paid if they follow the guidelines. ODG has been proven. The 2007 edition of Official Disability Guidelines is the 12th annual edition of these leading return-to-work guidelines, and the 2007 edition of ODG Treatment is the 5th annual edition of those leading treatment guidelines. And studies have shown that outcomes are significantly improved through use of ODG. In fact, one study showed that after adoption of ODG, medical costs were reduced by 64% and lost work days were reduced by 69%, while at the same time injured workers got earlier access to appropriate care and doctors praised the program.

Editorial independence (items 22-23): ODG is independent of any medical specialty group and multidisciplinary in scope, and represents all medical specialties, and not just occupational medicine doctors, orthopaedic surgeons, chiropractors, physical therapists, etc. ODG has realized considerable provider acceptance (including adoption by 16 states and provinces – more than any other guideline) because ODG is evidence based, and recommendations are linked directly to the most up to date studies; the results of that research are reflected in the constant updating of the guidelines. These studies are focused on one outcome: What is best for the injured worker. WLDI is in the guideline business, focused on researching and publishing evidence based medical guidelines. The funding body for ODG Treatment
in Workers Comp is the subscribers who purchase the guideline. With 42,000 paid ODG users from all types of stakeholders in workers’ comp, this is a diverse group with many different interests. The employees of WLDI who guide the editorial process are independent of this funding body, and their overriding objective is to publish the highest quality guideline, one that is evidence based and defensible before all of these different interests, as these customers make decisions about which guideline to purchase or adopt. Ultimately, the recommendations in ODG may not please each of these subscribers, but they do agree that ODG is fair and balanced, and accurately summarizes the scientific evidence. ODG has been more successful in this than any other workers’ compensation medical treatment guideline, which attests to the editorial independence of ODG. It has proven to be the only guideline that employers, insurers, providers, and labor can all get behind and support. The only measure of success for the ODG editors is that they have created a high quality product that succeeds in the marketplace. This is in contrast to guidelines produced by special interest groups, such as insurance companies or medical specialty societies, whose interests go beyond just sales of the guideline, and whose agenda may be to advance the success of their own members.
AGREE Instrument Domains and Questions

**Scope and purpose** (items 1-3)
1. The overall objective is specifically described.
2. The clinical questions covered by the guidelines are specifically described.
3. The patients to whom the guideline is meant to apply are specifically described.

**Stakeholder involvement** (items 4-7)
4. The guideline development group includes individuals from all the relevant professional groups.
5. The patients’ views and preferences have been sought.
6. The target users of the guidelines are clearly defined.
7. The guideline has been piloted among target users.

**Rigor of development** (items 8-14)
8. Systematic methods were used to search for evidence.
9. The criteria for selecting the evidence are clearly described.
10. The methods used for formulating the recommendations are clearly described.
11. The health benefits, side effects, and risks have been considered in formulating the recommendations.
12. There is an explicit link between the recommendations and the supporting evidence.
13. The guideline has been externally reviewed by experts prior to its publication.
14. A procedure for updating the guideline is provided.

**Clarity and presentation** (items 15-18)
15. The recommendations are specific and unambiguous.
16. The different options for management of conditions are clearly presented.
17. Key recommendations are easily identifiable.
18. The guideline is supported with tools for application.

**Applicability** (items 19-21)
19. The potential organizational barriers to applying the recommendations have been discussed.
20. The potential cost implications of applying the recommendations have been considered.
21. Key review criteria are included for monitoring and review purposes.

**Editorial independence** (items 22-23)
22. The guideline is editorially independent from the funding body.
23. Conflicts of interest of guideline development members have been recorded.

**Exhibits**
- Exhibit A - Background on AGREE
- Exhibit B - Thirteen unique and major advantages of ODG
- Exhibit C - Procedure Summary/Sample Search Terms Used
- Exhibit D - Editorial Advisory Board, ODG/ODG Treatment
- Exhibit E - ODG Methodology Outline
- Exhibit F - Explanation of Medical Literature Ratings
- Exhibit G - Guideline Comparisons
- Exhibit H - Guidelines Licensed by Top WC Payors
- Exhibit I - Adelaide Health Technology Assessment
- Exhibit J - ODG Guiding Principles
Scope and purpose (items 1-3)

Summary. The scope and purpose of ODG Treatment in Workers’ Comp (ODG-TWC) is to improve outcomes for any claim that might be seen in a jurisdictional workers’ compensation system. Therefore, critically important to achieving this scope is comprehensiveness. If conditions are missing from a treatment guideline, or treatments are not covered for a condition, there will be uncertainty, and the guideline cannot accomplish its purpose. Delays in treating injured workers or under treatment can result, because providers will not have confidence about reimbursement, and payers may deny necessary care if a treatment is not covered in the guideline. The scope of ODG-TWC is fully comprehensive -- it covers virtually any condition seen in workers’ compensation, as well as any possible treatment for those conditions. See Exhibit B, ODG is comprehensive. Being comprehensive also means covering new technologies as they are introduced, requiring frequent updating. The comprehensiveness of ODG has also been validated by ODG’s national workers’ compensation claims database, representing over 2 million claims, covering almost 50 million paid invoices on medical encounters for those claims. The focus of the guideline recommendations is on patient selection, i.e., not just whether or not a specific treatment should be approved, but, if it works, what types of patients can it be recommended for.

1. The overall objective is specifically described.

ODG Treatment in Workers’ Comp (ODG-TWC) is designed to help improve outcomes for any claim that might be seen in a jurisdictional workers’ compensation system, and to be comprehensive in doing this so that no diagnoses or treatments are missing. Being comprehensive also means covering new technologies as they are introduced, requiring frequent updating. Specific objectives of ODG Treatment in Workers Comp include the following:

- Improve outcomes in workers’ comp by focusing on restoration of function (Core chapters include Ankle/Foot, Burns, Carpal Tunnel Syndrome, Elbow, Eye, Fitness for Duty, Forearm/Wrist/Hand, Head, Hernia, Hip, Knee, Low Back, Neck, Pain, Shoulder and Stress/Mental, and all conditions are covered in the UR Advisor sections containing every possible procedure/diagnosis code combination from ODG’s national workers’ compensation claims database covering about 50 million WC medical bills.)
- Reduce excessive utilization of workers’ comp medical services (and corresponding medical costs) and effectively manage its delivery
- Identify and target ineffective, harmful and debilitating procedures, thus reducing the inherent risk on injured workers (like unnecessary spinal fusions)
- Reduce delayed recovery rates with the effective and concurrent management of treatment and time away from work, thus curbing indemnity costs
- Improve patient satisfaction through prompt, responsible delivery of medical care
- Improve clinical practice and utilization management by indexing procedures adjacent to a summary of their relative effectiveness, based on supporting evidence (systematic reviews, clinical trials) that is also provided by way of link, in abstract form
- Automate approval for universally effective treatment methods, where appropriate, reducing friction and administrative delays on necessary medical care
- Identify appropriate patient selection criteria, where appropriate, to maximize the effectiveness of expensive and subjective treatment modalities
- Open the lines of communication among all parties in the return-to-work process by providing a common framework based on existing and emerging medical evidence
- Help injured workers get back on their feet in good time, safely, easily and effectively

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• Take evidence-based medicine to its logical endpoint, the convergence of health, wellness, productivity, efficiency and responsible, cost-effective medical care

2. The clinical questions covered by the guidelines are specifically described.

ODG Treatment in Workers’ Comp contains 14 core chapters, broken into three sections each. In general, the first section, the Treatment Planning, answers the following major question:

Based on the characteristics of each case, what is the ideal treatment plan towards restoration of function that should be followed after injury of… the lower back (for example)?

Within the guideline, hundreds of other questions are answered, depending on the nature of injuries in each chapter. Cases branch out based on symptoms/signs/tests/demographics. Below are only a few examples answered in various stages of the Low Back Treatment Planning:

a. For the first visit, what percentages of cases are likely to see a primary care physician MD/DO, an orthopedist or a chiropractor?

b. For cases with lower back pain, what are the signs of radiculopathy?

c. For cases with radiculopathy, under what circumstances is an epidural steroid injection (ESI) considered? What are the risks or side effects, if any, of ESI’s? Would a 2nd ESI ever be considered? What would be the maximum allowable ESI’s? What is the benchmark cost of an ESI?

d. Under what circumstances is surgery appropriate? What procedure(s) are recommended for candidates for surgery? What are the inherent risks?

e. What is the expected length of disability following each procedure? What activity modifications are appropriate in the early stages of recovery?

f. What are the recommended frequency and duration of chiropractic care?

The second section in each chapter, Codes for Auto-Approval, maps CPT codes to ICD9 codes based on the Treatment Plan, with a field for “Maximum Occurrences”, for auto-approval of universally supported treatment methods, to answer questions for utilization management: What CPT procedure codes are recommended/allowed for each diagnosis, and how many occurrences?

The third section in each chapter, the Procedure Summary, lists all the potential therapies for each condition and provides summaries of their effectiveness based on existing medical evidence. The recommendations are linked to summaries of the supporting studies in abstract form.

The Procedure Summaries were developed to answer the questions: What proven efficacy, if any, does each treatment method have for each condition, and what potential risks or side effects exist? Are there patient selection criteria that should be met? There may be hundreds listed in the Procedure Summary of each chapter. For a sample from the Low Back chapter, see Exhibit C.

3. The patients to whom the guideline is meant to apply are specifically described.

As implied by its name, ODG Treatment in Workers Comp is designed to apply to patients ill or injured while on the job. Essentially, these are working-age adults (18-65) of both genders stricken with conditions commonly associated with occupation, including musculoskeletal and other disorders. Core chapters currently include Ankle/Foot, Burns, Carpal Tunnel Syndrome, Elbow, Eye, Fitness for Duty, Forearm/Wrist/Hand, Head, Hernia, Hip, Knee, Low Back, Neck, Pain, Shoulder and Stress/Mental.
Impairment Guides are also provided in *ODG Treatment in Workers Comp* from the International Association of Industrial Accident Boards and Commissions (IAIABC). Within the Procedure Summaries, there are often specific Patient Selection Criteria that may be highlighted in blue, where the scientific evidence shows that a treatment may work on some patients and not others. For example, for knee meniscus tears, ODG says, “**Patient selection criteria:** Patients younger than 35 with clear evidence of a meniscus tear may benefit from arthroscopic partial meniscectomy or arthroscopic meniscal repair. For older patients with degenerative tears, possibly indicating osteoarthritis, surgery may not be as beneficial.” [http://www.odg-twc.com/odgtwc/knee.htm#Codes](http://www.odg-twc.com/odgtwc/knee.htm#Codes) Here is another example, for Low Back Physical Therapy, “**Patient Selection Criteria:** Multiple studies have shown that patients with a high level of fear-avoidance do much better in a supervised physical therapy exercise program, and patients with low fear-avoidance do better following a self-directed exercise program. When using the Fear-Avoidance Beliefs Questionnaire (FABQ), scores greater than 34 predicted success with PT supervised care.” [http://www.odg-twc.com/odgtwc/low_back.htm#Physicaltherapy](http://www.odg-twc.com/odgtwc/low_back.htm#Physicaltherapy)

**Stakeholder involvement** (items 4-7)

*Summary.* The guideline development group includes individuals from all the relevant professional groups (primary care physicians, occupational health specialists, orthopedic surgeons, neurologists, neurosurgeons, physical medicine specialists, physical therapists, chiropractors, radiologists, and others). ODG is independent of any medical specialty group and multidisciplinary in scope, and represents all medical specialties, and not just occupational medicine doctors, orthopaedic surgeons, chiropractors, physical therapists, etc. ODG has realized considerable provider acceptance (including adoption by 16 states and provinces – more than any other guideline) because ODG is evidence based, and recommendations are linked directly to the most up to date studies; the results of that research are reflected in the constant updating of the guidelines. These studies are focused on one outcome: What is best for the injured worker. Unlike medical specialty society guidelines, ODG does not represent the interests of any one provider-group over other providers. ODG is serious about patient involvement in the process. ODG now has a Patient Information Resource appendix, designed to provide patient education and self care techniques to improve outcomes. Because of the ongoing update process used by ODG, along with ODG’s encouragement of stakeholder suggestions, combined with the widespread use of ODG, ODG receives many editorial suggestions from patient advocacy groups. These suggestions may prompt additional research into the scientific evidence, and in some cases, updates to the guidelines. This open process is one reason that stakeholders have described ODG as “fair and balanced.” With more editions and more users than any other WC medical treatment guideline, ODG has been well tested. ODG has also been adopted, and is being used successfully, by more states than any other guidelines.

4. **The guideline development group includes individuals from all the relevant professional groups.**

The guideline development group includes individuals from all the relevant professional groups (primary care physicians, occupational health specialists, orthopedic surgeons, neurologists, neurosurgeons, physical medicine specialists, physical therapists, chiropractors, radiologists, and others). ODG is independent of any medical specialty group and multidisciplinary in scope, and represents all medical specialties, and not just occupational medicine doctors, orthopaedic surgeons, chiropractors, physical therapists, etc. Unlike medical specialty society guidelines, ODG does not represent the interests of any one provider-group over other providers. See Exhibit D, the *ODG Treatment in Workers Comp* Editorial Advisory Board.
Editor-in-Chief, Philip L. Denniston, Jr. and Senior Medical Editor, Charles W. Kennedy, MD, together pilot the group of approximately 80 members. Senior Chiropractic Editor is Preston B. Fitzgerald, DC CDE CICE CIFCME (President, National Board of Forensic Chiropractors) and Senior Physical Therapy Editor is Stuart H. Platt, MSPT, PT (Principal, Appropriate Utilization Group). Research analysts and medical editorial assistants are on staff at WLDI.

Philip Denniston, Jr. Editor-in-Chief (B.S. Stanford University, M.B.A. Harvard University), has founded a number of other leading medical database companies over the last 20 years, including:

- Medical Device Register (MDR) – an annually updated directory of hospital equipment and supplies first published in 1981 and acquired by Thomson Corporation in 1985, along with Distributor Profiles, Product SOS, and Homecare Product Directory, also created by Phil. While under contract with Thomson, the Directory of Hospital Personnel and the HMO/PPO Directory were developed. Phil later became CEO of Medical Economics Data with responsibility for the Physicians’ Desk Reference (PDR) and American Health Consultants, publisher of Occupational Health Management, Case Management Advisor, Disease State Management, Home Care Case Management, Employee Health & Fitness, and Hospital Case Management.

- Physicians’ GenRx – a complete annual reference on branded and generic prescription drugs used by physicians and pharmacists to determine when generic substitution is appropriate and when it is not. With the GenRx database, Phil later became charter provider to Physicians’ Online. Physicians’ GenRx was acquired by Mosby-YearBook (now part of Harcourt Brace) in 1994.

Due largely to a reputation for evidence-based medicine instilled under the direction of Philip Denniston, Work Loss Data Institute was selected by the American College of Occupational and Environmental Medicine (ACOEM) as the medical library research contractor in the development of the second edition of the ACOEM Occupational Medicine Practice Guidelines. Work Loss Data Institute has also recently been chosen by the Council on Chiropractic Guidelines and Practice Parameters (CCGPP) to lead research and development for an evidence-based guideline for chiropractic professional care, which is scheduled for completion and publication by Work Loss Data Institute in conjunction with CCGPP in 2005.

Charles W. Kennedy, MD, Senior Medical Editor, has been extensively involved in the workers’ compensation process and involved with the development of guidelines by the American Academy of Orthopaedic Surgeons (AAOS) for the spine and lower extremities. He was on the Guidelines Development Committee for the American Academy of Orthopaedic Surgeons and also the Task Force for Disability Testing Phase 1 of the Spine Treatment Guidelines for the American Academy of Orthopaedic Surgery. He is a founding member of the Evidence Analysis Committee for AAOS. He was past Board of Counselor member of the American Academy of Orthopaedic Surgery and is a current member of the Complementary and Alternative medicine Committee of the American Academy of Orthopaedic Surgery.

Dr. Kennedy was the original co-chairman of the Designated Doctor training as taught by the American Academy of Disability Evaluating Physicians and has been a frequent lecturer on disability issues. He is on the Board of Directors of the American Academy of Disability Evaluating physicians.

Dr. Kennedy has been either chairman or co-chairman of the Texas Orthopaedic Workers’ Compensation Committee for a ten-year period. He was the original alternate physician for the Medical Advisory Committee to the Texas Workers’ Compensation Commission. He was also on the Task Force for the Spine Treatment Guideline development for the Texas Workers’ Compensation Commission. He is a former president of the Texas Orthopaedic Association.
Currently, Dr. Kennedy is a frequent lecturer to case managers and other physicians on workers’ compensation issues. His orthopedic practice now specializes in the integrative medicine approach to treatment of industrial problems. He serves as President of the Disability Evaluating Center of Texas and has been active in disability evaluation over the last ten years.

5. The patients’ views and preferences have been sought.

Patient satisfaction is one of many outcomes considered. The studies considered in ODG are focused on one primary outcome, whether or not the treatment under consideration helped the patient get better.

In addition, a new “Patient Information Resources” section was added in 2006 to Official Disability Guidelines Treatment in Workers’ Comp. This enhancement to ODG contains prescreened links to credible patient-friendly treatment resources available on the Web. Patient Information is provided for all workers’ comp conditions including those pertaining to Ankle & Foot, Burns, Carpal Tunnel Syndrome, Elbow, Eye, Forearm, Wrist, & Hand, Head, Hernia, Hip & Pelvis, Knee & Leg, Low Back, Neck & Upper Back, Pain, Shoulder and Stress/Mental.

The links are followed by a short description or excerpt from each of the website’s contents so, without having to filter through hundreds of online and hardcopy resources, healthcare providers can quickly provide their patient with a personal aid to recovery by printing the list of selected links or clicking on the links and printing the most relevant pages within the selected websites. ODG’s Patient Information Resources section efficiently connects the patient and provider to pertinent information such as a basic understanding of the injury, self-help methods for speeding recovery and suggested therapies for regaining functionality and productivity.

The Patient Information Resource appendix is designed to provide patient education and self care techniques to improve outcomes. ODG Senior Medical Editor, Dr. Charles W. Kennedy, initiated the idea behind this section. According to Dr. Kennedy, “Blending the principals of holistic medicine which recognize and encourage an individual’s responsibility for his own well-being with the latest evidence-based treatment protocols creates an ideal environment for maximum healing and preventive care.”

The Patient Information Resources appendix also includes ODG’s disability duration guidelines for common conditions. It is part of WLDI’s philosophy that the educated patient, who is made aware of the best practices for treatment and disability duration through effective communication with his or her provider, will be more likely to return to work sooner and in better health.

This section enables the treating physician to conveniently empower their patients with relevant and targeted recovery information from some of the finest resources available. Patient education links referenced include the National Library of Medicine, the American Association of Family Physicians, the Mayo Clinic and the American Association of Orthopaedic Surgeons, and others.

The new appendix, entitled “Appendix B, Patient Information Resources,” is available to online subscribers of ODG Treatment in Workers’ Comp and was also included in the hard-copy book beginning with the 2007 edition.

ODG is serious about patient involvement in the process. Because of the ongoing update process used by ODG, along with ODG’s encouragement of stakeholder suggestions, combined with the widespread use of ODG, ODG receives many editorial suggestions from patient advocacy groups. These suggestions may
prompt additional research into the scientific evidence, and in some cases, updates to the guidelines. This open process is one reason that stakeholders have described ODG as “fair and balanced.”

6. The target users of the guidelines are clearly defined.

As indicated in the first chapter, Background and Description, ODG Treatment in Workers Comp is designed for use by independent treating physicians, allied healthcare providers, insurance claims professionals, nurse case managers, state and federal workers’ comp authorities, and employer representatives. Without any specific affiliation, Work Loss Data Institute is unique in its ability to bridge the interests of the many professional groups involved in diagnosing and treating the various conditions associated with workers’ compensation.

7. The guideline has been piloted among target users.

Draft editions of ODG Treatment in Workers Comp have been released to clients of Work Loss Data Institute from each of the above groups for testing and response prior to publication.

The 2008 edition of ODG Treatment in Workers Comp will be the 6th annual edition, and draft copies of this edition have already been circulated to members of the ODG Editorial Advisory Board. See Exhibit D.

In addition, in the five years of previous editions of ODG Treatment, there have been a total over 42,000 paid users, far more than any other medical treatment guideline used in workers’ comp, so ODG Treatment in Workers Comp has clearly stood the test of time. With more editions and more users than any other WC medical treatment guideline, ODG has been well tested. ODG has also been adopted, and is being used successfully, by more states than any other guidelines.

Rigor of development (items 8-14)

Summary: ODG Treatment in Workers Comp is the most thoroughly developed guideline used in workers’ comp. ODG is unique in taking evidence-based guidelines to their logical end point; the conclusions are linked directly to the evidence in the studies and references. ODG Treatment is based on a comprehensive and ongoing medical literature review with preference given to high-quality systematic reviews, meta-analyses and clinical trials. Each recommendation is linked to a summary of the supporting medical evidence, provided in abstract form, which has been ranked, highlighted and indexed. Full text copies of these studies are used by physician editors in formulating recommendations and are available on request. ODG is continuously updated reflecting the findings of new studies as they are conducted and released; subscribers are always up to date. ODG undergoes a comprehensive annual update process based on scientific medical literature review, survey data analysis and expert panel validation. In addition, as new studies are released, the Web version is updated throughout the year to reflect these new studies. WLDI is in the guideline business, focused on researching and publishing evidence based medical guidelines. As new technologies are introduced, evidence reviews are initiated and new summaries are added to the Procedure Summaries. This also happens when users contact the help desk because they cannot find something, and ODG editors discover that the topic has not been sufficiently covered. In the five years of previous editions of ODG Treatment, there have been a total over 42,000 paid users, far more than any other medical treatment guideline used in workers’ comp, so these users represent a powerful force for suggesting updates.

8. Systematic methods were used to search for evidence.
As indicated in the first chapter in *ODG Treatment in Workers’ Comp, Background & Description* [http://www.odg-disability.com/ODG_Treatment_in_Workers.htm](http://www.odg-disability.com/ODG_Treatment_in_Workers.htm), Work Loss Data Institute conducted a comprehensive medical literature review (now ongoing) with preference given to high quality systematic reviews, meta-analyses, and clinical trials published since 1993, plus existing nationally recognized treatment guidelines from the leading specialty societies. WLDI primarily searched MEDLINE and the Cochrane Library. In addition, WLDI also reviewed other relevant treatment guidelines, including those in the National Guideline Clearinghouse, as well as state guidelines and proprietary guidelines maintained in the WLDI guideline library. These guidelines were also used to suggest references or search terms that may otherwise have been missed. In addition, Work Loss Data Institute also searched other databases, including MD Consult, eMedicine, CINAHL, and conference proceedings in occupational health (i.e. ACOEM) and disability evaluation (i.e. AADEP, ABIME). Search terms and questions were diagnosis, treatment, symptom, sign, and/or body-part driven, generated based on new or previously indexed existing evidence, treatment parameters and experience.

In searching the medical literature, answers to the following questions were sought: (1) If the diagnostic criteria for a given condition have changed since 1993, what are the new diagnostic criteria? (2) What occupational exposures or activities are associated causally with the condition? (3) What are the most effective methods and approaches for the early identification and diagnosis of the condition? (4) What historical information, clinical examination findings or ancillary test results (such as laboratory or x-ray studies) are of value in determining whether a condition was caused by the patient’s employment? (5) What are the most effective methods and approaches for treating the condition? (6) What are the specific indications, if any, for surgery as a means of treating the condition? (7) What are the relative benefits and harms of the various surgical and non-surgical interventions that may be used to treat the condition? (8) What is the relationship, if any, between a patient’s age, gender, socioeconomic status and/or racial or ethnic grouping and specific treatment outcomes for the condition? (9) What instruments or techniques, if any, accurately assess functional limitations in an individual with the condition? (10) What is the natural history of the disorder? (11) Prior to treatment, what are the typical functional limitations for an individual with the condition? (12) Following treatment, what are the typical functional limitations for an individual with the condition? (13) Following treatment, what are the most cost-effective methods for preventing the recurrence of signs or symptoms of the condition, and how does this vary depending upon patient-specific matters such as underlying health problems? Chapter-specific reference lists are found within *ODG Treatment in Workers Comp*.

9. The criteria for selecting the evidence are clearly described.

As indicated in Exhibit F, ODG Methodology Outline, and Exhibit F, Explanation of Medical Literature Ratings:

Preference was given to evidence that met the following criteria: (1) The article was written in the English language, and the article had any of the following attributes: (2) It was a systematic review of the relevant medical literature, or (3) The article reported a controlled trial – randomized or controlled, or (4) The article reports a cohort study, whether prospective or retrospective, or (5) The article reports a case control series involving at least 25 subjects, in which the assessment of outcome was determined by a person or entity independent from the persons or institution that performed the intervention the outcome of which is being assessed.

Especially when articles on a specific topic that met the above criteria were limited in number and quality, Work Loss Data Institute also reviewed other articles that did not meet the above criteria, but all evidence
was ranked alphanumerically using the methodology in Explanation of Medical Literature Ratings (and found in second chapter of ODG Treatment) so that the quality of evidence could be clearly weighted and taken into consideration when formulating recommendations. This ranking used an alphanumerical rating system ranging from 1a to 10c, based on Ranking by Type of Evidence (1. Systematic Review/Meta-Analysis, 2. Controlled Trial – Randomized (RCT) or Controlled, 3. Cohort Study - Prospective or Retrospective, 4. Case Series, 5. Unstructured Review, 6. Nationally Recognized Treatment Guideline (from guidelines.gov), 7. State Treatment Guideline, 8. Other Treatment Guideline, 9. Textbook, 10. Conference Proceedings/Presentation Slides), and Ranking by Quality within Type of Evidence (a. High Quality, b. Medium Quality, or c. Low Quality, as defined in Ranking by Quality).

WLDI reviewed each article that was relevant to answering the question at issue, with priority given to those that met the following criteria: (1) The article was written in the English language, and the article had any of the following attributes: (2) It was a systematic review of the relevant medical literature, or (3) The article reported a controlled trial – randomized or controlled, or (4) The article reported a cohort study, whether prospective or retrospective, or (5) The article reported a case control series involving at least 10 subjects, in which the assessment of outcome was determined by a person or entity independent from the persons or institution that performed the intervention the outcome of which is being assessed.

Especially when articles on a specific topic that met the above criteria were limited in number and quality, WLDI also reviewed other articles that did not meet the above criteria, but all the evidence provided was ranked using the methodology described above, so that the quality of evidence could be clearly determined when making decisions about what to recommend in the Guidelines. Articles with a Ranking by Type of Evidence of (11) Case Reports and Case Series were not used in the evidence base for the Guidelines. These articles were not included because of their low quality (i.e., they tend to be anecdotal descriptions of what happened with no attempt to control for variables that might effect outcome). Not all the evidence provided by WLDI was eventually listed in the bibliography of the published Guidelines. Only the higher quality references were listed. The criteria for inclusion was a final ranking of 1a to 4b (the original inclusion criteria suggested the methodology subgroup), or if the Ranking by Type of Evidence was 5 to 10, the quality ranking should be an “a”. Chapter-specific reference lists are found within ODG Treatment in Workers Comp.

10. The methods used for formulating the recommendations are clearly described.

As indicated in Exhibit E, ODG Methodology Outline, and in Exhibit F, Explanation of Medical Literature Ratings:

Process Used for Formulating the Recommendations

Link between evidence and recommendations:

- The Procedure Summary of ODG/TWC provides a concise synopsis of effectiveness, if any, of each treatment method based on existing medical evidence.
- Each summary and subsequent recommendation is hyper-linked into the studies on which they are based, in abstract form, which have been ranked, highlighted and indexed and may be copied and pasted to quote specifically, if desired.
- The Treatment Protocol identifies the ideal utilization plans that should be followed after illness or injury, based on the recommendations in the Procedure Summary.
- Codes for Automated-Approval map CPT codes to ICD-9 codes based on the Treatment Protocol, with a field for “maximum occurrences”, for auto-approval of medical bills that meet the guideline. (Note: This process to translate the evidence into specific auto-authorization protocols is unique, for pre-approval of treatment plans and triage of utilization management. For those
treatments that do not meet the recommended Treatment Protocol, the Procedure Summary lists all potential therapies and indicates a summary as to their effectiveness, as well as why they may not be recommended based on the evidence.) This process is detailed below:

- **ODG Treatment in Workers' Comp** is being updated monthly on the Web. From the Contents page the last date updated for each chapter is identified. There is a hard copy version once a year, but this is not recommended since it does not link into the actual studies, and it is not current.

- The heart of each chapter in **ODG Treatment in Workers' Comp** is the "Procedure Summary", which provides a summary of effectiveness, if any, based on existing medical evidence, hyper-linked directly into the studies on which they are based, in abstract form, which have been ranked, highlighted and indexed. The "Treatment Protocol" identifies the ideal treatment pathway that should be followed, based on the "Procedure Summary". "Codes for Automated-Approval" links CPT procedure codes to ICD-9 diagnosis codes based on the ideal treatment protocol, with a field for “maximum occurrences”, for auto-approval of charges that meet the guideline.

- For example, in the Low Back chapter, under Fusion, it says, "There is no good evidence from controlled trials that spinal fusion is effective for treatment of any type of low back problem, in the absence of spinal fracture or dislocation, or spondylolisthesis...” so the Treatment Protocol does not include fusion. Same for IDET, facet injections, etc., etc. Under Epidural injections, it says, "Although epidural injections of steroids may afford short-term improvement in leg pain and sensory deficits in patients with sciatica due to a herniated nucleus pulposus, this treatment offers no significant long-term functional benefit, and the number of injections should be limited to two", so the Treatment Protocol for "With Radiculopathy" includes 2 ESIs, and the Codes for Auto Approval includes CPT code 62311 (Epidural steroid injection) 2 times for ICD9 722.x (Intervertebral disc disorders), but not for ICD9 847.2 (Lumbar sprain).

- This effort to translate the evidence into specific auto-authorization protocols is unique, for pre-approval of treatment plans and triage of claims management. Of course, most cases will not meet this ideal protocol, and that is where the many other listings in the Procedure Summary come into play.

- In addition to an extensive internal editorial staff, WLDI retains doctors who are leaders in their fields to act as chapter leads on a compensated basis. WLDI is in the business of publishing evidence based medical guidelines, and does not rely solely on volunteer contributors, as do many medical specialty guidelines. Unlike volunteers who may have other priorities, these WLDI editors are incentivized to focus their efforts on one objective – creating the highest quality guideline.

- As new studies become available from peer-reviewed medical journals, they are ranked and weighted accordingly based on the WLDI evidence-ranking system: [http://www.disabilitydurations.com/ExplanationofMedicalLiteratureRatings.htm](http://www.disabilitydurations.com/ExplanationofMedicalLiteratureRatings.htm)

- New studies are referenced in the guidelines as they are published. If studies suggest changes in guideline recommendations, these are approved by appropriate medical chapter leads. See the **ODG Editorial Advisory Board**.

- Potential impact on the recommendations is first outlined and summarized by internal medical editorial staff, then forwarded on for internal audit by the respective chapter leads (doctors who are leaders in the field working on a compensated basis) who draft any changes.

- Many, but not all, of the ODG contributors are listed on the ODG Editorial Advisory Board. Of those 80-90 doctors on the Board, an increasing number are working for WLDI on a compensated basis, especially the current chapter leads, so WLDI can have more demand on their time, but others still make substantial contributions only on an honorary basis, because that is the way they
prefer to work. Also, increasingly in recent years, WLDI receives editorial input from many others who are not listed on the board. These contributors include ODG subscribers, state jurisdictional representatives, medical specialty societies, and product companies. The most common source has been ODG subscribers since WLDI encourages Helpdesk comments/suggestions/questions. These people are not listed on the ODG Editorial Advisory Board, either because they never asked to be, or because they felt there may be an appearance of a conflict (for example, large clients of ODG, state decision-makers, manufacturers, etc.). ODG represents all medical specialties since WLDI looks at all evidence for all specialties, and WLDI receives input from all specialties, including specialties that may not be represented on the ODG Editorial Advisory Board.

- This process highlights a unique strength of ODG Treatment. Each treatment guideline summary and subsequent recommendation in ODG is hyper-linked into the studies on which it is based, in abstract form, which have been ranked, highlighted and indexed. This accountability and transparency in ODG lets users evaluate the strength of medical evidence behind guideline recommendations on their own. Then, if they disagree with the ODG rating of a study, the ODG interpretation of a study, or if they think ODG has overlooked a specific study, they are encouraged to provide their feedback to the ODG authors, and these comments are then reviewed and reflected in the guidelines as appropriate. The editorial effort behind ODG Treatment is an open process, and its success is based on its reputation for being (1) unique in taking evidence-based guidelines to their logical end point, with the conclusions linked directly to the evidence in the studies and references; (2) continuously updated reflecting the findings of new studies as they are conducted and released so subscribers are always up to date; (3) comprehensive, covering all types of treatments and the relevant studies; and (4) independent and multidisciplinary in scope. (See "The Unique and Major Advantages ODG" at www.odg-disability.com/Advantages of Official Disability Guidelines.pdf.)

Link between evidence and recommendations:

The heart of each chapter in ODG Treatment in Workers Comp is the Procedure Summary, which provides a concise synopsis of effectiveness, if any, of each treatment method based on existing medical evidence. Each summary and subsequent recommendation is hyper-linked into the studies on which they are based, in abstract form, which have been ranked, highlighted and indexed. The Treatment Protocol identifies the ideal utilization plans that should be followed after illness or injury, based on the recommendations in the Procedure Summary. Codes for Automated-Approval map CPT codes to ICD-9 codes based on the Treatment Protocol, with a field for “maximum occurrences”, for auto-approval of charges that meet the guideline.

For example, the Low Back chapter Procedure Summary indicates there is no good evidence that spinal fusion is effective for the treatment of any type of low back problem in the absence of spinal fracture, dislocation, or spondylolisthesis. Fusion for general back pain or degenerative disc disease seldom cures the patient, and there is significant risk, including a 17% complication rate. This summary is linked to about ten supporting studies, in abstract form, which can be consulted by end-users. As a result of this evidence, fusion is not recommended in the Low Back Treatment Protocol. The same can be said for IDET, facet injections, etc. Under epidural injections, on the other hand, the Procedure Summary indicates that although epidural injections of steroids may afford short-term improvement in leg pain and sensory deficits in patients with sciatica due to a herniated nucleus pulposus, this treatment offers no significant long-term functional benefit and the number of injections should be limited to two. This summary is linked to five supporting studies, in abstract form, which can be consulted and quoted by end-users, if desired. As a result of the evidence, the Low Back Treatment Protocol includes up to 2 ESI's for
cases with radiculopathy (to reduce pain and inflammation, restoring range of motion and thereby facilitating progress in more active treatment programs), and Codes for Auto-Approval include CPT code 62311 (ESI) up to 2 times for ICD9 722.x (intervertebral disc disorders).

This process to translate the evidence into specific auto-authorization protocols is unique, for pre-approval of treatment plans and triage of utilization management. Of course, for those treatments that do not meet the recommended Treatment Protocol, the Procedure Summary lists all potential therapies and indicates a summary as to their effectiveness, as well as why they may not be recommended based on the evidence. While there are some physical medicine modalities for which adequate trials are scarce, as a general rule, they should be avoided entirely when significant risk exists, and otherwise, it would not be advisable to use these modalities beyond 2-3 weeks if signs of objective progress towards functional restoration are not demonstrated. Each is identified as such in the Procedure Summaries within *ODG Treatment in Workers Comp*.

11. **The health benefits, side effects, and risks have been considered in formulating the recommendations.**

Many outcomes are considered, including health benefits (long and short term), side effects and risks. For example, for cases with intervertebral disc disorders, epidural steroid injections are shown to provide short-term improvement in leg pain and sensory deficits. However, these injections offer no significant long-term functional benefit. Therefore, the number of injections should be limited to two, used to reduce pain and inflammation, restore range of motion and thereby facilitate progress in more active treatment programs (with long-term functional benefit).

Each treatment is summarized with respect to health benefits, side effects and risks, within the Procedure Summary of each chapter in *ODG Treatment in Workers Comp*. Restoration of function is a driving force for many recommendations, because as the evidence indicates, it is associated with pain relief, health benefits, quality of life, patient satisfaction and limited risk. When formulating treatment recommendations, side effects and risks are balanced against the potential benefits, and the strength of evidence supporting those benefits. An intervention that is invasive, with high risks, would require stronger evidence for a recommendation than a relatively conservative, low-cost intervention.

12. **There is an explicit link between the recommendations and the supporting evidence.**

Within the Procedure Summary for each chapter in *ODG Treatment in Workers Comp*, each summary of the medical evidence and subsequent recommendation provides a list of references that are hyper-linked to the supporting studies, provided in abstract form. These studies can be consulted and quoted (copy/paste) by end-users at the click of a mouse, and have been ranked, highlighted and indexed by Work Loss Data Institute. The Procedure Summaries are the bulk of the text and the driving force behind all recommendations in *ODG Treatment in Workers Comp*. There is an explicit link between the recommendations and the supporting evidence, which is actually summarized in abstract form, so that users can quote it specifically, if desired.

13. **The guideline has been externally reviewed by experts prior to its publication.**

Prior to publication, select organizations and individuals making up a cross-section of medical specialties and typical end-users externally reviewed *ODG Treatment in Workers Comp*. See *Exhibit E*, ODG Methodology Outline. Complimentary review access is also made available to all major medical specialty groups as well as other stakeholders. Among those groups providing feedback are American Academy of

14. A procedure for updating the guideline is provided.

The Official Disability Guidelines product line, including ODG Treatment in Workers Comp, is updated annually, as it has been since the first release in 1996. The comprehensive update process is literally in continuous operation with annual publication of new editions. This process includes an ongoing literature search of peer-reviewed medical studies and marked input from the ODG Editorial Advisory Board. New data is also received each year from alliances with the CDC National Health Interview Survey and BLS/OSHA Survey of Occupational Injuries and Illnesses. The compilation is analyzed to understand the effectiveness (outcome-based), risks, and cost-benefits of potential existing and emerging therapies for work-related conditions, as well as trends in length of disability and return-to-work, including vocational rehabilitation and modified duty. Work Loss Data Institute would be happy to investigate and respond to any formal comment from specialty societies or other vested interests during each update year.

Ongoing Updates
The literature search is repeated for every chapter of ODG Treatment at least every six months, and for major chapters at least quarterly. As new technologies are introduced, evidence reviews are initiated and new summaries are added to the Procedure Summaries. This also happens when users contact the help desk because they cannot find something, and ODG editors discover that the topic has not been sufficiently covered. In the five years of previous editions of ODG Treatment, there have been a total over 42,000 paid users, far more than any other medical treatment guideline used in workers’ comp, so these users represent a powerful force for suggesting updates.

Clarity and presentation (items 15-18)

Summary: Ease-of-use and clarity are the hallmark of ODG, and they reduce uncertainty and facilitate early access to treatment for the injured worker. While hard copy books are published each year with each annual edition, ODG is primarily accessed in a user-friendly Web-based version, which users can access from any location with an Internet connection. ODG Treatment is designed to be used for utilization review (UR) as well as clinical practice, so ODG seeks clarity and lack of ambiguity in recommendations, and ODG allows the ability to copy & paste, saving time and effort in documenting approvals or denials of treatment. Entries in the Procedure Summaries always start with the words, “Recommended,” “Not recommended,” or “Under study.” ODG can be integrated into claims management systems. The ODG ICD9-CPT© Crosswalk UR Advisor file contains every possible combination of ICD9 diagnosis code and CPT procedure code seen in workers’ comp. For each ICD9-CPT combination, it provides information on frequency as well as number of visits, plus recommendations from ODG. The file also provides a "Bill
Review Payment Flag” which is Green, Yellow, Red, or Black, for use in automating claims management decision-making. The ODG guidelines have integrated both medical treatment guidelines and return-to-work guidelines (also known as lost time guidelines or disability duration guidelines). Treatment and duration guidelines must work together to be effective (timeframes for duration correspond precisely to treatment pathways). There are many specific tools available to help use the guidelines.

15. The recommendations are specific and unambiguous.

Ease-of-use and clarity are the hallmark of ODG, and they reduce uncertainty and facilitate early access to treatment for the injured worker. ODG is not written like a medical textbook, which may be vague in its recommendations, and may also suffer from conflicting recommendations in different sections written by different authors.

As indicated in the first chapter in ODG Treatment in Workers’ Comp, Background & Description http://www.odg-disability.com/ODG Treatment in Workers.htm:

The Procedure Summary is the most important section in ODG Treatment, and the first two sections, the Treatment Planning and the Codes for Automated Approval, are based on the conclusions from the evidence in the Procedure Summary. Many cases may involve a procedure that is not covered in the Treatment Planning, so then the Procedure Summary is used to help evaluate whether that procedure is appropriate. This section lists all possible therapies and diagnostic methods, as well as other issues that apply for each condition, and provides a summary of the latest evidence from the highest quality medical studies, beginning with the words “Recommended”, “Not recommended”, or “Under study”. The studies providing this evidence are referenced and hyper linked so that they can be consulted directly, and if necessary, copied and pasted into a claims report or a patient record, or even shared with the patient in some cases. For each condition, there may be as many as 200 separate listings covered in this fashion. Many of these procedures are being performed regularly, but are not supported by the quality medical evidence as summarized in this guideline, and in some cases, are proven to be harmful. On the other hand, there are some therapies that are not well known, but which may have excellent outcomes. When patient selection is important to the success of a procedure, the criteria for patient selection is also outlined, and the appropriate study is referenced.

16. The different options for management of conditions are clearly presented.

For each condition in the Treatment Planning section, specific pathways are identified that each treatment plan should focus on. Emphasis is given to key determinants that distinguish how to handle a case. For example, with low back problems this may be the presence of radiculopathy, or for carpal tunnel syndrome it may be severity and electrodiagnostic confirmation of the condition. The treatment protocols also identify the percent of cases following different pathways, along with benchmark costs, as well as the expected disability durations from Official Disability Guidelines. Since these treatment protocols focus on the most common treatment pathways, they are not meant to apply to every case. There are many other types of treatments that may be appropriate, and the Procedure Summary contains a list of all of them.

In the Procedure Summary for each chapter, there may be over 200 entries for different treatment options. Many of these therapies are recommended and many are not, but there is not any one approach that is right for every patient. Providers and patients can select from a comprehensive list depending on provider experience and patient preferences.
ODG is also unique in providing extensive guidelines for all of the specific pharmaceuticals that may be used in workers’ comp. These guidelines appear in each appropriate chapter, but there is an extensive listing in the Pain Chapter.

17. Key recommendations are easily identifiable.

Every therapy is listed alphabetically, with cross references for alternative descriptions. Entries in the Procedure Summaries always start with the words, “Recommended,” “Not recommended,” or “Under study.” In addition, whenever there is confusion about the description of a diagnosis or procedure, the Crosswalk UR Advisor can be used. Every medical bill must have a CPT Procedure Code along with an ICD9 diagnosis code. The ODG ICD9-CPT© Crosswalk UR Advisor file contains every possible combination of ICD9 diagnosis code and CPT procedure code seen in workers’ comp. For each ICD9-CPT combination, it provides recommendations from ODG. Whenever there is uncertainty about the recommendation for a specific treatment, all the user needs to find the recommendation is a CPT Procedure Code along with an ICD9 diagnosis code. These codes would be available because they would also be required for reimbursement.

18. The guideline is supported with tools for application.

While hard copy books are published each year with each annual edition, ODG is primarily accessed in a user-friendly Web-based version, which users can access from any location with an Internet connection. ODG allows the ability to copy & paste, saving time and effort in documenting approvals or denials of treatment. ODG can also be integrated into claims management systems. The ODG ICD9-CPT© Crosswalk UR Advisor file contains every possible combination of ICD9 diagnosis code and CPT procedure code seen in workers’ comp. For each ICD9-CPT combination, it provides information on frequency as well as number of visits, plus recommendations from ODG. The file also provides a "Bill Review Payment Flag" which is Green, Yellow, Red, or Black, for use in automating claims management decision-making. Major claims management software vendors have already integrated ODG. See a description of offerings from American Technical Services, EnableComp, Insurity, McKesson Health Solutions, Medgate, MECC, & Unique Software Solutions, at http://www.odg-disability.com/casemanagement.htm. ODG also provides standard benchmarking tools to measure compliance with the guideline. Some of these are explained the AAOHN Journal, in the Feature Article (offering CE Credit), "Benchmarking Medical Absence: Measuring the Impact of Occupational Health Nursing". http://www.odg-disability.com/benchmarking_lost_time.htm Tools are also available to use ODG along with provider profiling, and “pay for performance” programs.

Applicability (items 19-21)

Summary: ODG support is provided so that the guidelines can be applied successfully. There are many training options for ODG customers: (1) Telephone Demo: WLDI staff are happy to conduct a complimentary online demo of ODG Treatment before or after purchase of the product; (2) ODG Helpdesk: The helpdesk is always open for general questions and guidance about the product, by calling 1-800-488-5548 or e-mailing odg@worklossdata.com with any questions; (3) Self-paced training: Depending on how much time is available, there are a few versions of ODG self-training tools, including an online self-paced interactive training demo of ODG Treatment in a Microsoft PowerPoint® presentation, requiring up to one hour to complete, an abbreviated ODG training demo narrative in the MP3 format lasting about thirty minutes, and a short 15-minute overview of ODG in a Microsoft PowerPoint® presentation. (4) In depth courses: Courses in how to apply the guidelines, using case studies, are offered by specialized training organizations that are independent of WLDI, and completion
of these courses may result in CME or CE credit. WLDI recommends the courses offered by AADEP. For information on their courses, go to www.aadep.org, or call AADEP at 800-456-6095. In addition, for Texans, the Texas Medical Association offers many courses throughout Texas; go to www.texmed.org or call TMA at 800-880-1300. [http://www.worklossdata.com/odgtraining.htm](http://www.worklossdata.com/odgtraining.htm)

ODG is cost effective for all types of users, and in states that have adopted ODG, users within those states can purchase the guidelines at a 50% discount, bringing the cost down to $162.50. There are also substantial discounts available to organizations with quantity users. In addition, because ODG has been accepted by AHRQ for inclusion in the National Guidelines Clearinghouse, summaries of the guidelines are available at no charge on www.guidelines.gov, and these summaries may be all some users need, including providers doing a limited amount of workers’ comp, as well as small employers and even some injured workers. The goal is for the guidelines to be a communication tool so that all parties are on the same page when it comes to expectations for treatment and return to work. For guidelines to be successful, they need to facilitate early access to appropriate care for the injured worker, when all providers know up-front that they will get paid if they follow the guidelines.

ODG has been proven. The 2007 edition of Official Disability Guidelines is the 12th annual edition of these leading return-to-work guidelines, and the 2007 edition of ODG Treatment is the 5th annual edition of those leading treatment guidelines. While other publishers may promise better guidelines in the future, ODG keeps delivering. And studies have shown that outcomes are significantly improved through use of ODG. In fact, one study showed that after adoption of ODG, medical costs were reduced by 64% and lost work days were reduced by 69%, while at the same time injured workers got earlier access to appropriate care and doctors praised the program.

19. The potential organizational barriers to applying the recommendations have been discussed.

Depending on the organization in question, potential barriers may exist. For example, if an organization were performing unnecessary spinal fusions on a regular basis, ODG Treatment in Workers Comp would not authorize this activity. In general though, this would not be considered a barrier for the State, but an opportunity to create order, improve outcomes, reduce risk and cut costs in medical benefit delivery in the California workers’ compensation system.

The recommendations in ODG Treatment in Workers Comp are clear, including frequency and duration parameters for physical therapy or chiropractic care, and each recommendation is linked explicitly to the evidence on which it is based; so organizational barriers should be limited.

20. The potential cost implications of applying the recommendations have been considered.

Given the current state of medical benefit delivery in workers’ compensation systems, including what is often described as excessive utilization of medical services, there are no specific additional cost implications or resources required to apply the recommendations.

While not required, to maximize the potential health and cost-benefits, employers may accommodate modified duty in the early stages of recovery. Specific activity modifications and job restrictions are identified in ODG Treatment in Workers Comp, so they can be compared with a job analysis form or copied and pasted directly into an employer’s return-to-work form. Not only good for productivity and profitability, these programs have the best impact on the injured worker as well. In fact, as found in ODG Treatment in Workers Comp (under “Return-To-Work” in the Procedure Summary for Low Back), the strongest medical evidence regarding potential therapies for low
back pain indicates that returning the patient to normal activities has the best long term outcome. There are many therapies, both invasive and noninvasive, whose purpose is to cure the pain, but no strong evidence that they accomplish this as successfully as those that focus on restoring functional ability, without focusing on the pain.

Regarding purchasing costs, ODG Treatment in Workers Comp is available in textbook and electronic (Web, CD and raw data) formats. Published prices range from $143 - $325 per user/unit, depending on quantity. Enterprise licensing is also available.

Additionally, state adoption discounts may be negotiated. For example, when the State of Texas and the State of Ohio Bureau of Workers Comp adopted ODG Treatment in Workers Comp for their states, they negotiated a 50% discount for all treating doctors on the Web version of ODG Treatment in Workers Comp, excluding the textbook.

21. Key review criteria are included for monitoring and review purposes.

The key review criteria for monitoring adherence are the sections called Codes for Auto-Approval. In ODG Treatment in Workers Comp, each Treatment Protocol is mapped out in a CPT/ICD9 crosswalk section, called Codes for Auto-Approval. Only procedures that meet the guideline (therefore are supported by the medical evidence) are fit for “auto-approval”, and only up until the point of “maximum occurrences”. For cases that exceed this limit, the Procedure Summary can be used to identify if additional treatment may be appropriate on a case-by-case basis, including if there is any patient selection criteria that should be met for each.

Retrospectively, organizations can review charges to determine the level of adherence. For example, for lumbar sprain, ICD9 847.2, the maximum occurrences for auto-approval for CPT 98940 (spinal manipulation, one to two regions) is 6, meaning chiropractic manipulation is approved for 6 visits for any case of lumbar sprain. If a provider requests additional visits, the Procedure Summary shows that up to 12 additional visits are allowed but only in cases of severe sprains where evidence is shown of objective functional improvement following the initial care.

Therefore, in any case of 847.2, chiropractic should never exceed 18 visits, and in most cases, should be capped at 6. By the same token (according to Codes for Auto-Approval and Procedure Summary), spinal fusions and trigger point injections should never be done (capped at zero) for 847.2. Organizations can monitor adherence and identify system abuse using these files.

In fact, the State of Ohio Bureau of Workers Comp just began this program, and one of the major Ohio MCO’s, CompManagement Health Systems, Inc., is beginning a project to track and quantify differences in savings, outcomes and utilization schedules in Ohio before and after the Codes for Auto-Approval crosswalk. Published results are expected in about one year.

The ODG ICD9-CPT© Crosswalk UR Advisor file contains every possible combination of ICD9 diagnosis code and CPT procedure code seen in workers’ comp. This clearly defined review criteria is derived from the guideline recommendations themselves. Usage of this tool to monitor and audit adherence to guideline recommendations can enhance their use.

ODG Treatment in Workers Comp also contains evidence-based disability duration guidelines within the medical treatment guidelines. Pathways are provided throughout the Treatment Protocol at each endpoint with expected time away from work based on severity and type of job. Demonstrating adherence to the disability durations communicates adherence to the protocol, at least in part. In addition to these expected
duration pathways provided in the Treatment Protocol based on severity and type of job, ODG provides benchmark Summary Guidelines for each diagnosis, indicating when 50% (Midrange) and 90% (At-Risk) of claims return-to-work.

These benchmarks can be used as follows:

- **Pre-authorization Requirements** – Insurance entities and State WC authorities use the “At-Risk” date to trigger pre-authorization requirements, making providers submit approved treatment plans prior to payment, for cases that have exceeded this limit.

- **Identifying and Harnessing Outliers**: “Outliers” is a term used to describe all claims having disability durations greater than the ODG At-Risk date (at which 90% of have returned nationally). This small percentage of claims represents a huge portion of costs.
  - Divide the number of outliers by total # of claims. Multiply result by 100 to get “outlier percentage”. 10% is the national benchmark, where lower is better.
  - If “outlier percentage” of a provider or claims entity notably exceeds 10%, they may be investigated and/or temporarily or permanently removed from a network. Claims can be directed to providers with the best outlier percentages (assuming all else is equal).

- **Performance Measures (Grading RTW 101)**: Organizations measure performance of RTW efforts by adding up actual internal claims durations:
  - Sum up corresponding At-Risk durations from ODG Summary Guidelines (with an ICD9 coded At-Risk date corresponding to each claim)
  - Divide the sum of the At-Risks minus the sum of internal claims durations by the sum of the At-Risk dates: (sum of At-Risks – sum of claims)/sum of At-Risks
  - Multiply the result by 100 to get a percentage score:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grading Your Results</td>
<td>99-75%</td>
<td>74-50%</td>
<td>49-25%</td>
<td>24-0%</td>
<td>Negative</td>
</tr>
</tbody>
</table>

Regardless of ultimate grade, the value of these benchmarks is to create consistency across different conditions, allowing for comparison of various claims entities or time-series evaluations of new programs, despite the likelihood of heterogeneous case mixes.

- **Targets/Triggers** – The Summary Guidelines are used in selecting durations as the “number to hit” (Midrange) or the “number to beat” (At-Risk). Cases beyond the Midrange will trigger a yellow flag, and may solicit more attention or specific action. Cases unresolved beyond the At-Risk date will trigger a red flag, as they become outliers. This date may trigger a search for factors that may be retarding recovery (co-morbidities, psychosocial or job satisfaction issues, chemical dependence, etc), or some other action.

- **Reserves** – Most common among insurers and risk managers at self-insured employers, the object is to conservatively set reserve funding under the assumption that each claim will be out until the At-Risk date for each condition. Thus, on an aggregate scale, there will be enough funding for all claims. Productivity issues are also addressed this way.

**Editorial independence** (items 22-23)

**Summary**: ODG is independent of any medical specialty group and multidisciplinary in scope, and represents all medical specialties, and not just occupational medicine doctors, orthopaedic surgeons, chiropractors, physical therapists, etc. ODG has realized considerable provider acceptance (including adoption by 16 states and provinces – more than any other guideline) because ODG is evidence based,
and recommendations are linked directly to the most up to date studies; the results of that research are reflected in the constant updating of the guidelines. These studies are focused on one outcome: What is best for the injured worker. WLDI is in the guideline business, focused on researching and publishing evidence based medical guidelines. The funding body for *ODG Treatment in Workers Comp* is the subscribers who purchase the guideline. With 42,000 paid ODG users from all categories of stakeholders in workers’ comp, this is a diverse group with many different interests. The employees of WLDI who guide the editorial process are independent of this funding body, and their overriding objective is to publish the highest quality guideline, one that is evidence based and defensible before all of these different interests, as these customers make decisions about which guideline to purchase or adopt. Ultimately, the recommendations in ODG may not please each of these subscribers, but they hopefully accede that ODG is fair and balanced. ODG has been more successful in this than any other workers’ compensation medical treatment guideline, which attests to the editorial independence of ODG. It has proven to be the only guideline that employers, insurers, providers, and labor can all get behind and support. The only measure of success for the ODG editors is that they have created a high quality product that succeeds in the marketplace. This is contrary to guidelines produced by special interest groups, such as insurance companies or medical specialty societies, whose interests go beyond just sales of the guideline, and whose agenda may be to advance the success of their own members.

22. The guideline is editorially independent from the funding body.

Work Loss Data Institute is an independent database development company focused on workplace health and productivity, founded in 1995 to create, maintain and market information databases to implement standards for managing workforce productivity based on strict principals of evidence-based methodology, with ongoing focus on healthcare cost containment.

As indicated in the first chapter of *ODG Treatment in Workers Comp*, Work Loss Data Institute is without any specific affiliation and therefore unique in being able to bridge the interests of the many professional groups involved in diagnosing and treating workers comp conditions.

The funding body for *ODG Treatment in Workers Comp* is the subscribers who purchase the guideline. With 42,000 paid ODG users from all categories of stakeholders in workers’ comp, this is a diverse group with many different interests. The employees of WLDI who guide the editorial process are independent of this funding body, and their overriding objective is to publish the highest quality guideline, one that is evidence based and defensible before all of these different interests, as these customers make decisions about which guideline to purchase or adopt. Ultimately, the recommendations in ODG may not please each of these subscribers, but they hopefully accede that ODG is fair and balanced, and ODG has been more successful in this than any other workers’ compensation medical treatment guideline, which attests to the editorial independence of ODG. It has proven to be the only guideline that employers, insurers, providers, and labor can all get behind and support. The only measure of success for the ODG editors is that they have created a high quality product that succeeds in the marketplace. This is contrary to guidelines produced by special interest groups, such as insurance companies or medical specialty societies, whose interests go beyond just sales of the guideline, and whose agenda is to advance the success of their own members.

23. Conflicts of interest of guideline development members have been recorded.

Work Loss Data Institute is an independent database development company focused on workplace health and productivity, founded in 1995, to create, maintain and market information databases to implement standards for managing workforce productivity based on strict principals of evidence-based methodology,
with ongoing focus on healthcare cost containment. There are no conflicts of interest among the guideline development members.

WLDI is a medical publishing company in the guideline business, focused on researching and publishing evidence based medical guidelines. WLDI does not rely solely on volunteer contributors, as do many medical specialty guidelines. In addition to an extensive internal editorial staff, WLDI retains doctors who are leaders in their fields to act as chapter leads on a compensated basis. Unlike volunteers who may have other priorities, these WLDI editors are incentivized to focus their efforts on one objective: creating the highest quality guideline. Where these contributors have experience that may reflect a bias, this is noted, and input is also sought by other contributors with no bias, or possibly even a counterbalancing bias. See Exhibit D - Editorial Advisory Board, ODG/ODG Treatment, for the specialties of different contributors. For some therapies, ODG must strive for agreement from contradictory interests, for example, orthopedic surgeons, physical therapists, and occupational physicians working for an employer or an insurance company.

Since ODG encourages editorial feedback from all stakeholders, there may be bias on the part of some of these recommendations. For example, medical staff employed by device manufacturers may be in the best position to be familiar with scientific studies covering their products, so their input is encouraged, but they would also be expected to have a clear conflict of interest, and that is noted and taken into account when the ODG editors evaluate their recommendations.
Exhibit A

Background on AGREE

AGREE stands for "Appraisal of Guidelines Research and Evaluation". It originates from an international collaboration of researchers and policy makers who work together to improve the quality and effectiveness of clinical practice guidelines by establishing a shared framework for their development, reporting and assessment. [www.agreecollaboration.org](http://www.agreecollaboration.org)
Exhibit B

Thirteen unique and major advantages of ODG

(This document is also posted online at http://www.odg-disability.com/Advantages of Official Disability Guidelines.pdf.)

1. **ODG is unique in taking evidence-based guidelines to their logical end point; the conclusions are linked directly to the evidence in the studies and references.** ODG Treatment is based on a comprehensive and ongoing medical literature review with preference given to high-quality systematic reviews, meta-analyses and clinical trials. Each recommendation is linked to the supporting medical evidence, provided in abstract form, which has been ranked, highlighted and indexed. Full text copies of these studies are used by physician editors in formulating recommendations and are available on request. The ODG return-to-work guidelines are based on an aggregate of over 10 million cases from CDC, OSHA, and actual workers’ compensation claims. For details on methodology, see www.odg-disability.com/methodology_outline.pdf. Accountability and transparency are the hallmarks of the ODG development process.

2. **ODG is comprehensive.** The treatment guidelines cover conditions that represent over 99% of workers’ compensation costs, and the Procedure Summaries cover virtually every treatment or procedure that may be performed for those conditions, along with links to the scientific evidence. Treatment guidelines that are clear and comprehensive can minimize uncertainty and unnecessary disputes between medical providers and managed care entities, and ensure that injured workers get early access to care. Because ODG Treatment is comprehensive, it does not need to be supplemented with other guidelines to cover missing treatments. The return-to-work guidelines cover every reportable condition, all 10,000 ICD9 diagnosis codes.

3. **ODG is continuously updated reflecting the findings of new studies as they are conducted and released; subscribers are always up to date.** ODG undergoes a comprehensive annual update process based on scientific medical literature review, survey data analysis and expert panel validation. In addition, as new studies are released, the Web version is updated throughout the year to reflect these new studies.

4. **ODG is independent of any medical specialty group and multidisciplinary in scope, and represents all medical specialties, and not just occupational medicine doctors, orthopaedic surgeons, chiropractors, physical therapists, etc.** ODG has realized considerable provider acceptance (including adoption by 16 states and provinces – more than any other guideline) because ODG is evidence based, and recommendations are linked directly to the most up to date studies; the results of that research are reflected in the constant updating of the guidelines. These studies are focused on one outcome: What is best for the injured worker. Unlike medical specialty society guidelines, ODG does not represent the interests of any one provider-group over other providers.

5. **WLDI is in the guideline business, focused on researching and publishing evidence based medical guidelines.** WLDI does not rely solely on volunteer contributors, as do many medical specialty guidelines. In addition to an extensive internal editorial staff, WLDI retains doctors who are leaders in their fields to act as chapter leads on a compensated basis. Unlike volunteers who may have other priorities, these WLDI editors are incentivized to focus their efforts on one objective: creating the highest quality guideline.

6. **ODG provides integrated guidelines, with both medical treatment guidelines and return-to-work guidelines (also known as lost time guidelines or disability duration guidelines).** Treatment and duration guidelines must work together to be effective (timeframes for duration correspond precisely to treatment pathways).

7. **ODG is designed to be used for utilization review (UR) as well as clinical practice, unlike other treatment guidelines, which may recommend the same treatment for every patient (sometimes referred to as "cookbook" medicine), and unlike nursing textbooks that lack any basis for UR. ODG seeks clarity and lack of ambiguity in recommendations, and ODG allows the ability to copy & paste, saving time and effort in documenting approvals or denials of treatment.** Entries in the Procedure Summaries always start with the words, “Recommended,” “Not recommended,” or “Under study.”
8. ODG is available in a Web-based version, which users can access from any location with an Internet connection, while the raw experience data from ODG is also available to clients in tabular format to compare with internal claims data.

9. ODG can be integrated into claims management systems. The ODG ICD9-CPT© Crosswalk UR Advisor file contains every possible combination of ICD9 diagnosis code and CPT procedure code seen in workers' comp. For each ICD9-CPT combination, it provides information on frequency as well as number of visits, plus recommendations from ODG. The file also provides a "Bill Review Payment Flag" which is Green, Yellow, Red, or Black, for use in automating claims management decision-making.

10. Training in ODG is readily available. Online training demos are provided by WLDI account executives at no charge to users, and a Help Desk is available via toll-free telephone line as well as email. In addition, the American Academy of Disability Evaluating Physicians (AADEP) offers continuing education courses on the use of ODG. There is also a self-paced CD-ROM training option available.

11. ODG has met the stringent criteria of the Federal Agency for Healthcare Research & Quality (AHRQ), and has been accepted for inclusion in the National Guidelines Clearinghouse (NGC), located at www.guidelines.gov. To be included a clinical practice guideline must provide corroborating documentation that a systematic literature search and review of existing scientific evidence published in peer reviewed journals was performed during the guideline development, and documented evidence can be produced that the guideline is up-to-date.

12. ODG is cost effective for all types of users, and in states that have adopted ODG, users within those states can purchase the guidelines at a 50% discount, bringing the cost down to $162.50. There are also substantial discounts available to organizations with quantity users. In addition, because ODG has been accepted by AHRQ for inclusion in the National Guidelines Clearinghouse, summaries of the guidelines are available at no charge on www.guidelines.gov, and these summaries may be all some users need, including providers doing a limited amount of workers’ comp, as well as small employers and even some injured workers. The goal is for the guidelines to be a communication tool so that all parties are on the same page when it comes to expectations for treatment and return to work. For guidelines to be successful, they need to facilitate early access to appropriate care for the injured worker, when all providers know up-front that they will get paid if they follow the guidelines.

13. ODG has been proven. The 2007 edition of Official Disability Guidelines is the 12th annual edition of these leading return-to-work guidelines, and the 2007 edition of ODG Treatment is the 5th annual edition of those leading treatment guidelines. While other publishers may promise better guidelines in the future, ODG keeps delivering. And studies have shown that outcomes are significantly improved through use of ODG. In fact, one study showed that after adoption of ODG, medical costs were reduced by 64% and lost work days were reduced by 69%, while at the same time injured workers got earlier access to appropriate care and doctors praised the program.
Exhibit C
Procedure Summary/Sample Search Terms Used

For the Low Back chapter in *ODG Treatment in Workers Comp*, the following is a list of treatment methods covered in the Procedure Summary. There are over 200 entries in this table, many are recommended and many are not, but there is not any one approach that is right for every patient. Providers and patients can select from a comprehensive list depending on provider experience and patient preferences. Each topic is listed with a summary of existing medical evidence and recommendations for use. The evidence summaries and subsequent recommendations are linked to the supporting studies, in abstract form. As new technologies are introduced, evidence reviews are initiated and new summaries are added to the Procedure Summaries. This is also a partial list of search terms, used along with the words back or lumbar or pain, in researching evidence for the Low Back chapter of *ODG Treatment in Workers Comp*.

(This list is available online at [http://www.odg-twc.com/odgtwc/low_back.htm#ProcedureSummary](http://www.odg-twc.com/odgtwc/low_back.htm#ProcedureSummary), and as of 01/04/08 there were a total of 238 entries in the Procedure Summary of the Low Back Chapter.)

Activity restrictions; Acupuncture; Acupressure; Adhesiolysis; Adhesiolysis, spinal endoscopic; Adjacent segment disease/degeneration (fusion); Aerobic exercise; Age adjustment factors; Allograft transplantation; Annuloplasty (IDET); Antidepressants; Anti-inflammatory medications; Aquatic therapy; Arthrodesis; Arthroplasty; Artificial disk; Back brace; Back brace, post operative (fusion); Back schools; Bed rest; Behavioral treatment; Biofeedback; Bone-growth stimulators (BGS); Bone scan; Botulinum toxin (Botox®); Bupropion (Wellbutrin®); Centralization phenomenon (McKenzie); Charite®; Chemonucleolysis (chymopapain); Chiropractic; Chronic pain programs; Coblation nucleoplasty; Cognitive intervention; Colchicine; Cold/heat packs; Computerized range of motion (ROM); Conservative care; Corsets; Cryotherapy; CT & CT Myelography (computed tomography); Current perception threshold (CPT) testing; Cybex® exercise machine; Dascor™ Disc Arthroplasty Nucleus; Decompression; Delayed treatment; Dermatosensory evoked potentials (DSEPs); Diagnostic imaging; DIAM (device for intervertebral assisted motion); Diathermy; Directional preference (DP) therapy; Differential Diagnosis; Disc prosthesis; Disc replacement; Disc transplantation; Discectomy/laminectomy; Discography; DRX® (traction); Dynamic neutralization system (Dynesys®); Dynesys®; Early access to treatment; Education; Electrical stimulators (E-stim); Electrodiagnostic studies (EDS); Electromagnetic pulsed therapy; EMGs (electromyography); Epidural neurology; Epidural neuroplasty; Epidural steroid injections (ESIs), therapeutic; Epidural steroid injections, “series of three”; Epidural steroid injections, diagnostic; Ergonomics interventions; ESIs (epidural steroid injections); Etanercept (Enbrel®); Evoked potential studies; Exercise; Facet injections; Facet joint diagnostic blocks (injections); Facet joint injections, lumbar; Facet joint injections, multiple series; Facet joint injections, thoracic; Facet joint intra-articular injections (therapeutic blocks); Facet joint medial branch blocks (therapeutic injections); Facet joint pain, signs & symptoms; Facet joint chemical rhizotomy; Facet joint radiofrequency neurootomy; Facet joint therapeutic blocks; Facet joint therapeutic steroid injections; Facet rhizotomy (radio frequency medial branch neurootomy); Fear-avoidance beliefs questionnaire (FABQ); Feldenkrais; Flexibility; Flexion/extension imaging studies; Fluoroscopy (for ESI's); Foraminotomy; Functional anesthetic discography (FAD); Functional improvement measures; Functional restoration programs (FRPs); Fusion (spinal); Fusion, endoscopic; F-wave tests; Gabapentin (Neurontin®); Gym memberships; Hardware; Hardware injection (block); Heat therapy; Hemilaminectomy; Herbal medicines; Home health services; Hospitalization; H-reflex tests; H-wave stimulation (devices); Hyperbaric oxygen therapy (HBOT); IDD therapy (intervertebral disc decompression); IDET (intradiscal electrothermal anuloplasty); Imaging; Implantable drug-delivery systems (IDDSs); Implantable spinal cord stimulators; Implants; Infliximab (Remicade®); Infrared therapy (IR); Injections; Interdisciplinary
rehabilitation programs; Interferential therapy; Interspinous decompression device (X-Stop®); Intradiscal electrothermal therapy (IDET); Intradiscal steroid injection; Intrathecal drug administration system; Iontophoresis; Kyphoplasty; Laminectomy/laminotomy; Laser discectomy; Ligamentous injections; Lordex® (traction); Low level laser therapy (LLLT); Lumbar extension exercise equipment; Lumbar supports; Lysis of epidural adhesions; Magnet therapy; Magnetic resonance imaging; Manipulation; Manipulation under anesthesia (MUA); Massage; Mattress firmness; McKenzie method; Medications; Medication-assisted spinal manipulation (MSAM); MedX® lumbar extension machine; Microcurrent electrical stimulation (MENS devices); Microdiscectomy; Modified duty; MR neurography; MRI’s (magnetic resonance imaging); Multidisciplinary pain programs; Muscle relaxants; Myelography; Narcotics; NC-stat nerve conduction studies; Nerve conduction studies (NCS); Neurometer®; Neuromodulation devices; Neuromuscular electrical stimulators (NMES); Neuoplasty; Neuroflexotherapy; Nonprescription medications; NSAIDs (non-steroidal anti-inflammatory drugs); Nucleoplasty; Occupational therapy (OT); Opioids; Oral corticosteroids; Orthotrac vest; Patient education; Percutaneous discectomy (PCD); Percutaneous electrical nerve stimulation (PENS); Percutaneous endoscopic laser discectomy (PELD); Percutaneous epidural neuroplasty; Percutaneous intradiscal radiofrequency (thermocoagulation); Percutaneous neuromodulation therapy (PNT); Percutaneous vertebroplasty (PV); Phototherapy; Physical therapy (PT); Pilates; PIRFT; Piriformis injections; Powered traction devices; ProDisc®; Prolotherapy (sclerotherapy); Psychological screening; Psychological treatment; Pulsed radiofrequency treatment (PRF); Quantitative sensory threshold (QST) testing; Racz neurolysis; Radiofrequency neurotomy; Radiography (x-rays); Range of motion (ROM); Reassurance; Return to work; Roman chairs exercise equipment; Sacroiliac joint injections (SJI); Sclerotherapy; Segmental rigidity (diagnosis); Selective nerve root blocks; Sensory nerve conduction threshold (sNCT) device; Shoe insoles/shoe lifts; Skilled nursing facility (SNF) care; SPECT (single photon emission computed tomography); Spinal cord stimulation (SCS); SpineCATH®; Standing MRI; Stimulators, electrical; Stretching; Supports & braces; Surface electromyography (SEMG); Surgery; Sympathetic therapy; Tendon injections; TENS (transcutaneous electrical nerve stimulation); Thermography (infrared stress thermography); Thiocolchicoside; Traction; Training; Transcutaneous electrical neurostimulation (TENS); Transplantation, intervertebral disc; Trigger point injections; Tumor necrosis factor (TNF) modifiers; Ultrasound, diagnostic (imaging); Ultrasound, therapeutic; Vacuum-assisted closure wound healing; Vertebral axial decompression (VAX-D®); Vertebroplasty; Videofluoroscopy (for range of motion); Work conditioning, work hardening; Work; Wound dressings; X-rays; X-Stop® Interspinous Process Decompression (IPD®) System; Yoga; Zygaphysical (facet) joint injections.
Exhibit D

Editorial Advisory Board

ODG/ODG Treatment

(This is also posted online at http://www.odg-twc.com/editorial_advisory_board.htm)

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Exhibit E

ODG Methodology Outline
(This is posted online at http://www.odg-disability.com/methodology_outline.pdf)

Treatment Guidelines

Return-to-Work Guidelines

Official Disability Guidelines
ODG Treatment in Workers’ Comp (ODG/TWC)
Development/Update/Review Process
Followed by
Work Loss Data Institute

Comprehensive Medical Literature Review
- Preference given to high quality systematic reviews, meta-analyses, and clinical trials published since 1993
- Nationally recognized treatment guidelines from the leading specialty societies
- Primary searches: MEDLINE and the Cochrane Library

Review of Other Relevant Treatment Guidelines
- National Guideline Clearinghouse entries
- State Guidelines
- Proprietary guidelines maintained in the WLDI guideline library
(Note: These guidelines were also used to suggest references or search terms that may otherwise have been missed).

Extensive Search of Additional Data Bases
- MD Consult; eMedicine; CINAHL
- Conference proceedings in occupational health and musculoskeletal medicine (i.e. ACOEM, AAOS, AAPM)
- Conference proceedings in Disability Evaluation (i.e. AADEP, EUMASS).
(Note: Search terms and questions were diagnosis, treatment, symptom, sign, and/or body-part driven, generated based on new or previously indexed existing evidence, treatment parameters and experience).
   Chapter-specific reference lists are found within ODG/TWC

Criteria for Selecting the Evidence
Preference was given to evidence that met the following criteria:
- The article was written in the English language, and the article had any of the following attributes:
• It was a systematic review of the relevant medical literature; or
• The article reported a controlled trial – randomized or controlled; or
• The article reports a cohort study, whether prospective or retrospective; or
• The article reports a case control series involving at least 25 subjects in which the assessment of outcome was determined by a person or entity independent from the persons or institution that performed the intervention the outcome of which is being assessed.

(Note: Especially when articles on a specific topic that met the above criteria were limited in number and quality, Work Loss Data Institute also reviewed other articles that did not meet the above criteria, but all evidence was ranked alphanumerically using the methodology in the second chapter of ODG Treatment so that the quality of evidence could be clearly weighted and taken into consideration when formulating recommendations. This ranking used an alphanumeric rating system ranging from 1a to 10c, based on Ranking by Type of Evidence: (1) Systematic Review/Meta-Analysis, (2) Controlled Trial - Randomized (RCT) or Controlled, (3) Cohort Study - Prospective or Retrospective, (4) Case Control Series, (5) Unstructured Review, (6) Nationally Recognized Treatment Guideline (from guidelines.gov), (7) State Treatment Guideline, (8) Other Treatment Guideline, (9) Textbook, or (10) Conference Proceedings/Presentation Slides; and also Ranking by Quality within Type of Evidence: (a) High Quality, (b) Medium Quality, or (c) Low Quality, as defined in the Ranking by Quality section of the second chapter.

Ongoing Updates
The literature search is repeated for every chapter of ODG Treatment at least every six months, and for major chapters at least quarterly.

Process Used for Formulating the Recommendations
Link between evidence and recommendations:
• The Procedure Summary of ODG/TWC provides a concise synopsis of effectiveness, if any, of each treatment method based on existing medical evidence.
• Each summary and subsequent recommendation is hyper-linked into the studies on which they are based, in abstract form, which have been ranked, highlighted and indexed and may be copied and pasted to quote specifically, if desired.
• The Treatment Protocol identifies the ideal utilization plans that should be followed after illness or injury, based on the recommendations in the Procedure Summary.
• Codes for Automated-Approval map CPT codes to ICD-9 codes based on the Treatment Protocol, with a field for “maximum occurrences”, for auto-approval of medical bills that meet the guideline. (Note: This process to translate the evidence into specific auto-authorization protocols is unique, for pre-approval of treatment plans and triage of utilization management. For those treatments that do not meet the recommended Treatment Protocol, the Procedure Summary lists all potential therapies and indicates a summary as to their effectiveness, as well as why they may not be recommended based on the evidence.) This process is detailed below:
• ODG Treatment in Workers’ Comp is being updated monthly on the Web. From the Contents page the last date updated for each chapter is identified. There is a hard copy version once a year, but this is not recommended since it does not link into the actual studies, and it is not current.
The heart of each chapter in *ODG Treatment in Workers’ Comp* is the "Procedure Summary", which provides a summary of effectiveness, if any, based on existing medical evidence, hyper-linked directly into the studies on which they are based, in abstract form, which have been ranked, highlighted and indexed. The "Treatment Protocol" identifies the ideal treatment pathway that should be followed, based on the "Procedure Summary". "Codes for Automated-Approval" links CPT procedure codes to ICD-9 diagnosis codes based on the ideal treatment protocol, with a field for “maximum occurrences”, for auto-approval of charges that meet the guideline.

For example, in the Low Back chapter, under Fusion, it says, "There is no good evidence from controlled trials that spinal fusion is effective for treatment of any type of low back problem, in the absence of spinal fracture or dislocation, or spondylolisthesis...” so the Treatment Protocol does not include fusion. Same for IDET, facet injections, etc., etc. Under Epidural injections, it says, "Although epidural injections of steroids may afford short-term improvement in leg pain and sensory deficits in patients with sciatica due to a herniated nucleus pulposus, this treatment offers no significant long-term functional benefit, and the number of injections should be limited to two”, so the Treatment Protocol for "With Radiculopathy" includes 2 ESIs, and the Codes for Auto Approval includes CPT code 62311 (Epidural steroid injection) 2 times for ICD9 722.x (Intervertebral disc disorders), but not for ICD9 847.2 (Lumbar sprain).

This effort to translate the evidence into specific auto-authorization protocols is unique, for pre-approval of treatment plans and triage of claims management. Of course, most cases will not meet this ideal protocol, and that is where the many other listings in the Procedure Summary come into play.

- In addition to an extensive internal editorial staff, WLDI retains doctors who are leaders in their fields to act as chapter leads on a compensated basis. WLDI is in the business of publishing evidence based medical guidelines, and does not rely solely on volunteer contributors, as do many medical specialty guidelines. Unlike volunteers who may have other priorities, these WLDI editors are incentivized to focus their efforts on one objective – creating the highest quality guideline.

- As new studies become available from peer-reviewed medical journals, they are ranked and weighted accordingly based on the WLDI evidence-ranking system: [http://www.disabilitydurations.com/ExplanationofMedicalLiteratureRatings.htm](http://www.disabilitydurations.com/ExplanationofMedicalLiteratureRatings.htm)

- New studies are referenced in the guidelines as they are published. If studies suggest changes in guideline recommendations, these are approved by appropriate medical chapter leads. See the [ODG Editorial Advisory Board](#).

- Potential impact on the recommendations is first outlined and summarized by internal medical editorial staff, then forwarded on for internal audit by the respective chapter leads (doctors who are leaders in the field working on a compensated basis) who draft any changes.

- Many, but not all, of the ODG contributors are listed on the ODG Editorial Advisory Board. Of those 80-90 doctors on the Board, an increasing number are working for WLDI on a compensated basis, especially the current chapter leads, so WLDI can have more demand on their time, but others still make substantial contributions only on an honorary basis, because that is the way they prefer to work. Also, increasingly in recent years, WLDI receives editorial input from many others who are not listed on the board.
These contributors include ODG subscribers, state jurisdictional representatives, medical specialty societies, and product companies. The most common source has been ODG subscribers since WLDI encourages Helpdesk comments/suggestions/questions. These people are not listed on the ODG Editorial Advisory Board, either because they never asked to be, or because they felt there may be an appearance of a conflict (for example, large clients of ODG, state decision-makers, manufacturers, etc.). ODG represents all medical specialties since WLDI looks at all evidence for all specialties, and WLDI receives input from all specialties, including specialties that may not be represented on the ODG Editorial Advisory Board.

- This process highlights a unique strength of ODG Treatment. Each treatment guideline summary and subsequent recommendation in ODG is hyper-linked into the studies on which it is based, in abstract form, which have been ranked, highlighted and indexed. This accountability and transparency in ODG lets users evaluate the strength of medical evidence behind guideline recommendations on their own. Then, if they disagree with the ODG rating of a study, the ODG interpretation of a study, or if they think ODG has overlooked a specific study, they are encouraged to provide their feedback to the ODG authors, and these comments are then reviewed and reflected in the guidelines as appropriate. The editorial effort behind ODG Treatment is an open process, and its success is based on its reputation for being (1) unique in taking evidence-based guidelines to their logical end point, with the conclusions linked directly to the evidence in the studies and references; (2) continuously updated reflecting the findings of new studies as they are conducted and released so subscribers are always up to date; (3) comprehensive, covering all types of treatments and the relevant studies; and (4) independent and multidisciplinary in scope. (See “The Unique and Major Advantages ODG” at www.odg-disability.com/Advantages of Official Disability Guidelines.pdf.)

Other Considerations in Formulating the Recommendations
- Health Benefits (long and short term)
- Side effects
- Risks
- Restoration of function
(Note: Restoration of function is a driving force for many recommendations, because as the evidence indicates, it is associated with pain relief, health benefits, quality of life, patient satisfaction and limited risk.)

Review by Experts
- Prior to publication, members of the ODG Editorial Advisory Board as well as select organizations and individuals making up a cross-section of medical specialties and typical end-users externally review ODG Treatment in Workers Comp. This same review process is continued on an annual basis.
- ODG has met the stringent criteria of the Federal Agency for Healthcare Research & Quality (AHRQ), and has been accepted for inclusion in the National Guidelines Clearinghouse (NGC), located at www.guidelines.gov. For a listing of guidelines accepted, go to: http://www.guideline.gov/browse/DisplayOrganization.aspx?org_id=1316
Provider Feedback

- Medical providers support these guidelines because they will know up front that they will get paid for treatments consistent with the guidelines, and the recommendations in ODG lack ambiguity and eliminate the need for any delay in treating injured workers.
- Medical providers are comfortable with ODG, because the publisher, Work Loss Data Institute, is independent of any single provider group, representing all medical specialties.
- ODG is clearly evidence-based, with conclusions linked to the related medical studies, which are provided in abstract form, highlighted, rated and indexed.
- ODG is continuously updated reflecting the findings of new studies as they are conducted and published in peer-reviewed journals.
- After adoption by workers’ compensation jurisdictions in several other states, ODG has shown proven results that benefit all stakeholders.

Use of the WLDI analysis of medical studies by other Treatment Guidelines

- The ODG Treatment Evidence Base, including WLDI’s review and summaries of studies in abstract form, which have been ranked, highlighted and indexed, were provided under contract to the American College of Occupational and Environmental Medicine on April 15, 2002, as the medical evidence base used in creating the ACOEM Practice Guidelines, 2nd Edition, published in December 2003. Note: While the studies were provided by WLDI, the recommendations in the ACOEM Practice Guidelines were authored by ACOEM, and not WLDI.
- Also provided under contract to the Council on Chiropractic Guidelines and Practice Parameters (CCGPP) on June 19, 2004, as the medical evidence base to be used in creating the CCGPP Best Practices For Chiropractic, to be published in January 2007. Note: While the studies were provided by WLDI, the recommendations in the CCGPP Guidelines will be authored by CCGPP, and not WLDI.
Evidence-Based Methodology

- **Official Disability Guidelines** is based on actual reported data from the annual CDC National Health Interview Survey (NHIS), the BLS Survey of Occupational Injuries and Illnesses (SOII), and over 2 million medical records from actual workers' compensation claims. This includes actual observed case data - rather than government survey "patient recollection" data. All data is tracked by ICD-9-CM code and not just general body part.
  - NHIS is one of the oldest, most respected national health surveys in the U.S., in continuous operation since July of 1957 and the principle data collection program for the National Center for Health Statistics under the CDC.
  - NHIS data are used widely throughout the Department of Health and Human Services to monitor trends in illness and disability, and both the public and private health research communities for epidemiological data analysis.
  - The Bureau of the Census under a contractual agreement is the NHIS data collection agent.
  - NHIS uses about 400 interviewers, trained and directed by health survey supervisors in each of the 12 Bureau of the Census Regional Offices. The supervisors are career Civil Service employees whose primary responsibility is NHIS.
  - The personal household interviewers are selected through an examination and testing process, receiving thorough training in interviewing procedures and concepts and procedures unique to NHIS. The questionnaire is conducted using a computer assisted personal interviewer (CAPI), administered using a laptop computer where interviewers enter responses directly into the computer during the interview, which offers distinct advantages in terms of timeliness of the data and improved data quality.
  - SOII is a Federal/State program in which employer's reports are collected annually from over 176,000 private industry establishments and processed by State agencies cooperating with the Bureau of Labor Statistics.
  - SOII serves to track epidemiological records, trends and statistics on occupational safety & health, especially time away from work due to illness/injury.
  - Summary information on the number of injuries and illnesses is copied directly from employer record keeping logs to the survey questionnaire.
  - Injuries/illnesses logged by employers conform to definitions and record keeping guidelines set by OSHA, U.S. Dept of Labor.
  - Employers keep separate counts by type of injury or illness and also identify and quantify for each whether a case involved days away from work or days of restricted work activity, or both, beyond the date of injury or onset of illness.
  - Note: A recent study has suggested that the Bureau of Labor Statistics undercounts the number of illnesses and injuries that occur in U.S. workplaces each year, largely...
as a result of underreporting by employers. While of concern, this should not impact
the disability duration data in ODG, as outlined below:

- Any possible undercounting will not effect expected duration on a per-injury basis, which is how the OSHA data is utilized in ODG.
- The undercounting is an important safety issue, not a disability duration issue. WLDI uses OSHA data (among other sources including client claims data and the CDC) to estimate expected disability duration for each condition on a per-injury basis. ODG is not using this data to gauge workplace safety (the likelihood of an injury).
- Undercounting does not affect expected time away from work on a per-injury basis, although it does make workplaces appear safer than they are in reality. For example, whether you have 246,000 back strains or twice that, the average duration would likely be the same.
- This undercounting would affect all sources of data. If employers are hiding injuries from OSHA (to keep insurance premiums down), then they are also hiding these injuries from their workers' comp insurance carriers. Therefore any disability duration database based on claims data would also be undercounting.
- Since 2003 all of the ODG disability duration data has been validated and enhanced by actual client claims data, and this is reflected in the Return-To-Work Summary Guidelines (Claims data Midrange and At-Risk) as well as the Return-To-Work "Best Practice" Guidelines, the RTW Claims Data (Calendar-days away from work by decile), and the RTW Post Surgery (Calendar-days away from work by decile).

(Note: Survey instruments were chosen for use as part of the ODG database because they are population-based and appropriately stratified, and therefore not restricted to any single or limited subdivision available from private claims entities. Furthermore, SOII and NHIS are the most credible and comprehensive workforce health survey instruments available, containing a wealth of information on time away from work due to illness and injury. They are referred to as “the most direct form of evidence that can be offered in court” under the newly revised Federal Rules of Evidence. The result is that ODG is independent, fair and defensible.

- **Official Disability Guidelines** also includes client data, based on almost 2 million claims from WLDI’s multi-year multi-state workers comp database, covering almost 50 million paid invoices on medical encounters for those claims. These medical costs represent a total of $10.0 billion dollars in actual incurred costs, and the indemnity costs represent a total of $7.2 billion dollars in actual incurred costs, for a total of over $17 billion of workers’ compensation costs, and they are presented in the table, entitled “Workers’ Comp Costs per Claim.”

Reach
• The ODG product line is used in all 50 states and internationally by over 30,000 of the world's best and brightest (employers, insurers, TPA's, healthcare providers and state & federal workers’ compensation authorities), who are realizing the immense benefits in taking evidence-based medicine to its logical endpoint by using ODG to effectively manage utilization and return-to-work following illness and injury.

Use of the ODG Disability Duration data by other Guideline Publishers

• In 2003 Guidelines Committee members of the American College of Occupational and Environmental Medicine (ACOEM) decided to incorporate normative disability duration data from ODG in the 2nd edition of the ACOEM Practice Guidelines, published in December 2003. This is the only return-to-work disability duration data from an external source that is contained in the ACOEM Practice Guidelines.

• In early 2004, after an extensive evaluation, McKesson Health Solutions entered into an agreement with Work Loss Data Institute whereby ODG would provide all of the disability duration data in the McKesson InterQual treatment guidelines. Prior to this the McKesson Guidelines had an agreement with the Medical Disability Advisor.

A Supplemental Outline: ODG Background, Features & Major Advantages


• Evidence-Based - disability duration norms from actual experience data from federal government databases, including OSHA BLS (Occupational Safety and Health Administration – Bureau of Labor Statistics) Survey of Occupational Injuries and Illnesses and CDC NCHS (Centers for Disease Control and Prevention, National Center for Health Statistics) National Health Interview Survey.

• Covers Every Reportable Condition, all 10,000 ICD9 codes (including those seen in workers’ comp, STD, LTD, sick leave, auto-liability, etc).

• Designed to enhance a timely and appropriate return-to-work for workers suffering from illness or injury. ODG allows for the systematic determination of appropriate disability duration for each case within a condition based on key indicators of severity, treatment and job

• Fair to employees and defensible by management. The raw data from CDC and OSHA is interpreted for end-users in the Summary and Best Practice Guidelines, and remains in graphical form as supportive documentation, where it is referred to as “the most direct form of evidence that can be offered in court” under the Federal Rules of Evidence as amended in December 2000.

• Reviewed by the ODG Editorial Advisory Board. Updated and fine-tuned annually based on review of new and existing data from CDC and OSHA, along with the experience of over 80 of the most revered professionals in occupational health and disability medicine, including current Senior Medical Editor, Charles W. Kennedy Jr. MD, a founding member of the Evidence-Analysis Committee for the American Academy of Orthopaedic Surgeons and a member of the Board of Directors of the American Academy of Disability Evaluating Physicians.
- **ODG Allows Benchmarking Against National Norms** using the ODG Summary Guidelines, which are available for virtually every reportable condition. These benchmarking methods (including “Grading RTW 101” & “Outlier Percentage”) have become the standard for employers and their vendors, as a way to compare outcomes to national data on a consistent basis.

- **ODG includes** Descriptions; Links to other resources (i.e. State Guidelines, Merck Manual, etc); Physical Therapy and Chiropractic Guidelines; Decile Tables for Benchmarking; Age Adjustment Multipliers; and Causality Indicators for determining work-relatedness

- **Integrated with ODG Treatment Guidelines**

- **ODG uses the term "At-Risk"** because that disability duration is employed by ODG clients to trigger treatment plans, and "Midrange" or median or average is used to set normative expectations. (ODG does not use the terms "Optimum" or "Maximum", since “Maximum” would be too late to trigger anything, and the term “Optimum” does not encourage acceptance by injured workers as a norm.)

- **ODG identifies procedure disability durations within the diagnosis** (in the Return-To-Work "Best Practice" Guidelines pathways), because the expected length of disability also depends on the diagnosis that the procedure is attempting to cure. For example, the expected RTW in ODG after spinal fusion for lumbar disc disorder and manual work is 140 days, but after spinal fusion for cervical disc disorder and manual work it is 77 days in ODG, a big difference.

- **ODG is the most commonly used RTW guideline.** As far as prevalence of use within Texas, ROC did a survey in July 2003 called, "Return-to-Work Related Communications: Employer, Health Care Provider, and Insurance Carrier Perspectives," that showed that twice as many providers in Texas were using ODG RTW guidelines compared to any other RTW guideline at that time (and ODG has grown more rapidly since then). See Table 10, "Percentage of Health Care Providers Using Disability Duration Guidelines" on page 36 of the report accessible on TDI’s Website, where it shows that 3% of Texas providers were using the MDA and 6% were using ODG. [Link](http://www.tdi.state.tx.us/wc/regulation/roc/pdf/rtwreport.pdf)

- **New ODG includes workers’ compensation cost data** based on almost 2 million claims from WLDI’s multi-year multi-state workers comp database, and it covers almost 50 million paid invoices on medical encounters for those claims.

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Exhibit F

Explanation of Medical Literature Ratings
(Ratings “1a” through “11c” noted under summary of each study)
(This is posted online at http://www.odg-twc.com/odgtwc/ExplanationofMedicalLiteratureRatings.htm)

Back to ODG - TWC Index

Ranking by Type of Evidence:
(click on links to go to explanation)
STUDIES
1. Systematic Review/Meta-Analysis
2. Controlled Trial – Randomized (RCT) or Controlled
3. Cohort Study - Prospective or Retrospective
4. Case Series
5. Unstructured Review
OTHER:
6. Nationally Recognized Treatment Guideline (from guidelines.gov)
7. State Treatment Guideline
8. Other Treatment Guideline
9. Textbook
10. Conference Proceedings/Presentation Slides
11. Case Reports and Descriptions

Ranking by Quality within Type of Evidence:
(click on links to go to explanation)
a. High Quality
b. Medium Quality
c. Low Quality

Ranking by Type of Evidence

1. Systematic Review/Meta-Analysis
Systematic Reviews: Written by reviewers who use explicit and rigorous methods to identify, critically appraise, and synthesize relevant studies from the published medical research. They use the process of systematically locating, appraising and synthesizing evidence from scientific studies in order to obtain a reliable overview. The function of a systematic review is: 1) to summarize the literature and 2) to provide new information that may not be readily apparent from individual studies where the effects are small, but become apparent in when the data from many studies are pooled together. Example: Cochrane Database of Systematic Reviews.
Meta-analysis: A type of systematic review that is an overview and also uses quantitative methods to summarize the results. A quantitative method of combining the results of independent studies (usually drawn from the published literature) and synthesizing summaries and conclusions which may be used to evaluate therapeutic effectiveness, plan new studies, etc., with application chiefly in the areas of research and medicine. Any study with the Level 1 ranking in
ODG must have been accepted for publication in a peer reviewed journal, and that journal must be one of the journals accepted for inclusion in MEDLINE® by the National Library of Medicine. For this Journal Selection Criteria, see www.nlm.nih.gov/pubs/factsheets/jsel.html. Unpublished studies, or studies in magazines that do not publish original research, would not receive this ranking.

2. Controlled Trial – Randomized (RCT) or Controlled
These are analytical experimental studies, where variables can be better controlled on a prospective basis. In a RCT (Randomized Controlled Clinical Trial), a group of patients is randomized into an experimental group and a control group. These groups are followed up for the variables/outcomes of interest. Advantages: Unbiased distribution of confounders; Blinding more likely; Randomization facilitates statistical analysis. Disadvantages: Expensive: time and money; Volunteer selection bias; Ethically problematic at times. Any study with the Level 2 ranking in ODG must have been accepted for publication in a peer reviewed journal, and that journal must be one of the journals accepted for inclusion in MEDLINE® by the National Library of Medicine. Unpublished studies, or studies in magazines that do not publish original research, would not receive this ranking.

3. Cohort Study - Prospective or Retrospective
Analytical observational studies involving identification of two groups (cohorts) of patients, one which did receive the exposure of interest, and one which did not, and following these cohorts forward for the outcome of interest. Advantages: Ethically safe; Subjects can be matched; Can establish timing and direction of events; Eligibility criteria and outcome assessments can be standardized; Administratively easier and cheaper than RCT. Disadvantages: Controls may be difficult to identify; Exposure may be linked to a hidden confounder; Blinding is difficult; Randomization not present; For rare disease, large sample sizes or long follow-up necessary. Any study with the Level 3 ranking in ODG must have been accepted for publication in a peer reviewed journal, and that journal must be one of the journals accepted for inclusion in MEDLINE® by the National Library of Medicine.

4. Case Series
Analytical observational studies involving identifying groups of patients who have the outcome or treatment of interest (cases) and quantifying the results. Ideally, control patients without the same outcome are also tracked, looking back to see if they had the exposure of interest. (The use of controls would influence the quality rating of a Case Series.) Generally, since the minimum ODG quality rating for studies (“c”) requires at least 10 cases, there must be 10 or more cases for a study to be classified as a Case Series, and otherwise the article would be classified in ODG as Case Reports and Descriptions. Advantages of Case Series: Quick and cheap; Only feasible method for very rare disorders or those with long lag between exposure and outcome; Fewer subjects needed than cross-sectional studies. Disadvantages: Reliance on recall or records to determine exposure status; Confounders; Selection of control groups is difficult; Potential bias: recall, selection. Any study with the Level 4 ranking in ODG must have been accepted for publication in a peer reviewed journal, and that journal must be one of the journals accepted for inclusion in MEDLINE® by the National Library of Medicine.

5. Unstructured Review
Descriptive (versus analytical) and observational (versus experimental) studies, written by reviewers who describe current practice as well as relevant studies from the published medical research, with no attempt to pool the results analytically. Compared to Systematic Reviews, an Unstructured Review makes little attempt to quantify outcomes based on the body of evidence described. Any study with the Level 5 ranking in ODG must have been accepted for publication in a peer reviewed journal, and that journal must be one of the journals accepted for inclusion in MEDLINE® by the National Library of Medicine.

6. Nationally Recognized Treatment Guideline (from guidelines.gov)

Accepted for inclusion in the National Guideline Clearinghouse by the Federal Agency for Healthcare Research & Quality (AHRQ), which requires that the guideline recommendations be based on a systematic literature search and review of scientific studies published in peer reviewed journals, and revised on a regular basis to maintain currency with new studies.

7. State Treatment Guideline

Treatment guidelines created for use in a specific state in the U.S., or for use in a province in Canada, or for use by another governmental entity, and they have the backing of the respective jurisdictional or governmental authority.

8. Other Treatment Guideline

Other treatment guidelines. These are typically national treatment guidelines not accepted in the National Guideline Clearinghouse, in many cases because the guideline publishers have chosen not to apply for inclusion (for example, commercial guidelines such as Milliman, McKesson, InterQual, etc.), or because they are private guidelines created for use under the terms of a specific health insurance policy (for example, Blue Cross, Medicare, Aetna, Cigna, United Healthcare, etc.). Since studies by healthcare insurers are generally given a rating of Level 8, they are not characterized in ODG as among the highest quality references when there are numerous other studies available. However, when there are limited studies available with the high quality ratings, it may be necessary to identify other studies that could provide guidance on a subject. In fact, many of the healthcare insurance provider structured reviews are very high quality, they represent a thorough analysis and quantitative weighting of all available evidence on a subject, including unpublished studies that the insurer may have conducted, and these healthcare insurance reviews might even rank as Level 1 if they were published in the peer-reviewed literature and available in MEDLINE®. Furthermore, the fact that a particular treatment is either covered or not covered by healthcare insurance should be relevant to coverage decisions in workers’ compensation.

9. Textbook

Medical reference texts, which may represent standards of practice, but which in and of themselves, are not necessarily evidence based versus consensus based or based primarily on the personal experiences of the authors.
10. Conference Proceedings/Presentation Slides

These are studies that have not been published in peer reviewed journals.

11. Case Reports and Descriptions

Descriptive articles published in the peer reviewed journals covering individual cases, and lacking any comparisons to controls. Generally, since the minimum ODG quality rating for studies (“c”) requires at least 10 cases, there must be 10 or more cases for a study to be classified as a Case Series, and otherwise the article would be classified in ODG as Case Reports and Descriptions. These articles were not included in the evidence base for any treatment guidelines except for the Council on Chiropractic Guidelines for Practice Parameters (CCGPP) chiropractic practice guidelines.

Ranking by Quality within Type of Evidence:

In evaluating clinical trials ODG has adopted the standards from the "Cochrane Handbook for Systematic Reviews of Interventions," as updated in September 2006. (Higgins, 2006) Specific additional criteria used by ODG include the following:

a. High Quality
   Sample size: Generally over 300, but at least 100, depending on other factors below.
   Conflict of interest: Authors and researchers had no financial interest in the product or service being studied.
   Study design: Ideally, blinded. No identifiable bias, including recall bias, confounding factors, selection bias, compliance bias, non-response bias, or measurement bias. If a case series, should be a case control series.
   Statistical significance: 99% Confidence level that the outcomes likelihood ratio will not cross 1.0 (i.e., the p value is .01).

b. Medium Quality
   Sample size: From 20-50 up to 100-300, depending on other factors below.
   Conflict of interest: Authors and researchers had no financial interest in the product or service being studied.
   Study design: No significant bias, including recall bias, confounding factors, selection bias, compliance bias, non-response bias, or measurement bias. If a case series, should be a case control series.
   Statistical significance: 95% Confidence level that the likelihood ratio will not cross 1.0 (i.e., the p value is .05).

c. Low Quality
   Sample size: Generally under 20-50, depending on other factors below, but no less than 10.
   Conflict of interest: Authors and researchers may have had some financial interest in the product or service being studied, even if the sample size was large.
Study design: Some obvious bias, including recall bias, confounding factors, selection bias, compliance bias, non-response bias, or measurement bias.

Statistical significance: Does not meet the 95% Confidence level that the likelihood ratio will not cross 1.0 (i.e., the p value is .05).

Link between evidence and recommendations

*ODG Treatment* is being updated quarterly on the Web. The Contents page indicates the last date updated for each chapter. The hard copy version is published once a year, but this is not recommended since it does not link into the actual studies, and it is not as current as the Web version.

The heart of each chapter in *ODG Treatment* is the "Procedure Summary", which provides a concise synopsis of effectiveness, if any, based on existing medical evidence, hyper-linked directly into the studies on which they are based, in abstract form, which have been ranked, highlighted and indexed. The "Treatment Planning" section identifies the ideal treatment plans that may be followed after illness or injury, based on the "Procedure Summary". "Codes for Automated-Approval" maps procedure codes to ICD-9 diagnosis codes based on the ideal treatment protocol, with a field for “maximum occurrences”, for auto-approval of charges that meet the guideline.

For example, in the Low Back chapter, under Fusion, it says, "Not recommended in the absence of fracture, dislocation, or instability", so the Treatment Protocol does not include fusion. Same for IDET, facet injections, etc., etc. Under Epidural injections, it says, "Recommended as an option prior to surgery when there are radicular signs… and the number of injections should be limited to two...", so the Treatment Protocol for "With Radiculopathy" includes 2 ESI's, and the Codes for Auto Approval includes CPT code 62311 (Epidural steroid injection) 2 times for ICD9 722.x (Intervertebral disc disorders).

This effort to translate the evidence into specific auto-authorization protocols is unique, for pre-approval of treatment plans and triage of claims management. Of course, most cases will not meet this ideal protocol, and that is where the many other listings in the Procedure Summary come into play.

In a recent pilot use of these Codes for Auto Approval reduced medical costs by 64%, cut lost days by 69%, minimized treatment delays for injured workers, and drew considerable praise from providers. (Ohio ODG Pilot, Comp Management, 2005)

6. ASSESSMENT OF STUDY QUALITY

6.0 Quality assessment of studies

Quality assessment of individual studies that are summarized in systematic reviews is necessary to limit bias in conducting the systematic review, gain insight into potential comparisons, and guide interpretation of findings. Factors that warrant assessment are those related to applicability of findings, validity of individual studies, and certain design characteristics that affect interpretation of results. Applicability, which is also called external validity or generalize-ability by some, is related to the definition of the key components of well-formulated questions outlined in section 4. Specifically, whether a review's findings are applicable to a particular population, intervention strategy or outcome is dependent upon the studies selected for review, and on how the people, interventions and outcomes of interest were defined by these studies and the authors (reviewers).

6.1 Validity

In the context of a systematic review, the validity of a study is the extent to which its design and conduct are likely to prevent systematic errors, or bias. An important issue that should not be confused with validity is precision. Precision is a measure of the likelihood of chance effects leading to random errors. It is reflected in the confidence interval around the estimate of effect from each study and the weight given to the results of each study when an overall estimate of effect or weighted average is derived. More precise results are given more weight.

6.2 Sources of bias in trials of healthcare interventions

There are four sources of systematic bias in trials of the effects of healthcare: selection bias, performance bias, attrition bias and detection bias.

6.3 Selection bias

Participants and those who recruit should remain unaware of next assignment in sequence. Empirical research has shown that lack of allocation concealment is associated with bias. For that reason trials should use approaches such as allocation by a central office unaware of subject characteristics, pre-numbered or coded identical containers which are administered serially to participants, or an on-site computer system combined with allocations kept in an unreadable file that can be accessed only after the characteristics of enrolled participants have been entered.

6.4 Performance bias

This refers to systematic differences in the care provided to the participants in the comparison groups other than the intervention under investigation. To protect against unintended differences in care and placebo effects, those providing and receiving care can be "blinded" so that they did not know the group to which the recipients of care have been allocated.

6.5 Attrition bias

This refers to systematic differences between comparison groups in the loss of participants from the study. The study should consider how losses of participants (withdrawals, dropouts and protocol deviations) are handled.

6.6 Detection bias

This refers to systematic differences between the comparison groups in outcome assessment.

Rating: 1a
## Exhibit G

### Guideline Comparisons

<table>
<thead>
<tr>
<th></th>
<th>ODG</th>
<th>ACOEM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Link to evidence</strong></td>
<td>Direct hyperlinks</td>
<td>Indirect list without links</td>
</tr>
<tr>
<td><strong>2. Comprehensive</strong></td>
<td>99% diagnoses, 95% treatments</td>
<td>70% diagnoses, 50% treatments</td>
</tr>
<tr>
<td><strong>3. Updating</strong></td>
<td>Monthly</td>
<td>Every 3-6 years</td>
</tr>
<tr>
<td><strong>4. Organization</strong></td>
<td>Guideline publisher</td>
<td>Medical society (occ docs)</td>
</tr>
<tr>
<td><strong>5. Objective</strong></td>
<td>Publishing success</td>
<td>Member success</td>
</tr>
<tr>
<td><strong>6. Independence</strong></td>
<td>No medical specialty</td>
<td>One provider type as members</td>
</tr>
<tr>
<td><strong>7. Integrated</strong></td>
<td>Both RTW &amp; treatment</td>
<td>Treatment only</td>
</tr>
<tr>
<td><strong>8. UR Codes</strong></td>
<td>Yes</td>
<td>Being added</td>
</tr>
<tr>
<td><strong>9. Claims integration</strong></td>
<td>Yes</td>
<td>Under development</td>
</tr>
<tr>
<td><strong>10. Ease of use</strong></td>
<td>Easy to navigate website</td>
<td>Focus on books, not website</td>
</tr>
<tr>
<td><strong>11. Training</strong></td>
<td>Free options</td>
<td>In-person courses</td>
</tr>
<tr>
<td><strong>12. Cost</strong></td>
<td>Adoption/quantity pricing</td>
<td>Member pricing</td>
</tr>
<tr>
<td><strong>13. AHRQ accepted</strong></td>
<td>Yes, from beginning</td>
<td>Partial</td>
</tr>
<tr>
<td><strong>14. Proven</strong></td>
<td>23 states, all large payers</td>
<td>2 states, respected elsewhere</td>
</tr>
</tbody>
</table>

**Conclusion:** Two excellent national choices are available, both evidence-based, for use individually or together on a complementary basis
Exhibit I

Adelaide Health Technology Assessment (AHTA)
WorkCover S.A.

**Systematic review of clinical practice guidelines on the management of acute/subacute soft tissue injuries to the low back**

- AHTA searched and reviewed guidelines worldwide, narrow to 27 using AGREE Instrument
- Threshold of 80% in Rigor Scores to identify higher quality
- Used ADAPTE Collaboration protocol, “consistency between recommendations and underlying evidence”
- Colorado Guides determined to be "Purely Consensus Guidelines" (pg 87) and disqualified
- ODG rated #2 worldwide after Canadian Diagnostic Imaging Guideline (Bussieres ‘08), which “covers only on a narrow area of diagnostic imaging”
- ODG identified as “most comprehensive and up-to-date guideline worldwide for all medical specialist groups”
Exhibit J

ODG Guiding Principles

To ensure that ODG succeeds in improving outcomes for patients, ODG adheres to nine Guiding Principles, as listed below:

1. **Evidence Based.** ODG is based on scientific evidence. This evidence drives decisions to recommend one treatment or test over another. The ODG guidelines include recommendations intended to optimize patient care that are informed by systematic reviews of evidence, with a ranking system that gives higher weighting to higher quality evidence. Systematic reviews of high quality randomized controlled trials are given the most weight in ODG.

2. **Total Body of Evidence.** ODG will consider the entire body of evidence, while giving higher weight to the best quality evidence. However, when high quality evidence is not available for a particular treatment or test, ODG will consider lower quality evidence in order to make a recommendation that can help improve patient care. Along the same lines, an absence of high quality evidence is not necessarily by itself evidence that a treatment modality is ineffective.

3. **Harms.** ODG recommendations are based on an assessment of the benefits and harms of alternative care options. For each recommendation in ODG, there is a clear description of potential benefits and harms, a summary of relevant available evidence (and gaps), description of the quality (including applicability), quantity (including completeness), and consistency of the available evidence. ODG is updated as new evidence is available, in an effort to continually optimize patient care by assessing the latest treatments today’s science has to offer.

4. **Clarity.** The ODG recommendations can be used to make current patient care decisions. The purpose of ODG is not to recommend that further studies would be helpful, although that is often the case, but to provide current guidance based on what we know, concerning whether a specific procedure is recommended or not recommended, and if recommended, then for whom. ODG describes and summarizes the entire body of medical evidence as support for the overall ODG recommendation on a topic, rather than using a simplistic alphanumeric rating system for the body of evidence. This is important for utilization review and in states that have mandated ODG, where clarity is essential, but providers still have an opportunity to fully understand the complete body of evidence along with the relative quality of studies in support of that.

5. **Functional Improvement.** Treatments recommended in ODG should help patients function in their everyday lives, and not merely address symptoms. The purpose of treating pain is to help patients get on with their lives and their daily activities. Restoration of function should be the primary measure of treatment success. Functional improvement measures should be used over the course of treatment to demonstrate progress in return to functionality, and to justify further use of ongoing treatment methods.

6. **Return to Work.** ODG has a return-to-work orientation. Prolonged absence from work due to temporary disability has been shown to be detrimental to the physical, psychological and
financial health of individuals. The risks of not working are substantial. Returning to work or some type of functional activity is therapeutic, and part of the healing process.

7. Less Invasive. In ODG, more invasive tests or interventions require stronger evidence of efficacy. In non-emergency situations, invasive treatment should be preceded by adequate conservative treatment and may be performed if conservative treatment does not improve the health problem.

8. Cost. More costly tests or interventions should require stronger evidence of efficacy. If one treatment is no better than another, but costs significantly more, ODG would take that into consideration, and not recommend it as a first-line choice over the other option. While cost is not as important as medical outcomes, it is a consideration if outcomes are no better than equal, and there is a major increase in cost. In those cases, there is no reason to drive up costs if there are no increased patient benefits.

9. Informed Patient. Treatment and testing decisions should be collaborations between the patient and the clinician, with full disclosure of benefits and risks. Shared decision making is an approach to care that seeks to fully inform patients about the risks and benefits of available treatments and engage them as participants in decisions about treatments selected.