#### HAWAII STATE DEPARTMENT OF LABOR & INDUSTRIAL RELATIONS



1:30 p.m. - 5:00 p.m.

#### **PRESENTERS**

#### **Department of Labor and Industrial Relations**

Nelson Befitel, Director of Labor and Industrial Relations Gary Hamada, Administrator, Disability Compensation Division James Hardway, Special Assistant to the Director

#### **Keynote Speakers**

#### Stephen L. Demeter, M.D.



Dr. Stephen L. Demeter has treated injured workers in Ohio, Arizona and Hawaii. He currently serves as the Director of Disability Evaluations and IMEs at Kaiser Permanente, Hawaii. He is board certified in pulmonary medicine, occupational medicine, internal medicine, disability evaluation, and critical care medicine. Dr. Demeter is a former professor and Head of Pulmonary and Critical Care Medicine at Northeastern Ohio Universities College of Medicine. He is also the past president of the American Academy of Disability Evaluating Physicians. He has authored numerous publications

on occupational medicine, including the American Medical Association's reference to Disability Evaluation (2nd Ed).

#### Robert Sussman, M.D.



Dr. Robert Sussman currently serves as the medical director at the The Medical Corner, specializing in family and occupational medicine. He is Board Certified by the American Board of Family Practice and the American College of Occupational & Environmental Medicine (ACOEM). He is licensed in Pennsylvania and Hawaii, and treated injured workers in Hawaii's workers' compensation system since 1987. He is a member of the ACOEM and the Hawaii Independent Physician's Association.

#### Philip LeFevre, Work Loss Data Institute

Mr. Phil LeFevre is an Account Executive with Work Loss Data Institute (WLDI) where he worked in client services for his entire professional career. Phil has worked side-by-side with the editorial staff at WLDI in the development and presentation of disability duration and medical treatment guidelines from the *Official Disability Guidelines* product line, to reflect both evidence-based methodology and changing market demand for increased functionality and scalability, to make tangible and accessible the results of the latest important and emerging medical studies. Phil's work has been published in the 2003, 2004 and 2005 editions of *Official Disability Guidelines – Treatment in Workers' Comp*, 2002's *OSHA Durations Report* and the *Journal of Disability Medicine*, September 2002.

#### <u>Notice</u>

Today's seminar presentation and the written materials in this handout are intended as a guide on the current law and administrative rules governing Hawaii's workers' compensation system, and are not intended to replace any rule or statute or as a substitute for legal counsel. Decisions pertaining to each case should be determined based on the specific facts and circumstances of the case and pertinent law.

#### **SYLLABUS**

8:30 -8:40 a.m. (1:30 – 1:40 p.m.)	<b>Opening Remarks (Nelson Befitel, Moderator)</b>
8:40 - 9:00 a.m. (1:40 – 2:00 p.m.)	<ul> <li>New Hearings and Claims Resolution Process (Gary Hamada)</li> <li>The Application and Response for a Hearing</li> <li>The Hearings Process</li> <li>Improving Efficiency, Transparency, Predictability and Accountability</li> <li>The Alternative Dispute Resolution Process</li> </ul>
9:00 - 9:15 a.m. (2:00 – 2:15 p.m.)	<ul> <li>Restorative Service Plan (James Hardway)</li> <li>&gt; Purpose, Goals</li> <li>&gt; Requirements</li> </ul>
9:15 - 10:00 a.m. (2:15 – 3:00 p.m.)	<ul> <li>Overview of "Evidence-Based Medicine" and the ODG (Phil LeFevre)</li> <li>What is "evidence-based medicine"?</li> <li>What are medical guidelines?</li> <li>How do medical guidelines benefit injured workers, physicians, case managers and attorneys?</li> <li>ACOEM/ODG Interplay <ul> <li>Brief explanation of first seven chapters of ACOEM</li> <li>How they are supposed to work together with ODG under Hawaii's rules</li> </ul> </li> <li>Background on the ODG <ul> <li>What is the Work Loss Data Institute?</li> <li>Where did they get their information?</li> <li>Why will ODG work in Hawaii?</li> <li>How will they positively affect the workers' compensation system?</li> <li>Accessing and using ODG Treatment Guidelines</li> </ul> </li> </ul>
10:00 - 10:15 a.m. (3:00 – 3:15 p.m.)	BREAK
10:15 - 11:30 a.m. (3:15 - 4:30 p.m.)	<ul> <li>Case History/Analysis (Stephen Demeter, M.D, and Robert Sussman, M.D.)</li> <li>➢ Treatment Guidelines vs. No Treatment Guidelines</li> <li>➢ Examples of how guidelines benefit injured workers, medical providers, employers, etc.</li> </ul>
11:30 - 11:40 a.m. (4:30 – 4:40 p.m.)	<ul> <li>Alternative Treatment Plans (Nelson Befitel)</li> <li>Submitting a valid alternative treatment plan</li> <li>What should be submitted</li> <li>Factors that will be considered for approval</li> </ul>
11:40 - 12:00 p.m. (4:40 – 5 p.m.)	<ul> <li>Closing Remarks - Questions and Answers (Time Permitted)</li> <li>All written questions will be responded to via e-mail or posted on www.hawaii.gov/labor</li> </ul>

\* Parentheses ( ) denote afternoon session

## **Opening Remarks**

Nelson Befitel





## Welcome to DLIR's Educational Seminar Questions and Comments

- Write them on index cards.
- Questions will be taken after entire presentation is done, as time permits
- Post Seminar
   DLIR will respond to your questions by e-mail.
   FAQ's will be posted on DLIR's website: <u>hawaii.gov/labor</u>

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- disability benefits and necessary vocational training that they are entitled to.
- Ensure costs and insurance premiums are affordable for businesses.
   Should not serve as a barrier to doing business in Hawaii.

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- DCD Hearings Officer
- Not advocate for worker or employer, but advocate of the law and steward of the work comp system.

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- Judicially trained by the National Judicial College.
- Subject to review to ensure consistency and fairness.

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## New Hearings and Claims Resolution Process

Gary Hamada



#### **The New Administrative Rules**

· We now have basic rules on:



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- The "discovery" or exchange of evidence in preparation for a hearing.
- > The scheduling of hearings.
- The expectation and conduct of the parties during the hearings process.
- > The alternative dispute resolution process.

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- The New Administrative Rules
  Encourage parties to resolve their disputes without a hearing.
- Eliminate appearance of favoritism when it comes to scheduling.
- Ensure hearings are scheduled and held in an orderly and efficient manner.
- Result in more cases being resolved in a timelier manner.
- · Eliminate "unwritten rules."

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- □ "Interrogatories" limited to 20 questions.
- Depositions allowed only under certain circumstances:
  - Responses to interrogatories are insufficient; or

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All parties agree to deposition.

#### Additional Discovery

- Only if "reasonable and necessary"; or
- Upon agreement of the parties.
   <u>HAR Section 12-10-65</u>

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All hearings will be scheduled within <u>80 days</u> from the Request for Hearing.

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#### Continuance of Hearing ... Rarely Granted



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- Unless you have reached a settlement, be prepared to go to hearing.
- Continuance will be granted only when there is "good cause" to continue. HAR Sec 12-10-72.1 provides certain situations that would constitute "good cause."

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> Absent additional grounds, the following generally do <u>not</u> constitute "good cause" :

- Not prepared for the hearing.
- Did not complete investigation and/or discovery.
- Did not obtain an IME report.
- Did not obtain witnesses' statements.
  Witness is unavailable for hearing.
- An agreement of the parties to continue case.
- HAR Sec 12-10-72.1

Remember, the parties will generally have at least 80 days to prepare for the hearing.

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- The recommended decision will be approved unless contrary to Chapter 386. (Deference will generally be given to the private referee's decision)
- If approved, the referee's decision will have the same effect as a Director's decision issued under Chapter 386.
- If the referee's decision is not modified or vacated by the Director, and the parties agreed that no appeal can be taken, the decision is binding on the parties.

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## **Restorative Service Plan**

James Hardway





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#### Why a Restorative Service Plan?

- To effectively monitor the expected return to work.
- Ensure that everyone (DLIR, insurance carriers/employers, and physicians) are "all on the same page".
- Return the injured worker as quickly as possible to their job or move them into vocational rehabilitation for retraining.

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#### What is Required on the Restorative Service Plan?

- Physical or mental functions necessary to perform job duties.
- Identify the functional deficits caused by the injury.
- Identify the minimal functional level to be attained in order to return to work.

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- Provide a treatment protocol.
- Provide a timeline for treatment outcome.



#### **Issues and Resolutions**

Creating and describing treatment protocols based on written reference. ODG and new revisions to RSP

Employer doesn't send job functions. Revisions to WC-1

Too much paperwork and time for physicians who need to see a certain number of patients.

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Revisions to RSP

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## Overview of "Evidence-Based Medicine" and the ODG

Phil LeFevre

#### Official Disability Guidelines

#### Overview of ODG from WLDI

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June 23rd, 2005 Phil LeFevre Work Loss Data Institute lefevre@worklossdata.com 760-753-9992

#### Agenda

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- 1. Background on WLDI
- 2. Define evidence-based medicine
- 3. Applications in treatment guides
- 4. Overview of ODG Treatment
- 5. Samples
- 6. Conclusions

#### Work Loss Data Institute

- Independent database development co. focused on workplace health and productivity, based in Encinitas, CA
- Publisher of ODG Treatment
- Contractor for ACOEM Guidelines
- S.M.E. Charles W. Kennedy, MD, founding member of Evidence-Analysis Committee for AAOS
- 80-Member Advisory Board

#### Definition: EBM

- Evidence-based medicine (EBM) is the conscientious, explicit & judicious use of current best evidence in making decisions about the care of individual patients
  - David L Sackett, William MC Rosenberg, JA Muir Gray, R Brian Haynes, W Scott Richardson, *Evidence-Based Medicine: What it is and what it isn't*. This article is based on an editorial from the British Medical Journal on 13th January 1996 (BMJ 1996; 312: 71-2)

#### **Best Evidence?**

- Critical appraisal of available scientific evidence; not clinical opinion or anecdotal reports
- Studies published in peer-reviewed medical journals (JAMA, etc)
- Evaluate the efficacy of treatment, potential associations, LOD

#### **Treatment Guidelines**

- Utilization review/management
- Clinical practice
- Apply principals of EBM
- Facilitate communication among all parties (on the "same page")
- EBM makes this non-adversarial, and ultimately, defensible

#### Hawaii Rules

- Frequency/Extent of treatment in accordance with ODG Treatment
- In addition, the director references Chapters 1-7 of the ACOEM Occupational Medicine Practice Guidelines, as an expression of disability management philosophy
- The two do not overlap



#### **ODG** Treatment

- Focuses on treatment, does not cover Ch. 1-7 of ACOEM Guidelines
- Independent (not representative of just one single specialty society)
- Designed for UR/UM, in addition to clinical practice
- 3<sup>rd</sup> edition, updated annually
- Links from recs. to evidence

#### **ODG** Treatment

- Approved in NGC by Federal Agency for Healthcare Research & Quality
- Recommended by AADEP, AAOHN and ABIME
- Provider application courses by AADEP
- Adopted in OH, ND, FL, BC, ON, Bahamas, plus State Funds of MI & CO, and pre-proposal rules written in TX
- Being used/accepted in CA

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#### **ODG Treatment**

- Available in textbook or Web version
- Can be integrated with internal claims/UR/software applications
- 50% discount offered to all Hawaii participants (\$162.50)
- 30-day free trials available









#### Basis for ODG Treatment

- Comprehensive, ongoing medical literature review
- Studies from peer-reviewed medical journals (JAMA, etc)
- Each ranked alpha-numerically
- Links from recommendations are provided to the supporting evidence, indexed in abstract form

	Official Datability Guided Control for Workers' Componentian Integrated Treatment/Euclidity Duration Chaleboar Low Back - Lumber & Thorracic (Actue & Chronic) Euclidity Control of Control
	CONTENTS
Treatment Protocols	2
Codes for Automated Approval	
Procedure Summary	7
Higher Priority References	
Low Priority References	
(Click on any reference above to go	to reference summary)
<u>Reference Summaries</u> (Including abstract, evaluation, and rating)	
(Click on summary to go to full copy	if included as a separate document)
Explanation of Medical Literature Ratings (s	re Contents for more detail).
Ranking by Type of Evidence. 1. Systematic Renew/Meter Analysis 2. Controlled That – Randomized (RCT) or 3. Cohort Study – Prospective of Retropped 4. Care Coeffic Series 5. Unitoximeré Renew OTHER 6. Nátomály Recognized Treatment Guidelin 5. Study Treatment Guideline 6. Portigu Treatment Guideline 6. Portigu Treatment Guideline 1.0. Conference Marking	Createrulard area (from gaudelines gov)



#### **ODG Treatment: 3 Sections**

- Treatment Protocol (ideal, or recommended treatment plan)
- Codes for Auto-Approval (designed for auto-pay, streamline UR)
- Procedure Summary (lists all potential therapies, many of which are recommended as options)

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	Treatment Protocols
m	ify Radicular Signs
-	t unit must be with Primary Care Physician MD/DO (50%) Orthone-dist (33%)
Ű	Director (12%)
D,	termine presence or absence of radiculoration
	Sensation: Feeling nain radiating helow the knee (calf or lower) not just referred nain (nain radiating to buttorks or thight). & dematological sensory loss
ς.	Straight les raigns tet (sitting & surger) productive of les pan
5	Motor strength and deep tendon reflexes
5	Document flexibility/ROM (fingertip test), muscle atrophy (calf measurement).
	local areas of tenderness, visual pain analog, sensation alternation
	History
2	NOTE. Rediculopathy is often over-diagnosed. For unequivocal evidence of radiculopathy, refer to the AMA Guides to the Braluation of Permanent Impairment, 5th Edition, page 382-383.
Rz	le out "red flag" diagnoses, including diagnostic studies (See other treatment parameters for each of these):
>	Cauda Equina Syndrome (ICD9 3446) (Schedule emergency procedure)
>	Fracture, Dislocation, Wound (JCDP 805 4, 805 5, 806 4, 806 5, 839 2, 838 3, 876, 911, 922 3, 926 11, 942, 952 2]
>	Cancer, Infection (ICD9 171.7, 195.8, 215.7)
2	Dissecting/Ruptured Aortic Aneurysm [ICD9 441.0]
2	Others (prostate problems, endometriosis/gynecological disorders, uninary tract infections, & renal pathology)
h	out Radiculonathy (90% of cases)
17	142 (745) (746) (746) (847) (847) (847)
Aİ	so first visit (day 1)
5	Prescribe decreased activity, if necessary, based on severity and difficulty of job; passive therapy with heat/ice (3-4 times/day), stretching, appropriate
	analgesia (i.e., acetaminophen) and/or anti-inflammatory (i.e., ibuprofen) [Benchmark cost: \$14]; back to work except for severe cases in 72 hours,
	possibly modified duty. Avoid bed rest,
	No X-Rays unless significant trauma (e.g., a fall)
	If muscle sparms, then consider muscle relaxant with limited sedative side effects [Benchmark cost, \$44] (Note The purpose of muscle relaxants is to facilitate
	return to activity, but muscle relarants have not been shown to be more effective than NSAIDs.)
>	REASSURE PATIENT: common problem (90% of patients recover spontaneously
_	in 4 weeks)
	ODG Return-To-Work Pathways (847.2 lumbar sprain & 724.2 lumbago)
	Modified Duty
	Mild, clerical/modified work: 0 days
	Severe, clencalmodified work: 3 days
_	(See <u>ODG Capabilities &amp; Activity Modifications for Restricted Work</u> under "Work" in Procedure Summary)
Se	cond visit (day 7 – about 1 week after first visit)
2	Document progress (flexibility, areas of tenderness, motor strength, straight leg raise – sitting & supine)
<u>.</u>	If shill SUB% desibled than preserving manual therapy L Reactionarie cost : \$7500. Refer to marcane therapyt, chiropractor, physical therapyt, or occupational

Wit	h Radiculopathy (10% of cases)
(ICD9	1211, 1212, 1213, 12132, 1213, 12133, 1219, 1343, 1343, 1344
• •	uso test viae (day 1)
°	Same as non-radicular
	ODG Return-To-Work Pathways (722.x intervertebral disc disorders)
	Disc bulge
	Mild cases with back pain, avoid strenuous activity: 0 days
	Hemisted disc
	Initial conservative medical treatment, clerical/modified work: 3 days
• S	econd visit (day 7 - about 1 week after first visit)
0	Same as non-radicular, but
0	Reassure, but if increased numbness or weakness of either leg, get back to provider in one day
0	Consider referral to musculoskeletal physician
	(Orthopedist/Physical Med/Sports Med)
• T	hird visit (day 14 - about 1 week after second visit)
0	Same as non-radicular, but
0	About 50% can be back at modified duty
0	If improvement, then add strengthening exercises, increased activity
0	<ul> <li>Consider an ESI (Epidural Steroid Injection) for severe cases hoping to avoid surgery [Benchmark cost: \$676] (Note: The purpose of ESI is to reduce pain and</li> </ul>
	influrmation, restoring range of motion and thereby facilitating progress in more active treatment programs, but this treatment alone offers no significant long-term functional breacht).
• F	ourth visit (day 21 to 28 - about 1-2 weeks after third visit)
0	Document, if no improvement then
0	First MRI (about 3% of total cases, or 30% of radicular cases) to confirm extruded disk with nerve root displacement [Benchmark cost; \$1.600]
0	(MRI or CT not indicated without obvious clinical level of nerve root dysfunction, or before 3-4 weeks)
0	If MRI negative and surgery still justified by severity of symptoms, then combined myelogram & post-myelogram CT [Benchmark cost: \$750]
0	Second MRI only if progession of neurological symptoms (less than 1% of cases)
0	If no improvement, consider prescribing 2nd ESI (7-10 days after 1st) [Benchmark cost; \$615], there should be a maximum of two ESI's, and the second
	ESI can be 7-14 days after the first, depending upon the patient's resconse and functional gain.
0	Refer to fellowship trained Spine Surgeon Neurosurgeon (50%),
	Orthopedist (50%)
0	Before surgery screen for psychological symptoms that could affect surgical outcome (e.g., substance abuse, child abuse, work conflicts, somatization,
	verbalizations, attorney involvement, smoking)
0	<ul> <li>Possibly refer to psychologist for testing (hdhdPI or better, Waddell test) [Benchmark cost: \$540]</li> </ul>
	ODG Return-To-Work Pathways (722.x intervertebral disc disorders)
	Initial conservative medical treatment, manual work: 28 days
	Initial conservative medical treatment, regular work if cause of disability: 84 days
• S	urgery (three months or more - after appropriate work-up and consultation) (about 2% of total cases, or 20% of radicular cases) (See also ODG Indications

## Consider referred to manufacturation (phyrician) (Othore-shaft Styres 1 Med/Spectra Med) Thard unit (day H - about tweek date rescond war) Same at non-shafted, but About 50% can be buck at monfield day Bend the shaft monfield day Bend the shaft monfield day Bend the shaft day of the shaft day of the shaft day in the shaft day of the shaft day of the shaft day of the shaft day of the shaft day in the shaft day of the shaft day shaft day in the shaft day shaft day in the shaft day bayes of the shaft day shaft day in the shaft day shaft day in the shaft day shaft day in the shaft day bayes of the shaft day shaft day in the shaft d





#### **Treatment Protocol**

- Recommendation only, based on the evidence, for ideal cases
- Not to be used to deny care
- What to do, when to do it (when to go to MRI, surgery, etc)
- Provides benchmark costs, expected time away from work

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Codes for Automated Approval           Codes for Automated Approval           New Earlies of the deals of the deals only of the dagoons and percedure codes.           Diagnoses (without radicalopathy)           Diagnoses (without radicalopathy)           Diagnoses (without radicalopathy)           Code           Diagnoses (without radicalopathy)           Code           Code Code Code Code Code Code Code Code	-	~			
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Production and product of and calls of any data of any	Note: Ideally each claim	should be managed based on the details of the case using the Procedure S	ammary. The codes below are provided for payors without the		
Diagnoses (without radiculopathy)           744 2         Lumbage           745 3         Eachack supcofied           748 3         Other speptons refnable to back           66 a         Sprate and errais of accordance region           847 8         Other speptons refnable to back           847 8         Sprate and errais of accordance region           847 8         Sprate and errais of accordance region           847 8         Contanou of runk.           22 2n         Contanou of runk.           79204         Offico/opplanet win erw           92054         Offico/opplanet win erw           92054         Offico/opplanet win erw           92054         Offico/opplanet size erw           92055         Other Manpulation, erw to two region           92050         Sprat Manpy erwalation,           92050         Bray erwalation,           92051         Bray erw erw           92052	resources to manage ea	ch case, who want to auto-pay the more routine claims based only on the d	agnoss and procedure codes.		
ICDP Code         Name           784.2         Lunkage           784.3         Backacku, ungeredied           784.5         Backacku, ungeredied           784.5         Ofter symptom referable to back.           865.         Syrates and arrais of acroitan regue           865.         Syrates and arrais of acroitan regue           923.7         Ortisons of trans.           923.8         Outsines of trans.           923.8         Outsines of trans.           923.8         Outsines of trans.           923.8         Outsines of trans.           923.4         Office/outgatest vite of trans.           9203.4         Office/outgatest vite of trans.           9213.         Office/outgatest vite of trans.           9214.         Office/outgatest vite of trans.           9215.         Otto Manual fortery           9214.         Office/outgatest vite of trans.           9215.         Otto Manual fortery or trans.           9710.0         Physical forter grow conclose           9710.0         Physical forter grow conclose           9732.         Therspecta. extender forters.           9733.         Therspecta. extender forters.           9734.         Interpretext. extender		Diagnoses (without radiculopa	thy)		
724 2         Lankage           724.5         Backack, superdisf           724.5         Backack, superdisf           724.8         Other symptoms refracto to took.           727.0         Other symptoms refractor and superdisf parts of back.           728.2         Consume of trains.           729.2         Consume of trains.           720.2         Name         Maximum           600.0         Other symptoms refractors.         Other symptoms refractors.           792.4         Other symptoms refractors.         Image: Symptoms refractors.           792.4         Other symptoms refractors.         Image: Symptoms refractors.           792.4         Other symptoms refractors.         Image: Symptoms refractors.           792.4         Other Marguitator	ICD9 Code	Name			
724.5         Backacke, unspecified           724.8         Other symptom refeable back.           B46.5         Sprains and strains of transface region           B47.5         Sprains and strains of transface region           B47.8         Sprains and strains of transface region           B22.8         Containson of transic           Protectares allowed:         Texcebarres allowed:           B22.8         Other symptoms:           B20.9         Other containson of transic           Protectares allowed:         Maximum           CPT Code         Maximum           B2034         Other contains, mol complexity           92034         Other contains, mol complexity           9214         Other contain, mol contenging           9214         Other contain, mol contenging           9210         Physical theragy eroscoles           9210         Physical theragy eroscoles           9210         Physical theragy eroscoles           9210         Physical theragy eroscoles           92110	724.2	Lumbago			
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97001         Physical threegy exceedage         1           97100         Physical threegy exceedage         6           970102         Physical threegy exceedage         6           970103         Physical threegy exceedage         6           970104         Physical threegy exceedage         6           970105         Pharapettic, exclusion         1           97017         Diarpostic, prophysicit, exclusion three thr	98925	Osteo Manipulation, 1-2 regions			
97110         Physical Interge proceedance         6           97002         Physical Interge re-relation         1           97030         Therapentic proceedance         6           97032         Therapentic proceedance         6           97032         Therapentic proceedance         6           Diagnoses (with readiculopathy)           TOP Code           TOP Code           Name           TOP Code	97001	Physical therapy evaluation	1		
97002         Physical Brarge re-relatation         1           97530         Diargenetic axbiint efferencies         6           90782         Diargenetic axbiint efferencies         1           Diagnosse (with radiculopathy)           TOD Code           TOD Code           Diagnosse (with radiculopathy)           TOD Code           TOD Code <td>97110</td> <td>Physical therapy procedure</td> <td>6</td>	97110	Physical therapy procedure	6		
97330         Therapenia aximitat/mercare         6           90782         Therapenia, prophylachia         1           Diagnoses (with radiculopathy)           TOP Code           TOP Code           Name           TOP Code	97002	Physical therapy re-evaluation	1		
9072 Therapents, prophlatics, or dagnotic spitchen l Diagnoses (with radiculopathy) ICD9 Code Name 72.2 E Envertedraj des deroders 72.5 E Envertedraj des deroders 73.5 Status 74.4 Deroses on hubocarari generates or radodins, unaesofied	97530	Therapeutic activities/exercises	6		
Diagnoses (with radiculopathy)           ICDP Cude         Name           72.2         Enterentifyin data: disorders           73.40         Signal monitor, durit than cerical           74.3         Signal monitor, durit than cerical           73.4         Toronics or handboarent neuritor or radiculin, suppredived	90782	Therapeutic, prophylactic, or diagnostic injection	1		
ICD9 Code         Name           722 z         Exervitedral dire daroders           734 0x         Sprak theorem, older has cervical           734 0x         Sprak theorem, older has cervical           734 0x         Borney on theorem of the state o		Diagnoses (with radiculopat	y)		
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T24 Ox         Spinal stemosis, other than cervical           724.3         Sciatica           724.4         Thorasis or humboracral neuritis or radicultis, unspecified	722.x	Intervertebral disc disorders			
724.3 Sciatica 724.4 Thoracic or humboracral neuritis or radicultis, unspecified	724.0x	Spinal stenosis, other than cervical			
724.4 Thoracic or lumbosacral neuritis or radiculitis, unspecified	724.3	Sciatica			
	724.4 Thoracic or lumbosacral neuritis or radiculitis, unspecified				
Procedures allowed:		Procedures allowed:			



#### Codes for Auto-Approval

- Maps CPT procedure codes to ICD9 diagnosis codes based on ideal TP
- Treatments supported in all cases up until "maximum occurrences"
- Designed for auto-pay, to streamline UR process when CPT requested
- Not to be used to deny care
- Can be integrated w/claims system

Procedure Summary – Low Back				
Procedure/topic	Summary of medical evidence			
Activity restrictions	See Work:			
Acupuncture	Not recommode for low body spin, but recommoded for related where conductions: Arrayments has not been fined affective in the management of this spin, stress of neural high spinght relations, the their is an end-balance in priority of the Arrayments in Sofiest here in the short at Spinger of High priority and the spin sections in a stress stress of the stress and the spin section of the stress br>priority results, but the stress br>priority results, but the stress br>and the stress br>enclosus and stress br>encloses and stress br>encloses and stress br>encloses and stress br>encloses and stress br>encloses and stress			
	ODG Acupuncture Guidelines (See the Pain Chapter for conditions where it is recommended): Initial total of 3-4 visits over 2 weeks			
	With evidence of objective functional improvement, total of up to 8-12 visits over 4-6 weeks			
Adheriolysis	Under study: Adhenistyne is an epidanel cathertenistics procedure used to treat charact-bad park by elimanizing filterus tarses from the rejuding targe. Local sanchristics and tready are impediate to the opidanel parket. During the Abran cannot by also and alternities in spirations of Dynetistic status. Cannot evidence on the study and efficiency of this procedure does not spirate adoption for the to be used what proceed manipuments for constraint affect status of constraints of the advectional processing of the spirate advection of the particular spirate and another the study and efficiency of this procedure does not be of strendom evidence are indeed to a spirate advectional processing of the spirate advection (), it is transformed burblenet in this discovery advection of the spirate advection (). The spirate advection () and the spirate advection () adve			
Aerobic exercise	Recommended. A reobic energies in beneficial as a conservative management technique, and exercise of as little as 30 minutes torics a week can be effective in managing low bark pain. ( <u>Mainreases, 1955</u> (Strukos, 2011). (Liskile, 2019). (Kool, 2019). 2019.			
Age adjustment factors	Recommended. Age is a significant predictor of return-to-work for low back pain, with one high quality study showing that each 5-year increase in age was associated with a 10.5% increase in the odds of remaining on disability of a fourback 2010; Reino, 2020; Loog, 2016; Data from the CCO NHS how a similar effect in disability duration. (Duranito, 2020)			
Annuloplasty (IDET)	See DEL			
Antidepressants	Percommended as as option in theories tasts. A secret competinentiary array of discicil listic on the efficiency and safety of discipant for the treatment of low body have considered that array bids relations approximately and an advance of the safety of discipant. 2019 (Section 2019) (Sect			
Anti-inflammatory medications	Performancies: Anti-influenzations we the tedisonal first isse of transients, for other pains as utrivity and fractional resolutions on a resonar. Constraint, and an anti-influenzation of the state of the state pains are utrivity and a starty of our pain to be stated at the back pains contained by the variable relations response that differences of the state description of the state of the state of the state pains contained by the state of the			
Aquatic therapy	Under study. There may be advantages to weightless running in back pain recovery. (Burns, 2001)			
Arthrodesis	Definition: Arthrodesis is the fassion of a joint. See Fusion.			
A share beats	San Dick montheasis			

- Most important feature of ODG
- Lists all potential therapies, associated with each condition
- Includes surgical procedures, physical medicine modalities, diagnostic/imaging tests
- Alphabetical order

#### Procedure Summary

- For each, provides summary of existing medical evidence
- Each entry begins with:
  - "Recommended..."
  - Not Recommended"
  - "Under Study"

- Continues with summary of evidence
- Includes frequency and duration of care, where appropriate
- Includes patient selection criteria, where appropriate
- References cited and hyper-linked
- If not covered, no ruling

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#### Procedure Summary

- Links lead recommendations to studies that support
- Provided in abstract form, ranked, highlighted, indexed
- Updated throughout year
- Can copy/paste and print
- Accountability/credibility

- Not "cookbook medicine"
- Many therapies work, therefore they are recommended as options
- Not every case has to follow the same road to recovery
- Doctor/patient can choose therapy they are most comfortable with

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#### **Procedure Summary**

- Many therapies commonly used in WC are not effective
- They should be avoided, therefore are not recommended
- Waste money, delay recovery
- Can also be harmful to injured workers (invasive, dangerous)





- ESI: Recommended as option prior to surgery in radicular cases
- To avoid surgery, allow for the restoration of function
- Help return to activity



- Fusion: Not recommended in the absence of fracture, dislocation or instability
- No scientific benefit otherwise
- Debilitating procedure, 17% complication rate, life-threatening
- Can cost about \$50k

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Mangodahon	Recommender is une operior. Media erreiner, hierer gele anderen from the une of anappations an area to be the pape Median is anticing of a fragmations has an origin of a fragmation grant error to be reiner to be reiner to have a been perme. While originaries the pape error to be paper and the second anappation of the second anappation is a splete. There a conserve on the align quantum permeasing in the product of the second anappation of the paper has a been perme. While originaries the paper and the paper and the second anappation of the paper and the has a been perme. While originaries the paper and the paper and the paper and the paper and the has a been permeased on the align quantum permeasing fragments on the paper and the paper and the has a been permeased on the paper and the paper and the paper and paper and the paper and the paper and the has a been permeased on the paper and the paper and paper and paper and the paper and the paper and the has a been permeased on the paper and the paper and paper and paper and the paper and the paper and the paper termination of paper and the paper and the paper and paper and paper and the pa
Manipulation under anesthesia (MUA)	Not a commode in the Ammer of verticable Bartner as disclosus. In this approximate shakine, mappakines with the patient matter incidential (MIA) and participation at a strate of a disclosus, and an approximate shakine, mappakines with the patient incidential (MIA) and a strategiest of strategiest and an approximate shakines and an approximate shakines as the abartners of verticable Bartners and an approximate shakines and an approximate shakines and the abartners of verticable Bartners and approximate shakines and approximate shakines and approximate shakines and approximate shakines and approximate shakines and approximate shakines approximate shakines and approximate shakines and approximate shakines and approximate shakines approximate shakines and approximate shakines and approximate shakines and approximate shakines applicable on adjustment shakines and applicable with the output shakines and approximate shakines applicable on adjustment shakines and applicable shakines and applicable shakines and applicable and applicable shakines and applicable shakines and applicable shakines and applicable and applicable shakines and applicable shakines and applicable shakines and applicable and applicable shakines and applicable shakines and applicable shakines and applicable and applicable shakines and applicable shakines and applicable shakines and applicable shakines and applicable and applicable shakines and applicable shakines and applicable shakines and applicable shakines and applicable applicable shakines and applicable shakines and applicable shakines and applicable shakines and applicable shakines and applicable applicable shakines and applicable shakines
Massage	Recommended as an option. Some proven efficary in the treatment of soute low back symptom, based on goulity studies, and three is substantial uncototal evidence. ( <i>Junta: Contrant. 2020</i> , ( <i>Ventat. 2020</i> , Stehman, 2020) (Chertina, 2020) (Cherti
Mattress firmness	Under study. A recent dimind find concluded that patients with medium-firm matterestes had better outcomes than patients with firm mattereste for pain in bod, pain on rising, and disability. A matteres of nedium firmesses improves pain and disability among patients with divoris non-specific low-back pain. ( <u>Korocc. 200</u> )
McKenzie method	Recommended as an option. Interexamine reliability of the McKenzie humbur prime assessment in performing chickel tests and classifying patients with low back pain into syndromes are good and statistically significant when the examines have been trained in the McKenzie method. <i>Classical</i> , 2020. (Classin, 1926). (Borodon, 2020.)
Medications	See more specific listings: Antidepresents, Anti-influentatory medications, Colorisins, Muscle relaxants, Nonprescription Medications, Opioids, & Oral conticostercids. For chronic pain see the PAIN Chapter of ODG Treatment.

- Manipulation (chiropractic): recommended as option
- Frequency, duration of care provided
- Massage: recommended as option
- PT: recommended as option
- Each can be continued beyond noted visits with objective signs toward functional restoration

TIPNTI	- and the second s
Descriptions are an address of the second states (D3D)	Say Vertebronlasty
Providanceus vertebroplanty (PV) Physical therapy (PT)	See <u>Endowinghild</u> See <u>Endowinghild</u> Development of the set of
Päster	Media durationni il Visita verd revola Posta negota Venanda Visita verd I verda Splast avecto: Il Visita verd I verda Relation Relations en en verda Relations Relations
Domon data at a dation	Sas Databasi spisi decompanyion (UAV To: Sas also Traction
Prolotherapy, also known as sclerotherapy	Note considered. These as configure guides concerning the differences of predictorys, the theorem as discretizeness, in the loce local Lindig functional improvement has real toos shown. The supervised rest is the standard line of predictory as of gravability expected or wardy used. Therefore, the use of predictorys probability is the local as in our as concerning and a faith time to as of gravability expected or wardy used. Therefore, the use of predictorys probability the local as the interval of approximation of the standard line of the standard line of the standard difference to
Psychological screening	Recommended as an option point to sugary. Before seffmal for sugary, diminish should consider refrand for psychological sciencing to improve rangel of automatic possibly including in induced tests and as MARY (Mannesol Multiplaine Personality (2019) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2010) (2014) (2010) (201
Racz neurolysis	See Adheriolyriz
Radiofrequency neurotomy	Under study. There is good evidence to support radiofrequency neurotomy in the cervical spins but benefits beyond one year are not yet established. Evidence in the hande spins is conflicting, but radiofrequency neurotomy may be an effective means of reducing pain in paintin certafly selected on the basis of contradic differential doration much tranch disputs blocks. (Derpfins, 2000) (Context, 2000) (Conflicted, 1929) (Anonhanz, 2000) (Neurosci.) Context, 2000) See size Extended Research and Net Context, 2000 (Context, 2000) (Context, 2000) (See size Extended Formation of the set of the Net Context of Context, 2000) See size Extended Formation of the set of the Net Context of Context, 2000 (Context, 2000) (Con
Radiography (x-rays)	Not recommended in the absence of red flags: (for indications list bolow). Lumbus spins readography should not be recommended in plant should be plant in the absence of red flags for ensure spinsing bullocity, even if the pan has persisted for at least 6 weeks. However, it non provident field it "may" be appropriate when the physican bulkwes it would aid in planter spectrations and management. Indirectionant antegraphy will red in Africe product flags, that are





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- MRI: recommended where appropriate
- ODG Indications for Imaging provided ("patient selection criteria")





- Indications for radiography provided
- Return-to-work: Recommended
- Strongest medical evidence indicates returning to normal activity (modified duty as necessary) accomplishes pain relief
- Can education injured workers

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#### HIGHER PRIORITY REFERENCES

STORY AND PHYSICAL EXAMINATION son SG, Brunner RL, Greenwald EJ, Rivera VG, Cox JC, Bigos SJ, Paying doctors more: use of musculoskeletal specialists and in are workers' compensation costs, Occup Environ Med 2001 Aug;43(8):672-9.

ustralian Acute Musculoskoletal Pain Guidelines Group, Bvidence-based Management of Acute Musculoskeletal Pain, App ealth And Medical Research Council, Australian Academic Press Pty. Ltd., 32 Jeays Street, Bowen Hills QLD 4006 Australia

attie MC, Videman T, Gibbons LE, Manninen H, Gill K, Pope M, Kaprio J, Occupational driving and humbar disc degeneration: a care 002 Nov 2,360(9343):1369-74. gos SJ. Perils, pitfalls, and accomplish ents of suidelines for tre ent of back problems, Neurol Clin 1999 Feb;17(1):179-92

os SJ, McKee JE, Holland JP, Holland CL, Hildebrandt J, Back pain, the uncomfortable truth - assurance and acti

nnibal M. Diagnostic evaluation of low back pain. Orthop Clin North Am. 2004 Jan;35(1):7-16.

ter JT, Birrell LN (Editors) 2000. Occupat supational Medicine. London. onal health guidelines for the management of low back pain at work - p

ma Healthcare Coverage Position. Subject: Invasive Treatment of Back Pain. Coverage Position Number: 0139 Effective Date: 8/15/2004 niston, Ranavaya, et al., Official Disability Guidelines (ODG), 8th edition, "Disability Duration Adjustment Factors by Age", December 2002

nelson R. Aprill C. Medcalf R. Grant W. A Prospective Study of Centralization of Lumbar and Referred Pain. A Predictor of Symptomatic Dircs and Annular mpetence. Sprine 1997;22:1115-22

<u>fan N</u>, Risk fa

nsen M, Woodward M, Norton R, Coggan C, Dawe M, Sher ue. 2002 Jan 1;27(1):92-8.

Reviser SG, Russell C, McGill SM, Relationships between lumbar flexibility, sit-and-reach test, and a previous lattory of low back discomfort in industrial workers 2av J April Physical, 2003 Apr: 28(2):165-77.

nees <u>EF, Machatane (J. Nahit ES, Silman AJ, McBeth J</u>, Risk factors for new-onset low back pain amongst cohorts of s matology (Oxford), 2003 Aug.42(8) 959-68. Epub 2003 Apr 16. Kyvik KO, Leboeuf-Yde C, Lings S, Bakketeig L, Ambiguou

#### Conclusions



- Apply principals of EBM to improve patient outcomes in workers' comp
- Reduce excessive/unnecessary utilization of medical services and the costs associated
- Make it easier for patients to get needed care
- Identify/target ineffective, harmful procedures, reducing risks for patients
- Reduce administrative "friction" by being clear to providers about what treatments will get paid for, and why, based on scientific evidence

#### Conclusions (continued)

- Open the lines of communication among all parties, allowing for a framework for discussion based on important and emerging studies from each of the peer-reviewed medical journals
- Improve patient satisfaction through prompt, responsible delivery of health care
- Improve outcomes by focusing on restoration of functional capacity (not "chasing the pain")
- Recognize early RTW opportunities, and use appropriate activity modification

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#### Conclusions (continued)

- Quickly identify effectiveness of any procedure
- Automate payment for appropriate treatment
- Reduce delayed recovery rates with effective, concurrent management of treatment & returnto-work, thus curbing indemnity costs
- Help good employees get back on their feet in good time, safely, easily and effectively
- Put evidence-based medicine to work for you

Official Disability Guidelines"

## **Case History/Analysis**

## Stephen Demeter, M.D. and Robert Sussman, M.D.

#### THE TREATMENT OF HAWAII'S INJURED WORKERS USING TREATMENT PROTOCOLS

Robert Sussman, MD Stephen L. Demeter, MD, MPH



THE TREATMENT OF HAWAII'S INJURED WORKERS USING TREATMENT PROTOCOLS

- IS IT NECESSARY?
  IS IT DESIRABLE?
  IS IT PRACTICAL?
  IS IT POSSIBLE?
- WHAT IS THE COST?
- WHY DO IT?

#### GOAL IN TREATING THE INJURED WORKERS OF HAWAII

• OUR MUTUAL GOAL, FIRST, LAST, AND ALWAYS, IT TO RETURN THE INJURED WORKER TO AS FUNCTIONAL A STATE AS POSSIBLE, IN AS SHORT OF A TIME AS POSSIBLE, WITH THE LEAST ECONOMIC REPERCUSSIONS ON HIM/HER AND HIS/HER FAMILY

#### **CASE HISTORY**

Mr. E.F. is a 48-year-old male who worked as an air-conditioning installer for the past 20 years. In the course of his employment, he would routinely install duct work for the air conditioning systems in various homes and office buildings. This often entailed overhead work during this installation.

#### **HISTORY OF INJURY**

On the day of his injury, Mr. F. was installing duct work. As he was coming down from a ladder, he missed the last step and fell. As he fell backward, in order to avoid falling and hitting his head on the concrete floor, he twisted to the right. He struck the floor with his right hip and outstretched right hand. He immediately complained of pain in his hip, hand, right arm, and right shoulder.

#### **EMERGENCY ROOM**

He was taken, by his supervisor, to the emergency room where he was seen and evaluated. Mr. F. had pain in the same locations as noted previously. X-rays were taken of his hip and right upper extremity. No fractures or dislocations were seen. He was prescribed pain medication and told to stay off work until cleared by his family physician.

#### TREATMENT BY FAMILY PHYSICIAN

Mr. F. obtained an office visit with his primary care physician two days later. His injury occurred on a Tuesday, May 1. When seen on Thursday, May 3, he continued to have significant pain in all the previously described areas. His doctor kept him off work and prescribed pain medications (NSAIDs and narcotics), a muscle relaxer, and told him to get some rest and use heat. He had a return visit on Monday, May 7.

#### TREATMENT BY FAMILY PHYSICIAN – VISIT 2

On Monday, May 7, Mr. F. was significantly better. He could walk and do most normal activities. He continued to have some discomfort in the previously described areas but "it was livable" with the medications. The only exception was his right shoulder. Mr. F. said that he could hardly move his arm because of the pain in his shoulder. He couldn't brush his teeth or comb his hair. Putting on his clothes was very difficult.

#### TREATMENT BY FAMILY PHYSICIAN – VISIT 2

His doctor knew that Mr. F. could not go back to work with that degree of difficulty in his right shoulder/arm, considering the type of job that he had, so he kept his patient off work for another week and continued to recommend the same medications. Acupuncture and massage were ordered for pain relief.

#### TREATMENT BY FAMILY PHYSICIAN – VISIT 3

Mr. F. was seen on Tuesday, May 15. He continued to be off work. His right shoulder pain was poorly controlled with ibuprofen three times a day and a narcotic at bedtime. Occasionally, he would take an extra dose through the night when the pain would awaken him. He told his doctor that he had not yet started the massage treatments and acupuncture. He was to come back in 10 days for a follow-up visit.

#### TREATMENT BY FAMILY PHYSICIAN - VISIT 4

On May 25, Mr. F. was no better. He continued to have significant pain in his right shoulder. He continued to have significant problems with activities that involved placing his arm above 90 degrees. The physical examination was unchanged. His doctor continued him off work and the same medications but decided to obtain an x-ray of Mr. F.'s collar bone with weights to make sure that he didn't have a dislocation. He considered physical therapy but decided to wait for the x-rays to come back. Mr. F. was scheduled for another appointment in two weeks. Massage and acupuncture were helping with his pain and were continued.

#### TREATMENT BY FAMILY PHYSICIAN – VISIT 5

On June 9, Mr. F. was no better. He continued to have significant pain with movement. His examination was showed diminished range of motion (ROM) in his right shoulder. The xrays were negative for fracture or dislocation. Mr. F. told his doctor that the massage and acupuncture were helping.

#### TREATMENT BY FAMILY PHYSICIAN – VISIT 6

Mr. F was no better two weeks later. He was still not working. Dr. Y. thought that a cortisone injection might help so he injected the shoulder with a cortisone preparation.

#### TREATMENT BY FAMILY PHYSICIAN – VISIT 7

Three weeks later, due to a vacation, Dr. Y. saw Mr. F. again. Things were unchanged. The cortisone shot helped somewhat, but the improvement only lasted about 10 days. On examination, visible atrophy was seen in the right shoulder region. The ROM was declining. Pain persisted, especially with activities, or through the night when Mr. F. would roll on his right side. His medications were ibuprofen, three times a day, one or two narcotic pills at night, and an occasional muscle relaxant to help him sleep. Dr. Y. discontinued the acupuncture and massage and ordered physical therapy.

#### TREATMENT BY FAMILY PHYSICIAN – VISITS 8 & 9

After another 3 weeks, Dr. Y. found his patient unchanged. The PT had been started 10 days ago and the patient had attended 3 sessions (ordered twice a week). He injected Mr. F.'s shoulder again. Two weeks later, things were unchanged. Dr. Y. then referred Mr. F. to an orthopedic surgeon for care.

#### TREATMENT BY ORTHOPEDIC SURGEON

Mr. F. was able to see the orthopedist on September 3. He continued to have pain with activities and during the night. He continued to be off work. His medications were ibuprofen - 3/d, a narcotic - 1 or 2 through the night, and an occasional muscle relaxer at bedtime. He had received 2 steroid injections in his shoulder, massage therapy and acupuncture without benefit. He was currently going to PT twice a week. A stress x-ray of his shoulder was negative. On examination, there was some shoulder atrophy with weakness, diminished ROM, and pain on palpation. An MRI was ordered.

#### TREATMENT BY ORTHOPEDIC SURGEON VISIT 2

Two weeks later, Mr. F. was seen again. His PT had been increased to 3 times a week and he was complaining of increased pain. He ran out of his narcotics. The MRI had not been approved. Dr. Z. injected the patient's shoulder with a cortisone preparation.

#### TREATMENT BY ORTHOPEDIC SURGEON VISIT 3

A month later, the patient was seen again. Approval for the MRI still had not been issued. Mr. F. was still not working. Dr. Z. wrote a letter to the insurance company requesting the MRI. The PT, that had run out 2 weeks earlier, was re-started.

#### TREATMENT BY ORTHOPEDIC SURGEON VISIT 4

Another month passed. The MRI was eventually performed showing a partial thickness rotator cuff tear. Dr. Z. continued the PT and returned the patient to work at light duty. He wrote a treatment plan that included arthroscopic surgery. Dr. Z. again injected the patient's shoulder with a cortisone preparation.

#### TREATMENT BY ORTHOPEDIC SURGEON VISIT 5

A month later, the patient continued to take the same medications, continued to receive PT, and, on examination, had continued pain on palpation, weakness, and diminished ROM. Mr. F. did not feel as though he was making any progress in PT and had missed a number of sessions. The surgical treatment plan had not been approved and the patient was ordered to have an IME to determine the nature of and proper treatment for his injury,

#### TREATMENT BY ORTHOPEDIC SURGEON VISIT 6

Two months passed and Mr. F. was again seen by Dr. Z. The IME had been performed but the results were not available yet. Mr. F. was not working as no light duty existed. He continued to miss frequent PT sessions. He continued to have pain with activities and through the night. His ROM was worsening as was his weakness.

#### TREATMENT BY ORTHOPEDIC SURGEON VISIT 7

On 3/17, Mr. F. was seen in follow-up. The surgical request had been denied. Aggressive PT and a work hardening program was suggested by the IME physician. Dr. Z. wrote an angry letter to the insurance company regarding the surgical denial. He discussed with his patient the need for the PT and agreed with the work hardening. Dr. Z. again injected the patient's shoulder with a cortisone preparation.

#### TREATMENT BY ORTHOPEDIC SURGEON VISIT 8

Two months later (5/17), Mr. F. was again seen. He was a little better. His pain had diminished and he no longer took the narcotics or muscle relaxers. He was still not working. He had been reasonably faithful with the PT. His strength had increased somewhat. Dr. Z. injected his shoulder again and recommended a Functional Capacity Evaluation.

#### TREATMENT BY ORTHOPEDIC **SURGEON VISIT 9**

Six weeks later, Dr. Z reviewed the FCE with Mr. F. It indicated that the patient could only perform duties at a light-medium level of manual labor due to deconditioning. The ROM of the right shoulder was significantly reduced and it was further recommended that the patient perform no above shoulder activities. Dr. Z. signed off the case and returned the patient to Dr. X., saying that he had nothing further to add to the care at that point.

#### MR. F. - FINAL DIAGNOSES **AND DISPOSTION**

- 1. PARTIAL TEAR OF THE ROTATOR CUFF PARTIALLY DUE TO INDUSTRIAL INJURY PARTIALLY DUE TO DEGENERATIVE DISEASE
- **FROZEN SHOULDER** 2. - MARKEDLY DIMINISHED ROM ABOVE SHOULDER LEVEL
- **DISUSE ATROPHY OF SHOULDER GIRDLE** 3

SINCE HE COULD NO LONGER PERFORM THE TYPE OF WORK THAT HE HAD ONCE PERFORMED, MR. F. WAS REFERRED TO **VOCATIONAL REHABILITATION** 

### **SUMMARY OF THE CASE**

- TOTAL TIME 14 MONTHS: OFF WORK ENTIRE TIME LIGHT DUTY HAD BEEN RECOMMENDED BUT WAS UNAVAILABLE IN THE MOST RECENT 7 MONTHS RETURN TO WORK – IN FUTURE, PENDING VOC REHAB RECOMMENDATIONS/RE-TRAINING •
  - TOTAL COSTS INCLUDED:
  - EMERGENCY ROOM 1

  - PCP 9 VISITS ORTHOPEDIST 9 VISITS ACUPUNCTURE 24 VISITS

  - MASSAGE THERAPY 24 VISITS PHYSICAL THERAPY 108 VISITS (including work hardening)
  - FUNCTIONAL CAPACITY EVALUATION 1
  - MRI 1
  - X-RAY 2 INTRA-ARTICULAR CORTISONE INJECTIONS 6

  - VOCATIONAL REHABILITATION EVALUATION INDEPENDENT MEDICAL EVALUATION

#### ODG

#### Initial Diagnosis

o

- First visit: with Primary Care Physician MD/DO (100%) Initial evaluation should include:
- Determine the type of trauma (direct trauma, fall, repetitive motion, twisting incident, etc.).
- Test the range-of-motion of the joint (normal, mild restriction, severe 0

restriction, or complete restriction). An initial evaluation of the shoulder requires accurate diagnosis of shoulde o injuries by careful inspection and palpation of the shoulder area. Although the shoulder is generally swollen, the injury is usually defined by direct tenderness over the injured area

#### ODG

#### Determine "degenerative changes" versus "acute trauma":

 Degenerative changes (Go to Initial Conservative Treatment)
 Lesions of the rotator cuff are a continuum, from mild inflammation and degeneration to full avulsions. Studies of normal subjects document the universal presence of degenerative changes and conditions, including full avulsions without symptoms. Conservative treatment has results similar to surgical treatment but without surgical risks. Surgical outcomes are much better in younger patients with a rotator cuff tear, than in older patients who may be suffering from degenerative changes in the rotator cuff. Impingement Syndrome, shoulder tendonitis, shoulder sprain, and subacromial bursitis are all closely related entities with the same etiology. They involve friction, abrasion, and inflammation of the rotator cuff and the long head of the biceps tendon with the subacromial arch (anterior lip of the acromion, coraco-acromial ligament and acromioclavicular joint). These conditions involve consequences of aging or repetitive use, or a

combination thereof, such as: THIS CASE IS COMPLICATED AND MAY BE AN ACUTE ON TOP OF CHRONIC - CARE IS BEGUN WITH THE CHRONIC MODEL

#### **"CONSERVATIVE TREATMENT"**

- Mild/Moderate -- Initial Conservative Treatment (90% of cases) .
- ODG Return-To-Work Pathways . Medical treatment (stage 1 or 2, impingement, no tear), modified
- Modical treatment (impingement, no tear), manual work: 7 days
- (See ODG Capabilities & Activity Modifications for Restricted Work under "Work" in Procedure Summary)

#### **"CONSERVATIVE TREATMENT"**

- Second visit (day 14 about 2 weeks • • after first visit)
  - Document progress • 0
  - If not significantly improved then prescribe • 0 physical therapy (gentle range-of-motion exercises plus exercises that strengthen the rotators and stabilize the scapula) should be started for home exercise training [Benchmark cost: \$250]: Refer to Physical Therapist (50%) or Occupational Therapist (50%) for up to 3 visits per week for 2 weeks

SECOND VISIT TOO SOON (1 WEEK) MASSAGE AND ACCUPUNCTURE ORDERED

#### **"CONSERVATIVE TREATMENT**

- Third visit (day 28 - about 1 month after first visit) . • 0
  - o Document progress Further relaxation and pain control can be achieved by injecting an anesthetic under the acromion (laterally or anteriorly) into the shoulder joint.
- the shoulder joint.
   Corticosteroid injection trial [Benchmark cost: \$276].
   Should be performed by musculoskelatally trained physician.
   Sprains of the rotator cuff cause swelling within a closed space and add an element of chronic impingement which may be slow to resolve. By decreasing swelling, local infiltration of the rotator cuff with corticosteroids may quicken the resolution of this problem. Repeat corticosteroid injection may be necessary, but should not be done any sooner than every two weeks, up to a maximum of three injections. Injection should be avoided in patients under 30 years of age.
   If prescribe therapy, then continue therapist, change from passive to active modality, up to 2 visits per week, teach home exercises.

#### TOO SOON (2 WEEKS)

NO PHYSICAL THERAPY - MT AND AC CONTINUED

#### **"RTW PATHWAYS"**

- ODG Return-To-Work Pathways
- Medical treatment (impingement, no tear), manual overhead work: 28 days Medical treatment, regular work if cause of disability: 42 days Medical treatment, heavy manual work: 42 days
- Fourth visit (day 42 about 6 weeks after first visit)
  - 0 Refer for Imaging

PATIENT NOT ABLE TO RTW - GO TO MRI; VISIT 4 - 3 WEEKS; SECOND X-RAY; MRI NOT DONE OR EVEN CONSIDERED FOR MANY MORE MONTHS

#### **"AGGRESSIVE TREATMENT"**

- Aggressive Treatment (10% of cases)
- [Benchmark cost: \$2,621]
- Include imaging as above. ••

#### **"AGGRESSIVE TREATMENT"**

Arthroscopy, Shoulder, Surgical: Rotator cuff • • Arthroscopy, Shoulder, Surgical: Hotator cum repair, with decompression of subacromial space with partial acromioplasty, with or without coracoacromial release. Performed by Orthopaedic Surgeon (90%) or General Surgeon (10%) on an outpatient or 23-hour basis. May be endoscopic. Decompression/acriomoplasty alone should be performed after at locat circ works of conservativo performed after at least six weeks of conservative treatment.

- Post-surgical treatment: • .
- Physical/Occupational Therapy: A short course may be needed; if so then Post-surgical treatment (endoscopic): 14 visits over 8 weeks; Post-surgical treatment (open): 20 visits over 10 weeks •

#### **ODG PATHWAYS**

ODG Return-To-Work Pathways

 ODG neutrino of autways
 Arthroscopic surgical repair/acromioplasty (stage 3), clerical/modified work: 28-56 days Arthroscopic surgical repair/acromioplasty, manual work, non-dominant arm: 56-90 days Arthroscopic surgical repair/acromioplasty, manual work, dominant arm: 70-90 days Open surgery (stage 3), clerical/modified work: 42-56

days Open surgery, manual work, non-dominant arm: 70-90

days Open surgery, manual work, dominant arm: 90-106

Open surgery, heavy manual work if cause of disability: indefinite

#### ACUPUNCTURE

- Recommended as indicated below. Several small clinical trials have found acupuncture to be effective on shoulder pain, but referral is dependent on the availability of experienced providers with consistently good outcomes. Among those shoulder indications, found to have positive outcomes from acupuncture, were rotator cuff tendonitis, frozen shoulder, subacromial impingement syndrome, and rehab following arthroscopic acromioplasty. (Kleinhenz, 1959) (Sun, 2001) (Ronol. 2000) (Nabela, 2002) (Gibertson, 2003) (Guerra, 2003) (He, 2004) (Vickers, 2004) (Grant, 2004) (Michener, 2004) (Guerra, 2003) (He, 2004) (Nickers, 2004) (Crant, 2004) (Michener, 2004) (Journa de Hoyos, 2004) On the other hand, a recent trial did not show any benefit of acupuncture compared with placebo TENS when added to the exercise treatment of rotator cuff tendinitis. (Razavi, 2004) Acupuncture was of benefit over placebo in improving a measure of shoulder function at four weeks, but by four months, the difference between the acupuncture and placebo groups, while still statistically significant, was no longer likely to be clinically significant. There is little evidence to support or refue the use of acupuncture to shoulder pain although there may be short-term benefit with respect to pain and function. (Green-Cochrane, 2005) . Recommended as indicated below. Several small clinical trials have found **ODG Acupuncture Guidelines:** Initial trial of 4-6 visits over 2 weeks
  - With evidence of objective functional improvement, total of up to 12-18 visits over 4-6 weeks

#### EXERCISE

Recommended. Shoulder disorders may lead to joint stiffness more often than other joint disorders. Therapeutic exercise, including strengthening, should start as soon as it can be done without aggravating symptoms. Pendulum exercises are usually tolerated by the patient even when discomfort is pronounced, and range of motion can be preserved by this method. Lifting and working at 90 degrees (the position of abuse) as well as overhead work should be proscribed or restricted during the first few weeks after onset of problems due to acute rotator cuff tear, AC joint strain or separation, and impigment syndrome. (Verhagen-Cochrane, 2004) Exercise was demonstrated to be effective in terms of short term recovery in rotator cuff disease, and longer term benefit with respect to function. Combining mobilization with exercise resulted in additional benefit when compared to exercise alone for rotator cuff disease. When compared to exercise, ultrasound is of no additional benefit over and above exercise alone. Supervised exercise regime is of benefit in the short and long term for mixed shoulder disorders and rotator cuff disease. (Green-Cochrane, 2003) (Michener, 2004) (Grant, 2004) For adhesive capsulitis, injection of corticosteroid combined with a simple home exercise program is effective in improving shoulder pain and disability in patients. Adding supervised physical therapy provides faster improvement in shoulder range of motion. When used alone, supervised physical therapy is of limited efficacy in the management of adhesive capsulitis. (Carette, 2003)

#### MRI

- Recommended as indicated below. Magnetic resonance imaging (MRI) and arthrography have fairly similar diagnostic and therapeutic impact and comparable accuracy, although MRI is more sensitive and less specific. Magnetic resonance imaging may be the preferred investigation because of its better demonstration of soft tissue anatomy. (Banchard, 1999) Subtle tears that are full hickness are best imaged by MRI within a stranger lears and participation and the stranger lears (Lines, scool). Shoulder and specifically of the rotator cuff lears, with over 9% commonly used, where many manifestations of a normal and an abromal and the stranger lears and the stranger lears and the stranger manifestations of a normal and an abromal and the stranger lears and the stranger manifestations of a normal and an abromal and the stranger lears and the stranger lears and the stranger lears and the stranger lear throscopy, then would shoulder attranger (Newter 2000). The stranger lear stranger lear stranger lears and the stranger lear stranger lear stranger lear stranger lear stranger lea
- Subacute shoulder pain, suspect instability/labral tear

#### **PHYSICAL THERAPY**

Recommended. Positive (limited evidence). See also specific physical therapy modalities by name. For impirgement syndrome significant results were found in pain reduction and isodynamic strength. (Bang, 2000) (Verhagen-Cochrane, 2004) There is poor data from non-controlled open studies favouring conservative interventions for rotator curl tears, but this still needs to be proved. Considering these interventions are less invasive and less expensive than the surgical approach, they could be the first choice for the rotator curl tears, until we have better and more reliable results from clinical trials. (Entiman-Cochrane, 2004) Self-training may be as effective as physical therapits supervised with arthroscopic subacromal decompression. (Anderson, 1999) For adhesive capsulitis, injection of corticosteroid combined with a patients. Adding supervised physical therapy is of limited efficacy in the management of adhesive capsulitis. (Cancelle, 2003) Use of a home patient streaded with an ensorting the rotatod. (Interact) and the rangement of adhesive capsulitis. (Cancelle, 2003) Use of a home patient streated with an ensorting the rotatod. (Interact) and the single dimeted. (Interact, and ensorted current is a streading and strengthening shoulder rangement of adhesive capsulitis. (Cancelle, 2003) Use of a home patient streaded and ensorted. (Interact, and the supervised ensorted at cortical neurostimulation (TENS) limits, and entimation of the single of motion. The single and strengthening shoulder rangement of adhesive capsulitis. (Cancelle, 2003) See of a home patient strengthening should be recommended. (Interact, and the supervised ensorts encoursed currents and the recommended. (Interact, and the supervised ensorts encourse entitical neurostimulation (TENS) limits, and entitical conservative treatment of acute shoulder symptoms, depending on the experience of local physical therapits available for referral. .

#### PHYSICAL THERAPY

- ODG Physical Therapy Guidelines –
- Allow for fading of treatment frequency (from up to 3 visits per week to 1 or less), plus active self-directed home PT .
- . Adhesive capsulitis:
- 16 visits over 8 weeks .
- Rotator cuff syndrome:
- Medical treatment: 10 visits over 8 weeks •
- Post-surgical treatment: 24 visits over 14 weeks Dislocation of shoulder:
- 12 visits over 12 weeks •
- Acromioclavicular joint dislocation:
- AC separation, type III+: 8 visits over 8 weeks • •
- Sprains and strains of shoulder and upper arm: 9 visits over 8 weeks
- •
- Sprained rotator cuff:
- Medical treatment: 10 visits over 8 week
- Post-surgical treatment: 24 visits over 14 weeks

#### **SHOULDER INJECTIONS**

Recommended as indicated below. For rotator culf disease, corticosteroid injections are superior to physical therapy interventions for short-term results, and a maximum of three are recommended. (Crean Cachrane, 2003) If pain with elevation is significantly limiting activities, a conservative therapy (i.e. strengthening exercises and NSAD) for two to three weeks, but the evidence is not yet overwhelming, and the total number of injections should be limited to no more than three. (und the reliaden 1989) (Green Cochrane, 2002) (Grant 2004) A recent meta-analysis concluded that subacromial controsteroid injection for rotator culf disease and intra-analysis concluded that subacromial controsteroid injection for note that the cosh the sub-map of the sub-term of the subacromial injection of methylpredinsione had no beneficial impact on reducing the pain or the duration of immobility. (Mennervy, 2003) Soft the obstructuring in on twell maintained. (Buchrader-Cochrane, 2003) On the other hand, for post-traumatic compared to physical therapy seem to have better initial but worse tong-term outcomes. One trial for injection, and a six months 5.9 for physical therapy and 4.55 for injection. (Hay, 2003) Soft of adhesive capsulitis, injection of corticosteroid combined with a simple home exercise program is effective in impoving shoulder range of motion. When used alone, supervised physical therapy provides laster improvement in shoulder range of motion. When used alone, supervised physical therapy provides laster improvement of corticosteroid combined with a simple home exercise program is provides laster improvement of corticosteroid sare effective to improvement for rotator culf rendonitis up to a 9-month period. They are also probably more effective than NSAID medication. Higher doses may be better than lower doses for subacromial corticosteroid injection for rotator culf tendonitis. (Arroll, 2005)

#### SURGERY FOR ROTATOR CUFF TEARS

- Recommended as indicated below. Repair of the rotator cuff is indicated for significant tears that impair activities by causing weak-ness of arm elevation or rotation, particularly acutely in younger workers. However, rotator cuff tears and requalit juit-thickness tears presenting variety in younger workers. However, rotator cuff tears and requalit juit-thickness tears presenting primarily as implications of the set of the primary as the set of the set

#### SURGERY FOR ROTATOR CUFF TEARS

- ODG Indications for Surgery<sup>™</sup> -- Rotator cuff repair:
- Citeria for control of anyon y rotator cun repart: Citeria for contact out repart with diagnosis of di<u>ll hickness</u> so totator cuff tear AND Cervical pathology and frozen shoulder syndrome have been ruled out: 1. Subjective Citiciae Findinges: Shoulder pain and inability to elevate the arm; tenderness over the greater tuberosity is common in acute cases. PLUS •
- .
- •
- the greater tuberosty is common in acute cases. PLUS 2. Objective Chinical Findings: Patient may have weakness with abduction testing. May also demonstrate atrophy of shoulder musculature. Usually has full passive range of motion. PLUS 3. Imaging Clinical Findings: Conventional x-rays, AP, and tup lateral or xallary views. AND Gadolinum MRI, ultrasound, or arthrogram shows positive evidence of defoit in rotator cuff. Criteria for rotator cuff repair OR anterior acromolpastly with diagnosis of <u>parall hickness</u> rotator surgery.)
- surgery.)
  1. Conservative Care: Recommend 3 to 6 months: Three months is adequate if treatment has been continuous, six months if treatment has been intermittent. Treatment must be directed musculature. FULS
  HUS
  between the subscription of th
- .
- . http://time/tasa.org/active/tasg/setar/ta

- CRITERIA MET IN THIS PATIENT

Nashington, 2002)

#### **RETURN TO WORK**

- Under study. Quantitative exposure-response relationships have been established between current work with highly elevated arms and clinically verified shoulder disorders. For current upper arm elevation above 90 degrees, a duration increment of 1% of the daily working hours was associated with odds ratios of 1.23 for supraspinatus tendinitis, 1.16 for shoulder pain with disability, and 1.08 for shoulder pain without disability. (Svendsen, 2004) See also <u>Return to work</u>.
- Converse pain with useduity, and 1.06 for shoulder pain without disability. (Svendser, 2004) See also <u>Return to work</u>.
  ODG Capabilities & Activity Modifications for Restricted Work: <u>Modified work</u>: No overhead work (reaching above shoulder) plus no reaching to shoulder level (90 degree position); no holding arm in abduction or flexion; pulling and pushing not more than 8 lbs up to 4 limes/hr; lifting and carrying up to 5 lbs 3 times/hr; single arm upper extremity work using injured arm for light work only; possible immobilization by abduction brace, sling, or clavicle brace; no climbing ladders.
  <u>Manual work</u>: Reaching above shoulder up to 15 lbs of weight; reaching to shoulder up to 51 bissofth; pulling and pushing up to 60 lbs 20 immes/hr; lifting and carrying up to 4 lbs 15 times/hr; single upper extremity work using injured arm for indertak work on the other of non-nity and the probabilization by abduction brace, sling, or clavice brace; no climbing to 60 lbs 20 immes/hr; lifting and carrying up to 40 lbs 15 times/hr; single upper extremity work using injured arm for moderate work only (full use of non-nityred arm;) possible immobilization by abduction brace, sling, or clavicle brace; climbing ladders up to 50 rungs/hr.



#### SUMMARY OF THE CASE:

	CASE	ODG
	EXAMPLE	MODEL
TIME OFF WORK	60 WEEKS	26 WEEKS
RETURN TO WORK	UNKNOWN	26 WEEKS
RETURN TO NORMAL JOB	NO	MAYBE

	CASE	000	
	EXAMPLE	MODEL	
MASSAGE	24	0	
THERAPY			
SESSIONS			
ORTISONE	6	3	
IJECTIONS			
OTHERS	FCE, IME, VOC REHAB EVAL	NONE	
X-RAYS	2	1	
МРІ	1	1	



SUMMARY OF THE CASE:				
	CASE	ODG		
	EXAMPLE	MODEL		
PCP VISITS	9	4+		
TIMING OF MRI	6 MONTHS; PERMISSION ISSUES	4 WEEKS		
PHYSICAL THERAPY SESSIONS	46	108		
ACCUPUNC- TURE SESSIONS	24	MAX. 18; ? DECREASE PT		
SURGERY	NO (TOO LATE, TOO LITTLE ?)	YES		



#### SUMMARY OF THE CASE: TREATMENTS BEYOND ODG

- TOTAL TIME OFF- 8 MONTHS EXTRA
- TOTAL EXTRA COSTS INCLUDED:
  - PCP 2 VISITS

•

- ORTHOPEDIST 3 VISITS
- ACUPUNCTURE 3-15 VISITS
- MASSAGE THERAPY 24 VISITS
- PHYSICAL THERAPY 68 VISITS
- FUNCTIONAL CAPACITY EVALUATION 1
- INTRA-ARTICULAR CORTISONE INJECTIONS 3
- TREATMENT INCLUDED MULTIPLE EXAMPLES OF TREATMENTS THAT HAVE NO SCIENTIFIC VALIDITY AND, AS SEEN IN THIS CASE, WERE OF NO VALUE

#### WHAT ARE OUR GOALS IN TREATING HAWAII'S INJURED WORKERS?

#### IDEALLY,

- TO RESTORE THE IW TO PRE-INJURY HEALTH
- AS QUICKLY AS POSSIBLE
- WITH NO LOSS OF INCOME
- TO HIS/HER NORMAL JOB



• TO RESTORE THE IW TO AS CLOSE TO HIS/HER NORMAL JOB AS POSSIBLE

#### **SUMMARY OF THE CASE:**

#### WHAT ARE THE DIFFERENCES?

- 1. SPEED
- 2. EFFICIENCY
- 3. THE FOREST IS NOT OVERLOOKED WHEN SEEING THE TREES
- 4. ECONOMIC COST
- 5. SCIENTIFIC VALIDITY

#### **SUMMARY OF THE CASE:**

#### WHAT ARE THE DIFFERENCES FOR THE PATIENT?

- 1. EARLIER AND BETTER RETURN TO WORK
- 2. LESS LOSS OF INCOME
- 3. ENHANCED RETURN TO OPTIMAL HEALTH STATUS

#### **SUMMARY OF THE CASE:**

#### WHAT ARE THE DIFFERENCES?

THE TWO PRECEEDING SLIDES REFLECT OBVIOUS DIFFERENCES. BUT, THERE ARE SOME OTHER DIFFERENCES THAT REFLECT THE MEDICAL LITERATURE REGARDING DELAYS IN TREATMENT AND OFF-WORK STATUS

#### **SUMMARY OF THE CASE:**

#### WHAT ARE THE DIFFERENCES?

THERE IS SUFFICIENT MEDICAL EVIDENCE, THAT IS SUFFICIENTLY SCIENTIFICALLY SOUND, THAT SUPPORTS THE CONCEPT OF INCREASED MORBIDITY AND INCREASED MORTALITY IN INDIVIDUALS WHO ARE OFF WORK, EVERYTHING BEING EQUAL

BUT IN ORDER TO DO THIS, WE MUST CHANGE OUR APPROACH TO THESE INJURED WORKERS

#### A MAJOR PARADIGM SHIFT IS NECESSARY

- THE GOAL OF TREATMENT MUST EMPHASIZE A RETURN TO FUNCTION AS SOON AS POSSIBLE
- THE GOAL *CANNOT* BE A RETURN TO WORK ONLY WHEN THE INJURED WORKER IS PAIN FREE



#### REASONS FOR RTW AS SOON AS POSSIBLE

- REDUCE MORBIDITY
- REDUCE MORTALITY
- ENHANCE THE PROSPECT OF RETURNING TO WORK WITH NO LOSS OF POSTION, WAGE, INCOME, OR STATUS



![](_page_59_Figure_1.jpeg)

## REASONS FOR RTW AS SOON AS POSSIBLE Table 7.6 Probability of return to work as a function of time off work Time off work Odds of still being off work one year later Day 1 1–10% 1 month 20% 6 months >50% 2 years (or lose job, which may be much earlier) Up to 100%

![](_page_59_Picture_3.jpeg)

![](_page_59_Picture_4.jpeg)

#### Box 9.5 Effects of prolonged bed rest

- Catabolic, poor tissue nutrition, depressed ٠
- metabolism • Progressive loss of bone mineral and bone strength
- Stiffness due to loss of joint and soft tissue mobility, connective tissue contracture, fibrosis and adhesions •
- And adhesions Muscle wasting, 3% loss of muscle strength per day, decrease in time to fatigue, reduced • endurance
- Loss of neuromuscular coordination and balance Ligaments lose strength Poorer healing, increased scar tissue formation Systemic effects loss of cardiovascular fitness

- loss of cardiovascular fitness
   anemia and thrombosis
   respiratory and renal stagnation
   endocrine changes
   immune system, lowered resistance
   Loss of sensory and mental acuity
   Psychologic distress, depression
   Lower pain tolerance

#### An explanation for patients \*\*\*\*

- Back pain is a symptom, not a disease. Most back pain is not due to any serious disease or damage in your back
- · Back pain is usually a symptom of physical dysfunction. Your back is simply not moving and working as it should. It is unfit or out of condition
- · Recovery and relief of pain depend on getting your back moving and working again and restoring normal function

#### Box 7.1 Information for patients

- We can reassure them honestly that their pain is likely to improve
- Most people either stay at work or can return to work quickly, even if they still have some pain
- Back pain often recurs. Attacks may settle over several years, but back pain sometimes becomes chronic. However, even chronic back pain does not inevitably continue forever, and about onethird of people improve spontaneously each year
- It may also help to tell them that most people with back pain do manage to continue most activities and to work despite their pain

![](_page_61_Figure_0.jpeg)

![](_page_61_Figure_1.jpeg)

#### UNEMPLOYMENT AND MORTALITY

# A note on the effect of unemployment on mortality ULG, Gerdham N, N, Magnus J dhannesson () Department of Community Market () Department of Community (Market () Department of Community () Department of Departme

#### UNEMPLOYMENT AND MORTALITY

In this note we test if unemployment has an effect on mortality using a large individual level data set of nearly 30,000 individuals in Sweden aged 20-64 years followed-up for 10-17 years. We follow individuals over time that are initially in the same health state, but differ with respect to whether they are employed or unemployed (controlling also for a number of individual characteristics that may affect the depreciation of health over time).

#### UNEMPLOYMENT AND MORTALITY

Unemployment significantly increases the risk of being dead at the end of follow-up by nearly 50% (from 5.36 to 7.83%). In an analysis of cause-specific mortality, we find that unemployment significantly increases the risk of suicides and the risk of dying from "other diseases" (all diseases except cancer and cardiovascular), but has no significant effect on cancer mortality, cardiovascular mortality or deaths due to "other external causes" (motor vehicle accidents, accidents and homicides).

#### UNEMPLOYMENT AND MORTALITY

	NUMBER OF DEATHS (%)	EFFECT OF UNEM	PLOYMENT
		ABSOLUTE RISK	RELATIVE RISK
ALL CAUSE MORTALITY	1521 (100%)	2.467	1.460
CANCER	595 (39.1%)	-0.095	0.955
CARDIOVASCULAR	560 (36.8%)	0.520	1.262
OTHER DISEASES	214 (14.1%)	1.350	2.877
SUICIDES	67 (4.4%)	0.329	2.477
OTHER EXTERNAL	85 (5.6%)	-0.036	0.882

#### **SUMMARY:**

#### EARLY RETURN TO WORK – WHY?

- DECREASED MORBIDITY
- DECREASED MORTALITY
- RETENTION OF JOB
- RETENTION OF ABILITY TO DO JOB
- PATIENT SATISFACTION

#### SUMMARY:

#### EARLY RETURN TO WORK - WHY?

- DECREASED COSTS TO:
  - PATIENT
  - EMPLOYER
  - WORKERS' COMPENSATION SYSTEM

#### SUMMARY:

**EARLY RETURN TO WORK - WHY?** 

#### SUMMARY:

EARLY RETURN TO WORK - WHY?

IT'S THE RIGHT THING TO DO!

#### **SUMMARY:**

EARLY RETURN TO WORK - HOW?

- DEDICATED HEALTH PERSONNEL
- DEDICATED EMPLOYERS
- DEDICATED "SYSTEM"

#### SUMMARY:

#### **EARLY RETURN TO WORK - HOW?**

#### DEDICATED HEALTH PERSONNEL

- EARLY RETURN TO WORK
- WORKING WITH TREATMENT PROTOCOLS

#### • DEDICATED EMPLOYERS

LIGHT DUTY/ACCOMODATIONJOB DESCRIPTIONS

#### • DEDICATED "SYSTEM"

- WOKING WITH TREATMENT PROTOCOLS
- FLEXIBILITY WITHIN THOSE PROTOCOLS

#### COULD THIS BE DONE ANY OTHER WAY?

PERHAPS, BUT THIS ISN'T A BAD WAY TO TRY TO CHANGE A SYSTEM THAT HAS ITS INHERENT FLAWS

#### GOAL IN TREATING THE INJURED WORKERS OF HAWAII

• OUR MUTUAL GOAL, FIRST, LAST, AND ALWAYS, IT TO RETURN THE INJURED WORKER TO AS FUNCTIONAL A STATE AS POSSIBLE, IN AS SHORT OF A TIME AS POSSIBLE, WITH THE LEAST ECONOMIC REPERCUSSIONS ON HIM/HER AND HIS/HER FAMILY

## Alternative Treatment Plans

**Nelson Befitel** 

![](_page_67_Picture_0.jpeg)

![](_page_67_Picture_1.jpeg)

![](_page_67_Picture_2.jpeg)

![](_page_68_Picture_0.jpeg)

factors we will consider in determining whether an "alternative" treatment plan should be approved is whether it is based on "evidence-based medicine."

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What facts will be considered in determining whether the "evidence-based medicine" requirement is met?

- Whether the proposed treatment plan is necessary and appropriate to cure and relieve the claimant from the workplace injury.
- □ Whether the proposed treatment plan has been adequately established to cure and relieve the claimant from the workplace injury.
- □ Whether the proposed treatment plan has been subjected to peer review and publication.
- The degree of community and or national acceptance of the treatment plan.

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![](_page_68_Figure_8.jpeg)

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![](_page_69_Picture_1.jpeg)