



**WORKERS' COMP  
TRAINING CENTER**

## **How to Use Evidence Based Medicine to Create Better WC Outcomes**

### **Introduction: (3-5 minutes)**

- Welcome to WC Mastery training,
  - Medical portion only growing in importance
  - Biggest challenge:
    - Cost – excessive treatment
    - Outcomes
    - Get team on board
  - **Goal is Decision Making Support**
- Context on perspective of discussion – for employers, not states
  - Two types of guidelines, clinical & duration
- Introduce 3 Major Points
  - What is EBM?
  - Claim Examples
  - How to implement into your program

### **Main Point #1: What is EBM? (15-20 minutes)**

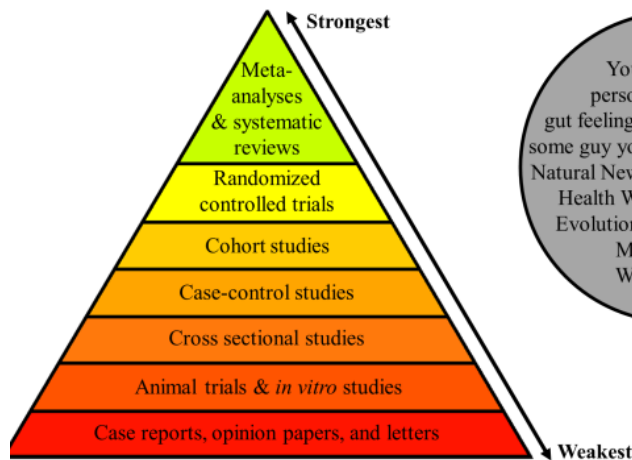
#### **Clinical Guidelines**

- Definition:
  - EBM is defined in Texas Labor Code Section 401.011 (18a) as "the use of current best quality scientific and medical evidence formulated from credible scientific studies, including peer-reviewed medical literature and other current scientifically based texts, and treatment and practice guidelines in making decisions about the care of individual patients."
- Hierarchy of evidence



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### Hierarchy of Scientific Evidence



### Not Scientific Evidence

Youtube videos, personal anecdotes, gut feelings, parental instincts, some guy you know, websites like Natural News, Info Wars, Natural Health Warriors, Collective Evolution, Green Med Info, Mercola.com, Whale.to, etc.

thelogicofscience.com

- Randomized controlled trials
  - Considered gold standard
    - Blind or double blind (neither patient or doctor know)
    - Placebo and Medicine testing for half of testing population
    - Randomized Placebo Based Double Blind Controlled Trial
- Meta-Analysis
  - Multiple RCT studies analyzed together
- Evidence-Based Medicine Editorial Advisory Board
  - guidelines is they are created by a multi-disciplinary editorial advisory board
  - Organizations that develop have large panels of review physicians
    - Look at RCT evidence and use as basis to develop guidelines
    - Consensus panel to make recommendations.
    - High level of research and expertise put into guidelines
- Tools & Resources to Locate EBM Information
  - Government entities
  - ODG.
    - Official Disability Guidelines (ODG) produced by Work Loss Data Institute
  - MDG.
    - MDGuidelines sourced by American College of Occupational & Environmental Medicine (ACOEM), produced by Reed Group
  - State-created custom guidelines
  - State vs. National
    - Be aware if there is a mandated state guideline for your particular state



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- 21 States do not have treatment guidelines
- Results of Using Guidelines
  - Medical cost savings of 25-60%
    - (by state, payer, TPA, and health plan)
  - Average disability duration down 34-66%
    - (median duration down 30%)
  - Treatment delay down 77%
    - (from date of injury to initial treatment)
  - Insurance premiums down 40-49% as a result of improved health outcomes
  - Access to care up 42%
    - (more treating providers accepting patients under ODG)
- Opposing view
  - “this is a cookbook and I don’t practice cookbook medicine”
  - Room for exceptions in implementation, but should be documented why;
    - Peer review roundtable for specific application with specific patient

### Injury Duration Guidelines

- Risk Manager / Adjuster perspective:
  - Allows non-medical professionals access to best practice guidelines & expectations
  - **Accomplishes 3 things:**
    1. Sense if time out of work (or say they need to be out of work) is reasonable.
    2. Give indication of when intervention is appropriate.
    3. Provides benchmark to calculate savings for successful return to work.
      - **provide ranges and guidance, not precise answers.**
- Physician Use
  - Sense of how performing
  - Used for physician performance measurement
  - Automated flags in claims systems for intervention
- Factors that affect duration
  - The severity of the injury
  - The pre-injury condition of the employee
  - Other injuries
  - The post injury treatment program
  - The personal habits of the employee



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- The employee's stress level, sleeping habits and general health.
- Comorbid conditions
  - Biggest variance is employee motivation to return to work (YOUR Involvement)
- Interpreting Duration Guidelines
  - **COMMON MISTAKE:** should NOT be confused with the time the employee should be off work, is amount of time from injury to maximum medical improvement.
    - 90-95%+ of injured employees should be back to work in 0-4 days.
  - Set goals & calculate savings

### Main Point #2: Claim Examples (20 minutes)

- John Smith – warehouse worker - 726.13 Partial Tear of Rotator Cuff
  - Risk, Capacity, Tolerance
    - Risk: Reinjury is possible, but most individuals are on modified work.
    - Consider Risk, Capacity & Tolerance
  - Best Practice Duration Table: (without malingering or extraneous)

Employee Name: John Smith

Job Description: Warehouse worker loading & unloading boxes

Injury: ICD-10 M75.11 Partial Rotator Cuff Tear

Type of Work	Minimum	Optimum	Maximum
Sedentary	0	3	4
Light	0	3	4
Medium	8	21	42
Heavy	21	42	85
Very Heavy	21	42	85

Department of Labor determines the Type of Work level;

- ODG Job Profiler – can get more specific regarding a ‘nurse’ job and duration guidelines

Time to Return to Work	5%	Median	95%	No Work
Partial Rotator Cuff Tear	18	96	373	17% never returned to work



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		<b>Comorbidities:</b> Obese & depression - 145 expected duration		
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Predictive modeling with co-morbidities.

- Basic understanding of treatment recommendations
  - Rotator cuff repair is moderately recommended for treatment of small, medium, or large tears (<5cm).
  - While surgery tends to produce modestly superior outcomes over 1 to 5 years non-operative treatment is often successful.
  - Physical therapy is a reasonable option for many patients,
  - Data insufficient to make it a pre-operative requirement.
  - Surgical cuff repair is believed to be a superior option among patients for whom occupational shoulder exposures and demands are greater, although quality data that address this issue are not available.
- Clinical Guidelines
  - Guideline Example – Spine

<b>Treatment</b>	<b>Recommendations</b>
Facet joint medial branch blocks (therapeutic injections)	Not recommended except as a diagnostic tool. Minimal evidence for treatment.
Fusion (spinal)	<ul style="list-style-type: none"> <li>- Not recommended in workers' compensation patients for degenerative disc disease (DDD), disc herniation, spinal stenosis without degenerative spondylolisthesis or instability, or nonspecific low back pain, due to lack of evidence or risk exceeding benefit.</li> <li>- Recommended as an option for spondylolisthesis, unstable fracture, dislocation, acute spinal cord injury with post-traumatic instability, spinal infections with resultant instability, scoliosis, Scheuermann's kyphosis, or tumors, as indicated in the <u>Blue Patient Selection Criteria</u> below.</li> </ul>
IDET (intradiscal electrothermal annuloplasty)	Not recommended.



Prolotherapy  
(sclerotherapy)

Not recommended. There are conflicting studies concerning the effectiveness of prolotherapy, also known as sclerotherapy, in the low back. Lasting functional improvement has not been shown. The injections are invasive, may be painful to the patient, and are not generally accepted or widely used. Therefore, the use of prolotherapy for low back pain is not recommended at this time. (Colorado, 2001) (Yelland-Cochrane, 2004) (Yelland2, 2004) (Hooper, 2004) (Dagenais, 2005) (BlueCross BlueShield, 2006)





- Guideline Example – Rx

Example: Prescription Drug Formularies

*Muscle Relaxants (Antispasticity drugs)*

Cost	Generic Name	Brand Name	Available Generically	Formulary
\$17.82	Baclofen	Lioresal®	Yes	Y
\$106.93	Carisoprodol	Soma®	Yes	N

*Muscle Relaxants (Antispasmodics)*

Cost	Generic Name	Brand Name	Available Generically	Formulary
\$21.93	Dantrolene	Dantrium®	Yes	N
\$8.67	Chlorzoxazone	Parafon Forte®, Paraflex®, Relax <sup>TM</sup> DS, Remular <sup>STM</sup>	Yes	Y

*data provided by ODG*



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### **Main Point #3: How to Implement in Your Program (10-15 minutes)**

- **Implementation Best Practices**
  - **Cost of Using services**
    - Negotiable based on volume
      - Example: \$600-\$1,000 for one user, +/- based on volume
  - **Understand and coordinate use of guidelines**
    - Know each jurisdiction
    - claims handlers, nurse case managers, physicians and all others involved coordinate and be consistent in application
      - **Ask and talk to claims team about EBM tools and how using them**
    - Make easy to implement
      - API Integration with RMIS systems
      - Talk with provider about integration options
    - Efficient and effective use within claims handling system
    - Integrate into injury management best practices
      - Weekly meetings
      - Return to work
      - NCM decisions
  - **Work with accredited providers**
    - URAC accreditation.
    - Medical providers need to be on board with the guidelines
    - Outsource to vendor partners, managed care organizations
  - **Flexibility in treatment decisions**
    - Comorbidities or psychosocial issues or other extenuating circumstances, the guidelines may require alternative treatment.
    - Team approach / Grand rounds
      - Employer, case manager, adjuster, physicians – put all heads together to decide best approach to certain claims
      - Partners need to be involved in process
  - **Consistent system of escalation**
    - Employer, case manager, adjuster; follow consistent protocol to escalate claim to higher level of clinical knowledge for review
      - Example





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- If proposed treatment doesn't meet criteria
  - Goes to physician reviewer
  - Match specialty with reviewer (board certified)
  - Discussion with treating physician regarding treatment
  - Appeal process
- **Overcome disagreement in treatment plan.**
  - In situations where the best treatment does not concur with the guidelines, there should be a smooth process to review and decide on them quickly.
  - Physicians working with the organization need to understand how to properly document exceptions to the guidelines and explain why recommended treatment can improve function.
  - Appropriate use of Peer Review
- **Quantify Savings**
  - Transitional Duty Calculator
    - 20 days x \$1000 / day plus \$1,500 replacement cost = \$21,500
    - 5% profit margin = \$400,000 in revenue
- **Pennywise and Pound Foolish**
  - UR / Peer Review - \$200-\$300
  - Spinal Fusion - \$35,000 - \$50,000