Effective Strategies to Manage Work Injuries and Prevent Needless Disability

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CT DPH Injured Workers and Opioid Use Symposium
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OEHN
Occupational & Environmental Health Network

UCONN HEALTH

Why We Are Here

- Opioid public health crisis
- Prescriber practice gaps, variations, fragmented care
- Patient perception, expectation and risk deficits
- Pharmaceutical industry marketing
- Need for all stakeholders to work together
- Necessity for innovative solutions

The New York Times

BUSINESS DAY

In Guilty Plea, OxyContin Maker to Pay $600 Million

By BARRY MEIER MAY 10, 2007

ABINGDON, Va., May 10 — The company that makes the narcotic painkiller OxyContin and three current and former executives pleaded guilty today in federal court here to criminal charges that they misled regulators, doctors and patients about the drug's risk of addiction and its potential to be abused.

PERSPECTIVE | GLOBE MAGAZINE

How did the opioid epidemic get so bad?

Doctors are partly to blame, but so is a culture that demands zero pain after medical treatment.

By Dr. Sushrut Jangi | MARCH 29, 2016

Disability Factors

- Employer
  - Physical work demands, pace, control
  - Available modified duty
  - Supervisor response
  - Co-worker support
  - Crook JOR 2002, IWH 2011, McClellan JOR 2001, Shaw JOR 2003, Werner OM 2007
- System
  - Delayed reporting
  - Compensability issues
  - Timeliness in processing claim, payments, UR
  - Communication issues
  - Worker perceived fairness
  - IWH 2011, Kilgour JOR 2015

Disability Factors

- Worker
  - Pain severity and fear
  - Self reported function
  - Recovery expectations
  - Job tenure and satisfaction
  - Prior work absence
  - Medical and psychologic
  - Attorney
  - Injury physical factors
  - Chou JAMA 2010, Crook JOR 2002, Ebrahim JOR 2015, Iles OEM 2008, IWH 2011, Shaw Spine 2005, Shaw Disab & Rehab 2005, Shaw JOEM 2009
- Provider
  - Interactions, communications with all
  - Treatment and RTW
    - How providers respond to pain, RTW
    - Opioids and benzodiazepines
    - LBP MRI absent red flags
    - Lumbar fusion DDD
- Allen JOEM 2014, Franche Disab & Rehab 2005, Hall Spine 1994, IWH 2011, Kilgour JOR 2015, Linton JOR 2002, Rainville Spine 2000

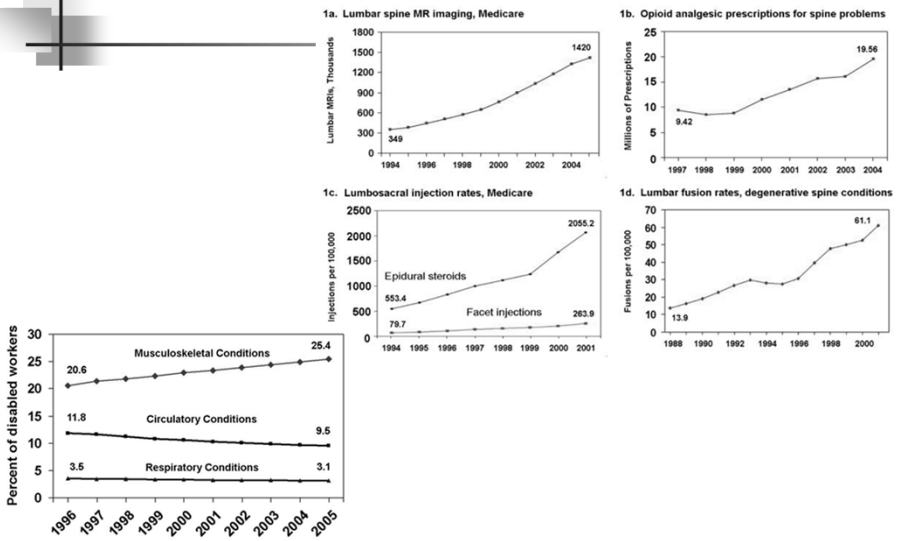
MSD Management Tips

- Identify the minority with "red flags" who require early imaging and/or referral
- Reassurance for the remainder that most MSDs resolve with conservative care
- Pain may not mean harm, allay worry if not eliminated
- Promote self care, coping, total worker health
- Promote beneficial / evidence based interventions
  - Avoid unsupported imaging, esp LBP
  - Caution treatments with ↑risk vs. benefit considerations (opioids, benzodiazepines, LBP fusion for DDD)

Worsening Trends in the Management and Treatment of Back Pain Mafi JAMA IM 2013

- Outpatient neck / back visits NAMCS & NHAMCS 1999-2010
  - Excluded "red flags"
- Guideline supported
  - NSAID (acetaminophen) ↓36.9%-24.5%
  - PT no change 20%
- Guideline limitations
  - Opioids ↑19.3%-29.1%
  - MRI/CT ↑7.2%-11.3%
  - Specialty referrals ↑6.8%-14%

Overtreating Chronic Back Pain: Time to Back Off? Deyo et al. J Am Bd Fam Med 2009



Opioids and WC Claim Impact

- ↑Work loss and disability
  - 11-14 ↑ odds ratio work loss, 6x ↑ # work loss days opioids > 90 days Volinn Pain 2009
  - Early opioid dose (450 mg/15 days) ↑ 69 days work loss Webster Spine 2007; 7 days opioids 2x ↑ OR disability @ 1 yr Franklin Spine 2008
- ↑Claim cost
  - $20K ↑ claim cost opioids > 90 days Volinn Pain 2009
  - ↑ risk $100k claim cost (SA opioids 1.8x, LA 3.9x) independent of severity White JOEM 2012
    - Benzos/SA opioids 5x, BZ/LA 14x) Lavin JOEM 2014

MSD Management Tips

- Exhaust non-opioid treatments
  - Exercise, Lifestyle, Complementary & Alternative, Cognitive Behavioral Therapy
  - NSAIDs, Tricyclics, Antidepressants, Anticonvulsants
  - Evidence based interventional options
- May be equivalent treatments or combinations of treatments
  - Role of shared decision making

Shared Decision Making

- Evidence based information on treatment alternatives, benefits, risks; PLUS
- Collaborative process between patient and HCP
- "Patient preference sensitive care"
  - Less consistent or known outcomes, multiple options
  - Patient variation in value of risks, outcomes
- Diagnostic and treatment decisions made together; often use decision aids
- Reflects patient goals, values and preferences
- ↑ patient knowledge, ↑ choices c/w values, ↑ conservative care Stacey Cochrane 2014

Advice Regarding Low Back Pain (ACP)

Annals of Internal Medicine SUMMARIES FOR PATIENTS

Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain

Before taking medicines, patients with *chronic* low back pain should try other treatments.

- Studies show that the following treatment options can help relieve pain:
  - Exercise
  - Rehabilitation: therapy that addresses physical, psychological, and social issues that may be causing pain
  - Acupuncture
  - Mindfulness-based stress reduction: learning ways to focus and calm the mind

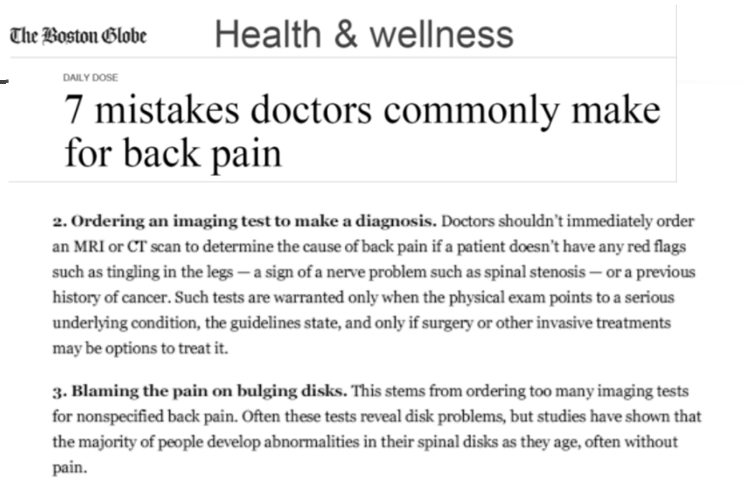
If these nonmedicine treatments do not work, patients with chronic low back pain and their doctors should discuss medicines, such as ibuprofen, tramadol, or duloxetine, as possible treatment.

Opioids should be considered only if no other treatments work and only if there are more benefits than risks for an individual patient.

http://annals.org/aim/article/2603231/noninvasive-treatments-acute-subacute-chronic-low-back-pain

Advice Regarding MRI For Low Back Pain Absent Evidence Based Indication

- Natural history of recovery
- Unlikely to have serious condition Jarvik AIM 2002, Ferrari CanFP 2016
- MRI findings are common and may not be the cause of symptoms Boden JBJS 1990, Carragee Spine 2006
- MRI findings may not predict outcome or change management Lehnert ACR 2010, McNee BMC MSD 2011, Kleinstruck Spine 2006
- Early unsupported MRI without indication does not improve outcomes and may cause harm Jarvik JAMA 2003, Graves Spine 2012, Ash AJNR 2008, Webster JOEM 2010. Webster Spine 2013 & 2014
- MRI may be indicated if recovery does not occur as expected or clinical condition changes



The Boston Globe Health & wellness

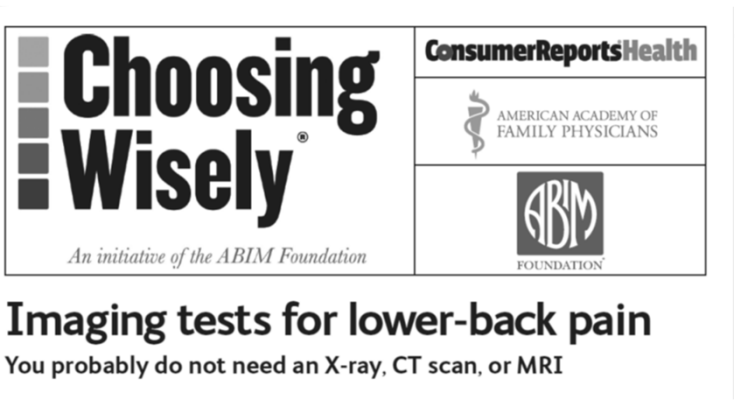
DAILY DOSE

7 mistakes doctors commonly make for back pain

2. Ordering an imaging test to make a diagnosis. Doctors shouldn't immediately order an MRI or CT scan to determine the cause of back pain if a patient doesn't have any red flags such as tingling in the legs — a sign of a nerve problem such as spinal stenosis — or a previous history of cancer. Such tests are warranted only when the physical exam points to a serious underlying condition, the guidelines state, and only if surgery or other invasive treatments may be options to treat it.

3. Blaming the pain on bulging disks. This stems from ordering too many imaging tests for nonspecified back pain. Often these tests reveal disk problems, but studies have shown that the majority of people develop abnormalities in their spinal disks as they age, often without pain.

https://www.bostonglobe.com/lifestyle/health-wellness/2013/08/04/managing-back-pain-mistakes-doctors-commonly-make/V7BkwRyGEs76JcrUlonxSP/story.html



Choosing Wisely®

An initiative of the ABIM Foundation

ConsumerReportsHealth

AMERICAN ACADEMY OF FAMILY PHYSICIANS

ABIM FOUNDATION

Imaging tests for lower-back pain

You probably do not need an X-ray, CT scan, or MRI

http://consumerhealthchoices.org/wp-content/uploads/2012/06/ChooseWiselyBackPainAAFP-ER.pdf

Advice Regarding Fusion for LBP DDD Absent Evidence Based Indication

- Therapeutic exercise + CBT is as effective as lumbar fusion
- Fusion outcomes
  - 1/2 have no pain relief
  - Rare to be pain free
  - 2/3 disabled at 2 years; mod functional limitations
  - Opioids ↑ 41% and contribute to deaths
- Fusion risks
  - Complications 9-18%
  - Repeat operation 22-27%
- Brox Spine 2003 / Pain 2006, Fairbank BMJ 2005, Franklin Spine 1994, Juratli Spine 2006, Nguyen Spine 2011, Mannion Spine J 2016

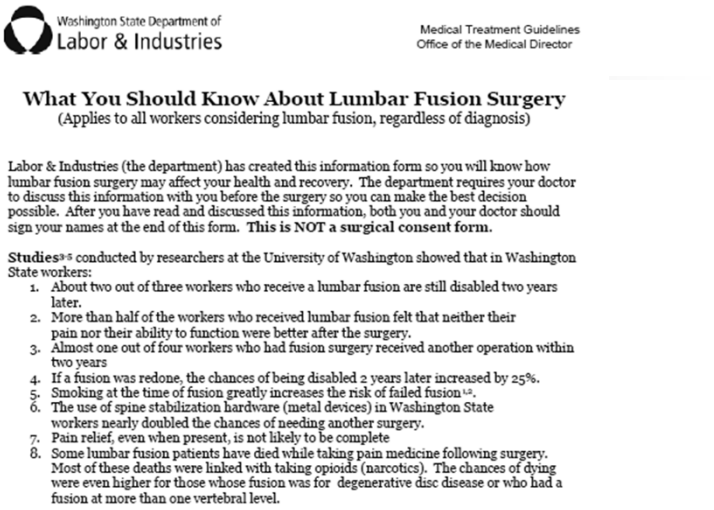
MINNESOTA DEPARTMENT OF LABOR & INDUSTRY

What injured workers should know about lumbar fusion surgery as a treatment for degenerative disc disease

What are the results of lumbar fusion for injured workers with chronic low back pain and degenerative disc disease?
You might want to consider and discuss the following information[1] with your physician before making a decision about whether you will proceed with surgery.

- Studies of injured workers show about half of them get better after the surgery. However, up to one-third of patients report a "poor" result.
- In some studies, when lumbar fusion is compared to other treatments, patients who receive a fusion do better than those who just continue to get the same treatment they were already receiving. However, in other studies, patients who were referred for intensive medical management and interdisciplinary rehabilitation did as well as those who had fusion surgery.
- Ten to 20 percent of patients develop complications from the surgery. Complications include infection, deep vein thrombosis, pulmonary embolism, nerve injuries and problems with bone grafts or implanted devices.
- About one in every four injured workers who have a lumbar fusion will have another lumbar surgery. Subsequent surgeries are often done because the fusion doesn't "take" (become solid) or the hardware used in the fusion becomes a problem; or, because the spine above or below the fusion starts to deteriorate, causing more pain and disability.
- Most injured workers who are disabled by their back pain remain disabled after their fusion surgery, with fewer than 50 percent returning to work.
- Most injured workers continue to use strong pain medication after their surgery; some even require more medication.

http://www.dli.mn.gov/WC/Pdf/fact_sheet_lumbar_fusion.pdf



Washington State Department of Labor & Industries

Medical Treatment Guidelines
Office of the Medical Director

What You Should Know About Lumbar Fusion Surgery
(Applies to all workers considering lumbar fusion, regardless of diagnosis)

Labor & Industries (the department) has created this information form so you will know how lumbar fusion surgery may affect your health and recovery. The department requires your doctor to discuss this information with you before the surgery so you can make the best decision possible. After you have read and discussed this information, both you and your doctor should sign your names at the end of this form. **This is NOT a surgical consent form.**

Studies[3-5] conducted by researchers at the University of Washington showed that in Washington State workers:

1. About two out of three workers who receive a lumbar fusion are still disabled two years later.
2. More than half of the workers who received lumbar fusion felt that neither their pain nor their ability to function were better after the surgery.
3. Almost one out of four workers who had fusion surgery received another operation within two years
4. If a fusion was redone, the chances of being disabled 2 years later increased by 25%.
5. Smoking at the time of fusion greatly increases the risk of failed fusion[1,2].
6. The use of spine stabilization hardware (metal devices) in Washington State workers nearly doubled the chances of needing another surgery.
7. Pain relief, even when present, is not likely to be complete
8. Some lumbar fusion patients have died while taking pain medicine following surgery. Most of these deaths were linked with taking opioids (narcotics). The chances of dying were even higher for those whose fusion was for degenerative disc disease or who had a fusion at more than one vertebral level.

http://www.lni.wa.gov/ClaimsIns/Files/OMD/MedTreat/LumbarfusionUpdate020216.pdf

Information Regarding Opioids

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

SEARCH

CDC A-Z INDEX

Injury Prevention & Control: Opioid Overdose

Opioid Overdose
Opioid Basics
Data
CDC Guideline for Prescribing Opioids for Chronic Pain
Prescription Drug Monitoring Programs (PDMPs)
State Information
CDC Publications
Resource Center
Pressroom

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The United States is in the midst of an opioid overdose epidemic.

Opioids (including prescription opioids and heroin) killed more than 33,000 people in 2015, more than any year on record. Nearly half of all opioid overdose deaths involve a prescription opioid.

Learn More about the Epidemic >

15% INCREASE IN OPIOID DEATH RATES IS DRIVEN IN LARGE PART BY ILLICIT OPIOIDS.

What Can You Do to Prevent Opioid Overdose Deaths?

The Public
Learn more about opioids in order to

States
Consider ways to increase use of

Health Care Providers
Consider CDC's opioid prescribing

https://www.cdc.gov/drugoverdose/index.html

TURN THE TIDE

PRESCRIBING OPIOIDS FOR CHRONIC PAIN

ADAPTED FROM CDC GUIDELINE

Opioids can provide short-term benefits for moderate to severe pain. Scientific evidence is lacking for the benefits to treat chronic pain.

IN GENERAL, DO NOT PRESCRIBE OPIOIDS AS THE FIRST-LINE TREATMENT FOR CHRONIC PAIN (for adults 18+ with chronic pain > 3 months excluding active cancer, palliative, or end-of-life care).

http://turnthetiderx.org/#

ConsumerReports.org®

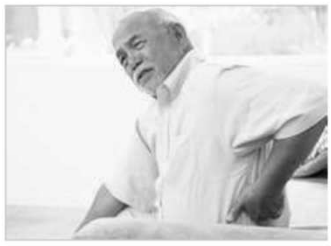
The Dangers of Painkillers: A Special Report

Every year, Percocet, Vicodin, and other opioids kill 17,000 Americans and acetaminophen sends 80,000 people to the ER

Published: July 2014

Opioids: Deadly misconceptions

One of the biggest misconceptions people have about opioids is that the risks apply to other people, not themselves. But the "typical" victim of overdose might not be whom you think. About 60 percent of overdoses occur in people prescribed the drugs by a single physician, not in those who "doctor shopped" or got them on the black market. And a third of those were taking a low dose.



Used properly, opioids can ease severe short-term pain from, say, surgery or a broken bone, and manage chronic pain from an illness such as cancer. But people run into trouble when they inadvertently misuse the drugs—combining them with alcohol or

http://www.consumerreports.org/cro/magazine/2014/09/the-dangers-of-painkillers/index.htm

CDC Vitalsigns™

November 2011

Prescription Painkiller Overdoses in the US

Deaths from prescription painkillers‡ have reached epidemic levels in the past decade. The number of overdose deaths is now greater than those of deaths from heroin and cocaine combined. A big part of the problem is nonmedical use of prescription painkillers—using drugs without a prescription, or using drugs just for the "high" they cause. In 2010, about 12 million Americans (age 12 or older) reported nonmedical use of prescription painkillers in the past year.

Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for a month. Although most of these pills were prescribed for a medical purpose, many ended up in the hands of people who misused or abused them.

http://www.cdc.gov/VitalSigns/PainkillerOverdoses/index.html

FDA Consumer Health Information www.fda.gov/consumer www.fda.gov/consumer/updates/painmeds022309.html

A Guide to Safe Use of Pain Medicine

http://www.fda.gov/downloads/ForConsumers/ConsumerUpdates/ucm095742.pdf

JAMA PATIENT PAGE — The Journal of the American Medical Association — MEDICINES

Misuse of Opioid Medication

About 100 million Americans have chronic pain and some may be treated with opioid medications. Opioid medications include codeine, morphine, oxycodone, and fentanyl, among others. These medications can help some people and harm others. In the United States, opioid medications are the second most common drug abused after marijuana.

Opioid medication misuse is defined as use of an opioid medication different than the way in which it was prescribed (for example, in higher doses) or for reasons other than why it was prescribed (for example, to get high).

An article published in the March 6, 2013, issue of *JAMA* discussed opioid misuse.

RISK FACTORS FOR OPIOID MEDICATION MISUSE

- Younger age (<45 years)
- Personal history of substance abuse, mental illness, or legal problems
- Family history of substance abuse

http://jama.jamanetwork.com/article.aspx?articleid=1687580

MSD Management Tips

- Promote continued activity, appropriate RTW
- Explore barriers to recovery, engage worker in solutions
- Ergo/PT/OT as optional problem solver
  - Worksite visit, assess RTW options, tailored advise
- Communication with workplace, insurer
  - Written, verbal, onsite visit

Provider LBP RTW Intervention

- RTW decisions Hall Spine 1994
  - LBP, Canadian Back Schools with work conditioning
  - RTW FD @ 4 mo 77% unrestricted vs. 48% based upon lifting capacity and pain
- RTW Advice
  - "…early return to work (or continuing to work) with some persisting symptoms does not increase the risk of 're-injury' but actually reduces recurrences and sickness absence…" Carter JT, Birrell LN (Editors) 2000 Low Back Pain at Work
- Disability duration guidelines