ODG: Evidence-Based Medicine to Improve Workers’ Comp Outcomes

Medical, RTW & Reserve Management Using ODG

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Part I: PowerPoint

- Why are workers’ comp costs so high?
  - The problem (many) and the solution (one: EBM)

- Company background and full disclosure
  - Evidence-based medicine (EBM), workers’ comp and ODG
  - Outcomes from the use of ODG

- Taking control of expenditures and RTW
  - RTW: What factors are most important?
  - Automated EBM and preauthorization

Part II: ODG Demo & Discussion
The Wild West of Medicine

- WC is the only area of medicine where health encounters aren’t completely scripted
  - In general health, insurance companies set health policy
  - Because of the “grand bargain”, workers’ comp payers cannot set their own health policy
  - Also no copayments, deductibles, coinsurance
  - Result is both excessive utilization, and too much UR

- Solution: Regulators set health policy at the state level using evidence-based treatment guidelines
EBM as a Medical Management Tool

- UR Guidelines must serve DUAL MANDATE

Safeguard and expedite access to quality care

Limit excessive or inappropriate utilization
Adopting Guidelines at the State Level

Evidence-Based Medicine (ODG)

- Safeguards access to multidisciplinary, quality care
- Reduces uncertainty
- Limits excessive / inappropriate utilization

- Injured workers receive early access to effective treatment
- Doctors treat quickly and receive timely payment for services
- Minimizes unnecessary UR, delays, disputes, denials and friction

Healthy workforce, timely return-to-work, low rates, good ROI, efficient system
Background on WLDI

- Independent database development company focused on workplace health, absence & productivity
  - Founded in 1995, offices in Texas and California
- Publisher of ODG Product Line, now 20th edition
  - Evidence-based medical management and RTW guidelines
  - “The only way to achieve real & lasting cost-savings in workers’ comp is through the delivery of quality and timely care”
  - Most widely used work injury guidelines in the world
- Decision-support and automation tools
  - RTW Prescription, UR Advisor, Drug Formulary, NDC Advisor, Reserve, Comorbidity and MED Calculators
Evidence-Based Medicine (EBM)

- EBM is healthcare based on clinical studies of what works best and what does not
  - Systematic reviews, meta-analyses, RCT’s, cohort studies
  - Requires (1) transparent literature review (2) evidence-ranking
  - EBM does not vary from state-to-state
- EBM is not healthcare based on opinion, consensus, personal observation or tradition
- Two guidelines exist, evidence- and consensus- based
  - Not interchangeable; not created equal
  - Device lobby pushing for state-specific panels, changing the process in stealth from EBM to consensus
What is the relationship between workers’ comp, EBM, and ODG?
If treatment guidelines are like speed limits than…
Guidelines that are too restrictive cause unnecessary delays, disputes, denials and friction, preventing workers from getting needed medical care, driving good doctors out of the system.
Bad guidelines are worse than having no guidelines. If you set speed limits at 150 mph, congratulations, you don’t any speed limits, and have rendered existing controls impotent.
Set them just right…

Guidelines should use UR judiciously, auto-approving care while limiting excessive/inappropriate utilization. Expertise in guideline development/delivery always comes with a track record.
Lesson: Ten years into the state guideline story, there should be no more surprises.  
Lesson to regulators:  
Do your homework!!!
ODG Outcomes

- Ohio (adopts ODG in 2003)
  - 07/05 average medical costs/claim down 60% ($8k to $3k)
  - 07/05 average lost-time/claim down 66% (123 to 42)
  - Treatment delay down 77% (#1 benefit: early access to care)
  - 2009: Deloitte Consulting reaffirms ODG success
  - 84% Provider Approval (4.18 on scale of five)

- North Dakota (adopts ODG in 2005)
  - Work comp premiums (already lowest in nation) drop 40%
  - $52 million in premium dividend credits returned to employers
  - “One of largest direct cash infusions into ND economy”
  - Perennial top ranked State in the Oregon WC Ranking
ODG Outcomes

- Texas (adopts ODG 2007)
  - Work comp premiums down 49%
  - Average lost-time down 34%
  - Median disability duration down 20%
  - RTW rates up across board (acute, sub-acute, chronic)
  - Medical/drug costs both down 30% (opioid costs down 81%)
  - Access to care up 42%
  - NASI study: Texas new lowest cost state in the U.S.

- Recent ODG adoptions: KS, OK, WY, NM, MI proposal

- No state to adopt ODG has changed course
  - All continue under original intent or strengthened ODG rules
Texas experience: Effects on RTW rates

Comparisons of RTW rates pre-ODG vs. post-ODG

- Within three months of injury, RTW rate is significantly higher for Post-ODG sample
- RTW rates also higher within six months after injury, and overall

(Impacts of the 2007 Adoption of ODG, Workers’ Compensation Research & Evaluation Group, Texas Department of Insurance)
Setting the Standard
Reforms on the Texas Workers’ Compensation System,

Section 7. Return-to-Work Outcomes

(ODG adopted in Texas in 2006, effective May 1st, 2007)

Mean Days off Work for Injured Employees Who Returned to Work

<table>
<thead>
<tr>
<th>Injury Year</th>
<th>Mean days off work</th>
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<tbody>
<tr>
<td>2006</td>
<td>86</td>
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<tr>
<td>2007</td>
<td>75</td>
</tr>
<tr>
<td>2008</td>
<td>57</td>
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</table>

-13%
-34%
State Report Cards for WC: Texas

Texas (TX) — Tier III Ranking

<table>
<thead>
<tr>
<th>Texas (TX)</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
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<tbody>
<tr>
<td>Incidence Rates</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Cases Missing Work</td>
<td>30</td>
<td>25</td>
<td>20</td>
<td>25</td>
<td>26</td>
<td>16</td>
<td>21</td>
<td>18</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Median Disability Durations</td>
<td>36</td>
<td>39</td>
<td>42</td>
<td>38</td>
<td>34</td>
<td>39</td>
<td>36</td>
<td>39</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Delayed Recovery Rate</td>
<td>35</td>
<td>40</td>
<td>42</td>
<td>39</td>
<td>37</td>
<td>40</td>
<td>36</td>
<td>41</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Low Back Strain</td>
<td>39</td>
<td>43</td>
<td>42</td>
<td>42</td>
<td>37</td>
<td>41</td>
<td>38</td>
<td>30</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Overall ranking</td>
<td>29.8</td>
<td>31.0</td>
<td>30.4</td>
<td>30.6</td>
<td>27.6</td>
<td>27.8</td>
<td>27.0</td>
<td>26.0</td>
<td>12.2</td>
<td>12.8</td>
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<td>Grade</td>
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<td>F</td>
<td>F</td>
<td>D-</td>
<td>D</td>
<td>D+</td>
<td>C-</td>
<td>B-</td>
<td>B-</td>
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<td>Grade Codes</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>8</td>
</tr>
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</table>

[Graph of Texas data with Grade and Linear (Grade) plots]
TDI Medical Denial Rates post-ODG

Figure 5.11: Percentage of Professional Medical Services Denied for the Top 25 Workers’ Compensation Insurance Carriers, by Service Year

Denial rates, along with workers’ comp premiums, have been cut in half.

Note: Denial rates for 2005 were excluded due to missing data. Source: Texas Department of Insurance, Workers’ Compensation Research and Evaluation Group, 2014.
What are they saying?

“Premiums rates have dropped, RTW rates have improved, and access to care has improved across all specialties.”

- Texas WC Commissioner Rod Borderlon

"This is a fine piece of legislation. It will help us not only retain jobs, but attract new industries while protecting the injured worker."

- Oklahoma Governor Mary Fallin

"We believe that California's injured workers and the workers' comp healthcare system as a whole would be best served by adoption of the most current version of Official Disability Guidelines (ODG)."

- California Senator Carol Migden, Chair of Committee on Labor & Industry
What are they saying?

"We found ODG to be very affordable, current, and easy to access. They are evidence based, and have been a home run!"

-Diane Ritucci, Connecticut Workers' Comp Trust

"ODG is a 'win-win' for policyholders and employees. The primary objective is improved patient outcomes and RTW through functional restoration, supporting best medical and financial outcomes for all."

-Ted Jeffries, Missouri EMI

"We appreciate the time and hard work looking beyond the ACOEM guidelines to create a more comprehensive treatment schedule. CMA is generally very supportive of the California DWC's use of ODG."

-Frank Navarro, California Medical Association
Time Away from Work vs. Cost

- Total costs are an *EXPONENTIAL* function of disability duration / return-to-work
What factors drive RTW?

- Getting a release to work from the physician
  ...AND...
- Availability of modified duty
- Ultimate measure of post-injury success in workers’ comp is disability duration
  - Best thing you can do for injured workers is keep them working or bring them back ASAP
  - Make the medical-only claim your best friend
  - Keep indemnity claims from becoming outliers
- Make **doctor’s job easy**: write release for them
847.2 Lumbar sprains and strains

**Return-To-Work Summary Guidelines**

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Midrange</th>
<th>At-Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claims data</td>
<td>17 days</td>
<td>39 days</td>
</tr>
<tr>
<td>All absences</td>
<td>10 days</td>
<td>36 days</td>
</tr>
</tbody>
</table>

**Return-To-Work "Best Practice" Guidelines**

- **Mild** (grade I), clerical/modified work: **0 days**
- **Mild**, manual heavy manual work: 7-10 days
- **Severe** (grade II-III), clerical/modified work: **0-3 days**
- **Severe**, manual work: 14-17 days
- **Severe**, heavy manual work: 35 days
- With radicular signs, see 722.1 (disc disorders)
- Obesity comorbidity (BMI ≥ 30), multiply by: 1.31

**Capabilities & Activity Modifications for Restricted Work:**

- **Clerical/modified work:** Lifting with knees (with a straight back, no stooping) not more than 5 lbs up to 3 times/hr; squatting up to 4 times/hr; standing or walking with a 5-minute break at least every 20 minutes; sitting with a 5-minute break every 30 minutes; no extremes of extension or flexion; no extremes of twisting; no climbing ladders; driving car only up to 2 hrs/day.
- **Manual work:** Lifting with knees (with a straight back) not more than 25 lbs up to 15 times/hr; squatting up to 16 times/hr; standing or walking with a 10-minute break at least every 1-2 hours; sitting with a 10-minute break every 1-2 hours; extremes of flexion or extension allowed up to 12 times/hr; extremes of twisting allowed up to 16 times/hr; climbing ladders allowed up to 25 runs 6 times/hr; driving car or light truck up to 4 hrs/day; driving heavy truck up to 4 hrs/day.

**Export to Toolbox**

- RTW Prescription
- UR Advisor
- Reserve Calculator
- Comorbidity Calculator

**Description:** MedLineConnect. Injury to the ligament (sprain) or to the muscle (strain) of the lower back. Sprains and strains are usually accompanied by a tearing of the tissue as well as symptoms of pain, limited motion, swelling, bruising, and/or a change in sensation.

**Other names:** Lower back sprain, Lower back strain

**ICD-10 Code:** S33.5

**ODG Treatment** Procedure Summary (not all recommended): Activity restrictions, Acupuncture, Adhesiolysis, Aerobic exercise, Age adjustment factors, Annuloplasty (IDET);
From the Desk of:
Jay Jackson, Claims Mgr.
555-555-1212

Claim Number: 123456
Employer Name: ABC, Inc.
Employee Name: John Doe
Physician Name: Dr. James Andrews

Diagnosis: 847.2 (Lumbar sprains and strains)

Comments:
Dr. Andrews: Please see enclosed ODG guidelines for return-to-work, review and modify as needed for Mr. Doe. I have also enclosed a job function evaluation form if you would like to use that. We would like to put an early RTW plan in place and have modified duty available. Thank you!

Date of Injury: 01/15/2014
Expected RTW Date: 01/18/2014

ODG Return-To-Work "Best Practice" Guidelines:
Severe (grade II-III), clerical/modified work: 0-3 days
Severe, manual work: 14-17 days
Severe, heavy manual work: 35 days

ODG Capabilities & Activity Modifications for Restricted Work:
Clerical/modified work: Lifting with knees (with a straight back, no stooping) not more than 5 lbs up to 3 times/hr; squatting up to 4 times/hr; standing or walking with a 5-minute break at least every 20 minutes; sitting with a 5-minute break every 30 minutes; no extremes of extension or flexion; no extremes of twisting; no climbing ladders; driving car only up to 2 hrs/day.
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Work Loss Data Institute
ODG Comorbidity Calculator

Show All: This option will show at-a-glance disability duration projections using each dataset and allow the user to select the one that best fits the underlying claim.

Change Dataset: Show All

RAS (Risk Assessment Score): 71.55

Duration Projections by Dataset (use + to select the best fit)

<table>
<thead>
<tr>
<th>Adjusted Duration (in Days)</th>
<th>Best Practice (+)</th>
<th>Claim Profile 95% (+)</th>
<th>Claim Profile 100% (+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>59</td>
<td>140</td>
</tr>
</tbody>
</table>

Add Claim ID and contact info (for printing/documentation)?

State: No designation

DOL Job Class: Light

Confounding Factors: Depression/PTSD/Psychosocial
Legal Representation
Opioids

<15 Days 15-30 Days 30+ Days

Diagnosis ICD Code 1: 847.2 Lumbar sprains and strains (Mean Duration 25 Days)

Diagnosis ICD Code 2:
Diagnosis ICD Code 3:
Diagnosis ICD Code 4:
Diagnosis ICD Code 5:

Employee Age: 49

Surgery or Hospital Stay
Smoker
Hypertension

User Notes:
ODG Demo & Trial:

www.odg-twc.com

Username: scsi
Passcode: 2525
Ankle & Foot (updated 03/26/14)

Burns (updated 02/18/14)

Carpal Tunnel Syndrome (updated 02/20/14)

Diabetes (updated 02/20/14)

Elbow (updated 02/14/14)

Eye (updated 02/17/14)

Fitness for Duty (updated 03/26/14)

Forearm, Wrist, & Hand (updated 02/18/14)

Head (updated 11/18/13)

Hernia (updated 02/18/14)

Hip & Pelvis (updated 03/25/14)

Infections Diseases (updated 02/21/14)

Knee & Leg (updated 01/20/14)

Low Back (updated 03/18/14)

Mental Illness & Stress (updated 03/14/14)

Neck & Upper Back (updated 03/27/14)

Pain (updated 03/27/14)
Explanation of Medical Literature Ratings
(Ratings “1a” through “11c” noted under summary of each study)

Individual Study Ratings (medical treatment studies)

Ranking by Type of Evidence (treatment procedures):

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:

a. High Quality
b. Medium Quality
c. Low Quality

Evaluating the Body of Evidence (and prognostic/diagnostic/economic studies)
# Procedure Summary – Low Back

## Abobotulinum toxin A (Dysport)
Not recommended for acute low back pain. (Tulder-Cochrane, 2000) (Furlan-Cochrane, 2003) Recommended as an option for chronic low back pain using a short course of treatment in conjunction with other interventions. (See the Pain Chapter.) Acupuncture has been found to be more effective than no treatment for short-term pain relief in chronic low back pain, but the evidence for acute back pain does not support its use. (Furlan-Cochrane, 2005) (Manheimer, 2003) (van Tulder, 2005) (Thomas, 2005) (Ratcliffe, 2006) (Thomas, 2006) (Haake, 2007) (Santaguida, 2009) These authors have reported that acupuncture provides a greater effect than sham treatment, while others have reported non-significant differences between the two modalities. (Brinkhaus, 2006) In this latter case, both modalities were shown to be more effective than no treatment. (Haake, 2007) Acupuncture has not been found to be better than other treatment (either conventional or alternative) in terms of pain or function. Acupuncture has been shown to add to the treatment effect of conventional therapy (improving pain and function) when compared to conventional therapy alone. (van Tulder, 2005) (Manheimer, 2003) (Furlan-Cochrane, 2005) Overall outcomes from trials have been mixed, with some lower-quality trials producing positive results, but trials with higher validity scores tending to be negative or inconclusive. There is a tendency for patient expectations to influence the outcome independently of the treatment itself. (Tulder-Cochrane, 2000) (Cherkin, 2001) (van Tulder-Spine, 1999) (Smith, 2000) (Cherkin-Annals, 2003) (Giles-Spine, 2003) (Muller, 2003) (Airaksinen, 2006) A recent RCT comparing usual care to acupuncture plus usual care found that at 24 months the acupuncture/usual care subjects were significantly more likely to report 12 months pain free and less likely to report they required use of medication for pain (after only 10 treatments that were performed at the beginning of the protocol). (Thomas, 2005) Note: This recent Thomas study prompted the UK Health Tech Assessment to recommend acupuncture for chronic LBP. A recent systematic review of randomized controlled trials concluded that acupuncture versus no treatment, and as an adjunct to conventional care, should be advocated for the treatment of chronic LBP. (Yuan, 2008) This recent quality RCT concluded that actual or sham acupuncture appear to be equally effective for low back pain, raising questions about acupuncture’s purported mechanisms of action. (Cherkin, 2009) For an overview of acupuncture and other conditions in which this modality is recommended see the Pain Chapter. Evidence for the benefit of acupuncture is conflicting, with higher-quality trials showing no benefit. (Kirkade, 2007) According to a recent NEJM review, there is continuing debate in the medical community regarding the role of the placebo effect in acupuncture, and the most recent well-powered clinical trials of acupuncture for chronic low back pain showed that sham acupuncture was as effective as real acupuncture. The simplest explanation of such findings is that the specific therapeutic effects of acupuncture, if present, are small, whereas its clinically relevant benefits are mostly attributable to contextual and psychosocial factors, such as patients’ beliefs and expectations, attention from the acupuncturist, and highly focused, spatially directed attention on the part of the patient. (Beman, 2010) This passive intervention should be an adjunct to active rehab efforts.

**ODG Acupuncture Guidelines:**
- Initial trial of 3-4 visits over 2 weeks
- With evidence of objective functional improvement, total of up to 8-12 visits over 4-6 weeks (Note: The evidence is inconclusive for repeating this procedure beyond an initial short course of therapy.)

## Acupressure
Not recommended due to the lack of sufficient literature evidence (1 Chinese study). There are promising initial results. Acupressure, the use of fingers rather than needles (as in acupuncture) to press on various points in the body, conferred an 89% reduction in significant disability compared with physical therapy in this RCT conducted in Taiwan. (Hsieh, 2006) However, because the study was conducted in a country where acupressure is widely accepted, the results may be hard to replicate in the U.S. Some have suggested self-applied acupressure can be used by patients on their own as part of home physical therapy.

## Adalimumab
See Tumor necrosis factor (TNF) modifiers.

## Adhesiolysis
See Adhesiolysis, percutaneous & Adhesiolysis, spinal endoscopic.

## Acupressure
Not recommended due to the lack of sufficient literature evidence (risk vs. benefit, conflicting literature). Also referred to as epidural neurolysis, epidural neurectomy, or lysis of epidural adhesions. Percutaneous adhesiolysis is a treatment for chronic back pain that involves disruption of the epidural scar tissue, often by chemical means.

<table>
<thead>
<tr>
<th>Procedure/topic</th>
<th>Summary of medical evidence</th>
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</tr>
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<td>Adhesiolysis</td>
<td>See Adhesiolysis, percutaneous &amp; Adhesiolysis, spinal endoscopic.</td>
</tr>
</tbody>
</table>
Acupuncture and dry-needling for low back pain.
Furjan AD, van Tulder MW, Cherkin DC, Tsukayama H, Lao L, Koeh BW, Berman BM.

Abstract

BACKGROUND: Although low-back pain is usually a self-limiting and benign disease that tends to improve spontaneously, there is a large number of therapeutic interventions available for its treatment.

OBJECTIVES: To assess the effects of acupuncture for the treatment of non-specific low-back pain and dry-needling for myofascial pain syndrome in the low-back region.

SEARCH STRATEGY: We searched the Cochrane databases from 1993 to February 2003 in CENTRAL, MEDLINE, and EMBASE. We also searched the Chinese Cochrane Centre database of clinical trials and Japanese databases to February 2003.

SELECTED STUDIES: Randomized controlled trials of acupuncture (that involves needling) for adults with non-specific (sub)acute or chronic low-back pain, or dry-needling for myofascial pain syndrome in the low-back region.

DATA COLLECTION AND ANALYSIS: Two reviewers independently assessed methodological quality (using the criteria recommended by the Cochrane Back Review Group) and extracted data. The trials were combined using meta-analyses methods or levels of evidence when the data reported did not allow statistical pooling.

MAIN RESULTS: Thirty-five RCTs were included. Twenty were published in English, seven in Japanese, five in Chinese and one each in Norwegian, Polish and German. There were only three trials of acupuncture for acute low-back pain. They did not justify firm conclusions, because of small sample sizes and low methodological quality of the studies. For chronic low-back pain there is evidence of pain relief and functional improvement for acupuncture, compared to no treatment or sham therapy. These effects were only observed immediately after the end of the sessions and at short-term follow-up. There is evidence that acupuncture, added to other conventional therapies, relieves pain and improves function better than the conventional therapies alone. However, effects are only small. Dry-needling appears to be a useful adjunct to other therapies for chronic low-back pain. No clear recommendations could be made about the most effective acupuncture technique.

AUTHORS’ CONCLUSIONS: The data do not allow firm conclusions about the effectiveness of acupuncture for acute low-back pain. For chronic low-back pain, acupuncture is more effective for pain relief and functional improvement than no treatment or sham treatment immediately after treatment and in the short-term only. Acupuncture is not more effective than other conventional and “alternative” treatments. The data suggest that acupuncture and dry-needling may be useful adjuncts to other therapies for chronic low-back pain. Because most of the studies were of lower methodological quality, there is certainly a further need for higher quality trials in this area.
Hospitalization

Not recommended for low back pain in the absence of major trauma (i.e., acute spinal fracture, spinal cord injury, or nerve root injury), acute or progressive neurologic deficit, or the patient's inability to manage basic ADLs at home and alternative placement in a Skilled Nursing Facility is not available or appropriate. These recommendations are based on medical practice and are consistent with other evidence-based guidelines. (Washington, 2002) (ICSI, 2004)

Criteria for Hospital Admissions:
I. Acute Major Back Trauma is Suspected: Back injury occurred within the past 7 days; & Major trauma was sustained (e.g., fall from a height or back crushed by heavy object); & Examining physician documents or suspects acute spinal fracture, spinal cord injury, or nerve root injury. Hospital Admission Criteria: May be individualized.

II. Acute Major Back Trauma Not Suspected; Patient Has Neurologic Findings Suspected to be Acute or Progressive: No history of recent major injury; & Patient complains of symptoms suggesting acute or progressive neurologic deficit [typically these include: (1) progressive weakness or numbness in one leg (and occasionally both legs), or (2) loss of control of bowel or bladder function, or (3) progressive numbness in the penile region]; & The examining physician indicates that the patient has (or probably has) an acute or progressive neurologic deficit. Hospital Admission Criteria: If a patient has a new or progressive neurologic deficit, he/she may be hospitalized in order to facilitate surgical decision-making, to provide close observation of further progression, or to help the patient compensate for neurological deficits (e.g., to determine whether the patient needs to learn intermittent catheterization). If a patient does NOT have a new or progressive neurologic deficit, the only valid reason for hospitalization is that he/she cannot manage basic ADLs at home. Duration of hospitalization should be brief. The great majority of these patients who are admitted to a hospital can be discharged in 1 to 3 days (if spine surgery is not performed). Prolonged bed rest usually does more harm than good in a patient with low back pain. Admission for the purpose of bed rest is not acceptable.

III. Acute Major Back Trauma Not Suspected; Patient Has Back Pain without Evidence of Acute or Progressive Neurologic Findings: No history of recent major trauma; & Patient complains of back pain with or without symptoms in the legs (occasionally patients will complain mainly of symptoms in the legs but the evaluating physician concludes that symptoms are not caused by lumbar radiculopathy); & No evidence of acute or progressive neurologic deficit. Hospital Admission Criteria: The primary valid reason for hospitalizing these patients is that they cannot manage basic ADLs at home. Example, the patient lives alone and is unable to get to the bathroom. If a patient is admitted through the emergency department, the decision to admit should be made with the concurrence of the attending physician, unless the attending physician cannot be reached. Duration of hospitalization should be brief. The great majority of these patients who are admitted to a hospital can be discharged in less than 24 hours. Admission for the purpose of bed rest or traction alone is not acceptable. The need for parenteral narcotics is a valid admission criteria. A patient should not be admitted to a hospital that does not have the capacity to assess ADLs, develop a treatment plan, and provide physical therapy within the first 24 hours. For Hospital LOS after admission criteria are met, see Hospital length of stay (LOS).

Hospital length of stay (LOS)

Recommend the median length of stay (LOS) based on type of surgery, or best practice target LOS for cases with no complications. For prospective management of cases, median is a better choice that mean (or average) because it represents the mid-point, at which half of the cases are less, and half are more. For retrospective benchmarking of a series of cases, mean may be a better choice because of the effect of outliers on the average length of stay. Length of stay is the number of nights the patient remained in the hospital for that stay, and a patient admitted and discharged on the same day would have a length of stay of zero. The total number of days is typically measured in multiples of a 24-hour day that a patient occupies a hospital bed, so a 23-hour admission would have a length of stay of zero. (HCUP, 2011)

ODG hospital length of stay (LOS) guidelines:

Discectomy (ICD 80.51 - Excision of intervertebral disc)
Actual data - median 1 day; mean 2.1 days (± 0.0); discharges 109,057; charges (mean) $26,219
Best practice target (no complications) - 1 day

Laminectomy (ICD 03.09 - Laminectomy/laminotomy for decompression of spinal nerve root)
Actual data - median 2 days; mean 3.5 days (± 0.1); discharges 100,600; charges (mean) $34,978
Best practice target (no complications) - 1 day

Lumbar Fusion, posterior (ICD 81.08 - Lumbar and lumbosacral fusion, posterior technique)
Actual data - median 3 days; mean 3.9 days (± 0.1); discharges 161,761; charges (mean) $86,900
Best practice target (no complications) - 3 days

Lumbar Fusion, anterior (ICD 81.06 - Lumbar and lumbosacral fusion, anterior technique)
Actual data - median 3 days; mean 4.2 days (± 0.2); discharges 33,521; charges (mean) $110,156
Best practice target (no complications) - 3 days

Lumbar Fusion, lateral (ICD 81.07 - Lumbar fusion, lateral transverse process technique)
Actual data - median 3 days; mean 3.8 days (± 0.2); discharges 15,125; charges (mean) $89,088
Official Disability Guidelines™

Type two or more characters and select from dropdown (no need to press "Enter").

SEARCH (code or text): ________________________ Enter Search Criteria.

Customize results to improve performance? Check to include:
- ICD9 database (codes/names)
- ICD10 database (codes/names)
- CPT database (codes/names)
- NDC database (codes/names)
- Procedure Summaries by Topic

- For users in the USA, default to ICD9 database for RTW/UR by diagnosis and Procedure Summaries for full-text treatment guidelines.
- Add CPT database for UR Advisor by CPT code/name.
- ICD10 codes are primarily for international use until 10/1/2015.

Feedback +
# ODG Evidence-Based Decision Support

**ODG: Good to Go!** (complimentary self-training module)

## Work Loss Data Institute

### ODG UR Advisor Entry

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<td>CPT Code</td>
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### Lookup

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Click [here](#) for Explanation of Rows.
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ODG Evidence-Based Decision Support

ODG: Good to Go! (complimentary self-training module)

ODG Workers Compensation Drug Formulary
NDC Code (National Drug Code) Inquiry

NDC Code: 00093-0150

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<td>Drug Class</td>
<td>Opioids</td>
</tr>
<tr>
<td>Generic Class</td>
<td>Codeine/acetamin.</td>
</tr>
<tr>
<td>Brand Name</td>
<td>Tylenol #3</td>
</tr>
<tr>
<td>GE (generic equivalence)</td>
<td>Yes</td>
</tr>
<tr>
<td>Strength</td>
<td>300;30mg</td>
</tr>
<tr>
<td>Trade Name</td>
<td>Acetaminophen And Codeine Phosphate Tablets</td>
</tr>
<tr>
<td>Status</td>
<td>Y</td>
</tr>
</tbody>
</table>

Click [here](#) for Explanation of Rows.
## Work Loss Data Institute
### ODG Opioid MED Calculator

<table>
<thead>
<tr>
<th>Opioid (oral or transdermal)</th>
<th>Dose</th>
<th>Morphine Equivalent Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>10 mg per day</td>
<td>1.50 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Fentanyl Transdermal</td>
<td>10 mcg/hr</td>
<td>24.00 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>0 mg per day</td>
<td>0.00 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>10 mg per day</td>
<td>40.00 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Methadone</td>
<td>10 mg per day</td>
<td>40.00 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Morphine</td>
<td>10 mg per day</td>
<td>10.00 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>0 mg per day</td>
<td>0.00 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>0 mg per day</td>
<td>0.00 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Tapentadol</td>
<td>0 mg per day</td>
<td>0.00 morphine equivalent dosage (MED) per day.</td>
</tr>
<tr>
<td>Tramadol</td>
<td>5 mg</td>
<td>1.00 morphine equivalent dosage (MED) per day.</td>
</tr>
</tbody>
</table>

**Total daily morphine equivalent dose (MED) per day:** 116.50

For informational purposes only, and should not be used to determine doses when converting patients from one opioid to another. Dose ratios are approximations and cannot account for potential patient response and other variables like increased risk of overall opioid toxicity. See Chronic Pain chapter for complete ODG Opioid Dosing.
847.2 Lumbar sprains and strains

Return-To-Work Summary Guidelines

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Midrange</th>
<th>At-Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claims data</td>
<td>17 days</td>
<td>39 days</td>
</tr>
<tr>
<td>All absences</td>
<td>10 days</td>
<td>36 days</td>
</tr>
</tbody>
</table>

Return-To-Work "Best Practice" Guidelines

- Mild (grade I), clerical/modified work: 0 days
- Mild, manual/heavy manual work: 7-10 days
- Severe (grade II-III), clerical/modified work: 0-3 days
- Severe, manual work: 14-17 days
- Severe, heavy manual work: 35 days
- With radicular signs, see 722.1 (disc disorders)
- Obesity comorbidity (BMI >= 30), multiply by: 1.31

Capabilities & Activity Modifications for Restricted Work:

- Clerical/modified work: Lifting with knees (with a straight back, no stooping) not more than 5 lbs up to 3 times/hr; squatting up to 4 times/hr; standing or walking with a 5-minute break at least every 20 minutes; sitting with a 5-minute break every 30 minutes; no extremes of extension or flexion; no extremes of twisting; no climbing ladders; driving car only up to 2 hrs/day.
- Manual work: Lifting with knees (with a straight back) not more than 25 lbs up to 15 times/hr; squatting up to 16 times/hr; standing or walking with a 10-minute break at least every 1-2 hours; sitting with a 10-minute break every 1-2 hours; extremes of flexion or extension allowed up to 12 times/hr; extremes of twisting allowed up to 16 times/hr; climbing ladders allowed up to 25 runs 6 times/hr; driving car or light truck up to a full work day; driving heavy truck up to 4 hrs/day.

Export to Toolbox: RTW Prescription | UR Advisor | Reserve Calculator | Comorbidity Calculator

Description: Injury to the ligament (sprain) or to the muscle (strain) of the lower back. Sprains and strains are usually accompanied by a tearing of the tissue as well as symptoms of pain, limited motion, swelling, bruising, and/or a change in sensation.

Other names: Lower back sprain, Lower back strain

ICD-10 Code: S33.5
Work Loss Data Institute
RTW Prescription

ICD Code: 847.2

Search in: ICD9 database ICD10 database

847.2 - Lumbar sprains and strains

From the Desk of: Dr. James Andrews
Claim Number: 12345
Employee Name: John Doe
Include Diagnosis? No

Telephone/email: 512-551-5555
Employer Name: ABC Inc.
Physician Name:
Attach Job Description? No

Comments: Please review and modify (if needed) the enclosed ODG guidelines for return-to-work. I have also added a Job Function Evaluation form if you prefer that format. We would like to put a RTW plan in place and can have modified duty available if needed. Please contact me with any questions or concerns, or just return the form with signature. Thank you!

Date of Injury: 03/13/2015
Expected RTW Date: 03/16/2015

ODG Return-To-Work "Best Practice" Guidelines (check only those that apply):
- [ ] Mild (grade I), clerical/modified work: 0 days
- [ ] Mild, manual/heavy manual work: 7-10 days
- [ ] Moderate, sedentary work: 1-5 days
- [x] Maximal, full duty: 3-6 days
- [ ] Special considerations: 5-7 days
## Work Loss Data Institute
### ODG Comorbidity Calculator

**Duration Projections by Dataset (use + to select the best fit)**

<table>
<thead>
<tr>
<th>Adjusted Duration (in Days)</th>
<th>Best Practice (+)</th>
<th>Claim Profile 95% (+)</th>
<th>Claim Profile 100% (+)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88</td>
<td>204</td>
<td>410</td>
</tr>
</tbody>
</table>

**State:**
- Texas

**Employee Age:**
- 56

**Confounding Factors:**
- Depression/PTSD/Psychosocial
- Legal Representation
- Opioids
- Substance Abuse
- Diabetes
- Obesity
- Hypertension
- Smoker
- Surgery or Hospital Stay

**Diagnosis ICD Code 1:**
- 847.2 Lumbar sprains and strains *(Duration 25 Days)*

**Diagnosis ICD Code 2:**
- 722.1 Displacement of thoracic or lumbar intervertebral disc without myelopathy *(Duration 97 Days)*

**Diagnosis ICD Code 3:**
- 311 Depressive disorder, not elsewhere classified *(Duration 36 Days)*

**User Notes:**
- See enclosed ODG guidelines for RIW.
Back Injuries

Your back is made of bones, muscles, and other tissues extending from your neck to your pelvis. Back injuries can result from sports injuries, work around the house or in the garden, or a sudden jolt such as a car accident. The lower back is the most common site of back injuries and back pain. Common back injuries include:

- Strains and sprains
- Herniated disks
- Fractured vertebrae

These injuries can cause pain and limit your movement. Treatments vary but might include medicines, icing, bed rest, physical therapy, or surgery. You might be able to prevent some back injuries by maintaining a healthy weight, lifting objects with your legs, and using lower-back support when you sit.

Get Back Injuries updates by email

Enter email address

MEDICAL ENCYCLOPEDIA

- Back pain and sports
- Compression fractures of the back
- Lifting and bending the right way
- Lumbosacral spine x-ray
- Returning to sports after a back injury
- Returning to work
- Spinal fusion
- Spinal fusion - slideshow
- Vertebroplasty - slideshow
Claim Profile 95%: Most historical claims fit this profile; more costly than they should be in a best practice setting, but this dataset also trims the outliers from calculations, which would otherwise drive average costs up considerably.

<table>
<thead>
<tr>
<th>Reserve Bucket</th>
<th>Estimated Exposure</th>
<th>Amount Paid to Date</th>
<th>Existing Reserves</th>
<th>Reserve Increase Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indemnity (-)</td>
<td>$31,314.00</td>
<td>$22,100.00</td>
<td>$4,000.00</td>
<td>$5,214.00</td>
</tr>
<tr>
<td>Medical (-)</td>
<td>$190,904.75</td>
<td>$125,000.00</td>
<td>$10,000.00</td>
<td>$55,904.75</td>
</tr>
<tr>
<td>Expense &amp; Administrative (-)</td>
<td>$10,183.40</td>
<td>$6,200.00</td>
<td>$600.00</td>
<td>$3,483.40</td>
</tr>
<tr>
<td>Total</td>
<td>$232,402.15</td>
<td>$153,300.00</td>
<td>$14,500.00</td>
<td>$54,602.15</td>
</tr>
</tbody>
</table>

Check here for medical-only claim (do not check for indemnity claims).

- Benefit State: No designation
- Work Status: TTD
- Confounding Factors: Depression/PTSD/Psychosocial, Opioids, Surgery or Hospital Stay
- Chapter/Procedure: Low Back, Lumbar Fusion, anterior (icd 81.06)
- Diagnosis ICD Code 1: 847.2, Lumbar sprains and strains
- Diagnosis ICD Code 2: 722.1, Displacement of thoracic or lumbar intervertebral disc without myelopathy
- Diagnosis ICD Code 3: 311, Depressive disorder, not elsewhere classified

Average Weekly Wage: $921.00
Claimant Age: 42
### Workers' Comp Costs per Claim (based on 107,132 claims)

<table>
<thead>
<tr>
<th>Quartile</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>Mean</th>
<th>% no cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indemnity</td>
<td>$1,332</td>
<td>$2,610</td>
<td>$5,307</td>
<td>$5,410</td>
<td>80%</td>
</tr>
<tr>
<td>Medical</td>
<td>$251</td>
<td>$568</td>
<td>$1,693</td>
<td>$1,851</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td>$251</td>
<td>$633</td>
<td>$2,446</td>
<td>$2,977</td>
<td>4%</td>
</tr>
</tbody>
</table>

### Disability Duration Adjustment Factors by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustment Factor</td>
<td>0.66</td>
<td>0.74</td>
<td>1.07</td>
<td>1.10</td>
<td>1.35</td>
<td>1.64</td>
</tr>
</tbody>
</table>

### RTW Claims Data (Calendar-days away from work by decile)

<table>
<thead>
<tr>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>12</td>
<td>14</td>
<td>15</td>
<td>17</td>
<td>19</td>
<td>33</td>
<td>36</td>
<td>53</td>
<td>365</td>
<td>27.96</td>
</tr>
</tbody>
</table>

### RTW Post Surgery (Calendar-days away from work by decile)

<table>
<thead>
<tr>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>365</td>
<td>365</td>
</tr>
</tbody>
</table>

### Low back disk surgery (CPT 63030)

<table>
<thead>
<tr>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>51</td>
<td>58</td>
<td>92</td>
<td>142</td>
<td>205</td>
<td>321</td>
<td>365</td>
<td>365</td>
<td>365</td>
<td>182.98</td>
</tr>
</tbody>
</table>

**Integrated Disability Durations, in days**

- Median (mid-point): 10.0
- Mean (average): 17.09
- Mode (most frequent): 1
- Calculated rec.: 10
- Percent of Cases: 21.9 (16516 cases)
Conclusions

• Decision to implement “guidelines” is not as critical to success as which guidelines to adopt
  - If you do your homework, both choices are easy
  - Stay wary of competing interests (there are many)
  - *Evidence-based medicine doesn’t vary from state to state*

• ODG will improve medical and RTW outcomes and reduce costs as a byproduct
  - The primary objective is to improve patient outcomes
  - EBM process is unmatched in rigor/tempo
  - Strong record of success; experience
Conclusions: Take control

- EBM medical and RTW management drives optimal health outcomes for injured workers, lower costs
  - RTW Prescription for early release to work
  - UR Advisor to auto-approve treatments according to ODG
- Use data to measure and improve performance

Watching the world go by...  
“All hands on deck!”