



# The Journey Away From Opioids In the Management of Chronic Pain

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# The Journey Away From Opioids In the Management of Chronic Pain

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## Objectives

- Identify and Mitigate Challenges
- Evaluate Pain
- Classifications of Pain
- Medical Diagnosis Driven Treatment
- The Science of Behaviors in Pain Medicine
- Physician Directed Pain Management
- Patient/Customer-Owner Directed Pain Management

# Definition of Pain

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- An unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage. The pain pathways can involve an external stimulus, peripheral sensory nociceptors, subcortical structures, and cortical pathways. In addition, individual psychologic factors contribute to pain in the acute and chronic phases and may predominate in these later stages.



# Prevalence, Evidence Based Medicine, and Regulation

Pain accounts for more than half of primary care visits in the US. -Department of Health

Medical Education is primarily pharmacology, regionally and resource biased, and lacks objectivity

Randomized prospective, double-blinded clinical trials are needed and difficult to obtain in the research of pain, limiting the advancement of the science of pain

There is an abundance of variation in prescribing practices for opioids for pain.

Alaska legislation and State Medical Board requires a minimum of 2 hours of continuing education in pain management, opioid use, and addiction for providers who hold a valid DEA registration.

# The Journey Away From Opioids In the Management of Chronic Pain

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## Identify and Mitigate Challenges

- The Opioid Crisis
- Expectations that Opioid use for chronic pain remains the same
- Efficacy of Opioids in management of acute, subacute, and chronic pain
- Efficacy of adjunctive options
- Efficacy of alternative options



# The Opioid Crisis

Identify and Mitigate Challenges

1996 American Pain Society- Introduced the concept that Pain should be treated as the 5<sup>th</sup> Vital Sign

2001 Joint Commission rolled out it's Pain Management Standards including "Pain as the 5<sup>th</sup> Vital Sign"

(HCAHPS) question 14: "During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?"

Hospital Consumer Assessment of Healthcare Providers and Systems

# The Opioid Crisis

Identify and Mitigate Challenges

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- 1996: OxyContin (oxycodone, Purdue Pharma) approved by FDA

- Heavily marketed for with “no risk of withdrawal symptoms”

BID dosing, up to 60 mg/day

Greater than 34,000 coupons for free RX's distributed

1999: “Less than 1% of patients become addicted”.


- Opioid prescriptions increased 300 to 400% 1999 through 2000
- Prevalence of Unused Opioids Prescribed after Surgery Increased

American became the highest consumers of opioids of any country.

- United Nations International Narcotics Control Board

# The Opioid Crisis

Identify and Mitigate Challenges

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- 1996-2016 Deaths from drugs, suicide, and alcohol in the US more than doubled -Center for Disease Control and Prevention
  - US becomes only western country with an increasing mortality rate
  - 2017 More than 47,000 Americans died from opioid overdose
  - 1999-2020 Overdose deaths involving prescription opioids have quadrupled -Center for Disease Control and Prevention
  - Every day we count 78 Americans die of an opioid overdose- National Institute on Drug Abuse: National Center for Health Statistics, CDC Wonder



# The Opioid Crisis

Identify and Mitigate Challenges

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- 2012 Sales of prescription opioids were grossing \$11 Billion dollars annually in the US
- The estimated cost of the opioid crisis to the US in 2018 was \$696 Billion, (3.4% GDP) - Council of Economic Advisors
- Greater than \$631 Billion lost earnings, plus \$214 Billion healthcare, justice system, gvmt funded childcare and family assisted programs, education and lost productivity (2015-2018) -Society of Actuaries -

# TIME THE OPIOID DIARIES

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- "It was especially hard to get your mind around a statistic from 2016: almost as many deaths from drug overdoses as in all of America's recent wars combined".
- "I was making a lot of money and had a really good job. Then I started up with the OxyContin.....I always knew about heroin, but it was a line I didn't want to cross. But, you know, the ship had already sailed. An opiate's an opiate's an opiate. I'm not trying to die, contrary to people's belief. I'm not trying to kill myself."

# The Opioid Crisis

Identify and Mitigate Challenges

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## Statistics from 2019 National Survey on Drug Use and Health

### For the year 2018

- 10.3 Million people misuse prescription opioids
- Roughly 21 to 29% of patients prescribed opioids for chronic pain misuse them with 8 to 12% developing an opioid use disorder.
- 2 Million people were diagnosed with Opioid Use Disorder.
- Of patients with OUD, 4 to 6% transition to heroin.
- 47,000 deaths opioid related deaths
- Opioids prescriptions were involved in 32% of the deaths

# The Opioid Crisis

Identify and Mitigate Challenges



## **Addressing the Opioid Epidemic**

- Education
- Prevention
- Funding
- Faith, Family, Culture
- Change thoughts, expectations, beliefs, practice patterns

# The Opioid Crisis

Identify and Mitigate Challenges: Education

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“Goal to avoid adverse events associated with opioid usage, including addiction, misuse, abuse, diversion, and death. Our specialty is striving to mitigate overprescribing and to reduce stigma as well as the undertreatment of chronic pain.”

**American Academy of Physical Medicine and Rehabilitation Position Statement of Opioid Prescribing**

# The Opioid Crisis

Identify and Mitigate Challenges: Education

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“Acute, subacute, and chronic pain management should be multimodal”

“Compelling scientific evidence shows that physical therapy, behavioral health, nonopioid medications, and interventional procedures may be better treatment options compared with opioids alone.”

Dowell D, Haegerich TM, Chou R, CDC Guideline for Prescribing Opioids for Chronic Pain-United States, 2016, JAMA 2016;315:1624-1645

# The Opioid Crisis

Identify and Mitigate Challenges: Education



Every provider who prescribes opioids maintains a commitment to Patient  
C-O safety and continuing education.

# The Opioid Crisis

Identify and Mitigate Challenges: Prevention



“Chronic opioid therapy should be accompanied by appropriate risk stratification and ongoing risk management.”

“Opioid therapy for new onset of acute pain should be restricted”



# The Opioid Crisis

Identify and Mitigate Challenges: Prevention



“Opioid dosages should be the lowest necessary to achieve functional improvement”

“Opioid therapy for new onset of acute pain should be restricted”

- **American Academy of Physical Medicine and Rehabilitation Position Statement of Opioid Prescribing**

# The Opioid Crisis

Identify and Mitigate Challenges: Efficacy



Statistics for decreasing pain, (immediate decrease, mood and pain intensity)  
and for loss of function

Willingness of the population to accept or ignore side effects

Objective measures of function to evaluate efficacy

# The Opioid Crisis

Identify and Mitigate Challenges: Funding



American Indian and Alaska Natives are disproportionately represented in these statistics with the second-highest overdose rates from all opioids

-Choctaw Nation

# Expectations

Identify and Mitigate Challenges



Compassionate and intelligent changes in current patterns of care

Is the C-O interested in making a changes alternatives or adjunctive treatments?

Are medical objectives aligned?

Do opioids have role in the management of chronic pain?

What do we use as a measure of success in treatment?

# Expectations

Identify and Mitigate Challenges

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- Common objectives
- Feel no pain
- Increase function; Patient Specific Functional Scale

Providers, patients and family understand the diagnosis and treatments

# Efficacy

Identify and Mitigate Challenges



Iatrogenic neurochemical changes

How soon

How much

How long

# Efficacy of Adjunctive Pain Treatment

Identify and Mitigate Challenges

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Timing Dependent

Improves with the following:

- Establishing mutual expectations before initiating treatment

- Repeated exposure to same messaging, same provider

- Repeated exposure to same messaging; multiple sources

- Education combined with relative rest, position and activity

- change

# Efficacy of Adjunctive Pain Treatment

Identify and Mitigate Challenges

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Efficacy of **Adjunctive** Pain Treatments/Management

Medications

Many variables

Improved with condition-specific treatment and education

Difficult to tease out with concurrent use of opioids in some

Lose ability to retry as an **alternative** medication choice in the future



# Efficacy of Alternative Pain Treatment

Identify and Mitigate Challenges

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Efficacy of **Alternative** Pain Treatments/Management

Medications

Allow time between stopping and starting if possible

Provide abundant education regarding expectations

Implement multimodal model before, during and upon making the changes

# Evaluation of Pain

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- **Where** (Location),
- **When** (How long ago, sudden or gradual onset, injury or illness)
- How has it **Changed** since onset
- Are there **Other** or accompanying symptoms, (tingling, numbness, or weakness)
- Does pain follow a **Pattern**, such as the time it is present, intermittent or constant, time of day or night that pain is greatest
- Describe what you noticed that **Minimizes** and **Maximize** pain
- How would you describe the pain **Severity/Intensity**
- Provide specifics of how pain interferes with your **Lifestyle**

# Customer Reported Pain

Name \_\_\_\_\_ Date \_\_\_\_\_

Date of Birth \_\_\_\_/\_\_\_\_/\_\_\_\_ Medical Record Number \_\_\_\_\_

## HISTORY

When did the pain start? \_\_\_\_\_

Did it start suddenly or gradual? Sudden / Gradual

Did an event or activity cause the onset of pain?  
\_\_\_\_\_

Is the pain a result of a work related injury? Yes / No

How many work days have you missed in the past year? \_\_\_\_\_

Has a motor vehicle accident been the cause of or contributed to pain? Yes / No

Is this the first time you have had this pain? Yes/No

If NO, When was the first time? \_\_\_\_\_

Since the onset of pain have you noticed a change in your control of bowel, bladder or sex? Yes/No

How has the pain changed since the onset?  
\_\_\_\_\_

Have other symptoms changed since the onset?  
\_\_\_\_\_

Does pain:	Yes	No
Start in a big area and is now smaller	<input type="checkbox"/>	<input type="checkbox"/>
Start in one spot and is now in more areas	<input type="checkbox"/>	<input type="checkbox"/>
Stay in the same place	<input type="checkbox"/>	<input type="checkbox"/>
Affect your sleep	<input type="checkbox"/>	<input type="checkbox"/>
Affect your balance or walking	<input type="checkbox"/>	<input type="checkbox"/>
Affect your family or recreational activities	<input type="checkbox"/>	<input type="checkbox"/>
Affect your participation in work	<input type="checkbox"/>	<input type="checkbox"/>
Make you sad, angry or worried	<input type="checkbox"/>	<input type="checkbox"/>

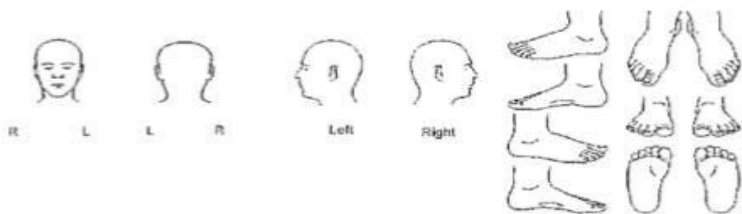
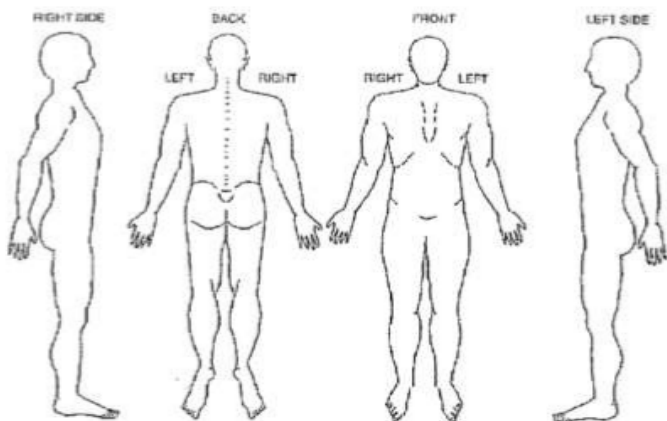
## DRAWING KEY

### Pain Symptoms

SP - Sharp	V
D - Dull	O
ST - Stabbing	
SH - Shooting	↗
B - Burning	X
P - Prickling/Stinging	~
A - Achy/Throbbing	△
R - Radiating	))))

### Non-pain Symptoms

N - Numbness	N
T - Tingling	+++
W - Weakness	W



Where is your pain? Draw and describe in the diagram above using the symbols in the key

Write in your own words to describe your pain: \_\_\_\_\_

# Customer Reported Pain

## PAIN DESCRIPTION

Is the pain present some of the time or all of the time? Some / All \_\_\_\_\_

If pain comes and goes, how often (many times) do you experience it? \_\_\_\_\_ How long does it last? \_\_\_\_\_

What time of day is the pain the least? Waking / Morning / Afternoon / Evening / Going to bed / Sleeping

What time of day is the pain the most? Waking / Morning / Afternoon / Evening / Going to bed / Sleeping

Does the pain increase through the day? Increase / Decrease / Stays the same

Rate the pain you are having by placing a mark on the line from NOT AT ALL to the WORST PAIN you can imagine

### RIGHT NOW

NOT AT ALL WORST PAIN

●-----●

### ON AVERAGE

NOT AT ALL WORST PAIN

●-----●

### WHEN IT'S THE WORST

NOT AT ALL WORST PAIN

●-----●

### WHEN IT'S THE LEAST

NOT AT ALL WORST PAIN

●-----●

### Name 3 things that increase your pain:

- 1.
- 2.
- 3.

### Name 3 things that decrease your pain:

- 1.
- 2.
- 3.

What are your expectations from your visit(s) regarding pain? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Evaluation of Pain

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- “What has helped in the past to reduce pain when it was severe and debilitating?”
- “What was the condition that caused pain in the past?”
- “What treatments in the past did you find were not to be helpful, were accompanied by undesirable effects or increased pain?”

## The Patient-Specific Functional Scale

This useful questionnaire can be used to quantify activity limitation and measure functional outcome for patients with any orthopaedic condition.

**Clinician to read and fill in below:** Complete at the end of the history and prior to physical examination.

### Initial Assessment:

I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your \_\_\_\_\_ problem. Today, are there any activities that you are unable to do or having difficulty with because of your \_\_\_\_\_ problem? (Clinician: show scale to patient and have the patient rate each activity).

### Follow-up Assessments:

When I assessed you on (state previous assessment date), you told me that you had difficulty with (read all activities from list at a time). Today, do you still have difficulty with: (read and have patient score each item in the list)?

### Patient-specific activity scoring scheme (Point to one number):

0	1	2	3	4	5	6	7	8	9	10
Unable to perform activity					Able to perform activity at the same level as before injury or problem					

### (Date and Score)

Activity	Initial									
1.										
2.										
3.										
4.										
5.										
Additional										
Additional										

Total score = sum of the activity scores/number of activities

Minimum detectable change (90%CI) for average score = 2 points

Minimum detectable change (90%CI) for single activity score = 3 points

PSFS developed by: Stratford, P., Gill, C., Westaway, M., & Binkley, J. (1995). Assessing disability and change on individual patients: a report of a patient specific measure. *Physiotherapy Canada*, 47, 258-263.

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# Classifications of Pain

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- Musculoskeletal
- Myofascial
- Visceral
- Neuropathic

# Treatment Specific to Medical Diagnosis



Ankle sprain verses ankle fracture; fibular fracture verses tibial fracture

Post operative

Cancer

Chronic Regional Pain Syndrome

Fibromyalgia



# The Science of Pain Reduction with Behavioral Change

- Sleep
- Eat
- Exercise
- Smoking
- ETOH
- Excess



# Physician Guided Pain Management

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What resources does a medical provider have?



Inpatient, outpatient in the home, outpatient out of the home



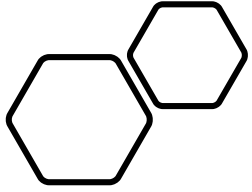
Financial resources  
Care provider resources



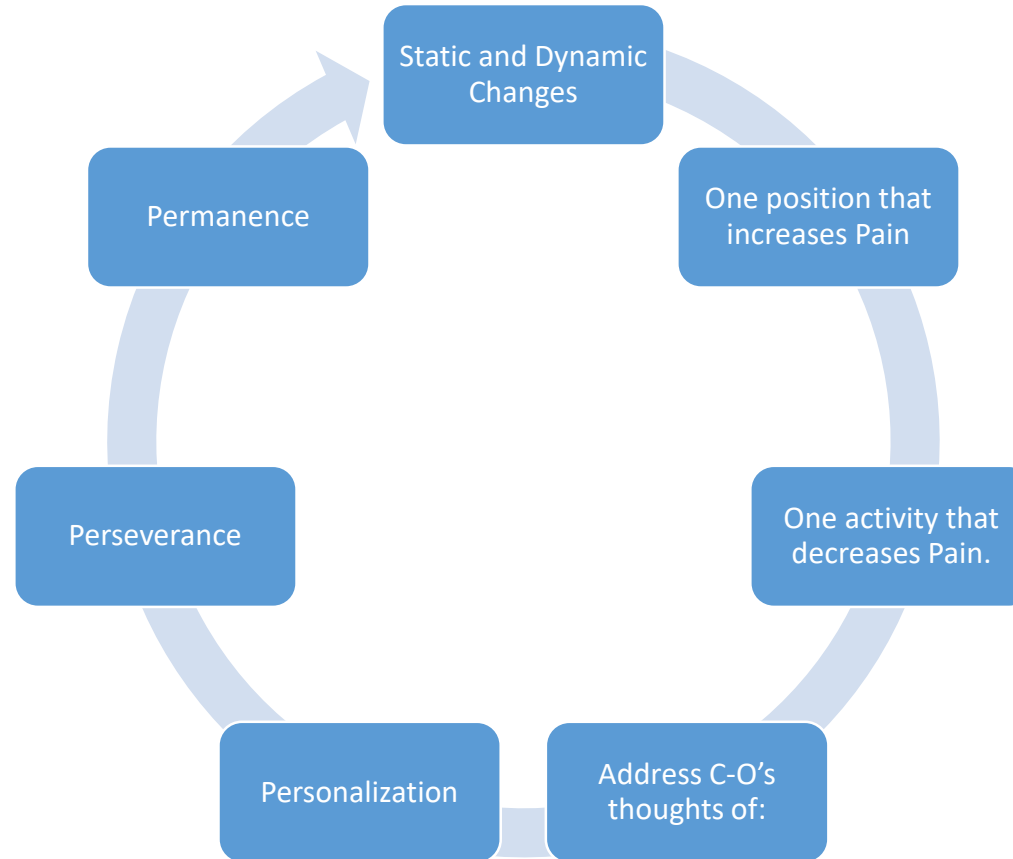
Passive  
Active Assistive  
Active



Medical Supervision  
Transition Patient to Independent



# Cognitive: Thoughts, Beliefs, Understanding



# Passive

- Braces, Assistive devices for ADL's , IADL's and mobility
- Up in chair, comfort companion, spiritual visit; (Pastor, Chaplin, TH)
- Reading materials, being read to, music, aromatherapy, pets, puzzles, hobbies, pictures, beading, transport outside, Comfort Menu, distraction
- Stockings, sleeves, wraps, sacral belt, kinesiotape
- Cushions, Pillows, Seating Systems, Ergonomic Set Ups
- Traction
- Electric Stimulation, TENS
- Cryotherapy
- Warm moist heat

# Passive

- Medications
- Acupuncture
- Massage
- Chiropractic Medicine
- Traditional Healing
- Occupational Therapy
- Physical Therapy
- Injections
- Infusions
- Catheters; short term or indwelling with pumps
- Dorsal Column Stimulators
- Surgery

# Customer Reported Medication List

Name: \_\_\_\_\_ Date of Birth: \_\_\_/\_\_\_/\_\_\_ Medical Record Number (MRN): \_\_\_\_\_

Today's Date: \_\_\_\_\_

If I could change one thing about my pain medications it would be... \_\_\_\_\_

Please CIRCLE the words that best represent the relief you receive from your CURRENT PAIN medications:

Full Relief      Much Relief      Moderate Relief      Little Relief      No Relief

CIRCLE if you are CURRENTLY experiencing any of the following SIDE EFFECTS from your PAIN medications:

Nausea	Itching	Sleepiness	Change in appetite
Vomiting	Constipation	Dizziness	Heartburn
Rash	Upset stomach	Mood Changes	Other: _____

CHECK ALL PAIN MEDICATIONS EVER TRIED IN THE PAST OR CURRENTLY TAKING

	Current Y/N	Past Y/N	Effective? Y/N	Maximum Dose?	Length of Therapy?	If stopped, why? (Side Effect vs Ineffective)
<b>Anti-Inflammatory/Pain Reliever</b>						
acetaminophen (Tylenol)						
celecoxib (Celebrex)						
etodolac (Lodine)						
ibuprofen (Advil, Motrin)						
indomethacin (Indocin)						
ketorolac inj (Toradol)						
meloxicam (Mobic)						
naproxen (Aleve, Naprosyn)						
nabumetone (Relafen)						
piroxicam (Feldene)						
salsalate (Disalcid)						
sulindac (Clinoril)						
Other: _____						
<b>Anti-Seizure/Mood stabilizers</b>						
carbamazepine (Tegretol)						
gabapentin (Neurontin)						
lacosamide (Vimpat)						
lamotrigine (Lamictal)						
oxcarbazepine (Trileptal)						
tiagabine (Gabatril)						
topiramate (Topamax)						
zonisamide (Zonegran)						
pregabalin (Lyrica)						
valproic acid (Depakote)						
Other: _____						
<b>Anti-Depressants/Anti-Anxiety</b>						
amitriptyline (Elavil)						
bupropion (Wellbutrin)						
bupirone (Buspar)						
citalopram (Celexa)						
desipramine (Norpramin)						
desvenlafaxine (Pristiq)						
duloxetine (Cymbalta)						
escitalopram (Lexapro)						
fluoxetine (Prozac)						
fluvoxamine (Luvox)						
imipramine (Tofranil)						
milnacipran (Savella)						
mirtazapine (Remeron)						
nefazodone (Serzone)						

Anti-Depressants/Anti-Anxiety continued	Current Y/N	Past Y/N	Effective? Y/N	Maximum Dose?	Length of Therapy?	If stopped, why? (Side Effect, Didn't Work, etc.)
nortriptyline (Pamelor)						
paroxetine (Paxil)						
sertraline (Zoloft)						
trazodone (Desyrel)						
venlafaxine (Effexor)						
Other: _____						
Benzodiazepines	Current Y/N	Past Y/N	Effective? Y/N	Maximum Dose?	Length of Therapy?	If stopped, why? (Side Effect, Didn't Work, etc.)
alprazolam (Xanax)						
clonazepam (Klonopin)						
diazepam (Valium)						
lorazepam (Ativan)						
temazepam (Restoril)						
Other: _____						
Muscle Relaxants						
baclofen (Lioresal)						
carisoprodol (Soma)						
cyclobenzaprine (Flexeril)						
metaxalone (Skelaxin)						
methocarbamol (Robaxin)						
tizanidine (Zanaflex)						
Other: _____						
Opioid Medications						
buprenorphine (Subutex, Suboxone)						
codeine/acetaminophen (Tylenol #3)						
hydrocodone/acetaminophen (Norco)						
hydromorphone (Dilaudid)						
fentanyl patches (Duragesic), tabs, film, loz						
methadone (Dolophine)						
meperidine (Demerol)						
morphine immediate release						
morphine extended release (MScContin ER)						
oxycodone/acetaminophen (Percocet)						
oxycodone immediate release						
oxycodone extended release (Oxycontin)						
oxymorphone (Opana)						
tapentadol (Nucynta)						
tramadol (Ultram, Ultram ER, Ultracet)						
Other: _____						
Sleep Agents						
diphenhydramine (Benadryl)						
hydroxyzine (Atarax)						
modafinil (Provigil)						
ramelteon (Rozerem)						
zolpidem (Ambien)						
Other: _____						
Topical/Nasal Medications						
calcitonin nasal spray (Miacalcin)						
capsaicin cream/patch (Zostrix)						
diclofenac topical gel (Voltaren)						
lidocaine patches (Lidoderm)						
Herbal Medications						
hypericum perforatum (St John's Wort)						
Over the Counter:						
Other: _____						



# Medications

## Anti-inflammatory/Pain Reliever

acetylsalicylic acid (aspirin)\*

acetaminophen (Tylenol)

ibuprofen (Advil, Motrin)

Naproxen (Aleve, Naprosyn)

diclofenac (Voltaren)

indomethacin (Indocin)

ketorolac (Toradol)

meloxicam (Mobic)

piroxicam (Feldene)

salsalate (Disalcid)

sulindac (Clinoril)

etodolac (Lodine)

nabumetone (Relafen)

celecoxib (Celebrex)

\* FDA approved for mild to moderate pain, osteoarthritis, and rheumatoid arthritis

Dose: 325-650 mg PO every 4 hoursMax: 3.9 gm/24 hours



# Medications

## Anti-seizure/Membrane Stabilizers

gabapentin (Neurontin)

pregabalin (Lyrica) \*

topiramate (Topamax)

lamotrigine (Lamictal)

oxcarbazepine (Trileptal)

carbamazepine (Tegretol)

lacosamide (Vimpat)

tiagabine (Gabitril)

zonisamide (Zonegran)

valproic acid (Depakote)

\* FDA approved for diabetic peripheral neuropathy, fibromyalgia, neuropathic pain due to spinal cord injury, postherpetic neuralgia



# Medications

## Antidepressant/Anti-Anxiety

amitriptyline (Elavil)

Bupropion (Wellbutrin)

Buspirone (BuSpar)

Citalopram (Celexa)

Desipramine (Norpramin)

Desvenlafaxine (Pristiq)

Duloxetine (Cymbalta)

escitalopram(Lexapro)

Sertraline (Zoloft)

Venlafaxine (Effexor)

fluoxetine (Prozac)

fluvoxamine (Luvox)

imipramine (Tofranil)

milnacipran (Savella)

mirtazapine (Remeron)

nefazodone(Serzone)

nortriptyline (Pamelor)

paroxetine (Paxil)

trazodone (Desyrel)





# Medications

## Benzodiazepines

Alprazolam (Xanax)

Clonazepam (Klonopin)

Diazepam (Valium)\*

Lorazepam (Ativan)

Temazepam (Restoril)

\*Diazepam (Valium) has the best evidence and carries an FDA approval for skeletal muscle spasms

- 2-10 mg PO, 3-4 times daily
- OR 5-10 mg IM or IV initially; repeat in 3-4 hours as needed



# Medications

## Muscle Relaxants

Baclofen (Lioresal)

Carisoprodol (Soma)

Cyclobenzaprine (Flexeril)

Metaxalone (Skelaxin)

Methocarbamol (Robaxin)

Tizanidine (Zanaflex)



# Medications

## Sleep Agents

Diphenhydramine (Benadryl)

Hydroxyzine (Atarax)

Modafinil (Provigil)

Ramelteon (Rozerem)

Zolpidem (Ambien)

Tylenol, Coffee, and Carrots



# Medications

## Topical/Nasal Medications

Calcitonin nasal spray (Miacalcin)

Capsaicin cream/patch (Zostrix)

Diclofenac topical gel (Voltaren)

Lidocaine patches (Lidoderm)

Capsaicin cream/patch



# Medications

## Herbal/Homeopathic Medications

Hypericum perforatum (St John's Wort)

Black cherry juice

Willow bark, Turmeric, Cloves

Mg++

Rice and corn packs for moist heat

Oat and corn meal poultices

Ice packs, coolant sprays, and ice massage

DSMO

Tea Tree Oil

Emu oil

Epsom Salt and Baking Soda Soaks

So many things



# Active Assistance

- Movement Therapy
- Exercise Specialists
- Psychological Intervention
- Chiropractic Medicine
- Traditional Healing
- Occupational Therapy
- Physical Therapy



# Active

- Movement Therapy
- Exercise Specialists
- Chiropractic Medicine
- Traditional Healing
- Occupational Therapy
- Physical Therapy

# Self-Directed Pain Treatment/Management

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- Pacing, timing postures and activities
- Rollers, straps, therapy balls, wands, therapy bands,
- Adaptive household furniture; lounge chairs, beds, motor vehicles, work stations,
- Adaptive exercise equipment for home use; “antigravity boards, boots, Pilates equip
- Exercise classes; Yoga, Pilates, Tai Chi, Aquatics
- Positive thinking, gratitude, cognitive changes
- Identification and making changes in pain producing lifestyle



A photograph of the Aurora Borealis (Northern Lights) over a dark lake at night. The lights are green and purple, reflecting on the water. In the background, there are dark silhouettes of mountains and a few small lights on the water.

# The Journey Away From Opioids for Pain

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Establish the differential medical diagnosis

Determine if opioids are indicated for the medical condition

Evaluate risk factors for use and implement appropriate concurrent treatments to dissuade patterns leading to dependency, misuse, addiction, diversion

Provide education, compassion, support, and an interdisciplinary approach

Implement adjunctive therapies and close follow up