It's Not Just Opioids:
Problematic Interventional Pain Treatments

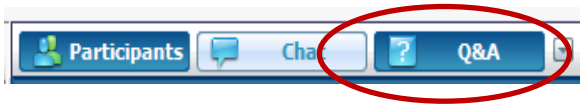
Part 2: Non-Opioid Painkillers

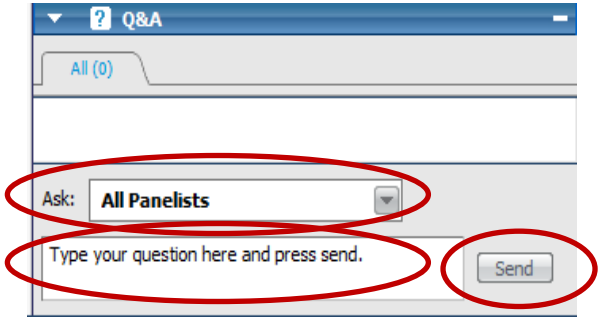
PARADIGM®
OUTCOMES

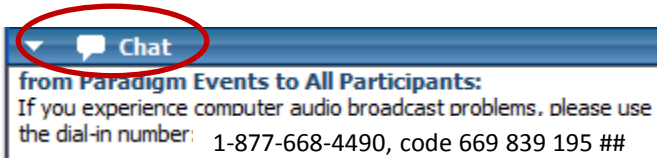
Hassan Moinzadeh, MD, PhD Physician, Long Beach Memorial Medical Center
Steve Moskowitz, MD Senior Medical Director, Paradigm

First, a Few Housekeeping Points

- Slides will advance automatically
- Question & Answer period at end
- You may submit questions at any time
  - Q&A panel is on the lower right side (If you don't see it, click the "Q&A" button in the upper right)
  - Type a question into the lower section of the Q&A panel that appears
  - Ask "All Panelists" and click "Send"
- The presentation was emailed to all registered participants this morning; a copy of the replay will also be emailed
- When the webinar ends, a short survey will pop up; you must take the survey to receive CCMC credit
- If you experience computer broadcast audio problems, please use the dial in number posted in the Chat panel







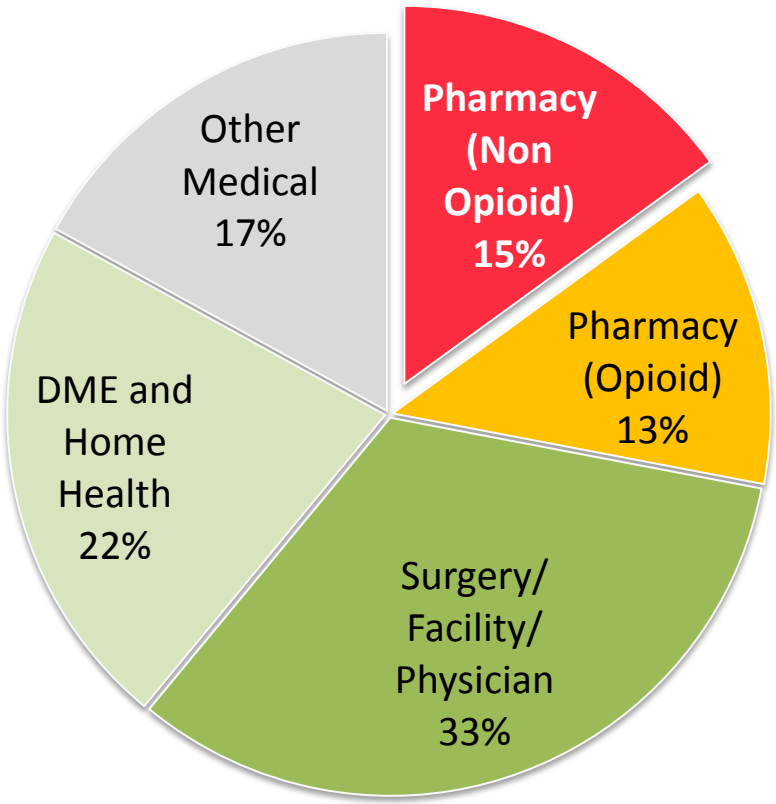
In a study of chronic pain patients, **57% had limited health literacy**; poor health literacy is known to result in substantial negative impact on patient outcomes including a poorer ability to take medications correctly, a higher rate of hospitalizations and greater emergency care use, and poorer overall health status[1]

1. Devraj R, Herndon C, Griffin J. Pain Awareness and Medication Knowledge: A Health Literacy Evaluation. Journal of Pain & Palliative Care Pharmacotherapy. 2013; 27:19-19.

The Costs Add Up, and Are Not Simply Pharmacy

While costs may be moderate in a given year, they represent significant expense over time. Changing this trajectory requires intervening beyond just pharmacy.

Typical Complex Pain Case Spend



Source: Paradigm Analytics. Based on 10,000 open lost time claims.

Today's Objectives

We'll cover these topics in today's conversation.

- Understand the role of medications as one component of a treatment plan for chronic pain
- Understand how pain medications act in the body
- Determine who is (and who isn't) the right candidate for the top non-opioid painkillers
- Discuss the way to differentiate between a significant therapeutic response and a non-significant response

Our Presenters

Dr. Steven Moskowitz

- Senior medical director for Paradigm's pain program
- Physiatrist with 30 year experience treating pain and complex neurological
- 26 years experience in managed care and program development

Dr. Hassan Moinzadeh

- Associate professor at University of California, Irvine and staff physician at Long Beach Memorial Medical Center
- MD with specialty in physical medicine and rehabilitation
- PhD in clinical psychology

Role of Medications as Part of a Treatment Plan for Chronic Pain

Simply prescribing one or more medications is unlikely to resolve chronic pain.

- Pain is a biopsychosocial condition from day one
- Chronic pain involves numerous combined factors:
  - Nociceptive pain, neuropathic pain, myofascial pain, deconditioning, flexibility impairments, catastrophizing, fear avoidance, work comp
  - These factors do not respond equally to medications
- Medications are not the primary treatment for chronic pain, they are ancillary
  - Physical fitness and restoration of function are the centerpiece
  - ODG 2014: There is strong evidence that exercise programs, including aerobic conditioning and strengthening, are superior to treatment programs that do not include exercise; importance of careful evidence based application and adoption of each part of plan
- Medications can be effective or simply result in polypharmacy
  - No consensus definition
  - “Use of a potentially inappropriate drug” or “use of six or more concomitant drugs”[1]

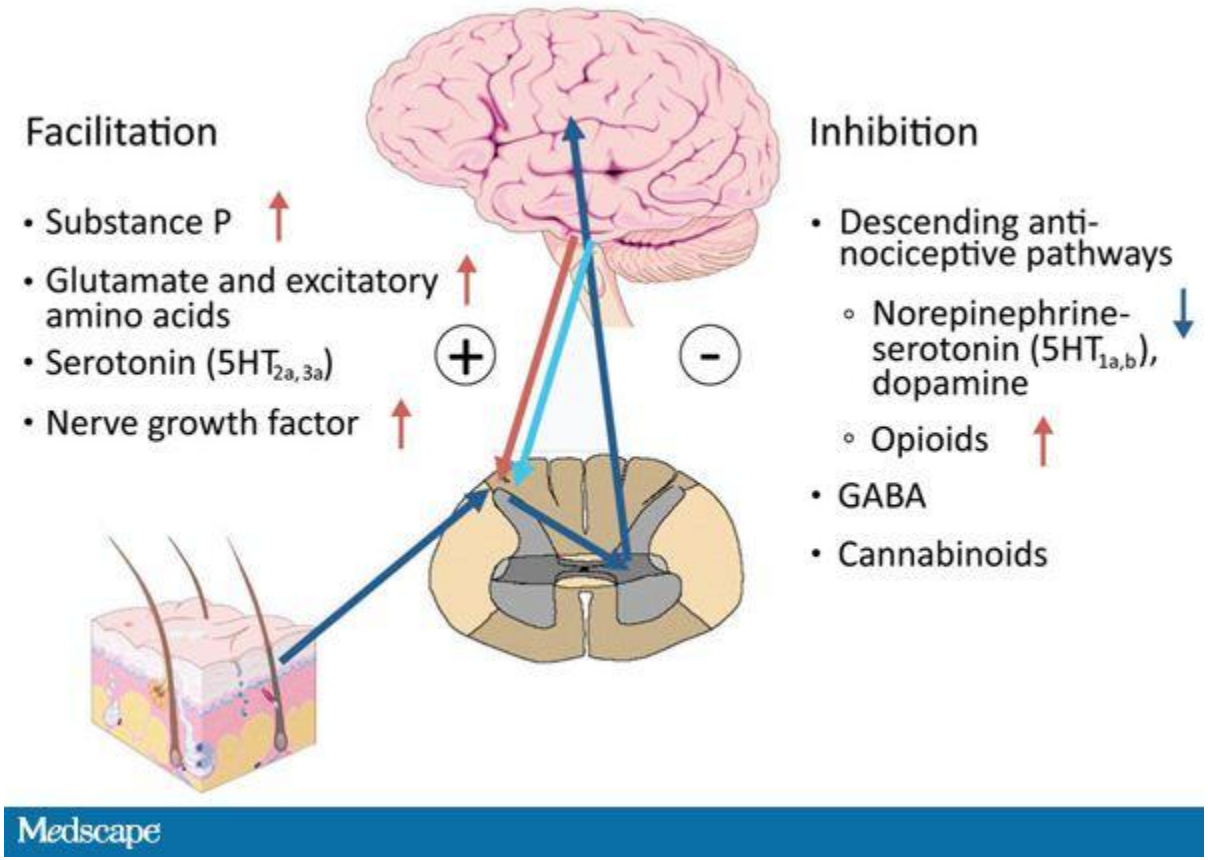
1. Polypharmacy: Misleading, But Manageable; Clinical Interventions in Ageing 2008:3(2)

What are Medications Intended to Do?

- Reverse, mitigate or cure pathology
  - Anti-inflammatories
  - Antispasmodics
- Relieve symptoms
  - Analgesics
  - Neuropathic pain medications
- Modify reaction to pain
  - Antidepressants
  - Anti-anxiety
  - Sleep meds
- “Neuromodulation”
  - Anticonvulsants
- Treating the side effects of prescribed drugs

How Pain Medications Work

Intended to stimulate a receptor in our body and initiate a <u>desired</u> response.



Many physicians underestimate the difference between *intended* and *actual* biological effect

Non-Opioid Painkillers

Dr. Hassan Moinzadeh

Creating a “Soup” of Medications is All Too Common

Medical providers often respond to each complaint as a separate symptom to manage and prescribe more medications, thus creating a “med soup” with additional side effects that then require more treatment.

Polypharmacy: Cumulative Impact of Adding More Medicines

Although different classes of medications have different intended purposes, a large number of chronic pain patients take the same med "soup."

- Injured workers with chronic pain conditions typically complain of multiple symptoms, some related to their underlying injury, and some related to the biopsychosocial aspects of their chronic illness.
- Myofascial pain
- Poor sleep hygiene
- Fatigue and lack of energy
- GI related abnormalities
- Depression and anxiety
- Increased attention and sensitivity to pain-associated symptoms

The cycle perpetuates itself: more symptoms, more meds…

A Case Study: Mr. M

- 53-year-old male construction worker who fell about ten feet from a ladder in 2010 with subsequent right calcaneal fracture which required ORIF as well as a L2 compression fracture.
- Initially treated by his orthopedist and sent to physical therapy for his back and ankle, then referred to a pain management specialist for further treatment since 1/2012. Injured worker was treated with a combination of trigger point injections, spinal blocks and medications. He was referred in 6/2013 when his pain management specialist recommended spinal cord stimulator for treatment of his low back pain and possible CRPS of the right foot.

Medications at time of initial evaluation

- Lyrica 150 mg three times a day
- Cymbalta 60 mg once a day
- Ambien CR 12.5 mg daily
- Senekot two tablets daily
- Reglan 10 mg twice a day
- Nexium 20 mg twice a day
- Lidoderm patch 5% 2/day
- Ultram ER 100 mg twice a day

Lyrica and Neurontin

Gabapentin (Neurontin) and its precursor drug, Pregabalin (Lyrica), modulate calcium channels to decrease the release of neurotransmitters including Glutamate, NE, Gaba.

- Intended purpose and mechanism
  - Anticonvulsant used for epilepsy & GAD
  - Certain kinds of neuropathic pain such as post-herpes and also fibromyalgia
- Who is a candidate?
  - Diabetic Peripheral Polyneuropathy
  - Central neuropathic pain diagnosis e.g. SCI
  - Fibromyalgia
- How should the MD and injured worker measure a therapeutic benefit?
  - 1-2 point decrease in pain rating
  - Not beneficial for CRPS or burning
- Indications to stop this medication or class of medications
  - Side effects, liver, kidney damage
  - Lack of improvement after 1-2 months
- Conservative alternatives
  - Tricyclic antidepressants

Key Insight

First line for neuropathic pain diagnosis and second line for fibromyalgia. Stop if no benefit in 1-2 months.

Cymbalta

Duloxetine belongs to a class of antidepressants known as Serotonin-Norepinephrine Reuptake Inhibitors.

- Intended purpose and mechanism
  - Major Depression/GAD
  - PN, OA, fibromyalgia, MSK pain
- Who is a candidate?
  - Burning pain associated with PN
  - FM, CLBP accompanied with depression
- How should the MD and injured worker measure a therapeutic benefit?
  - Most response within first 2 weeks
  - Not effective for numbness/tingling
- Indications to stop this medication or class of medications
  - SE profile includes nausea/sleep dysregulation, dizziness, sexual dysfunction
  - Considered no better than placebo in France
- Conservative alternatives
  - Treat depression
  - Consider Gabapentin/TCA

Key Insight

If no benefit with pain disorder after 2-4 weeks, consider discontinuation. Better drugs are available for depression and pain.

Lunesta

Eszoplicone, along with the other "Z" drugs, Zoplidem (Ambien) and Zaleplon (Sonata), belong to a class known as Norbenzodiazepine hypnotics.

- Intended purpose and mechanism
  - Short-term use of insomnia
  - Reduce falling asleep time by 15 min.
- Who is a candidate?
  - Difficulty falling asleep short term
  - Jet lag, short term sleep deprivation
- How should the MD and injured worker measure a therapeutic benefit?
  - Not indicated for chronic use
  - Avoid in elderly
- Indications to stop this medication or class of medications
  - Anterograde amnesia
  - Daytime sedation, risk of falls and MVAs
- Conservative alternatives
  - TCAs
  - Melatonin, dietary changes and supplements

Key Insight

Avoid this class if possible and try to get the patient off them if already taking regularly.

Nexium

Esomeprazole belongs to the class of proton pump inhibitors that decrease acid production in the stomach through interfering with the enzyme production in gastric cells.

- Intended purpose and mechanism
  - GERD, esophagitis, duodenal ulcers
  - Gastric ulcers in NSAIDs Crohn's
- Who is a candidate?
  - Gastritis secondary to chronic NSAIDs
  - Opioid-induced GERD
- How should the MD and injured worker measure a therapeutic benefit?
  - Ability to take NSAIDs for pain relief
  - Monitor Hg/Hct for anemia
- Indications to stop this medication or class of medications
  - No signs of dyspepsia especially after discontinued NSAID or opiate use
  - Osteoporosis or fracture of the hips
- Conservative alternatives
  - Dietary changes
  - Review indications for other meds

Key Insight

Use proton pump inhibitors for indicated purpose only and for a limited time if possible.

Flector Patch

Diclofenac Sodium is a topical form of Voltaren, an NSAID, used for the treatment of musculoskeletal pain and osteoarthritis.

- Intended purpose and mechanism
  - Treatment of muscle and joint pain when oral agents are contraindicated or not tolerated
- Who is a candidate?
  - Localized joint or musculoskeletal pain in patient with inability to take oral agents
  - Acute and chronic strains
- How should the MD and injured worker measure a therapeutic benefit?
  - Increased functional mobility
  - Decreased pain or use of opiates
- Indications to stop this medication or class of medications
  - Sensitivity to the topical agent
  - No change in function or level of pain
- Conservative alternatives
  - OTC topical agents
  - Nutritional anti-inflammatories

Key Insight

Use Flector patch when an oral NSAID is not tolerated or contraindicated. Stop after one month if no change in pain.

Lidoderm

Lidocaine patch is an anesthetic, analgesic topical agent for the treatment of localized skin and superficial/soft-tissue pain disorders.

- Intended purpose and mechanism
  - Post-herpetic neuralgia
  - Treatment of acute lumbosacral strain
- Who is a candidate?
  - Neuropathic burning pain, itching
  - No open wounds
- How should the MD and injured worker measure a therapeutic benefit?
  - Diminished pain as measured by increased function or reduced pain
- Indications to stop this medication or class of medications
  - No change in pain levels or function
  - Arrhythmias
- Conservative alternatives
  - OTC topical ointments and patches
  - Physical modalities: hot packs, ice

Key Insight

For most patients, there are far more effective, less expensive alternatives. If it doesn't change their pain medication use, stop!

Stopping the Cycle of Drugs and Complaints

Biopsychosocial approach to the whole person and their environment is the key to addressing ingrained beliefs and long-standing patterns of behavior.

- Sleep hygiene
- Nutrition and exercise
- Identify underlying comorbidities and encourage IW to seek necessary treatments
- Establish guidelines for effectiveness of each drug
- Stop medicines that do not help after a reasonable trial before starting something else
- Watch out for side effects that create their own problems
- Cognitive behavioral approaches to treatment of chronic pain syndrome, depression and anxiety
- Identify environmental factors including presence or absence of significant others

“First do no harm.”

Returning to Mr. M

Back to the injured 53-year-old construction worker whose medication "soup" included eight drugs.

Medications at time of initial evaluation

- Lyrica 150 mg three times a day
- Cymbalta 60 mg once a day
- Ambien CR 12.5 mg daily
- Senekot two tablets daily
- Reglan 10 mg twice a day
- Nexium 20 mg twice a day
- Lidoderm patch 5% 2/day
- Ultram ER 100 mg twice a day

Treatment plan

- Judicious use of biofeedback, cognitive behavioral therapy and acupuncture along with physical therapy in conjunction with medication tapering

Compound Creams and Case Management Tips

Dr. Steven Moskowitz

Poll: Your Turn to Vote!

What is the FDA requirement for reporting adverse events related to the use of compounds?

A. Adverse events must be reported by the pharmacy within 24 hours
B. Adverse events must be reported by the pharmacy within 72 hours
C. Adverse events must be reported to the manufacturers of each ingredient within 1 week
D. None of the above

Compound Creams

A simple idea creating a complex problem.

- Intended purpose and mechanism
  - Local treatment of local pain
  - Often multiple agents in one cream
- Who is a candidate?
  - Unclear, not proven; safety not proven
  - Compounded product that contains at least one drug (or drug class) that is not recommended is not recommended[1]
- How should the MD and injured worker measure a therapeutic benefit?
  - Increased use of limb
  - Decrease oral medications/procedures
- Indications to stop this medication or class of medications
  - No objective measureable benefit
  - Side effects, harm, lack of use
- Conservative alternatives
  - Heat and cold application
  - Over the counter options

Key Insight

Most agents in common compound topical creams have no proven topical effectiveness

1. ODG 2014
2. Compounding is Confounding Workers' Compensation; CompPharma

Case Management Tip for Appropriate Prescribing

Ensure appropriate prescribing by following this eight-step process.

1. Evaluate and clearly define the problem
2. Specify the therapeutic objective
3. Select appropriate drug therapy
4. Initiate therapy with appropriate details and consider nonpharmacologic therapies
5. Give information, instructions and warnings
6. Evaluate therapy regularly
7. Consider drug cost when prescribing
8. Use computers and other tools to reduce prescribing errors

From Appropriate Prescribing of Medications: An Eight-Step Approach;A merican Family Physician, January 15, 2007, Volume 75, Number 2 ; Pollock, Bazaldua, Dobbie

Case Management Tips for Measuring Effectiveness

Look at appropriate and meaningful measures of effectiveness.

- Treatment of pain should never be pharmacological only
- Many medications used in pain management have a limited effect in chronic pain
- Medications should only be initiated one at a time
- Evaluate therapy regularly for therapeutic response (all)
  - Significant decrease in pain complaint (VAS moving from severe to mod, mod to mild)
  - Improved function (should be realistic)
  - Decrease in more risky care (meds, procedures)
- Evaluate therapy regularly for adverse effects
  - Side effects
  - Effects requiring additional treatment (ex: meds for nausea, “low”)
  - Misuse, abuse, diversion

The Conversation Continues

Ask more questions during our LIVE post-webinar LinkedIn discussion on August 28th.

Dr. Moskowitz will answer more of your questions during a live chat in our LinkedIn Discussion Group:

- Thursday, August 28, at 10 am PST
- Visit www.linkedin.com
- Join Paradigm's Workers' Compensation Catastrophic and Pain Medical Management Group

Join by visiting the discussion group or follow the instructions in next week's email

Get today's highlights on Twitter:

- Visit twitter.com/paradigmsays
- Search the hashtag #ParadigmOutcomes

Question and Answer Session

Submit your questions in the Q&A panel on the right of your screen.

Dr. Steven Moskowitz

Dr. Hassan Moinzadeh

Experiencing computer audio broadcast problems?
Please use the toll-free dial-in number: 1-877-668-4490, access code 669 839 195 # #

Follow Paradigm on Twitter: www.twitter.com/ParadigmSays

Find informative videos on our YouTube channel: www.youtube.com/paradigmoutcomes

Read Outlook on Outcomes, Paradigm's blog: www.paradigmcorp.com/blog